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**Cognitive bias in the judgment of business valuations and valuers :  
how systematic patterns of irrationality affect entrepreneurs, legal  
professionals and business valuers**

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**Citation**

Broekema, M. J. R. (2020, April 1). *Cognitive bias in the judgment of business valuations and valuers : how systematic patterns of irrationality affect entrepreneurs, legal professionals and business valuers*. Meijers-reeks. Retrieved from <https://hdl.handle.net/1887/87192>

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**Note:** To cite this publication please use the final published version (if applicable).

Cover Page



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**Title:** Cognitive bias in the judgment of business valuations and valutors : how systematic patterns of irrationality affect entrepreneurs, legal professionals and business valutors

**Issue Date:** 2020-04-01

## Appendices

### *Appendix A1: Valuation Case*

#### *History*

Trend is a Dutch trading company that focuses on buying and selling various, high-quality accessories around new or innovative products from, for example, A-brands like Apple, Samsung and Microsoft. Accessories that Trend purchases and sells include covers, connectors, cables, headsets, speakers and chargers. All Trend products are recognizable for their fashionable and sleek style. Approximately 70% of Trend's procurements are produced and in Asia from quality manufacturers, and the remaining 30% in Europe. The sale takes place exclusively to larger retail companies, both retail chains and online companies in the Netherlands and other Western European countries.

Trend was founded in 2005 by two college friends, called Remco Berends ('Berends'), the creative spirit, and Rogier Zomers ('Zomers'), the businessman. Trend now employs approximately twelve employees, varying from buyers, product managers, logistics staff to administrative staff. Berends and Zomers each own 50% of the share capital in Trend. Berends is known for his visionary view of constantly discovering trends. He was also the one who spotted the rise of the smartphone in 2005, and jumped on this development by coming up with accessories for it. He ensures that the company's culture is monitored, and takes care of the creation and innovation of the product offering. Zomers, on the other hand, is a real businessman. He knows where Trend can have the best products made and builds long-term relationships with customers, and knows how to capitalize on opportunities. He particularly enjoys working with customers and suppliers. Especially the first ten years after the company's incorporation, Trend grew rapidly and managed to build up a strong market position.

#### *Current situation*

For a few years now, both Trend's turnover and operating result have been stabilizing. The growth seems to be at an end and a decrease is even noticeable. Whereas Berends (the creative mind) is satisfied with the current size and performance of Trend, Zomers (the trader) has actual different ambitions. He wants to invest more in the company, and develop new markets and products. He believes that in recent years, many companies have emerged that do the same as Trend, resulting in constantly decreasing

margins. Berends sees enough potential in Trend's current form, and finds the ambitions of Zomers risky. After all, he believes that in this time you can easily lose your established position if you expand, and the company moves further away from its original product range.

Berends and Zomers not only have different visions of the future of Trend, they are also dissatisfied with each other's contribution and individual performance. They even feel that the *management fee* received by the other does not reflect the quality of the work performed. Zomers and Berends don't want to continue with each other anymore, and there is little or no trust in each other anymore. The situation that has arisen threatens the long-term continuity of the company, but also puts it in a difficult financial position in the short term, since the situation that has arisen means that both shareholders are no longer focused on the future of Trend, but merely on their own interests.

#### *The future of Trend*

Zomers and Berends both recognize that an irreconcilable shareholder dispute has arisen and that they want to break up their business. [Zomers] [Berends] has indicated to [buy] [sell] the shares [of] [to] the other. A possible agreement ultimately depends on the price of the shares. They therefore decide to consult Trend's accountant. It reminds them of Trend's articles of association which stipulate that, in the event of a dispute between the shareholders, an independent valuation specialist must first determine the value of the shares in Trend. Through the (Dutch) professional association for valuation specialists (NiRV), a valuation specialist unknown to both shareholders was selected and put forward by drawing lots. This specialist is experienced in valuing trading companies.

#### *The valuation specialist*

The valuation of Trend was conducted by Frank van Zetten, 42 years old, who has been working for several years as a valuation specialist for small and medium-sized enterprises, and he is particularly specialized in valuing trading companies. He is registered as an certified business valuator (Register Valuator; RV) and therefore well trained in valuing companies.

*Appendix A2: Assignment/Instructions [Buyer Condition]*

We ask you to put yourself in the position of [**Zomers, the merchant**] [**Berends, the creative mind**]. The most important thing when empathizing with the case is that as a 50% shareholder of Trend, weighing everything carefully, you have the desire to buy the shares of your fellow shareholder. You would like to continue the company.

The valuation specialist calculated the value of 100% of the shares in Trend as at 1 January 2018 at [**EUR 2.647 million**] [**EUR 5.067 million**]. For this, he has spoken to you and your co-shareholder, as well as Trend's key employees, and a number of trusted customers and suppliers.

Below is a brief (graphic) presentation of Trend's historical figures, the financial projections for the next five years and the main assumptions underlying the valuation outcome.

[Presented either Low Scenario (Appendix A4) or High Scenario (Appendix A5)]

*Appendix A3: Assignment/Instructions [Seller Condition]*

We ask you to put yourself in the position of [**Zomers, the merchant**] [**Berends, the creative mind**]. The most important thing when empathizing with the case is that as a 50% shareholder of Trend, weighing everything carefully, you have the desire to sell the shares of your fellow shareholder. You want to stop as a shareholder in the company.

The valuation specialist calculated the value of 100% of the shares in Trend as at 1 January 2018 at [**EUR 2.647 million**] [**EUR 5.067 million**]. For this, he has spoken to you and your co-shareholder, as well as Trend's key employees, and a number of trusted customers and suppliers.

Below is a brief (graphic) presentation of Trend's historical figures, the financial projections for the next five years and the main assumptions underlying the valuation outcome.

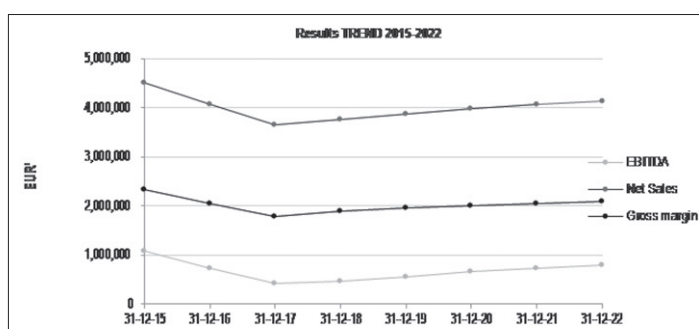
[Presented either Low Scenario (Appendix A4) or High Scenario (Appendix A5)]

Appendix A4: Valuation report (Low value anchor)

Results and valuation calculation of Trend (period 2015-2022):

| EUR'                           | 31-12-15  | 31-12-16  | 31-12-17  | 31-12-18  | 31-12-19  | 31-12-20  | 31-12-21  | 31-12-22  |
|--------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Net Sales                      | 4,519,539 | 4,067,585 | 3,660,827 | 3,770,651 | 3,874,344 | 3,971,203 | 4,060,555 | 4,141,766 |
| growth in %                    | 6.20%     | -10.00%   | -10.00%   | 3.00%     | 2.75%     | 2.50%     | 2.25%     | 2.00%     |
| Gross margin                   | 2,322,952 | 2,054,099 | 1,777,341 | 1,904,382 | 1,956,753 | 2,005,672 | 2,050,799 | 2,091,815 |
| gross margin in % of net sales | 51.40%    | 50.50%    | 48.55%    | 50.51%    | 50.51%    | 50.51%    | 50.51%    | 50.51%    |
| EBITDA                         | 1,069,748 | 738,105   | 424,726   | 475,098   | 543,026   | 661,241   | 731,559   | 795,635   |
| EBITDA in % of net sales       | 23.67%    | 18.15%    | 11.60%    | 12.60%    | 14.02%    | 16.65%    | 18.02%    | 19.21%    |
| Result before taxes            | 971,200   | 641,602   | 335,695   | 400,098   | 468,026   | 586,241   | 656,559   | 720,635   |

Graphically, the financial history (2015-2017) and the financial forecast (2018-2022) of Trend can be presented as follows, presenting the turnover, gross margin and operating profit before depreciation, interest and tax (EBITDA).



The main principles underlying the valuation of Trend are as follows:

- After years of declining turnover and gross margin (2015 to 2017, but also before), the expectations are that net sales and gross margin in the period 2018 to 2022 will grow again to the level of 2016.
- Operating profit (EBITDA) is also assumed to rise in the period 2018 to 2022, to the level of 2016.

Based on the globally accepted and widely used Discounted Cash Flow (DCF) method, according to the valuation expert, the value of 100% of the shares in Trend amounts to **EUR 2.647 million** (rounded) as of 1 January 2018. This outcome follows, inter alia, from Trend's financial forecast for the period 2018-2022 and thereafter (the residual period; the period after 2022).

The DCF method calculates the company's (free) cash flows that are freely available (on an annual basis) to all providers of capital (i.e., shareholders and other providers of capital), and discounts these cash flows against a risk profile expressed as a percentage (i.e., the cost of capital; determined at 18.6% in this value calculation) which percentage reflects the risks associated with realizing these free cash flows. The DCF method is a valuation method based on economic principles instead of accounting principles. The value of the shares of Trend is equal to the value of the company, because Trend has no net debt per the valuation date.

Below you will find the value calculation of the valuation expert.

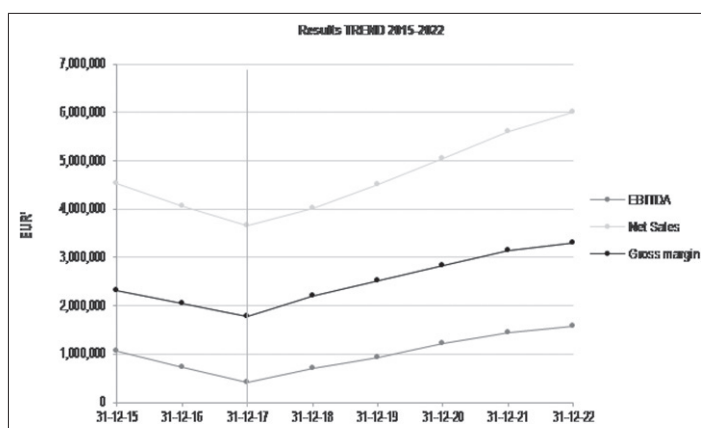
| EUR'                                      | 31-12-18         | 31-12-19       | 31-12-20       | 31-12-21       | 31-12-22       | RV             |
|-------------------------------------------|------------------|----------------|----------------|----------------|----------------|----------------|
| <b>EBIT</b>                               | <b>400,098</b>   | <b>468,026</b> | <b>586,241</b> | <b>656,559</b> | <b>720,635</b> |                |
| Taxes                                     | (90,025)         | (107,006)      | (136,560)      | (154,140)      | (170,159)      |                |
| NOPLAT                                    | 310,074          | 361,019        | 449,681        | 502,419        | 550,476        |                |
| Plus: depreciation                        | 75,000           | 75,000         | 75,000         | 75,000         | 75,000         |                |
| Minus: investments in fixed assets        | (90,000)         | (89,000)       | (83,000)       | (76,000)       | (75,000)       |                |
| Plus/minus: change in net working capital | 19,691           | (14,549)       | (13,552)       | (12,458)       | (11,273)       |                |
| <b>Free Cash Flow</b>                     | <b>314,765</b>   | <b>332,471</b> | <b>428,129</b> | <b>488,961</b> | <b>539,204</b> | <b>549,988</b> |
| Residual Value                            |                  |                |                |                |                | 3,313,179      |
| Growth rate                               |                  |                |                |                |                | 2.00%          |
| Reu (Return on Equity Unlevered)          | 18.6%            | 18.6%          | 18.6%          | 18.6%          | 18.6%          | 18.6%          |
| Time to cash flow                         | 1.00             | 2.00           | 3.00           | 4.00           | 5.00           | 5.00           |
| Discount rate: 18.6%                      | 0.843            | 0.711          | 0.599          | 0.506          | 0.426          | 0.426          |
| Present value Free Cash Flow              | 265,400          | 236,365        | 256,638        | 247,136        | 229,789        | 1,411,967      |
| Present value forecast period             | 1,235,328        |                |                |                |                |                |
| Present value of the residual value       | 1,411,967        |                |                |                |                |                |
| <b>Enterprise Value</b>                   | <b>2,647,285</b> |                |                |                |                |                |
| Plus: excess cash                         | -                |                |                |                |                |                |
| Minus: interest bearing debt              | -                |                |                |                |                |                |
| <b>Equity Value</b>                       | <b>2,647,285</b> |                |                |                |                |                |

Appendix A5: Valuation report (High value anchor)

Results and valuation calculation Trend (period 2015-2022):

| EUR'                           | 31-12-15  | 31-12-16  | 31-12-17  | 31-12-18  | 31-12-19  | 31-12-20  | 31-12-21  | 31-12-22  |
|--------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Net Sales                      | 4,519,539 | 4,067,585 | 3,660,827 | 4,026,909 | 4,510,138 | 5,051,355 | 5,607,004 | 5,999,494 |
| growth in %                    | 6.20%     | -10.00%   | -10.00%   | 10.00%    | 12.00%    | 12.00%    | 11.00%    | 7.00%     |
| Gross margin                   | 2,322,952 | 2,054,099 | 1,777,341 | 2,214,800 | 2,525,677 | 2,828,759 | 3,139,922 | 3,299,722 |
| gross margin in % of net sales | 51.40%    | 50.50%    | 48.56%    | 55.00%    | 56.00%    | 56.00%    | 56.00%    | 55.00%    |
| EBITDA                         | 1,069,748 | 738,105   | 424,726   | 712,241   | 938,065   | 1,215,806 | 1,455,490 | 1,585,226 |
| EBITDA in % of net sales       | 23.67%    | 18.15%    | 11.60%    | 17.69%    | 20.80%    | 24.07%    | 25.96%    | 26.42%    |
| Result before taxes            | 971,200   | 641,602   | 335,695   | 637,241   | 863,065   | 1,140,806 | 1,380,490 | 1,510,226 |

Graphically, the financial history (2015-2017) and the financial forecast (2018-2022) of Trend can be presented as follows, presenting the turnover, gross margin and operating profit before depreciation, interest and tax (EBITDA).



The main principles underlying the valuation of Trend are as follows:

- After years of declining sales and gross margin (2015 to 2017, but also before), net sales and gross margin in the period 2018 to 2022 are expected to grow above the level before 2015.
- Operating profit (EBITDA) is also assumed to rise in the period 2018 to 2022, to the pre-2015 level.

Based on the globally accepted and widely used Discounted Cash Flow (DCF) method, according to the valuation expert, the value of 100% of the shares in Trend amounts to **EUR 5.067 million** (rounded) as of 1 January 2018. This outcome follows, inter alia, from Trend's financial forecast for the period 2018-2022 and thereafter (the residual period; the period after 2022).

The DCF method calculates the company's (free) cash flows that are freely available (on an annual basis) to all providers of capital (i.e., shareholders and other providers of capital), and discounts these cash flows against a risk profile expressed as a percentage (i.e., the cost of capital; determined at 18.6% in this value calculation) which percentage reflects the

risks associated with realizing these free cash flows. The DCF method is a valuation method based on economic principles instead of accounting principles. The value of the shares of Trend is equal to the value of the company, because Trend has no net debt per the valuation date.

Below you will find the summary of the valuation expert's valuation calculation.

| EUR'                                      | 31-12-18         | 31-12-19       | 31-12-20         | 31-12-21         | 31-12-22         | RV               |
|-------------------------------------------|------------------|----------------|------------------|------------------|------------------|------------------|
| <b>EBIT</b>                               | <b>637,241</b>   | <b>863,065</b> | <b>1,140,806</b> | <b>1,380,490</b> | <b>1,510,226</b> |                  |
| Taxes                                     | (149,310)        | (205,766)      | (275,201)        | (335,123)        | (367,556)        |                  |
| NOPLAT                                    | 487,931          | 657,299        | 865,604          | 1,045,368        | 1,142,669        |                  |
| Plus: depreciation                        | 75,000           | 75,000         | 75,000           | 75,000           | 75,000           |                  |
| Minus: investments in fixed assets        | (90,000)         | (89,000)       | (83,000)         | (76,000)         | (75,000)         |                  |
| Plus/minus: change in net working capital | 2,061            | (62,237)       | (74,585)         | (76,577)         | (60,381)         |                  |
| <b>Free Cash Flow</b>                     | <b>474,992</b>   | <b>581,062</b> | <b>783,019</b>   | <b>967,791</b>   | <b>1,082,288</b> | <b>1,103,934</b> |
| Residual Value                            |                  |                |                  |                  |                  | 6,650,206        |
| Growth rate                               |                  |                |                  |                  |                  | 2.00%            |
| Reu (Return on Equity Unlevered)          | 18.6%            | 18.6%          | 18.6%            | 18.6%            | 18.6%            | 18.6%            |
| Time to cash flow                         | 1.00             | 2.00           | 3.00             | 4.00             | 5.00             | 5.00             |
| Discount rate: 18.6%                      | 0.843            | 0.711          | 0.599            | 0.506            | 0.426            | 0.426            |
| Present value Free Cash Flow              | 400,500          | 413,098        | 469,373          | 489,151          | 461,232          | 2,834,077        |
| Present value forecast period             | 2,233,364        |                |                  |                  |                  |                  |
| Present value of the residual value       | 2,834,077        |                |                  |                  |                  |                  |
| <b>Enterprise Value</b>                   | <b>5,067,430</b> |                |                  |                  |                  |                  |
| Plus: excess cash                         | -                |                |                  |                  |                  |                  |
| Minus: interest bearing debt              | -                |                |                  |                  |                  |                  |
| <b>Equity Value</b>                       | <b>5,067,430</b> |                |                  |                  |                  |                  |

*Appendix B1: Nationalities of the Participants*

*Table 18. Overview of the participants' nationalities*

|                | <i>N</i> | %    | Cumulative % |                 | <i>N</i> | %   | Cumulative % |
|----------------|----------|------|--------------|-----------------|----------|-----|--------------|
| United Kingdom | 72       | 26.5 | 26.5         | Italy           | 2        | .7  | 91.9         |
| Australia      | 44       | 16.2 | 42.6         | Luxembourg      | 2        | .7  | 92.6         |
| South Africa   | 25       | 9.2  | 51.8         | Portugal        | 2        | .7  | 93.4         |
| Canada         | 15       | 5.5  | 57.4         | Singapore       | 2        | .7  | 94.1         |
| United States  | 13       | 4.8  | 62.1         | Slovakia        | 2        | .7  | 94.9         |
| Netherlands    | 13       | 4.8  | 66.9         | Belgium         | 1        | .4  | 95.2         |
| Nigeria        | 12       | 4.4  | 71.3         | Bermuda         | 1        | .4  | 95.6         |
| Brazil         | 10       | 3.7  | 75.0         | Brit.Virg. Isl. | 1        | .4  | 96.0         |
| New Zealand    | 7        | 2.6  | 77.6         | Cayman Islands  | 1        | .4  | 96.3         |
| Ireland        | 6        | 2.2  | 79.8         | Colombia        | 1        | .4  | 96.7         |
| China          | 4        | 1.5  | 81.3         | Ghana           | 1        | .4  | 97.1         |
| Finland        | 4        | 1.5  | 82.7         | Hungary         | 1        | .4  | 97.4         |
| Russia         | 4        | 1.5  | 84.2         | Jamaica         | 1        | .4  | 97.8         |
| Argentina      | 3        | 1.1  | 85.3         | Peru            | 1        | .4  | 98.2         |
| Japan          | 3        | 1.1  | 86.4         | Philippines     | 1        | .4  | 98.5         |
| Malaysia       | 3        | 1.1  | 87.5         | Poland          | 1        | .4  | 98.9         |
| Bahamas        | 2        | .7   | 88.2         | Romania         | 1        | .4  | 99.3         |
| France         | 2        | .7   | 89.0         | Spain           | 1        | .4  | 99.6         |
| Guatemala      | 2        | .7   | 89.7         | Trinidad & Tob. | 1        | .4  | 100          |
| India          | 2        | .7   | 90.4         | <b>TOTAL</b>    | 272      | 100 | 100          |
| Indonesia      | 2        | .7   | 91.2         |                 |          |     |              |

*Appendix B2: Valuation Case (Fashion Retail)**History*

Recently, one of UK's respectable fashion companies, 'International Women Clothing' ('the Company'), went bankrupt. Exceeding an annual turnover of GBP 100 million and having more than 350 people employed, the Company was unable to become profitable during the last years, partly due to a decline in consumer spending. After many years of different retrenchment programs and financial restructurings, no meaningful improvements became visible. In the last year the loss exceeded an amount of GBP 12 million. The banks and financiers of the Company decided to end the funding. A bankruptcy was inevitable after being in the market for more than twenty years.

*Current situation*

We would like you to put yourself in the shoes of the trustee who is appointed by the court and whose main task is to optimize the revenues in the interest of the creditors. There is a potential candidate to relaunch the Company (i.e., going-concern) and that offers a serious chance for continuation of the Company (i.e., by means of a transfer of all assets of the bankrupt Company including most of its personnel). The most important assets are tradenames, distribution rights, clients, inventory, software, and leases of prime properties.

The secured and unsecured creditors of the Company are exposed to a deficit of approx. GBP 25 million, including all costs to settle the estate. You strive to sell the assets of the bankrupt Company for at least this amount to minimize any shortage of the estate. By doing so, you may possibly satisfy all creditors. All Company's stakeholders are of the opinion that these sales proceeds of the assets are realistic to expect. Importantly, outsiders follow the results in this bankruptcy with great interest as the (former) statutory director and main shareholder of the Company is well introduced in high society.

The potential buyer of the assets of the Company is a well-known European private equity firm ('PE-firm') specialized in fashion retail through one of its funds, but above all experienced in turnarounds of distressed companies. To prepare the negotiations with this potential buyer, you need some advice on the estimated value of the assets. Indeed, private equity is known for its financial knowledge and you want to avoid selling the assets too low. To realize a quick deal, you start the negotiations with this potential buyer who you know has the required capital to buy the assets. You hire a valuation professional who provides support in this delicate matter. Although the available budget for this work is limited as it increases the costs of the estate, it may eventually support in maximizing the sales proceeds.

*About the valuation professional and the valuation firm*

You are introduced to a valuator called [Laura/Andrew]<sup>1</sup> Matthews. [Laura/Andrew] Matthews is in [her/his] [twenties/thirties/forties/fifties/sixties] and is a certified valuation analyst accredited by the Association of Certified Business Valuators in the UK. [Laura/Andrew] has a BA in economics with a specialization in business valuation and has worked in different capacities in finance. For quite some years now [she/he] is active as a professional business valuator. [Laura/Andrew] Matthews works for [a/an] [small, local valuation/international Big Four]<sup>2</sup> firm.

*Valuation*

[Laura/Andrew] Matthews performed the valuation and presents the report, explaining the applied valuation assumptions and corresponding calculations in detail. A Discounted Cash Flow method (DCF, i.e. an intrinsic valuation) was used to calculate the present value of the future cash flows, applying an appropriate discount rate. The content of the valuation report includes the following main topics:

- About the DCF-method
- Historical performance
- Return on capital, Reinvestment rate and Growth rate
- Cash flow (from assets) projection
- Discount rate
- DCF-value of the assets (reflecting cash flow, growth, risk)

Unfortunately, it appears that the assets are valued at (rounded) GBP 18 million, around GBP 7 million less than the creditors deficit. Although a potential sale of GBP 18 million would imply a (mean) recovery rate of around 72%, senior unsecured and senior subordinated bond holders will lose a lot of money, contrary to earlier expectations.

The conclusion of the valuator is that based on the assumptions described in the report, the value of the assets at valuation date is GBP 18.25 million. Based on this outcome, a sale of the assets will very likely result in a deficit of the estate. Moreover, in the negotiations with the potential buyer it will now become more difficult to achieve sales proceeds close to GBP 25 million as they will probably do their math as well.

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1 NB either Laura or Andrew, resp. his or her, resp. twenties or thirties or forties or fifties or sixties, depending on the experimental condition.

2 NB either a small, local valuation firm, or an international Big Four firm, depending on the experimental condition.

*Appendix B3: Positive and negative outcome scenarios<sup>3</sup>**Positive deal:*

You moved forward with the PE-firm and started the negotiations based on the GBP 18 million valuation. The buyer probably made his own calculations as they were reluctant to accept the value of GBP 18 million. The Company's creditors and other stakeholders were surprised by how long the deal took to close, knowing that private equity normally is keen to jump on a good opportunity. During the negotiation process, you were approached by a few other interested parties who ended their interest after hearing the negotiation price was GBP 18 million. Nonetheless, in the end the deal was closed for GBP 18 million. The Company's creditors and other stakeholders felt that the deal was a good one and that a higher price for the assets was unattainable. They reported feeling satisfied, believing that a deal to cover the whole deficit of the estate was not feasible.

*Negative deal:*

You moved forward with the PE-firm and started the negotiations based on the GBP 18 million valuation. The buyer probably made his own calculations as they accepted the value of GBP 18 million instantly. The Company's creditors and other stakeholders were surprised by how fast the deal was closed, knowing that private equity normally takes the time to negotiate. Additionally, after closing this deal, you were approached by a few other interested parties who indicated a value of GBP 25 million and above. Based on these factors, the Company's creditors and other stakeholders felt that the deal was not a good one and that a higher price for the assets was attainable. They reported feeling frustrated, believing that a good enough deal to cover the whole deficit of the estate was feasible.

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3 NB either positive deal, or negative deal, depending on the experimental condition.

*Appendix C1: Nationalities of the participants Study 1.*

|                 | <i>N</i> | %    | Cumulative % |                | <i>N</i> | %   | Cumulative % |
|-----------------|----------|------|--------------|----------------|----------|-----|--------------|
| United States   | 58       | 31.4 | 31.4         | Egypt          | 1        | .5  | 93.0         |
| The Netherlands | 43       | 23.2 | 54.6         | Armenia        | 1        | .5  | 93.5         |
| Canada          | 23       | 12.4 | 66.7         | Albania        | 1        | .5  | 94.1         |
| Italy           | 10       | 5.4  | 72.0         | Brazil         | 1        | .5  | 94.6         |
| South Africa    | 8        | 4.3  | 76.3         | Japan          | 1        | .5  | 95.2         |
| Australia       | 6        | 3.2  | 79.6         | Poland         | 1        | .5  | 95.7         |
| UK              | 5        | 2.7  | 82.3         | New Zealand    | 1        | .5  | 96.2         |
| Germany         | 4        | 2.2  | 84.4         | Nigeria        | 1        | .5  | 96.8         |
| Not specified   | 4        | 2.2  | 86.6         | Pakistan       | 1        | .5  | 97.3         |
| Kenya           | 3        | 1.6  | 88.2         | Mauritius      | 1        | .5  | 97.8         |
| Zimbabwe        | 2        | 1.1  | 89.2         | Cayman Islands | 1        | .5  | 98.4         |
| India           | 2        | 1.1  | 90.3         | Mexico         | 1        | .5  | 98.9         |
| Switzerland     | 2        | 1.1  | 91.4         | Ivory Coast    | 1        | .5  | 99.5         |
| Belgium         | 1        | .5   | 91.9         | Taiwan         | 1        | .5  | 100          |
| Uganda          | 1        | .5   | 92.5         | <b>TOTAL</b>   | 186      | 100 | 100          |

### Appendix C2: Valuation Case (Case Flagship)

#### History

Flagship B.V. (the 'Company') is a Dutch advertisement and marketing agency that creates and implements large scale marketing campaigns for reputable brands. Today, Flagship serves corporate clients (representing 95% of net sales), predominately Dutch corporates and subsidiaries of international corporates in the Netherlands.

The Company is owned by two shareholders, neither of which is involved in day-to-day operations as the Company is managed by Mr Alfred de Boer ('De Boer'), the Company's charismatic CEO for more than ten years now. Both shareholders delegated a Supervisory Board Member (i.e. Roland Hofmann and Frederik van Buuren) to supervise, control and monitor the Company and the shareholders' interest.

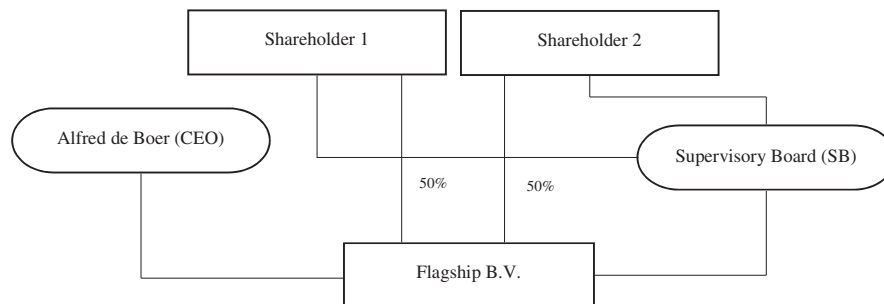


Figure 25. Organizational structure.

Since a few years, both the operating result and net income of the Company are negative due to declining sales and increasing costs. Furthermore, the Company struggles to make a solid transformation to today's customer needs that involve online and technology driven solutions.

As a response, the Company tried to make a shift to online advertisement and marketing campaigns. However, in addition to facing difficult economic circumstances, the Company suffered predominately from its outdated image and product offering. As a result, reductions in client spending continued, while the entrance of new players with technology driven product offerings caused a further decline.

According to both shareholders and the Supervisory Board ('SB'), the Company lacks a vision for the future. If in the short term a new strategy will not become successful, an insolvency scenario may arise.

#### Financial situation

The last few years, the shareholders contributed equity to the Company to cover past losses and provide working capital. It is evident that new capital is required to finance a necessary turnaround, but the financial resources of the shareholders have dried up. Bank loans are not achievable due to

the last years' poor performance. Hence, both De Boer and the SB are in a squeeze. On the one hand there is a viable turnaround plan available (details provided below), but on the other hand there is no funding to finance this turnaround plan. Therefore, alternative financing options have to be explored. During a meeting with the shareholders it is decided that a new shareholder must come on board to safeguard the Company's future.

Through a reputable M&A advisor, the Company is informed that a London based private equity firm called *Growth European Partners* (hereafter: 'GEP'), specialized in tech, media and entertainment, showed concrete interest. The Company is warned, however, that private equity firms will require a significant percentage of shares in these kinds of circumstances and generally consider these types of deals as 'take it or leave it'. Furthermore, private equity firms in general are not willing to acquire the existing shares of companies in distress, but require that new shares are issued. While the Company's shareholders do not seem to have many options, they are reluctant to accept a significant dilution of their interest, considering the amount of equity they contributed over the years.

#### *Turnaround*

Both the Company and GEP do agree that a turnaround, of which a new strategy is an important part, is essential to enhance the value of the Company after a period of poor organizational performance. De Boer and his team defined a roadmap to profitability by increasing sales, reducing costs, efficient management of working capital, and making (catch-up) investments (i.e. operational expenditures). This plan can be qualified as a 'Growth and Development' plan.

The main interventions to revitalize Flagship are:

*Table 19. Overview turnaround and strategic interventions.*

|   | Element                                                 | Turnaround action                                                                                                                                                                                                           |
|---|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Crisis stabilization, leadership, organizational change | <ul style="list-style-type: none"> <li>– Cash management</li> <li>– Short-term financing</li> <li>– Direct cost reduction</li> <li>– Control on operational performance</li> <li>– Building commitment of people</li> </ul> |
| 2 | Strategic focus                                         | <ul style="list-style-type: none"> <li>– Redefine core business</li> <li>– New client types (small and mid-market) and new industries</li> <li>– Technology driven (scalable) product offerings</li> </ul>                  |
| 3 | Process improvements                                    | <ul style="list-style-type: none"> <li>– Improvement of sales and marketing management</li> <li>– Improvement of planning and control cycle</li> <li>– Technology and agility driven processes</li> </ul>                   |

### Appendix C3: Valuation Report (Low Anchor)

#### Summary: Valuation of Flagship B.V. per 31 December 2017

| Profit and loss – Flagship B.V. |              |              |              |              |              |              |              |               |               |               |               |
|---------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|
| EUR '000                        | 2014A        | 2015A        | 2016A        | 2017A        | 2018F        | 2019F        | 2020F        | 2021F         | 2022F         | 2023F         | 2024F         |
| <b>Net Sales</b>                | <b>8,316</b> | <b>7,177</b> | <b>6,966</b> | <b>6,509</b> | <b>6,045</b> | <b>7,487</b> | <b>8,715</b> | <b>10,048</b> | <b>11,304</b> | <b>11,530</b> | <b>11,761</b> |
| % growth                        | 12.6%        | (13.7)%      | (2.9)%       | (6.6)%       | (7.1)%       | 23.8%        | 16.4%        | 15.3%         | 12.6%         | 2.0%          | 2.0%          |
| <b>Operational EBITDA</b>       | <b>4</b>     | <b>150</b>   | <b>243</b>   | <b>426</b>   | <b>(544)</b> | <b>(89)</b>  | <b>244</b>   | <b>610</b>    | <b>810</b>    | <b>835</b>    | <b>851</b>    |
| % of net sales                  | 0.0%         | 2.1%         | 3.6%         | 6.6%         | (9.0)%       | (1.2)%       | 2.8%         | 6.2%          | 7.2%          | 7.2%          | 7.2%          |
| Non-recurring expenses          | -            | -            | -            | -            | (250)        | (250)        | -            | -             | -             | -             | -             |
| <b>EBITDA</b>                   | <b>4</b>     | <b>150</b>   | <b>243</b>   | <b>426</b>   | <b>(794)</b> | <b>(339)</b> | <b>244</b>   | <b>610</b>    | <b>810</b>    | <b>835</b>    | <b>851</b>    |
| % of net sales                  | 0.0%         | 2.1%         | 3.6%         | 6.6%         | (13.1)%      | (4.5)%       | 2.8%         | 6.2%          | 7.2%          | 7.2%          | 7.2%          |

| Net working capital – Flagship B.V.  |              |              |              |              |              |              |              |               |                |                |                |
|--------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|
| EUR '000                             | 2014A        | 2015A        | 2016A        | 2017A        | 2018F        | 2019F        | 2020F        | 2021F         | 2022F          | 2023F          | 2024F          |
| <b>Net Sales</b>                     | <b>8,316</b> | <b>7,177</b> | <b>6,966</b> | <b>6,509</b> | <b>6,045</b> | <b>7,487</b> | <b>8,715</b> | <b>10,048</b> | <b>11,304</b>  | <b>11,530</b>  | <b>11,761</b>  |
| <b>Current Assets</b>                | <b>1,604</b> | <b>1,633</b> | <b>1,556</b> | <b>1,341</b> | <b>710</b>   | <b>879</b>   | <b>1,024</b> | <b>1,100</b>  | <b>1,326</b>   | <b>1,354</b>   | <b>1,382</b>   |
| % of net sales                       | 19.3%        | 22.8%        | 22.3%        | 20.6%        | 11.7%        | 11.7%        | 11.7%        | 11.7%         | 11.7%          | 11.7%          | 11.7%          |
| <b>Current Liabilities</b>           | <b>1,391</b> | <b>1,290</b> | <b>1,268</b> | <b>1,096</b> | <b>1,290</b> | <b>1,579</b> | <b>1,815</b> | <b>2,119</b>  | <b>2,374</b>   | <b>2,418</b>   | <b>2,472</b>   |
| % of net sales                       | 16.7%        | 18.0%        | 18.5%        | 16.8%        | 21.3%        | 21.1%        | 20.8%        | 21.1%         | 21.0%          | 21.0%          | 21.0%          |
| <b>Working capital</b>               | <b>213</b>   | <b>343</b>   | <b>288</b>   | <b>245</b>   | <b>(580)</b> | <b>(699)</b> | <b>(792)</b> | <b>(930)</b>  | <b>(1,046)</b> | <b>(1,064)</b> | <b>(1,091)</b> |
| % of net sales                       | 2.6%         | 4.8%         | 3.8%         | 3.8%         | (9.6)%       | (9.3)%       | (9.1)%       | (9.3)%        | (9.3)%         | (9.2)%         | (9.3)%         |
| <b>Investment in Working Capital</b> | <b>n/a</b>   | <b>130</b>   | <b>(75)</b>  | <b>(23)</b>  | <b>(825)</b> | <b>(119)</b> | <b>(82)</b>  | <b>(147)</b>  | <b>(188)</b>   | <b>(18)</b>    | <b>(27)</b>    |

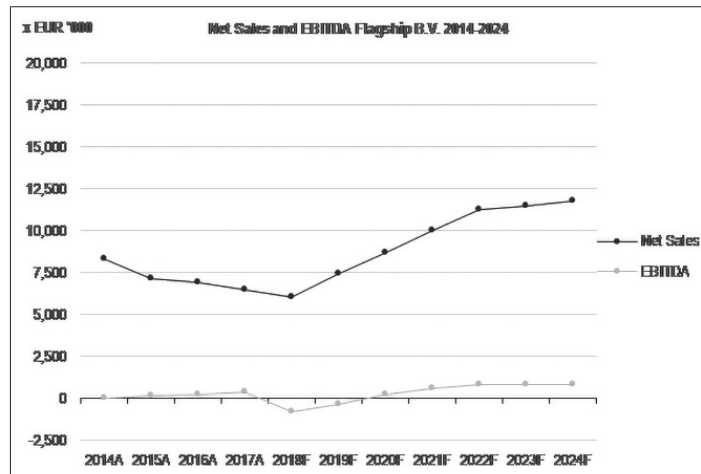
| Tangible fixed assets – Flagship B.V. |              |              |              |              |              |              |              |               |               |               |               |
|---------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|
| EUR '000                              | 2014A        | 2015A        | 2016A        | 2017A        | 2018F        | 2019F        | 2020F        | 2021F         | 2022F         | 2023F         | 2024F         |
| <b>Net Sales</b>                      | <b>8,316</b> | <b>7,177</b> | <b>6,966</b> | <b>6,509</b> | <b>6,045</b> | <b>7,487</b> | <b>8,715</b> | <b>10,048</b> | <b>11,304</b> | <b>11,530</b> | <b>11,761</b> |
| <b>Tangible fixed assets</b>          | <b>281</b>   | <b>225</b>   | <b>169</b>   | <b>112</b>   | <b>56</b>    | <b>60</b>    | <b>65</b>    | <b>65</b>     | <b>100</b>    | <b>100</b>    | <b>85</b>     |
| Tangible fixed assets BoP             | 281          | 225          | 169          | 112          | 56           | 60           | 65           | 65            | 100           | 100           | 85            |
| <b>Tangible fixed assets EoP</b>      | <b>225</b>   | <b>169</b>   | <b>112</b>   | <b>56</b>    | <b>60</b>    | <b>65</b>    | <b>65</b>    | <b>100</b>    | <b>100</b>    | <b>85</b>     | <b>70</b>     |
| % of net sales                        | 2.7%         | 2.3%         | 1.6%         | 0.9%         | 1.0%         | 0.9%         | 0.7%         | 1.0%          | 0.9%          | 0.7%          | 0.6%          |
| CAPEX in DCF                          | -            | -            | -            | -            | 75           | 25           | 25           | 75            | 50            | 25            | 25            |
| Depreciation in DCF                   | (56)         | (56)         | (56)         | (56)         | (71)         | (20)         | (25)         | (40)          | (50)          | (40)          | (40)          |

| Balance sheet – Flagship B.V. |  | 31-12      |
|-------------------------------|--|------------|
| EUR '000                      |  | 2017A      |
| <b>Tangible Assets</b>        |  | <b>56</b>  |
| Current Assets                |  | 1,341      |
| Current Liabilities           |  | 1,096      |
| <b>Working capital</b>        |  | <b>245</b> |
| <b>Invested Capital</b>       |  | <b>301</b> |
| Equity                        |  | 301        |
| Net debt                      |  | -          |
| <b>Total funding</b>          |  | <b>301</b> |

| Cost of Capital           | Valuation Date |
|---------------------------|----------------|
| Riskfree Rate (RF)        | 1.50%          |
| Market Risk Premium (MRP) | 6.00%          |
| Equity Beta               | 1.20           |
| Small Firm Premium (SFP)  | 3.50%          |
| <b>WACC</b>               | <b>12.20%</b>  |

| Main valuation assumptions                                               |
|--------------------------------------------------------------------------|
| Valuation Date: December 31, 2017                                        |
| The majority of operational risk is incorporated in the free cash flows. |
| Loss that can be carry forward have not been taken into account.         |
| Corporate taxes are assumed to be settled in the relevant year.          |
| (Losses > taxes to be returned, Profits > taxes to be paid)              |
| <b>In this case, Enterprise Value is equal to Shareholder Value.</b>     |

| DCF analysis - Flagship B.V.                    |              |              |              |               |               |               |               |               |
|-------------------------------------------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|
| EUR '000                                        | 2018F        | 2019F        | 2020F        | 2021F         | 2022F         | 2023F         | 2024F         | Res. Value    |
| <b>Net Sales</b>                                | <b>6,045</b> | <b>7,487</b> | <b>9,715</b> | <b>10,048</b> | <b>11,304</b> | <b>11,761</b> | <b>11,761</b> | <b>11,996</b> |
| % growth                                        | (7.1)%       | 23.8%        | 16.4%        | 15.3%         | 12.5%         | 2.0%          | 2.0%          | 2.0%          |
| <b>EBITDA</b>                                   | <b>(794)</b> | <b>(339)</b> | <b>244</b>   | <b>618</b>    | <b>818</b>    | <b>835</b>    | <b>851</b>    | <b>869</b>    |
| % of net sales                                  | (13.1)%      | (4.5)%       | 2.8%         | 6.2%          | 7.2%          | 7.1%          | 7.2%          | 7.2%          |
| Depreciation                                    | (71)         | (20)         | (25)         | (40)          | (50)          | (40)          | (40)          | (25)          |
| <b>EBITA</b>                                    | <b>(866)</b> | <b>(359)</b> | <b>219</b>   | <b>578</b>    | <b>768</b>    | <b>795</b>    | <b>811</b>    | <b>844</b>    |
| % of net sales                                  | (14.3)%      | (4.8)%       | 2.5%         | 5.8%          | 6.8%          | 6.8%          | 6.9%          | 7.0%          |
| Operational taxes: 25.0%                        | 216          | 90           | (65)         | (145)         | (192)         | (199)         | (203)         | (211)         |
| <b>NOPLAT</b>                                   | <b>(649)</b> | <b>(269)</b> | <b>164</b>   | <b>434</b>    | <b>576</b>    | <b>596</b>    | <b>609</b>    | <b>633</b>    |
| Depreciation                                    | 71           | 20           | 25           | 40            | 50            | 40            | 40            | 25            |
| <b>Operational cash flow</b>                    | <b>(578)</b> | <b>(249)</b> | <b>189</b>   | <b>474</b>    | <b>626</b>    | <b>636</b>    | <b>649</b>    | <b>658</b>    |
| Investments fixed assets                        | (75)         | (25)         | (25)         | (75)          | (50)          | (25)          | (25)          | (25)          |
| Investments in net working capital              | 825          | 119          | 92           | 147           | 108           | 18            | 27            | 27            |
| <b>Free cash flow</b>                           | <b>172</b>   | <b>(155)</b> | <b>257</b>   | <b>545</b>    | <b>684</b>    | <b>629</b>    | <b>650</b>    | <b>659</b>    |
| Partial adjustment factor                       | 1.00         | 1.00         | 1.00         | 1.00          | 1.00          | 1.00          | 1.00          | 9.80          |
| Time to cash flow                               | 1.00         | 2.00         | 3.00         | 4.00          | 5.00          | 6.00          | 7.00          | 7.00          |
| Discount rate: 12.20%                           | 0.89         | 0.79         | 0.71         | 0.63          | 0.56          | 0.50          | 0.45          | 0.45          |
| <b>Present value operational free cash flow</b> | <b>153</b>   | <b>(123)</b> | <b>182</b>   | <b>344</b>    | <b>385</b>    | <b>315</b>    | <b>291</b>    | <b>2,888</b>  |
| Present value forecast period                   | 1,547        |              |              |               |               |               |               |               |
| Present value of the residual value             | 2,888        |              |              |               |               |               |               |               |
| <b>Enterprise Value (EV)</b>                    | <b>4,435</b> |              |              |               |               |               |               |               |
| Net debt                                        | -            |              |              |               |               |               |               |               |
| <b>Shareholder Value (SV)</b>                   | <b>4,435</b> |              |              |               |               |               |               |               |



Appendix C4: Valuation Report (High Anchor)

Summary: Valuation of Flagship B.V. per 31 December 2017

| Profit and loss - Flagship B.V. |         |         |         |        |         |        |        |        |        |        |        |
|---------------------------------|---------|---------|---------|--------|---------|--------|--------|--------|--------|--------|--------|
| EUR '000                        | 2014A   | 2015A   | 2016A   | 2017A  | 2018F   | 2019F  | 2020F  | 2021F  | 2022F  | 2023F  | 2024F  |
| Net Sales                       | 8,316   | 7,177   | 6,966   | 6,589  | 7,000   | 10,710 | 13,010 | 15,512 | 10,233 | 10,597 | 10,969 |
| % of net sales                  | 12.5%   | (12.7)% | (12.9)% | (6.6)% | 19.8%   | 37.3%  | 21.5%  | 19.2%  | 17.6%  | 2.0%   | 2.0%   |
| Operational EBITDA              | (1,003) | (662)   | (702)   | (609)  | (625)   | 595    | 1,411  | 2,332  | 3,185  | 3,249  | 3,313  |
| % of net sales                  | (13.0)% | (12.0)% | (10.1)% | (7.0)% | (8.7)%  | 5.6%   | 10.8%  | 15.0%  | 17.5%  | 17.5%  | 17.5%  |
| Non-recurring expenses          | -       | -       | -       | -      | (1,500) | (500)  | -      | -      | -      | -      | -      |
| EBITDA                          | (1,003) | (662)   | (702)   | (609)  | (2,025) | 95     | 1,411  | 2,332  | 3,185  | 3,249  | 3,313  |
| % of net sales                  | (13.0)% | (12.0)% | (10.1)% | (7.0)% | (26.0)% | 0.9%   | 10.8%  | 15.0%  | 17.5%  | 17.5%  | 17.5%  |

| Net working capital - Flagship B.V. |       |       |       |       |       |        |        |        |        |        |        |
|-------------------------------------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|
| EUR '000                            | 2014A | 2015A | 2016A | 2017A | 2018F | 2019F  | 2020F  | 2021F  | 2022F  | 2023F  | 2024F  |
| Net Sales                           | 8,316 | 7,177 | 6,966 | 6,589 | 7,800 | 10,710 | 13,010 | 15,512 | 10,233 | 10,597 | 10,969 |
| Current Assets                      | 1,604 | 1,633 | 1,556 | 1,341 | 1,936 | 2,659  | 3,230  | 3,851  | 4,526  | 4,617  | 4,709  |
| % of net sales                      | 19.3% | 22.8% | 22.3% | 20.6% | 24.8% | 24.8%  | 24.8%  | 24.8%  | 24.8%  | 24.8%  | 24.8%  |
| Current Liabilities                 | 1,391 | 1,290 | 1,208 | 1,096 | 1,664 | 2,250  | 2,710  | 3,271  | 3,629  | 3,900  | 3,987  |
| % of net sales                      | 16.7% | 18.0% | 18.5% | 16.5% | 21.3% | 21.1%  | 20.8%  | 21.1%  | 21.0%  | 21.0%  | 21.0%  |
| Working capital                     | 213   | 343   | 260   | 245   | 272   | 400    | 520    | 580    | 897    | 716    | 722    |
| % of net sales                      | 2.6%  | 4.8%  | 3.8%  | 3.8%  | 3.6%  | 3.7%   | 4.0%   | 3.7%   | 3.8%   | 3.9%   | 3.8%   |
| Investment in Working Capital       | n/a   | 130   | (75)  | (23)  | 27    | 120    | 119    | 60     | 117    | 10     | 5      |

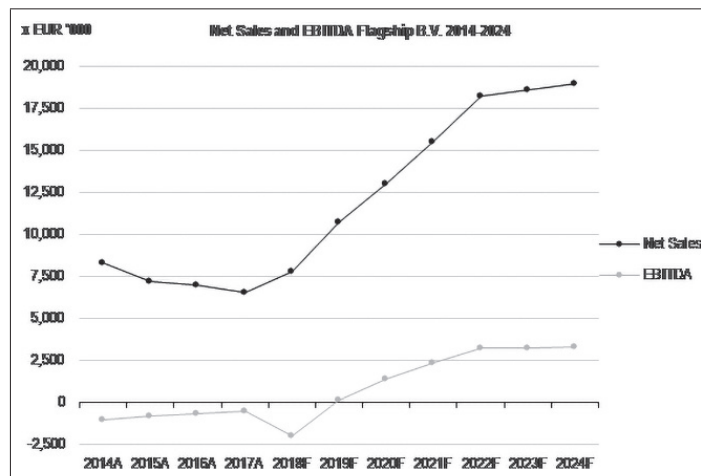
| Tangible fixed assets - Flagship B.V. |       |       |       |       |       |        |        |        |        |        |        |
|---------------------------------------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|
| EUR '000                              | 2014A | 2015A | 2016A | 2017A | 2018F | 2019F  | 2020F  | 2021F  | 2022F  | 2023F  | 2024F  |
| Net Sales                             | 8,316 | 7,177 | 6,966 | 6,589 | 7,000 | 10,710 | 13,010 | 15,512 | 10,233 | 10,597 | 10,969 |
| Tangible fixed assets                 |       |       |       |       |       |        |        |        |        |        |        |
| Tangible fixed assets BoP             | 241   | 225   | 169   | 112   | 56    | 200    | 270    | 210    | 205    | 160    | 150    |
| Tangible fixed assets EoP             | 225   | 169   | 112   | 56    | 200   | 270    | 210    | 205    | 160    | 150    | 151    |
| % of net sales                        | 2.7%  | 2.3%  | 1.6%  | 0.9%  | 2.6%  | 2.5%   | 1.6%   | 1.3%   | 0.9%   | 0.8%   | 0.8%   |
| CAPEX in DCF                          | -     | -     | -     | -     | 250   | 150    | 25     | 100    | 75     | 75     | 70     |
| Depreciation in DCF                   | (56)  | (56)  | (56)  | (56)  | (106) | (80)   | (85)   | (106)  | (120)  | (85)   | (89)   |

| Balance sheet - Flagship B.V. |  | 31-12 |
|-------------------------------|--|-------|
| EUR '000                      |  | 2017A |
| Tangible Assets               |  | 56    |
| Current Assets                |  | 1,341 |
| Current Liabilities           |  | 1,096 |
| Working capital               |  | 245   |
| Invested Capital              |  | 301   |
| Equity                        |  | 301   |
| Net debt                      |  | -     |
| Total funding                 |  | 301   |

| Main valuation assumptions                                               |  |
|--------------------------------------------------------------------------|--|
| Valuation Date: December 31, 2017                                        |  |
| The majority of operational risk is incorporated in the free cash flows. |  |
| Loss that can be carry forward have not been taken into account.         |  |
| Corporate taxes are assumed to be settled in the relevant year.          |  |
| (Losses > taxes to be returned, Profits > taxes to be paid)              |  |
| In this case, Enterprise Value is equal to Shareholder Value.            |  |

| Cost of Capital           |  | Valuation Date |
|---------------------------|--|----------------|
| Riskfree Rate (RF)        |  | 1,50%          |
| Market Risk Premium (MRP) |  | 6,00%          |
| Equit Beta                |  | 1,20           |
| Small Firm Premium (SFP)  |  | 3,50%          |
| WACC                      |  | 12,20%         |

| DCF analysis – Flagship B.V.                 |                |               |               |               |               |               |               |               |
|----------------------------------------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| EUR '000                                     | 2019F          | 2019F         | 2020F         | 2021F         | 2022F         | 2023F         | 2024F         | Res. Value    |
| <b>Net Sales</b>                             | <b>7,800</b>   | <b>10,710</b> | <b>13,010</b> | <b>15,512</b> | <b>18,233</b> | <b>18,969</b> | <b>18,969</b> | <b>19,349</b> |
| % growth                                     | 19.8%          | 37.3%         | 21.5%         | 19.2%         | 17.5%         | 2.0%          | 2.0%          | 2.0%          |
| <b>EBITDA</b>                                | <b>(2,825)</b> | <b>95</b>     | <b>1,411</b>  | <b>2,332</b>  | <b>3,105</b>  | <b>3,249</b>  | <b>3,313</b>  | <b>3,388</b>  |
| % of net sales                               | (26.0)%        | 0.9%          | 10.8%         | 15.0%         | 17.5%         | 17.1%         | 17.5%         | 17.5%         |
| Depreciation                                 | (106)          | (80)          | (85)          | (105)         | (120)         | (85)          | (69)          | (70)          |
| <b>EBITA</b>                                 | <b>(2,131)</b> | <b>15</b>     | <b>1,326</b>  | <b>2,227</b>  | <b>3,085</b>  | <b>3,164</b>  | <b>3,244</b>  | <b>3,318</b>  |
| % of net sales                               | (27.3)%        | 0.1%          | 10.2%         | 14.4%         | 16.8%         | 16.7%         | 17.1%         | 17.1%         |
| Operational taxes: 25.0%                     | 533            | (4)           | (331)         | (557)         | (766)         | (791)         | (811)         | (827)         |
| <b>NOPLAT</b>                                | <b>(1,599)</b> | <b>11</b>     | <b>994</b>    | <b>1,670</b>  | <b>2,299</b>  | <b>2,373</b>  | <b>2,433</b>  | <b>2,492</b>  |
| Depreciation                                 | 106            | 80            | 85            | 105           | 120           | 85            | 69            | 70            |
| <b>Operational cash flow</b>                 | <b>(1,492)</b> | <b>91</b>     | <b>1,079</b>  | <b>1,775</b>  | <b>2,419</b>  | <b>2,458</b>  | <b>2,502</b>  | <b>2,562</b>  |
| Investments fixed assets                     | (250)          | (150)         | (25)          | (100)         | (75)          | (75)          | (70)          | (70)          |
| Investments in net working capital           | (27)           | (128)         | (119)         | (60)          | (117)         | (19)          | (5)           | (5)           |
| <b>Free cash flow</b>                        | <b>(1,769)</b> | <b>(188)</b>  | <b>935</b>    | <b>1,615</b>  | <b>2,226</b>  | <b>2,363</b>  | <b>2,427</b>  | <b>2,477</b>  |
| Partial adjustment factor                    | 1.00           | 1.00          | 1.00          | 1.00          | 1.00          | 1.00          | 1.00          | 9.80          |
| Time to cash flow                            | 1.00           | 2.00          | 3.00          | 4.00          | 5.00          | 6.00          | 7.00          | 7.00          |
| Discount rate: 12.20%                        | 0.89           | 0.79          | 0.71          | 0.63          | 0.56          | 0.50          | 0.45          | 0.45          |
| <b>Present value operational free cash f</b> | <b>(1,577)</b> | <b>(149)</b>  | <b>662</b>    | <b>1,019</b>  | <b>1,252</b>  | <b>1,185</b>  | <b>1,084</b>  | <b>10,848</b> |
| Present value forecast period                | 3,476          |               |               |               |               |               |               |               |
| Present value of the residual value          | 10,848         |               |               |               |               |               |               |               |
| <b>Enterprise Value (EV) (Rounded)</b>       | <b>14,324</b>  |               |               |               |               |               |               |               |
| Net debt                                     | -              |               |               |               |               |               |               |               |
| <b>Shareholder Value (SV)</b>                | <b>14,324</b>  |               |               |               |               |               |               |               |



*Appendix C5: Perceived Decline Scale*

- The environment (i.e. market and economic circumstances) faced by Flagship presents challenges that will definitely be resolved by Flagship. (R)
- Despite the poor performance of the last few years, Flagship has the means to resolve the challenges presented by its environment. (R)
- The environment faced by Flagship offers many courses of action that are likely to lead to significant gains. (R)
- Flagship's managers have many turnaround options in response to Flagship's current situation. (R)
- Without additional funding by a private equity firm, Flagship still has enough resources to survive on the short term and to continue daily operations. (R)
- Flagship's managers have enough time left to execute a successful turnaround. (R)
- Flagship will likely fail any day and declare bankruptcy.

**(R) = recoded**

*Appendix C6: Locus of Strategic Control scale*

- Market opportunities in an industry are largely determined by factors beyond a company's control.
- Many of the problems experienced by businesses can be avoided through careful planning and analysis. (R)
- Most companies can have an influence in shaping the market. (R)
- Businesses that rarely experience strategic problems are just plain lucky.
- A company can pretty much accomplish what it sets out to achieve. (R)
- There is little point in engaging in detailed strategic analyses and planning because often events occur that a company cannot control.
- Usually companies fail because they have not taken advantage of their opportunities. (R)
- With respect to competing in the marketplace, most companies are victims of forces they cannot control.
- It is not always wise to make strategic plans far ahead because many things turn out to be a matter of good or bad fortune anyhow.
- Being a successful company is a matter of creating opportunities, luck has little or nothing to do with it. (R)

**(R) = recoded**

*Appendix C7: Nationalities of the participants of Study 2.*

|               | N  | %    | Cumulative % |              | N   | %   | Cumulative % |
|---------------|----|------|--------------|--------------|-----|-----|--------------|
| United States | 50 | 34.5 | 34.5         | Brazil       | 2   | 1.4 | 90.3         |
| Canada        | 22 | 15.2 | 49.7         | Kenya        | 2   | 1.4 | 91.7         |
| Italy         | 12 | 8.3  | 57.9         | Nigeria      | 2   | 1.4 | 93.1         |
| Germany       | 8  | 5.5  | 63.4         | Egypt        | 1   | 0.7 | 93.8         |
| UK            | 6  | 4.1  | 67.6         | Kazakhstan   | 1   | 0.7 | 94.5         |
| South Africa  | 6  | 4.1  | 71.7         | Korea        | 1   | 0.7 | 95.2         |
| France        | 4  | 2.8  | 74.5         | Mexico       | 1   | 0.7 | 95.9         |
| China         | 3  | 2.1  | 76.6         | Norway       | 1   | 0.7 | 96.6         |
| India         | 3  | 2.1  | 78.6         | Poland       | 1   | 0.7 | 97.2         |
| Russia        | 3  | 2.1  | 80.7         | Serbia       | 1   | 0.7 | 97.9         |
| Tunisia       | 3  | 2.1  | 82.8         | Slovenia     | 1   | 0.7 | 98.6         |
| Other         | 3  | 2.1  | 84.8         | Sweden       | 1   | 0.7 | 99.3         |
| Albania       | 2  | 1.4  | 86.2         | Zimbabwe     | 1   | 0.7 | 100          |
| Australia     | 2  | 1.4  | 87.6         | <b>TOTAL</b> | 145 | 100 | 100          |
| Belgium       | 2  | 1.4  | 89.0         |              |     |     |              |

*Appendix D1: Overview of participants*

| Name                  | Last name            | Company*                    | Country         | Referent |
|-----------------------|----------------------|-----------------------------|-----------------|----------|
| Mr. Kazuto            | Adachi               | Duff & Phelps               | Japan           | Yes      |
| Mr. Sergio            | Almeida              | EY                          | Brazil          | Yes      |
| Mr. Andrea            | Boasso               | EY                          | Italy           | Yes      |
| Mr. Jinphil           | Cho                  | EY                          | Canada          | Yes      |
| Mr. Viktor            | Fredlund             | EY                          | Sweden          | Yes      |
| Ms. Susana            | Furquim Xavier Couto | Wulaia Consultants          | Brazil          | Yes      |
| Mr. Richard           | Ginsberg             | Deloitte                    | Canada          | Yes      |
| Mr. Jean-Luc          | Guitera              | KPMG                        | France          | Yes      |
| Mr. Gerard            | Holdrinet            | BHP & Co                    | The Netherlands | Yes      |
| Mr. Joris             | Kersten              | Kersten CF                  | The Netherlands | Yes      |
| Mr. Doug              | McPhee               | KPMG                        | UK              | Yes      |
| Mr. Mathieu           | Mulders              | Monitoring Trustee Partners | The Netherlands | Yes      |
| Mr. Richard           | Peeters              | BHP & Co                    | The Netherlands | Yes      |
| Mr. Daniël            | Peters               | BHP & Co                    | The Netherlands | Yes      |
| Mr. Guido             | Rooijackers          | Sman Business Value         | The Netherlands | Yes      |
| Ms. Nyla              | Roopnarinesingh      | Crowe Soberman              | Canada          | Yes      |
| Mr. Gurpreet          | Singh                | EY                          | Kenya           | Yes      |
| Mr. Jan Jaap          | Snel                 | Monitoring Trustee Partners | The Netherlands | Yes      |
| Mr. Ahmed             | Taieb                | Deloitte                    | France          | Yes      |
| Mr. Jan Willem        | van den Hof          | Value Creation              | The Netherlands | Yes      |
| Mr. Pieter Christiaan | van Prooijen         | Hermes Advisory             | The Netherlands | Yes      |
| Mr. Dr. Jeroen        | Weimer               | Value Insights              | The Netherlands | Yes      |
|                       |                      |                             | United States   | No       |
|                       |                      |                             | South Africa    | No       |
|                       |                      |                             | The Netherlands | No       |
|                       |                      |                             | India           | No       |
|                       |                      |                             | Germany (2×)    | No       |
|                       |                      |                             | Spain           | No       |
|                       |                      |                             | Italy           | No       |

\* Company participant worked for at the time of completion of the digital interview.



## Curriculum Vitae

Marc Jacques Robert Broekema was born on 16 April 1971 in Leiden, The Netherlands. After attending his secondary education, he obtained a bachelor's degree in economics and master's degrees in marketing management, economics (valuation), and law. Afterwards, he completed post-master education to accomplish an accreditation as certified business valuator (Register Valuator) and forensic (judicial) expert witness. In 2016, he enrolled as an external PhD candidate at Leiden Law School under the supervision of Prof. Van der Rest.

In 2016, he co-founded BFI, an independent boutique firm, based in Amsterdam, with an international focus specialized in valuations issues, (forensic) investigations, economic damages assessments, disputes, bankruptcy related financial analyses, and business reviews. He advises predominately shareholders, corporate executives, and legal professionals on complex valuation issues and economic damages within the context of corporate and commercial litigation. He is regularly appointed by Dutch courts as an independent valuation expert, as a party valuation expert to represent an individual interest, or he participates in (court appointed) expert committees where he acts in cases taking place in different jurisdictions and under different procedural rules.

Additionally, he is a member of the disciplinary council and council of appeal of the Dutch association of business valuers (NiRV) and lectures regularly on valuation issues. In 2018 and 2019 he was awarded by Finance Monthly (UK) as Valuation and Appraisal Adviser of the year for the Netherlands.



In the range of books published by the Meijers Research Institute and Graduate School of Leiden Law School, Leiden University, the following titles were published in 2019 and 2020:

- MI-316 R. Zandvliet, *Trade, Investment and Labour: Interactions in International Law*, (diss. Leiden), Amsterdam: Ipskamp Printing 2019
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- MI-332 M. Wensveen, *Eigen haard is goud waard? Een studie naar de woonsituatie, het verhuisgedrag en recidive van (ex-)gedetineerden*, (diss. Leiden), Amsterdam: Ipskamp Printing 2019, ISBN 978 94 0281 780 5
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