

The Characteristics of Successful M&A

A Case Study on Handelsbanken's Acquisition of Heartwood

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ABSTRACT

Some finance scholars argue that mergers and acquisitions (M&A) provide little to no value to the parties involved in the transaction, especially the acquirer. Such conclusions are usually drawn from analyzing the impact of the transaction on tangible quantitative measures such as stock price and return-based metrics. Through a case study analysis of the acquisition of the UK wealth management firm Heartwood by the Swedish bank Handelsbanken, the authors will provide the reader with alternative and complementary methods to evaluate M&A transactions. After conducting 5 interviews, ranging from top executives, board members, and shareholders, to financial advisors and client directors, this thesis concludes that the evaluation of M&A should not only focus on short-term quantitative metrics that are not necessarily representative of long-term shareholder value. Instead, looking at industry-specific key performance indicators can provide useful insights into the success of the transaction. The authors hope that this M&A case study will serve as an educational tool that broadens the reader's understanding of key M&A considerations pre, during, and post-acquisition, with a special focus on valuation methodologies for both banks and non-bank financial institutions. Finally, it provides the reader with interesting drivers of the success of the acquisition that could be applied in future M&A transactions.

Keywords: Mergers & Acquisitions, Financial Institutions, Post-merger Analysis

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1. Introduction

Upon completion of a deal, to assess its successfulness, typically an analysis to stock price fluctuations is performed. However, this analysis suffers from several limitations such as the difficulty of isolating one effect on stock price from all the others external to the deal, or the depreciating effect from on-average feelings that M&A is unsuccessful.

Handelsbanken, a Swedish personal and business banking services provider, traditionally offers all products and services similarly across geographies. However, the bank did not offer wealth management services and products in the United Kingdom, representing the only proper missing piece in the country.

Handelsbanken had a strong presence in the UK for more than 20 years, and it was time to answer its customers' demand for investment and wealth management solutions. As such, to grow its customer and product base simultaneously, Handelsbanken announced on February 6th, 2013 that it would acquire the wealth management firm Heartwood. This represented the bank's first acquisition in the UK (Thompson & Milne, 2013). As a result of the transaction, Heartwood would become a wholly-owned subsidiary of Handelsbanken, forming the foundation of its UK wealth management offering. The acquisition of Heartwood would enable Handelsbanken to meet the growing demand for wealth management services from its clients and would enable Heartwood to have access to a bigger network of clients while retaining the ethos that made it stand out to its clients.

Due to an excellent business fit and mutual growth opportunities, the deal was expected to create new jobs and broaden career opportunities. However, Handelsbanken faced several challenges. Financial institutions' mergers and acquisitions (M&A) deals in the UK were typically not as successful as initially expected, particularly acquisitions of asset and wealth management firms. In addition, Handelsbanken traditionally preferred to grow organically in order to maintain the values and philosophy of the bank; in fact, its last acquisition had been in 2008, of Danish bank Lokalbanken (Thompson et al., 2013). Regardless of these difficulties, Handelsbanken believes to have accomplished a successful deal. The authors define any deal as successful if the two combined companies are better-off (quantitatively and/or qualitatively) than on a stand-alone basis.

Therefore, the key focus of our thesis is:

What post-merger analyses can be done on Handelsbanken's acquisition of Heartwood to indicate its successfulness, and what were the pre-merger characteristics that made it a success?

Additionally, given that both Handelsbanken and Heartwood are financial institutions, the second focus of our thesis is:

What are the different aspects one should take into consideration when doing financial institutions' valuation?

We find that the sole analysis of the announcement stock price returns is not the most adequate measure of success for this particular case. Additionally, our results show how the pre-merger characteristics of this deal positively influenced Handelsbanken's post-merger performance.

We conclude that the most important pre-merger characteristics of this deal that contributed to its success were the non-treatment of the target as a commodity, price not being a top concern for any of the parties, integration meaning working together and not imposing ideas, and the fact that the two companies had fully complementary businesses. Additionally, we conclude that the most appropriate post-merger analysis measures or indicators in this case are employee and client turnover ratios, revenue and assets under management growth, ROE improvement, realization of revenue synergies, employee mobility, higher customer satisfaction, and positive learnings for future transactions.

1.1. Purpose

The purpose of this thesis is three-fold. Through a case study, our main goal is to provide the reader with alternative evaluation methods of M&A transactions, challenging the idea that the sole analysis of stock price reaction is always fully adequate in assessing the quality of a transaction while exploring more sophisticated and tailored possibilities. The second objective is to gain an in-depth understanding of the distinguishing features of financial institutions' deals, especially in valuation as well as general keys to success when conducting Wealth Management transactions. Lastly, we intend to provide the faculty at the Department of Finance at the Stockholm School of Economics with all the information needed to create at least two different case studies on financial institutions suitable for teaching purposes.

1.2. Contribution

By analyzing this specific case with a special focus on the post-merger developments, we provide alternative ways of performing this analysis in a more sophisticated and detailed way, which is typically not possible as data for the target company after a merger is usually not available, forcing researchers to evaluate the sole performance of the combined entity. Additionally, the alternative performance measures are specifically relevant for deals in which the acquirer is significantly larger than the target, implying that the stock price reaction is

insignificant. At the same time, we provide readers with insights on pre-merger characteristics of this deal that made it successful, contrary to the trend in UK financial institutions' deals.

Additionally, given that these are different financial institutions, we provide the case writer with all the material and information needed to develop at least two different cases in which financial institutions' valuation can be taught in class, namely Discounted Cash Flow for wealth management firms, based on the case we depict in this thesis and which is our main focus, and Dividend Discount Model for banks. Regarding the latter, further details can be found in *Appendix 1*.

Finally, we contribute by increasing the number of case studies available on private and European deals, which we deem as very relevant since most deal volume concerns private companies (approximately 95%, as discussed with Adam Green from *Mannheimer Swartling*, a guest in one of the spring 2018 lectures of the course *4312 M&A - Value, Corporate Structure and Control* at the Stockholm School of Economics).

1.3. Outline

Section 2 presents a theoretical framework and summarizes relevant previous research on the post-merger evaluation of M&A deals as well as on financial institutions analysis and valuation. In Section 3, an analysis of announcement stock price reaction is presented, with the results motivating the case study methodology. Section 4 explains this methodology, data used and its limitations. Section 5 provides a historical background on both companies and on the UK M&A market, with a special focus on wealth management. Section 6 describes chronologically the main events and decisions regarding Handelsbanken's acquisition of Heartwood, laying the foundation of our case. Section 7 provides the theoretical framework, motivation, methodology, results and limitations of the additional quantitative time analysis performed on market-based multiples valuation. Section 8 aims to reconcile the literature review and the practical case of the acquisition, while providing insights on the keys for the success of this acquisition. Lastly, in section 9, we conclude the thesis.

2. Previous Research

2.1. An introduction to M&A Evaluation & Analysis

Regarded as one of the most common strategies to accelerate top-line growth within corporations, mergers and acquisitions allow companies to access new markets; expand their product and service offerings to meet consumer demand; obtain larger market shares; achieve economies of scale and scope; and decrease cost of capital. Although not exhaustive, these are

some of the most common reasons that managers use to support their M&A transactions. Therefore, it is not surprising that M&A activity has been on the rise in the past few years, reaching pre-financial crisis levels. In fact, announced M&A transactions reached \$3.3tn, with more than 2,000 transactions completed as of the third quarter of 2018 (Platt, 2018). The widespread use of M&A has prompted finance scholars to research whether these transactions are successful, thus providing incremental shareholder value.

In their article, King, Dalton, Daily & Covin (2004) indicate that there is “no evidence that acquisitions, on average, improve the financial performance of acquiring firms” (p.195). In fact, King et al. claim that acquisitions have either little impact on the acquirer’s financial performance or a modest negative effect. Even though this claim is supported by a compilation of over 90 previous research articles, it is important to understand which performance indicators were used by the authors to arrive to this conclusion.

King et al. measure and define performance by looking at stock market event studies – correlation of stock abnormal returns with the presence of a company’s M&A transaction at different window times – and return-based accounting metrics such as return on equity, sales, and assets. By only looking at these two evaluation metrics, M&A seems to provide little to no value for bidders; however, King et al. make the important concession that unidentified variables could explain significant variance in post-acquisition performance.

To identify these variables, King et al. use four moderation terms: conglomerate acquirer, related acquisition, method of payment, and acquisition experience. These variables were selected since these are the most used by finance scholars when evaluating M&A; however, the authors find no evidence indicating that these four variables could explain variances in post-acquisition performance. For this reason, the article suggests that further M&A research needs to be conducted to identify and better understand these obscure variables that could be the differentiating factors between a successful and an unsuccessful transaction. In addition, the authors do concede that some subgroups of M&A transactions exhibit positive returns but contend that current research models have failed to identify the characteristics of such subgroups. King et al further suggest that the most promising characteristic among these subgroups of transactions is that of complementary businesses and resources.

In their article, King et al argue that complementary businesses could explain the creation of synergies and therefore the positive returns from M&A transactions. King et al (2004) conclude that “both theory and initial empirical results suggest that complementary resources may help explain observed acquisition activity and predict post-acquisition performance” (p.197). This important suggestion creates the need for further research in exploring the so-called obscure variables that could positively affect M&A transactions.

Even though King et al. have done an important job by conducting a meta-analysis on over 90 articles and by reaching a plausible result regarding stock performance and accounting metrics of bidders' post-acquisition, the authors agree that looking at these two performance indicators might not fully answer whether M&A is successful. In the same line of thought, Adnan & Hossain (2016) indicate that there are five commonly used approaches to evaluate M&A performance from the acquirer's perspective: event studies (stock-market-based reactions), accounting measures, expert informant's assessments, managers' subjective assessments, and divestitures.

In their article, Adnan & Hossain clearly differentiate evaluation from measurement of performance. They argue that evaluation of a transaction can include both quantitative and qualitative measures such as the ones outlined above. On the other hand, measuring the performance can only be done by using quantitative measures such as accounting and event-based indicators, an idea which is consistent with King et al. Using these metrics, however, has an important flaw that should not be ignored when evaluating a transaction. Such metrics do not consider the initial rationale and motives for conducting M&A from both the bidder and the target's perspective.

The fact that the quantitative measures mentioned above ignore the managers' motives behind M&A is an important fact because one could argue that a company's end goal for completing a transaction is not always to experience a short-term stock appreciation or improve return metrics. Das & Kapil (2012) argue that "it is true that M&A motives vary widely and hence should the measures of M&A performance" (p.299).

For illustrative purposes, a UK company that wants to expand its geographical reach to risky and unstable emerging markets via M&A should not be solely evaluated by abnormal returns of its stock at announcement date. It could be argued that some short-term investors – or speculators – will not take the announcement positively as it could indicate lower immediate profitability and dividends while the M&A integration takes place. If one is to solely focus on the stock movement at announcement day, it could be concluded that the M&A transaction does not create value, thus ignoring the possibility that investor short-termism has created a gap between short-term valuation and the long-term intrinsic value of the company. For this reason, the company should also evaluate the success of its M&A strategy based on whether the geographical expansion was achieved, assuming that such expansion will create long-term shareholder value, which would be reflected in its intrinsic valuation.

2.2. An Introduction to Financial Institutions

The universe of financial institutions encompasses many industries, not just banking. Some of these industries' analysis and valuation are more similar to the case of normal corporations, while some are very different, and typically investment banks have a department specializing on them: the financial institutions coverage group (FIG).

The major financial institutions categories include:

1. Banking – Universal banks, investment banks, mortgage banks, retail banks;
2. Insurance – Life and pensions, reinsurance;
3. Wealth management – Asset management, private banking;
4. Specialty finance – Consumer finance, commercial finance, exchanges, brokers.

While wealth management firms can be analyzed and valued using the same metrics and methods used for industrial companies, the same cannot be done with banking, insurance, and specialty finance firms, as metrics like EBITDA or Enterprise Value do not apply. Our thesis focuses on the acquisition by a bank of a wealth management firm, allowing to explore the main differences between the approaches in analysis and valuation of each.

2.2.1. Banks' Analysis

From here on we will assume the reader is already familiar with the main corporate valuation techniques and concepts as presented by the most common finance and valuation textbooks.

The three most important characteristics of banks that make them so different from industrial companies are their business model, the heavy amount of strict regulation they are subject to, and their high leverage ratio (Masari, Gianfrate & Zanetti, 2014). Regarding the first point, banks (for example, Handelsbanken) typically on-lend or invest at a different (hopefully higher) rate the funds that depositors and investors lent them at a certain rate, earning the spread between borrowed and lent funds (Koller, Goedhart & Wessels, 2015). In other words, leverage is part of banks' operations instead of operations' financing, making interest margin the main income statement item, thus metrics such as EBITDA are not of much relevance. Regarding the latter characteristics, and in connection to the first point, if leverage is part of banks' operations then it would be ideal to maximize the amount of debt compared to equity in their capital structure, as banks would then be able to maximize the multiplier effect. Ideally, banks keep a minimum equity amount calculated according to minimum capital requirements.

A typical bank's capital structure may include 80% to 90% debt, with only 20% to 10% equity. If an industrial company's capital structure would be similar to a bank's, in general, one could probably assume it to be in financial distress or under special short-term circumstances

such as after a leveraged buy-out transaction (Masari et al., 2014). This structure can be achieved by banks given that they have access to different conditions in debt financing than other companies, due to two main factors:

1. Direct guarantees by governments on deposits, as specified in the Deposits Insurance Scheme (Kaufman & Eisenbeis, 2014);
2. Implicit guarantees on the remaining banks' liabilities as most banks are "too big to [be allowed to] fail" (Varmaz, Fieberg & Prokop, 2015), i.e. governments will typically bail out struggling banks as their failure is believed to have even worse systematic effects.

As such, the minimum capital requirements imposed by regulators on banks, i.e. minimum equity level in the capital structure, can be seen as the price to pay for benefiting from the two guarantees mentioned above. These minimum capital requirements currently follow the directives stipulated in the Basel framework and are usually expressed as a capital adequacy ratio of equity that must be held as a percentage of risk-weighted assets (RWA). The level of RWA is driven by the riskiness of a bank's asset portfolio and its trading book. For now, banks have some flexibility to choose either internal risk models or standardized Basel approaches to estimate their RWA (Koller et al., 2015). As such, equity is classified into different categories according to its quality: common-equity tier 1 (CET1), tier 1 capital and tier 2 capital, and each of these categories needs to meet a minimum level as a percentage of the bank's RWA (Gordy, Heitfield & Wu, 2014).

2.2.2. Banks' Valuation

FIG practitioners argue that valuation is very different from all the other sectors' valuations (e.g. consumer retail, industrials, etc.). The reality is that the valuations are different in the calculation, but not in approach. One still uses both fundamentals- and market-based approaches, including methodologies such as trading comparables and precedent transactions.

Banks' Valuation – Dividend Discount Model

As for the actual methodologies used, the most comprehensive one is the Dividend Discount Model (DDM), the equivalent to the Discounted Cash Flow Methodology (DCF) but for banks, insurance and specialty finance. Like the DCF, the DDM values the stream of cash flows available to a shareholder (Masari et al., 2014). However, certain adjustments are made in a DDM to account for the nature of banking operations. As free cash flow (FCF) is meaningless for banks, specialty finance, and insurance firms, dividends are used as a proxy for their free cash flow instead.

Recall that in banks, business expansion requires additional equity capital, not additional assets, and that borrowing is an operating activity creating value. The underlying principles in a DDM are that a bank tries to maximize its operating activity by complying with the minimum capital requirements and letting the remaining part of the capital structure be debt, and that it pays out as dividend all net income generated in a year that is not retained to adapt to changes in capital required (Masari et al., 2014). These changes could come, for example, from business expansion (asset growth), regulatory changes in the minimum capital adequacy ratios, or changes in the weights used in the calculation of risk-weighted assets (RWA).

To better understand how a DDM works, it is better to look at an example. Imagine a bank shows in Year 1 total assets of 200, risk-weighted assets of 100 and a CET1 level of 10 (implying a CET1 ratio of 10%). Now, consider the bank generates net income of 2 the following year, but also achieves an asset growth of 10%, implying a new total asset amount of 220. All else equal, and assuming the riskiness of assets stays the same, this implies a total of risk-weighted assets of 110 and consequently a CET1 level of 11. In the DDM, the dividend capacity in year 2 is therefore equal to:

$$\begin{aligned} \text{Dividend capacity} &= \text{Net income} - [\text{CET1}(\text{Year2}) - \text{CET1}(\text{Year1})] \\ &= 2 - (11 - 10) = 1 \end{aligned}$$

This dividend is the amount available to shareholders that year, corresponding to the free cash flow to equity. By creating assumptions on asset growth, CET1 ratio, margins, and other P&L items, one can forecast the dividend capacity for the future (Masari et al., 2014). Following the same reasoning as in a DCF, this dividend stream and the terminal value are then discounted by the cost of equity, normally calculated using the Sharpe–Lintner Capital Asset Pricing Model, and one arrives at the equity value of the bank (Masari et al., 2014).

A notable difference from other companies is that banks do not require the “de-levering” and “re-levering” process – using, for example, the “Hamada formula” – upon the computation of bank betas. This is also a consequence of these financial institutions’ nature: leverage structurally high and high degree of similarity across banks (Masari et al., 2014).

It is important to note that there is an alternative method for valuing banks which is also very comprehensive but that we will not explore for the purpose of this thesis: the Excess Return Model.

Banks’ Valuation – Modified Gordon Growth Model

A simpler method for banks’ valuation would be the modified Gordon Growth Model (GGM), which is a short way of modeling a simple DDM by assuming a constant growth in dividends

in perpetuity (Masari et al., 2014). The modified GGM formula derivation from the simple GGM formula can be found in *Appendix 2* and is the following:

$$\frac{P_0}{B} = \frac{ROE - g}{r_E - g}$$

Where P_0 corresponds to the bank's equity value and B is the latest book value of equity (or net asset value) of the bank. Therefore, this formula works as a multiple. It only requires assumptions on long-term sustainable return on equity (ROE), long-term sustainable growth rate (g) and cost of equity (r_E).

Banks' Valuation – Multiples and Regression Analysis

Besides the usual P/E multiple that is also widely used across industrial companies, it is very common in banks' valuation to use the P/BV multiple, i.e. price to book value. This is only possible because banks are heavily regulated, so they typically operate with extremely similar capital structures, and because their assets and liabilities are so tightly linked to the banks' operations that they are mostly fairly valued, allowing for the use of the book value as a proxy for the market value:

“If the new trend in accounting is towards recording assets at fair value (rather than original costs), financial service firms operate as a laboratory for this experiment. After all, accounting rules for banks [...] have required that assets be recorded at fair value for more than a decade, based upon the argument that most of a bank's assets are traded, have market prices and therefore do not require too many subjective judgments.” (Damodaran, 2009, p. 6)

Other possible profitability measures are: the Return On Average Equity (ROAE) that is the return over the mean of the current and expected equity book value, the Return On Tangible Equity (ROTE) that is an ROE computed on the Tangible Equity (Book Value of the Equity net of the intangible assets), the Return On Assets (ROA) that is the ratio between the operating income and the total assets, and the Return On Net Asset Value (RONAV) that is the ratio between net income and NAV (Masari et al., 2014). However, one should look at the P/BV multiple in the context of a regression analysis (Masari et al., 2014). Since the P/BV is closely related to a bank's ROE, it is very important to not look at P/BV out of context, to be able to make comparisons across banks. In fact, if one looks at this relationship together with the modified GGM formula, it is possible to see that if a bank's ROE is superior to its cost of equity then it should trade at premium to BV, and that if a bank's ROE is inferior to its cost of equity then it should trade at discount to BV. The regression of the P/BV multiple against ROE is the most popular choice, but other combinations of variables may perform equally or even better (Masari et al., 2014).

Table 1 – Summary of Methodologies’ Advantages and Disadvantages

The main advantages and disadvantages of the methodologies most commonly used for bank’s valuation can be summarized as follows:

	Advantages	Disadvantages
Trading and Transaction Multiples	<ul style="list-style-type: none"> - Simplified. The main assumption is comparability - Linked to valuations being achieved by comparable entities 	<ul style="list-style-type: none"> - Does not include a control premium - The level of comparability is uncertain - Static: failure to capture business cycles’ effects
Regression Analysis for P/B multiple	<ul style="list-style-type: none"> - Allows to account for different profitability levels/growth 	<ul style="list-style-type: none"> - Requires a large enough sample - Does not account for differences in risk profile
Modified Gordon Growth Model	<ul style="list-style-type: none"> - Simplified, and less assumption intensive - Accounts for growth - Permits sensitivity analysis on inputs 	<ul style="list-style-type: none"> - Only simplified approximation - Inputs not directly observable - Very sensitive to the inputs
Dividend Discount Model	<ul style="list-style-type: none"> - Allows for higher detail and high level of considerations: easier to adapt the valuation for a specific bank, cycle, etc. - Allows modeling of future earnings capacity - Allows for sensitivity analysis 	<ul style="list-style-type: none"> - Higher information requirements - Assumptions based on management

2.2.3. Wealth Management Analysis and Valuation

As previously mentioned, the analysis and valuation of wealth management firms are very similar to the one performed to an industrial company. However, there are some characteristics worth mentioning, such as that they are simple businesses with low balance sheet complexity and small fixed costs. The revenue streams are typically few, with monthly payments, and involve dramatically less credit risk than a bank, allowing for strong cash flows and positive operating leverage (Potter, 2013).

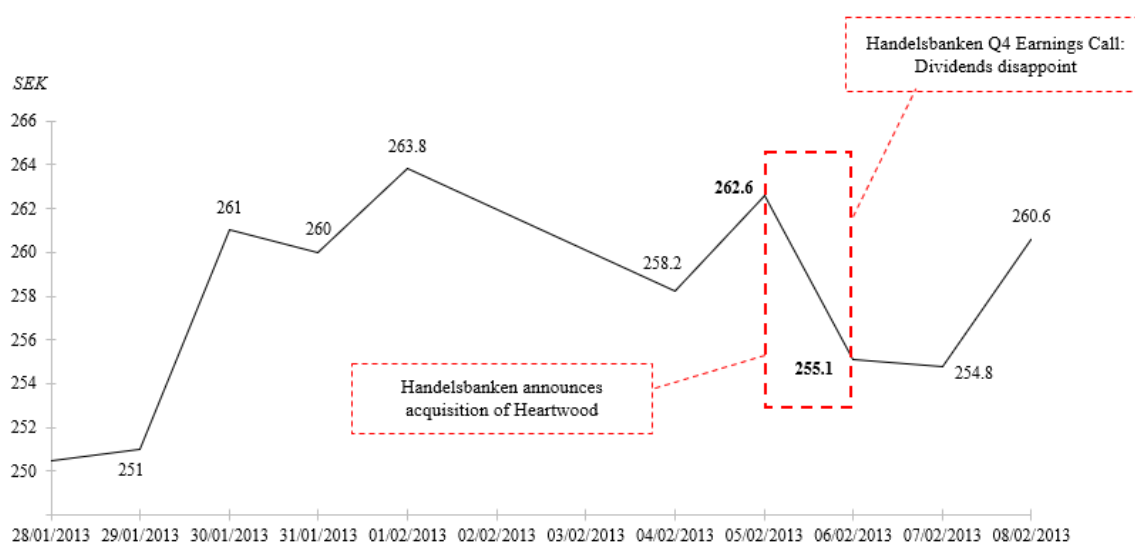
The most used methods for wealth management firms’ valuation are trading multiples and DCF. Transaction multiples can also be used, but as Potter (2013) notes, it is less common in this industry as there is a smaller number of deals executed than desired, most of them private or for undisclosed amounts and conditions. Each of the two preferred methods has, naturally, its advantages and disadvantages. Regarding trading multiples, the most serious concerns should be finding similar peers, which is rather complicated, and being able to discount the peers’ multiples in case the company being valued is private. Besides the EV/EBITDA multiple, widely used across most industries, in wealth management it is also common to look at the EV/AuM multiple, which portrays the enterprise value in relation to the firm’s assets under management. The DCF’s main difficulties are in the estimation of future cash flows and an appropriate discount rate, especially in the case of wealth managers whose revenue depends largely on performance fees, which are of a higher difficulty to predict.

3. Stock Price¹ Reaction on Announcement

On February 5th, 2013, Handelsbanken's stock price stood at around SEK262.6. On February 6th, 2013 before the Swedish Stock Market opened, Handelsbanken issued a press release outlining the acquisition of Heartwood, as can be seen in *Appendix 3.1*. As of 9:20 am, the stock had depreciated 2.3% to SEK256.5. At the end of the trading day, Handelsbanken's stock price stood at approximately SEK255.1, amounting a total decrease of 2.9% of its series A shares.

Figure 1 – Handelsbanken's Stock Price Evolution Around Announcement Day

Graphic representation of the small depreciation of Handelsbanken's stock price on the announcement date, not necessarily linked to the acquisition announcement.



Source: Bloomberg. Consulted October 26th, 2018

Most analysts would suggest that this depreciation was caused by the announcement of the acquisition. However, within the same press release, Handelsbanken announced a dividend growth that was below analysts and investor expectations. In addition, Handelsbanken announced that the Netherlands was appointed a new home market, which created the need for capital to support the growth (i.e. lower dividend pay-out), a strategy which was contrary to the higher dividends promised by Handelsbanken's competitors that were experiencing lackluster growth. News outlets showed the missed dividend growth as the main news story and the acquisition of Heartwood as a secondary, in which little to no details were disclosed. See a relevant news piece in *Appendix 3.2*.

Given that Handelsbanken's stock price depreciation cannot be entirely attributed to the acquisition of Heartwood demonstrates that identifying and isolating the causes for stock price fluctuations is difficult and sometimes impossible. Additionally, it is an inappropriate measure of long-term shareholder value. Provided that we have access to data on the target's post-merger

¹ Stock prices shown are unadjusted for stock splits and dividends, which may cause the chart to look different from other data providers.

performance, this analysis suggests that an in-depth analysis of this transaction through a case study is relevant.

4. Case Study Methodology

As a result of the analysis in *Chapter 3. Stock Price Reaction on Announcement*, and to find the answers to our key research question on the characteristics of successful M&A and alternative measures of deal performance we opted for both a quantitative time analysis, described and presented in *Chapter 7. Market-based Valuation Additional Analysis*, and a qualitative case study. This methodology is referred to as “mixed methods research”. Regarding the qualitative case study, we present below our approach in data collection and analysis and our view on its quality and reliability.

4.1. Research Design

From *Chapter 2. Previous Research*, it is possible to understand how quantitative measures have typically been applied for the post-merger analysis of M&A, namely stock price impact and evolution. This approach is commonly used as it is easily measurable across large samples of deals. However, there are cases in which this analysis is not applicable, such as Handelsbanken’s acquisition of Heartwood, as the impact on stock price is too small to be reliably measured. Additionally, qualitative aspects of the negotiations and integration of the deal cannot be quantitatively measured. Lastly, we propose that stock price analysis is insufficient to draw appropriate and reliable conclusions applicable to other deals, and as from the analysis in *Chapter 2. Previous Research* indicated, the inclusion of other factors such as return-based accounting metrics like ROE, sales, and assets do not help in explaining the successfulness of M&A.

With this hypothesis in mind and seeking to find alternative indicators of successfulness in M&A, namely qualitative aspects, our methodology of choice is a qualitative case study. This method presents an opportunity to look into detail how the transaction developed, and which factors were the main focus for the managers involved in the acquisition. We hypothesize that these factors have been crucial for the successfulness of this deal.

The importance of psychological and social factors has been debated in the finance community for some time, with Miller (1977) suggesting that a case study might be an alternative, even more fruitful, way to investigate our key research question:

“Given the complexities of the real-world setting, actual decision procedures are inevitably heuristic, judgmental, imitative and groping even where [...] they wear the superficial trappings of hard-nosed maximization. On this score, has there ever been

any doubt that the Harvard cases [...] give a far more accurate picture of the way things really look and get done out on the firing line than any maximizing 'model of the firm' that any economist ever drew?" (Miller, 1977)

It is also important to note that our main objective is to provide the reader with alternative additional tools for the assessment and improvement of successfulness in M&A, and not to argue against existing theories, which we only consider to be insufficient. Siggelkow (2007) supports this view, emphasizing the different objectives between case studies and empirical studies:

"The main object of case studies should be to provoke thought and new ideas, rather than to poke holes in existing theories. Theories are only simplifications of a much more complex reality." (Siggelkow, 2007)

A case study might also include several cases, but we chose to study one specific case to allow for a better understanding of the specific case, in accordance with Dyer & Wilkins (1991). For this purpose of in-depth exploration of our key research question, we opted to use interviews as research methodology, as suggested by Yin (2014). The interviews followed a semi-structured approach (Merriam, 1994), meaning that a fixed interview template was created to serve as outline, helping to ensure all topics of relevance were covered, but interviewees were encouraged to talk freely about their perspective and role on the deal and share their own view on possible qualitative and quantitative measures of successfulness in M&A, particularly in wealth management. This approach was expected to enable the collection of new insights and ideas not previously considered at the research design phase.

Lastly, Yin (1984) defines three different categories of case studies. First, exploratory case studies explore a phenomenon in data which serves as point of interest to the researcher. Second, descriptive case studies describe the data as they occur, which may be done in a narrative form. Third, explanatory case studies examine the data closely both at a surface and deep level in order to explain the phenomena in the data and, with basis on that, the researcher forms and tests a theory. Based on this, we classify our case study as descriptive, as we do not explore a particular phenomenon, nor we attempt to develop or test a theory. Instead, we aim to describe in a narrative form the main events and decision-making moments and processes incurred in Handelsbanken's acquisition of Heartwood, and we propose to contrast some characteristics of this deal that made it successful with available theory. As mentioned earlier, our only intention is therefore to suggest alternative ways of measuring and achieving success in M&A, and not to test current existing theories.

4.2. Data Collection

Interviews were our primary source of qualitative information. In the first interview, an initial broad view on the deal was accomplished, with a walk-through on the process and main decision-making events. In addition, this interview allowed us to establish which quantitative data would be provided and who we would be able to interview additionally. On the first meeting, we gathered perspectives from Handelsbanken's side, so we established as important to also obtain Heartwood's perspective to form a more complete and balanced view on the deal. For this reason, we asked to interview client directors, board members, and even shareholders from Heartwood's side. Finally, we considered relevant to interview the financial advisor of Handelsbanken, to not only understand their involvement and impact on decision-making, but also obtain a deep perspective on wealth management deal-making at the time.

A short biography of the interviewees, as well as other relevant management involved in the acquisition, can be seen in *Appendix 4*.

The first interview and the one with Anders Bouvin occurred in Stockholm, Sweden in person, while the remaining ones occurred over telephone, as the interviewees were based in the UK. The average time for each interview was approximately one hour, and word for word transcripts are available for all of them. All interviewees agreed to answer follow-up questions or provide further data if needed.

Table 2 – Disclosure on Interviews

Summary of interview participants with corresponding affiliations and roles as of the time of the acquisition (2012) and as of the time the thesis was written (2018).

Interviewee	Interview date	Company ¹ & Role as of 2012	Company ¹ & Role as of 2018
Tracey Davidson	21-09-2018	Handelsbanken – Head of Northern UK	Heartwood ¹ – CEO
Magnus Berglund		Handelsbanken – Head of Corporate Development	
Richard Winder		Handelsbanken – Head of Communications UK	Handelsbanken – Head of Group Brand Reputation
Ian Macfarlane	03-10-2018	Europa Partners – Investment Banker	Luberon Capital – Investment Banker (Partner)
Alastair Briggs	12-10-2018	Heartwood ¹ – Client Director	Retired
Anders Bouvin	12-10-2018	Handelsbanken – Head of UK	Handelsbanken – CEO
Simon Dixon	15-10-2018	Heartwood ¹ – Head of Wealth Management	

For the purposes of this case study analysis, and in order to draw relevant conclusions, our primary sources of quantitative information were provided to us via email by Magnus

¹ Please note that, as of 2018, Handelsbanken Wealth Management is a trading name of Heartwood Wealth Management Ltd, and that Heartwood Investment Management is a division of the latter. For simplification, these companies are mentioned as “Heartwood” in this table and throughout the document. Further details can be found in *Chapter 6.2.2 Brand Management*.

Berglund, namely the Information Memorandum by Heartwood and the presentation to Handelsbanken's Board pre-binding offer, both confidential. The valuation models were not provided, but it was possible to recreate the analysis considering the information given and final values on synergies' computation and stand-alone valuation. The reader should take this into consideration and understand that the extent of computations presented in this thesis goes beyond the data provided by Handelsbanken, in particular the DCF analysis.

Additionally, press releases and other public information were analyzed, as indicated throughout the thesis.

4.3. Case Study Validity & Reliability

The case study methodology is often criticized for not fulfilling the definitions of a proper scientific method, seen only as detailed narratives of events with few generalizable results (Yin, 2003). Nevertheless, Dubois & Gadde (2002), in line with what Miller (1977) previously mentioned, argue that the interaction between a phenomenon and its environmental context is best understood through in-depth case studies. In this direction, Yin (2014) presents four areas that challenge the research quality of case studies, both in terms of validity and reliability. Arguments on each of the areas, applied to this specific case study thesis, can be found in detail in *Appendix 5*.

We have taken every necessary step to make sure that the research quality is as high as possible. We thus think that there are insights from our findings that successfully indicate the insufficiency of the empirical methods and that our recommendations of alternative methodologies for the assessment and achievement of success in M&A could be extended to deals other than Handelsbanken's acquisition of Heartwood.

5. Case Background

5.1. Post-financial Crisis Wealth Management M&A market

5.1.1. The M&A Trend Globally and in the UK

Overall, the mergers and acquisitions market both in Europe and worldwide has improved since the 2007-08 financial crisis (IMAA, 2018). As a matter of fact, global M&A activity had already surpassed the \$2tn volume in mid-2018, with the only 2 periods when similar levels were reached being 2007 (\$1.8tn), right before the financial crisis, and in 2000 (\$1.5tn), before the bursting of the technology and internet bubble (Ponthus, 2018). By the third-quarter of 2018 global M&A reached a record level, with a total amount of \$3.3tn of announced deals (Platt, 2018).

Following on this trend, asset management deal-making in the UK had surged to a 10-year high in mid-2018, mainly a result of buyers aiming to strengthen their business inorganically (Flood, 2018). The preference for M&A could come from consolidation pressures in the market over the decade, given pricing pressures, low interest rates, and additional post-crisis regulation, forcing wealth management companies to exploit potential cost savings (Agnew, 2017). The increase in deal volume during this decade disguises the fact that the overall value of assets under management transferred declined, as mid-sized groups target smaller rivals (Greenhalgh, 2016), confirming this consolidation trend. Non-indifferent to these market developments, private equity firms had also been active buyers and sellers over this time frame. As Greenhalgh (2016) points out, “private equity groups have been snapping up wealth managers” and are primarily attracted by wealth management firms’ cash-generative nature (Agnew, 2017), which reduces risks on the latest *pass-the-parcel* deal-making private equity firms’ strategy. In 2017, there were a record 576 secondary deals, defined as when a company or a stake in a company is sold by one private equity firm to another (Espinoza, 2018). This increases the risk of these buyout groups acquiring assets based on trust, without acknowledging its specific needs, as if they were commodities. One example of a business which has been bought and sold repeatedly is Quilter Cheviot.

5.1.2. Comparable Deals in the UK in Recent Years

As mentioned above, the industry has been consolidating over the past decade, with the single biggest deal being the merger between Standard Life and Aberdeen AM for \$4.6bn in 2017 (Reuters & PwC, 2017). Since the merger, the combined company Standard Life Aberdeen’s shares have fallen 29% as of September 2018 despite several measures to counter the negativism surrounding the deal such as the appointment of co-chief executives and the sale of the insurance business to Phoenix (Vincent, 2018).

Another notable deal in the UK was the 2015 private-equity backed Towry Finance Co Ltd acquisition of Ashcourt Rowan plc for \$184mn at a 60.2% premium, with Ashcourt’s former CEO claiming indifference on whether buying another company or being bought to achieve scale and shareholder value. The combined business achieved the top 20 of UK wealth managers (Agnew, 2015).

Following on this private equity trend, in August 2015, Permira merged four of the regional arms of the UK wealth manager Tilney with the UK private client firm Bestinvest, that it had both acquired less than 2 years before (Agnew, 2015 and Greenhalgh, 2016). This is no different from what Permira’s rival Bridgepoint did in 2012 by merging Quilter & Co with Cheviot Investment Management which it sold to the insurance company Old Mutual in 2014 (Agnew, 2015).

In summary, from the analysis of the deals previously mentioned, there seem to exist some managerial difficulties on Standard Life Aberdeen's post-merger integration, severely affecting investor and customer trust, and a treatment by private-equity firms of wealth management companies as commodities. This industry is very customer dependent, and clients are not obligated to keep their funds with the firms after a deal is completed; however, managers and private equity firms might have been neglecting this fact, potentially indicating a root of the idea of unsuccess among most wealth management firms' deals in the UK.

5.2. Company Overview¹

5.2.1. Svenska Handelsbanken

Founded in 1871 as a local bank in Stockholm, Svenska Handelsbanken grew into a national bank by 1919 with over 200 branches. As customary, the bank followed US management methods which led to a centralized structure for the bank, ultimately creating inefficiencies within the organization. To reshape Handelsbanken's strategy and operations, Jan Wallander took over as CEO in 1970 and restructured the bank into a fully decentralized organization. This new structure and strategy gave significant participation and decision-making power to the local branches while reducing the power of the headquarters. Ever since, the bank has achieved a higher return on equity than its peers and competitors.

Activity

The bank provides the full range of products to corporates and consumers and has 5 key areas:

1. Handelsbanken's central head office oversees the support and management functions of the client-related areas of the bank.
2. Handelsbanken branch operation network within the Home markets of Sweden, Norway, Finland, Denmark, UK and the Netherlands, where the bank distributes full banking services to corporate and individual customers.
3. Handelsbanken International is a support function to the Home markets and provide banking services within 16 countries worldwide for the benefit of customers in the Home markets.
4. Stadshypotek is Handelsbanken's mortgage division providing services in consumer real estate as well as corporate real estate.
5. Handelsbanken Capital Markets ("HC") includes investment banking, asset management, macro, and corporate research as well as pension and insurance services.

¹ Sources for both Handelsbanken and Heartwood, consulted during October 2018: Website, Annual Reports from 2012 to 2017, Company Presentations, Confidential Material

HC also has responsibility for global product development within certain products marketed within the branch operations.

Values & Culture

Since its inception, Handelsbanken has thrived to always put the client first above all other things. Consequently, the bank does not have a focus on products or campaigns; instead, Handelsbanken makes an effort to provide all the products and services that customers demand. In addition, as opposed to some of its competitors, the bank operates with a long-term focus in order to have the most satisfied customers. In other words, the bank aims to achieve long-lasting relationships with all stakeholders of the bank, even if it sacrifices short-term gains. Finally, the bank has always given a higher priority to profitability over volumes. Handelsbanken aims to beat its competitors in profitability metrics rather than size, a culture that very much influences the way it conducts both its day-to-day operations and its organic and inorganic expansion strategies.

Strategy

The bank has tried to follow a similar strategy since 1970 based on a decentralized model called “Our Way.” This gave considerable decision-making significance to the regional and local branches and their managers. In addition, rigid budgeting plans and targets were discontinued; instead, the company has thrived to achieve a higher return on equity than its competitors. Handelsbanken believed that shareholder value would stem from the increased value for customers. For this reason, branch managers and local staff constantly received training to provide the best customer service possible to consumers.

Customer Relations

Under its motto “the branch is the bank,” Handelsbanken not only gave significant responsibilities to employees facing clients but also segmented its target markets and locations based on the *church spire principle*. Under the *church spire principle*, branch managers were supposed to serve customers in an area who could be “seen” from the branch. In this way, the bank would assure its strategy of being close to the customer and have a local and personal feeling of the branches. In fact, most employees in a particular branch live in close proximity to the branch.

Geographies

By 2012, Handelsbanken had a significant local presence in Sweden, Denmark, Norway, Finland, the United Kingdom, and the Netherlands. These countries were home-markets for the bank since the branches in these countries were ran under the same operating and business

model as in Sweden, with the exception of Netherlands which was not a home market, but it still had a very strong local presence. In addition, the bank was present in 19 countries outside of the Nordics and the United Kingdom under the Handelsbanken International division. As part of its corporate strategy, Handelsbanken aimed to provide full banking services in all its home markets, including offering wealth management services to clients. Even though Handelsbanken had a very successful wealth management operation in the Nordics, the bank lacked wealth management offerings in the UK, impeding it from becoming a full banking provider for its clients in the region.

Relevant Management in the Acquisition (Roles as of 2012)

- i. President and Chief Executive Officer: Pär Boman
- ii. Head of UK Regional Banks: Anders Bouvin
- iii. Head of Regional Bank Northern Great Britain: Tracey Davidson
- iv. Head of Corporate Development: Magnus Berglund
- v. Head of Communications UK: Richard Winder

Shareholding Structure

Handelsbanken had almost 100,000 shareholders of which 66% only held fewer than 500 shares and 4% owned more than 5,000 shares each and held 91% of the share capital. Two shareholders owned more than 10% of the shares: Oktogonen Foundation and Industrivärden.

5.2.2. Heartwood

History

Heartwood was founded in 1989 by David Lough, a young and successful investment banker in London who identified an opportunity in the market when he realized he could not find any one adviser who could help him, in an integrated way, to manage his savings, with his tax fillings and provide him with advice on pensions and his will.

Figure 2 – Heartwood’s History

Main historical events that led to the creation and evolution of Heartwood.

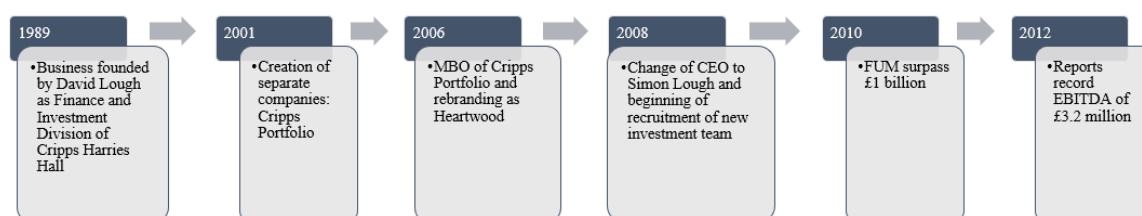
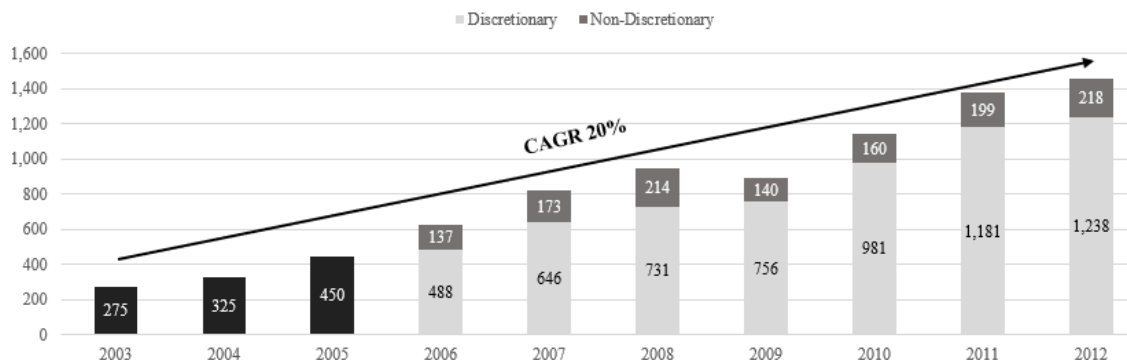


Figure 3 - Assets Under Management, Yearly Development (£mn)

Notable growth of Heartwood's assets under management from 2003 to 2012, achieving a CAGR of 20%.



By 2012, Heartwood was a well-established wealth management firm with approximately 25 years of experience managing the assets of sophisticated clients. Since both David and his brother Simon Lough were former investment bankers, as well as other key client directors, they built on their City network. As such, many of Heartwood's clients were FTSE 100 directors, private equity partners, hedge fund managers, and leading UK charities. The Heartwood Group comprised Heartwood Wealth Group Limited and its 100%-owned regulated subsidiary, Heartwood Wealth Management.

Products, Services and Customer Relations

Heartwood's service offering was broadly divided between Private Wealth Management (PWM) and Investment Management (IM). The four services offered were investment management, tax, pension and inheritance/will advisory. The distinguishing feature about Heartwood was that these services were provided in a very integrated way to the client, which was facilitated by the open plan office where the different specialized people would sit together and modelled up, and by the fact that a client could have meetings with the different people at the same time, helping in achieving the best solution.

IM (15-20 people) managed people's savings, i.e. they attempted to manage the portfolios in the most efficient way. Within PWM, client directors were responsible for understanding the client's risk profile, understand their tax position (as it influences the investment tactic, as tax plays such an important part in UK investment), hopes, fears, and wishes. Then, client directors put them in the right type of portfolio.

There was significant communication between IM and PWM. PWM, the advisor side, or client-facing side, would often invite a member of the investment team to come to the annual meeting with a client to talk about their views on markets, or they could be of help in conquering

a new client. IM did not have direct client responsibility, but the client directors would pass on customer feedback on performance and requirements for reporting.

In terms of customer relations, Heartwood's client directors organized annual meetings with every one of the clients they followed closely.

Geographies

Heartwood served clients in the southeast part of the United Kingdom, with two offices, one in Tunbridge Wells, Kent (Head Office) and another in Henrietta Street, Covent Garden, London.

The investment and dealing teams were based in London, as well as approximately half of the Client Directors. The remaining Client Directors were based in Tunbridge Wells but travelled to the London office regularly to see clients. Most of the firm's middle and back office activities and its personnel were based in the Tunbridge Wells office, as were the Professional Services team.

Values & Culture

Heartwood's core values were collectiveness and accountability.

As opposed to most asset managers in the United Kingdom, Heartwood operated in an environment where teamwork was emphasized, harnessing the strengths of every team member so that great ideas were always considered. In addition, all decisions were debated and challenged with the aim of making the investment and strategic decisions that the firm felt comfortable in taking full accountability. Because of the collective approach to investing, Heartwood took full accountability and ownership behind every investment strategy, and performance reports to individual clients were communicated continuously and timely.

Key Principles

- Integrity: put the clients' interests foremost, as that is the key to a mutually beneficial long-term relationship;
- Intelligence: a team with the expertise and experience to help preserve and grow the clients' wealth;
- Independent ownership: aligned Heartwood's interests with the clients' and allowed Heartwood to focus on helping the clients to achieve their long-term objectives for their wealth;

Personnel

"One of the keys to our success is our people..." – A strong team of experienced professionals from across the financial services industry attracted by Heartwood's culture of integrity, honesty, and intelligence. To reinforce the commitment to helping clients achieve their long-

term wealth objectives, senior staff invested their own money in Heartwood's equity, and Heartwood made equity available throughout the company via regular ownership schemes. The staff was encouraged to use Heartwood's investment, pension, and tax services so that they shared the clients' experience.

Total staff of 90 (83 FTEs), of which 30 were based in London and the remainder in Tunbridge Wells.

Investment Philosophy

The company specialized in sophisticated global multi-asset investing, focusing on making intelligent asset allocation decisions and diversifying properly to manage risk. In addition, Heartwood focused on a top-down investment approach – an optimal blend of asset classes was identified first and then an active management of the investment was performed depending on changes in market conditions. Even though portfolios were actively managed, the selection of investments was solely focused on the underlying value of the asset, thus securing long-term value creation for Heartwood's clients.

Heartwood's investments started with a general strategic allocation based on past and likely future performance as a reference point. All asset classes are evaluated at this stage, including equities, bonds, cash, property, private equity, hedge funds, and commodities. The initial blended target allocation is selected to achieve long-term returns while reflecting the risk being taken to achieve the target returns. In addition to the initial blended allocation, Heartwood uses a tactical allocation that allows deviation from the initial blended allocation to exploit opportunities that can be capitalized in the markets within 18 months of the investment.

Shareholders, Board of Directors and Executive Committee

The business was owned by management and employees, with more than 90% of the business owned by 2/3 of staff. The organizational charts as of the date of the acquisition of Heartwood's Group Board and Executive Committee can be found in *Appendix 6*.

6. The Case: Handelsbanken's Decision to Acquire Heartwood

6.1. Pre-merger Developments

6.1.1. Heartwood's First Approach to Handelsbanken

In 2009, long before any acquisition decision, Ian Macfarlane, investment banker at Europa Partners in London as of 2011, arranged for a cup of coffee with Anders Bouvin,

Handelsbanken's Head of UK at the time, and Simon Lough, Heartwood's CEO at the time. They met and had a nice discussion, compared notes, Simon spoke about his firm and Anders spoke about Handelsbanken's ambitions. Simon proposed to distribute Heartwood's products to the bank's customers through the creation of a joint venture. At the time, the firm operated only in Southeast UK and was a relatively small business, so Heartwood would be easily extending their customer base, making it a very good deal for them, but Handelsbanken did not see many advantages from it other than giving away their own customers. As such, the bank counter-proposed to acquire Heartwood, but the wealth management firm's shareholders were not interested in selling their stakes. In retrospective, Anders thinks neither Handelsbanken nor Heartwood were truly ready for a merger at the time.

Even though the negotiations led to a dead end, this represented the beginning of a very important relationship which would dictate the future for both companies. It left them both with a good feeling that maybe one day they would be ready for a merger and could continue the discussion, as they had similar business perspectives and they really admired each other. As such, both entities' management teams kept this idea in the back of their minds from then on. Already back then, Handelsbanken considered Heartwood as a good business and the key attractions included its strong customer relationships and satisfaction, highly profiled client base and solid financial performance.

6.1.2. Handelsbanken: Exploring Possibilities in the UK

Tracey Davidson joined Handelsbanken in 2003, and from early on she received requests from customers in the UK to broaden the product range, i.e. increase the investments' options available. Handelsbanken was already well established in the UK but had no wealth management services. Conscious of this need, the bank knew it would eventually need to start considering its options. Up to 2011, Handelsbanken took the time to consider a green field venture possibility. It was not impossible since the bank did not lack knowledge in Sweden and it could be implemented in the UK. However, Handelsbanken concluded it would take a long time to achieve a good and stable performance and, consequently, a good reputation.

UK's wealth management market is shielded by high barriers to entry for a bank:

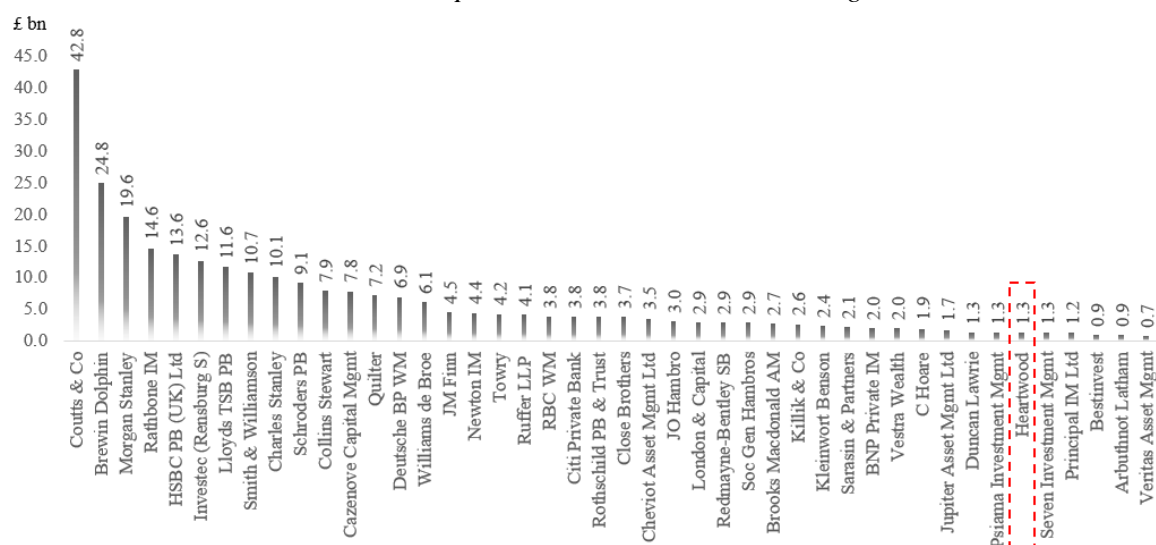
- The business would need scale and good reputation from day one to attract clients;
- Several experienced and costly people would have to be recruited in a short period of time since the bank did not have this skill set in the UK;
- It was far from certain that high-quality staff would be attracted to such a new startup and that their clients would feel confident to follow;

- An intensive recruitment campaign to build the necessary scale from day one would be challenging to combine with the formation of a coherent culture in compliance with “Our Way”;
- Regulation was increasingly complex, so the administration would be costly and require volume to support profit;
- Appropriate systems for the UK market were costly and of lengthy implementation.

It was when Magnus Berglund joined Handelsbanken’s Corporate Development, in June 2011, that a decision to make a move in the UK regarding this subject was made. After only two weeks in his new position, Magnus received a call from Anders Bouvin to organize a wealth management firms’ potential targets list in the UK. Magnus was also informed of the previous contact with Heartwood, which had left a very good impression. Internal analysis was performed, including of the proposals from different advisors on potential targets and different ways forward.

Figure 4 - Wealth Management Landscape in the UK, in Terms of AuM, in 2012

Heartwood was not one of the largest players in the UK market, in terms of AuM, but was in line with the peers considered in the initial targets list.



Source: retrieved from RBS Global Banking & Markets with 2012 as reference date

With the decision to grow inorganically made, Magnus hired Ian Macfarlane, and together organized a short list of potential targets, which included Heartwood. In accordance with what was mentioned in the case background section and in line with Ian’s opinion, this was a good time to pursue M&A in wealth management in the UK.

“There was a lot of consolidation going on at the time, which made me very interested as an investment banker in pursuing opportunities and finding clients to work with. There were a lot of businesses in wealth management, especially the smaller ones,

which were under higher pressure after the increase in requirements in terms of stability and compliance. Because of that, costs had gone dramatically up for these businesses, so they were looking to find new homes. A lot of transactions took place at that time. There were also some demographic interests motivating the consolidation. Several of the businesses I spoke to Handelsbanken about were sold to other companies shortly afterward. For example, Bestinvest was sold to Permira by November 2013, and Tilney was sold in 2014.” (Ian Macfarlane, October 3rd, 2018)

Consistent with Handelsbanken’s decentralized approach to decision-making, internal discussions were initiated with several branch managers in the UK. Ten to fifteen branch managers were involved throughout this initial assessment, quantifying the customers’ need for additional wealth management services. There was a lot of information internally in the bank, which allowed for the modelling of, among other things, the number of customers, their wealth and desired returns. This analysis served as the basis for any initial projections and modelling of each of the scenarios considering the different companies in the list of potential targets.

6.1.3. Heartwood: Decision to Sell

A few years later, Heartwood’s situation changed compared to the initial approach in 2009. Heartwood’s shareholders became motivated sellers, for two main reasons:

1. One major shareholder wished to retire.
2. Heartwood realized it needed to raise more capital, particularly to renew the IT systems and to expand. Their structure and business were very scalable, and it was estimated they could double the funds under management in a short period of time with the help of a partner to expand.

As such, and contrary to earlier, Heartwood’s shareholders were now looking to be bought out, and Heartwood began an official auction process, with the help of their own advisers Spencer House Partners. In conjunction with the advisers, Simon Lough, Simon Dixon, and other Heartwood key personnel oversaw the selection of potential buyers.

The owners intended to sell their business to some company who would care for their customers and employees, as well as for all their products and services. As mentioned earlier, Heartwood’s two distinctive features were:

1. It was founded by the investment banker David Lough, who was the chairman. His brother Simon Lough was also a former investment banker and was CEO. Some client directors were also former investment bankers. They all had an extensive personal network in the city of London. Throughout the years, David and Simon developed

strong friendships with most of their clients, so it was imperative for them to choose the right buyer who would respect the firm's objective to preserve their customers' wealth.

2. They did not just provide wealth management services, but also advice on tax, pensions and inheritance, in a very integrated manner.

To Heartwood, it was very important that any potential acquirer was not only interested in the wealth management part, as that was not the sole key to their success. Additionally, they specifically did not want to sell to a bank. Many of Heartwood's most influential clients did not particularly like bank-owned wealth managers as typically those banks see the private bank as a platform to sell to customers the complex investment products they created. Not only clients did not like that, it was not in line with Heartwood's demand-driven approach.

Based on Heartwood's criteria, Spencer House Partners was able to classify potential partners into three main categories: the consolidators, private equity buyers, and distribution capabilities providers.

The consolidators were identified as large wealth management firms in the UK that would mostly seek to acquire Heartwood's clients and few key client directors and personnel to integrate these within their wealth management business. There was the belief that consolidators would most likely dispose of the rest of the business. Private equity buyers would inject meaningful cash to the business with the possibility of combining it with other acquired firms or as a platform for further growth through acquisitions. Finally, distribution providers would allow Heartwood to reach nation-wide coverage, thus exploiting the potential of the wealth management industry at the time, while remaining independent.

Having received a broad list of candidates in these three categories, Heartwood quickly discarded the private equity category. They all feared that clients would quickly realize that a potential sale to private equity funds would mean additional changes to the business with the purpose of a potential sale in the future. In addition, the idea of selling to a consolidator that could tear apart the business and hurt their clients made the team very uncomfortable. Regardless, they selected between 3 and 4 companies as potential buyers that were a mix between consolidators and distribution providers.

It is also worth mentioning that Heartwood was proud of its independence and due to UK banks' reputation, selling to one of the bank consolidators could damage client relationships. Handelsbanken, with the investment bankers' help, would have the difficult task of convincing Heartwood to consider Handelsbanken. The admiration Simon Lough had on Handelsbanken and the relationship established with Anders Bouvin years ago, as well as the alignment between Heartwood's demand-driven approach with Handelsbanken's client-first

approach, successfully helped put the bank on the firm’s list of potential acquirers. Curiously, on Heartwood’s briefing documents it was then possible to read “Heartwood does not want to sell to a bank, unless it is Handelsbanken.”

6.1.4. Handelsbanken: Choosing Heartwood

The critical factors for organizing the list of potential targets according to Handelsbanken’s preferences were having a good cultural fit and being motivated sellers. These two factors would be the core of decision-making, i.e. even though other characteristics such as digital sales capability or national sales coverage could be enticing, Handelsbanken would always choose culture over functionality.

Table 3 – Criteria Handelsbanken Looked for in Potential Target Firms

Approximately 10 criteria were desired for a target firm, and Heartwood did not meet at least 3 of these.

Criteria desired for the target firm	Heartwood?
Good cultural fit	✓
Perceived good financial performance	✓
Motivated sellers of 100% of the business	✓
Nationwide coverage	✗
Not too big, to be easy to absorb by Handelsbanken’s network	✓
Very sophisticated internet offering	✗
Offering of same investment outcomes for similar profiles ¹	✓
No minimum investment requirement ²	✗
Prepared to shift variable to fixed compensation ³	✓
Clearly good and strong relationship with regulators	✓

When assessing the potential cultural fit, Handelsbanken was able to exclude some of the companies on the list by simply looking through their website and history. Additionally, Handelsbanken’s decentralized business model made it more difficult for the bank to find targets that fit within these guidelines. Tracey Davidson, Head of Handelsbanken Northern UK at the time, understood that she needed to truly gauge Heartwood’s culture to be able to move forward with the transaction. Meetings were arranged with the most promising companies. In the meetings with Heartwood, the future of the combined entity was the center of discussion, while the remaining companies focused most of their discussions on financial projections and the price to be paid. In addition, Heartwood executives showed a genuine interest to stay within

¹ At least in the UK and in Sweden, as explained by Ian Macfarlane, it can happen that different wealth managers within the same firm may invest differently the wealth of private clients with similar risk profiles, driven by different personalities. Handelsbanken did not want that, as they were very clear they wanted similar outcomes for clients with similar risk profiles.

² At the time, Heartwood had a minimum investment requirement of £350k. Handelsbanken did not believe this was compatible with a customer-first philosophy, and wanted it removed.

³ Variable compensation (for example, bonuses at year-end) are very common in wealth management. However, Handelsbanken wanted employees to choose the group remuneration policy; which they all did.

the firm post-acquisition to achieve a greater future as a combined entity. As Tracey mentioned, “we would come out of the meetings [with Heartwood’s management] and question ourselves if we were really that lucky to have found another company who thinks just like us”.

Regarding the other critical factor, and as mentioned before, Heartwood was at this time a motivated seller, while the great majority of the other companies were owned by private equity firms or other investment companies, which were in such position only for financial purposes and which had very specific holding periods. Once Handelsbanken narrowed its search to Heartwood, the team at Europa Partners and Handelsbanken’s team in charge of the acquisition gathered to collect their thoughts about the key transaction highlights and strategic rationale for the deal. Heartwood did not meet all the desired criteria as target firm, but as Ian Macfarlane (October 3rd, 2018) put it:

“If you think about it, when you go buy a house, you write down the ten things you most want. However, if you stick to those ten things, you will never buy a house... Since Heartwood met all the other characteristics so well, Handelsbanken thought they were prepared to work with the issues that were not immediately able to have satisfied. And they worked on it together.”

Without a solid strategic rationale, Handelsbanken would not be able to support the price offered to Heartwood, as culture was being chosen over functionality so areas such as national coverage and digital sales capability were to be achieved together during the integration. The bank’s two main goals were to maintain employee turnover ratios low, given that not doing so would likely detrimentally impact client retention, and to increase the size of funds under management, thus achieving higher operating profits. To do so, the bank also defined 5 key goals in the business plan that the combined entity would follow:

1. Achieve Heartwood’s initial business plan for the next 5 years.
2. Expand product and service offering so that all Handelsbanken’s UK customers have access to them.
3. Expand Heartwood’s network nationally while hiring more employees to cover increased demand from customers.
4. Introduce and invite Heartwood’s customer base to Handelsbanken’s banking.
5. Start working on the intermediary side of the business.

In summary, a combination of Handelsbanken and Heartwood was expected to:

- Establish Handelsbanken as a full-service bank in the UK;

- Facilitate cross-selling of wealth management services to Handelsbanken's customers, filling the remaining gap in the UK with respect to becoming a universal bank – complementary product offering;
- Enhance Heartwood's organic growth by drawing upon Handelsbanken's existing Independent Financial Advisors' (IFA) relationships;
- Facilitate development of Heartwood's current offering to attract a larger width of investment sizes and reach other parts of the UK;
- Strengthen relationships with customers as they share more business with Handelsbanken;
- Allow both parties to draw on each other's reputation to attract new customers.

The major threats to the success of the acquisition identified at the time were:

- The product offering could not be suitable for all Handelsbanken's customers, as Heartwood's business model was tailored for individuals with a minimum amount of investable assets;
- Heartwood's staff was used to receive a portion of variable salary (bonuses), with equity incentives forming a key part in Heartwood's remuneration policy and seen as crucial to attract and retain key talent over the long term;
- Heartwood was owned by its employees, but an alternative way of ensuring long-term commitment and incentives among key staff after the transaction was crucial;
- Heartwood's staff was potentially less experienced passing business to banks;
- Clients' view of the transaction was vital:
 - Handelsbanken's customers could feel discarded if the bank introduced an offering which they are not allowed to invest in;
 - Heartwood's clients could perceive that Heartwood would lose its independence and look negatively upon a bank ownership.

6.1.5. Valuation

Even though Handelsbanken had identified a target that would fit within the bank's culture and strategic goals for its product offering expansion in the UK, Magnus Berglund still needed to find the right price to offer to Heartwood. Given that Heartwood initiated an auction process, Handelsbanken needed to offer an attractive price, while making sure not to overpay for the firm. For this reason, a detailed valuation model was constructed by Magnus Berglund and his team.

Three main valuation methodologies were used: Discounted Cash Flow (DCF) method, trading comparables, and precedent transaction analysis. Even though all three methods were

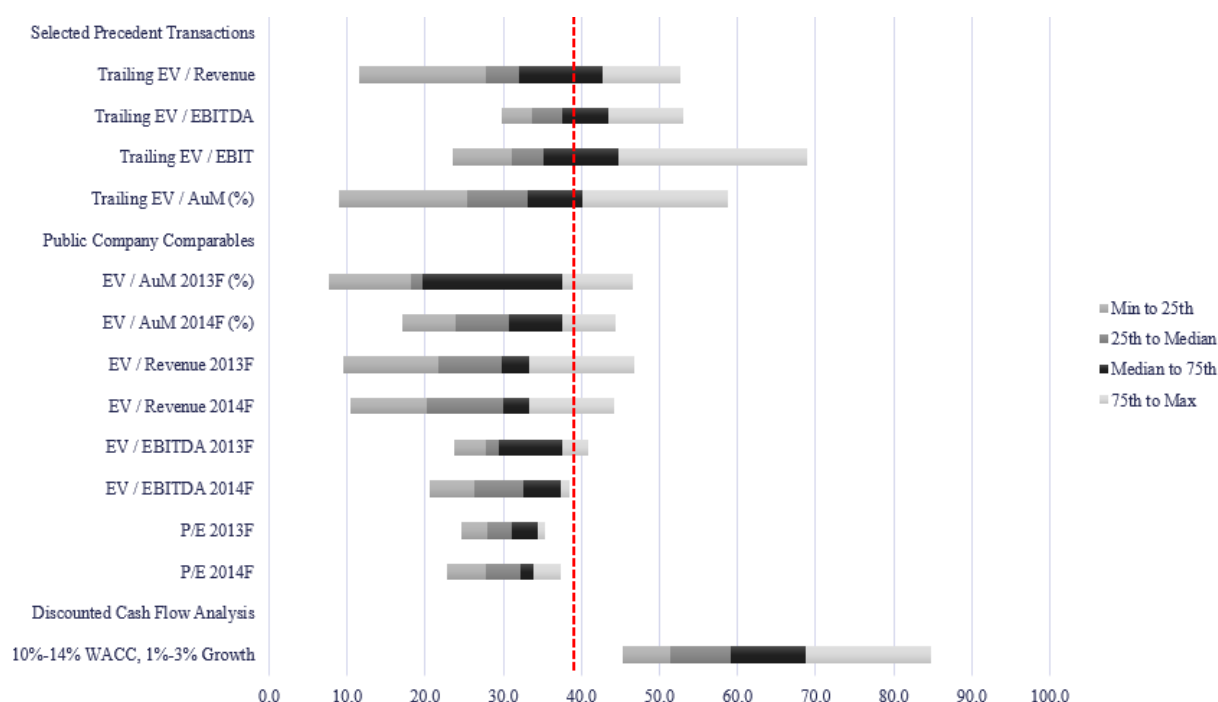
considered to find the right price of Heartwood, Handelsbanken gave more importance to trading and precedent transaction multiples. The bank decided to give more weight to these two methods given that it anticipated that those would be the two methods that Heartwood would use to argue for a higher price, especially the precedent transactions. In addition, by using market-based multiples, Handelsbanken made sure that its bidding offers were in line with competitor's bids so that it would not be taken out of the bidding process for offering lower than average price ranges. On the other hand, the discounted cash flow method was used to see the potential value creation of the deal based on Heartwood and Handelsbanken's projected business plans.

Heartwood provided Handelsbanken with an Information Memorandum and a Data Room, containing details on financial statements and business projections, among others. With the help of their advisors Europa Partners, Handelsbanken's first step was to critically evaluate that information and assess its reliability, given that Heartwood was a privately-owned company, subject to only a limited amount of regulatory reporting. At the same time, information was gathered on comparable companies and precedent transactions, to initiate the valuation models.

Summary of Heartwood's Stand-Alone Valuation

Figure 5 – Valuation Football Field

Considering the different methods used, the figure shows the different valuation ranges, obtained by the authors, for Heartwood as a stand-alone company, in millions of pounds. The consideration of £39mn is also represented in the graph for reference.



Precedent Transactions Analysis

Ian Macfarlane's team at Europa Partners organized information on precedent transactions on wealth management firms in the UK for the four precedent years, i.e. 2008 to 2012, the post-Lehman period. A total of 26 transactions was found, but information was reliably gathered only for 18. A number of these transactions were relatively small, and some were related to companies in which wealth management was only part of a larger business which included stockbroking or banking activities. Thus, 10 transactions that the bank felt were more closely comparable to Heartwood were selected. These transactions were of targets with a similar nature to the firm and/or a similar transaction in terms of scale or control.

A summary of the information on precedent transactions can be seen in *Appendix 7*, as well as the key statistics on these multiples. These metrics generated a range of equity values for Heartwood as a stand-alone company between £8.962mn and £68.875mn, assuming a net debt of £1.3mn.

It is important to note that these multiples include a control premium, meaning they were expected to translate into higher equity valuations for Heartwood when compared to trading multiples.

Public Company Comparables Analysis

Similarly, information was gathered on publicly traded wealth management firms at the time. Given that the different companies had different reporting year ends, the trading multiples were prepared on a calendarized basis to year-end December, i.e. companies with year ends other than December were proportionally adjusted to reflect an estimated December 31st position. Calendarizing is consistent with common accounting practices.

When choosing the comparable peers, it was ensured that the firms operated in the same industry and that wealth management was the core activity. Additionally, criteria such as similar growth, risk and business model were very important.

A table summarizing the main comparables information, as well as the key statistics on these multiples can be found in *Appendix 7*. Brooks Macdonald and Rathbones are the most comparable companies to Heartwood. They traded on 2013E EV/EBITDA of 12.4x and 10.7x and 2012A EV/AuM of 3.6% and 2.9% respectively. However, they were relatively larger companies.

Ashcourt Rowan, W.H. Ireland and Close Brothers were the least comparable companies and were excluded from the key statistics, as was outlier Hargreaves Lansdown which traded on particularly high multiples due to its different business model.

A table summarizing the results following the comparable companies' multiples for the equity value of Heartwood as a stand-alone company can also be found in *Appendix 7*, ranging between £7.672mn and £46.815mn, assuming a net debt of £1.3mn.

It is important to note that these comparables do not include a control premium. However, these companies are publicly-traded, meaning they are subject to higher levels of scrutiny and reporting requirements when compared to Heartwood. This implies that, to arrive to Heartwood's valuation, applying a riskiness and liquidity discount to the values above presented should be considered.

Synergies' Analysis and Estimation

As mentioned earlier, Heartwood provided Handelsbanken with financial information, namely a balance sheet as of April 30th, 2012, actual and projected income statement and actual and projected cash flow statement from 2012 to 2017, also with April 30th as reference. Information on the projected expansion of assets under management over the years was also provided, helping to support the numbers in the income statement. The original information provided by Heartwood can be found in *Appendix 8.1*.

Even though a DCF analysis was performed by Handelsbanken to see the potential value creation of the deal based on the bank's business plans, it was not emphasized for setting a price. As such, the bank did not provide us with their own analysis and projections. Instead, we were only walked through the synergies estimation and presented the final estimates, both in terms of revenue and costs' adjustments. It is important to notice that the bank identified 4 potential sources of revenue synergies:

1. Handelsbanken could refer clients for investment and advisory services to Heartwood;
2. Heartwood could refer clients for loans, mortgage, deposit and cash management products to Handelsbanken;
3. Handelsbanken could refer IFA contacts to Heartwood, enhancing the inflow of new business from the IFA channel;
4. Developing a way to offer all Handelsbanken customers a possibility of accessing Heartwood's assortment of managed portfolios through an internet platform.

However, only the first point was quantified and estimated by Handelsbanken.

The reason why the second point was not considered was that, even though the potential for Heartwood's referrals existed, it would imply a consumption of time which could be used for other relevant activities, a trade-off that was hard to quantify. It was decided, as such, that while there was an opportunity for Handelsbanken's branches to approach Heartwood's customers, it should be viewed as an additional upside rather than a reason for the acquisition.

Regarding the third potential source, Handelsbanken was skeptical about the assets under management growth provided in the original files by Heartwood (doubling the value in just 5 years, from £1.5bn in 2012 to 3bn in 2017), see *Appendix 8.1*. These values could only be achieved in case the acquisition materialized, as Heartwood was at the time fully employed and in need of access to further capital to hire new client directors. As a matter of fact, this IFA growth should be considered as synergies, and not in the stand-alone estimates. Handelsbanken decided not to lower these estimates by Heartwood, creating the first synergies' case: "Heartwood synergies case", where these assets under management expansion was considered at 100%, i.e. with no haircut.

Lastly, the fourth point was also considered just as an additional upside and not as a reason for the acquisition, as the bank did not know the framework of the IT platform, i.e. what functions it would have, how long it would take to develop and what investments were necessary. It would not be a meaningful exercise to quantify this long-term potential.

Coming back to the first point, the Handelsbanken's client referrals estimation, the bank decided to gather several branch managers in the UK to discuss it through some meetings, consistent with Handelsbanken's decentralized approach to decision-making. With their inputs and restricting the customers to those who were older than 30 years-old and had an amount of investable assets higher than £500k, the bank arrived to a total number of 1,517 current Handelsbanken's customers who could potentially adhere to Heartwood's products and/or services. Additionally, it was assumed a yearly growth rate for this customer base of 20% (compared to the previous 3 years' CAGR of 29%) and the distribution of the share of wallet (out of the investable assets, how much the company could invest) for these clients was obtained. With this growth rate, after 5 years this customer base would be 3,775, i.e. there would be 2,258 new customers. Out of these potential customers, the branch managers were able to estimate how many would effectively convert to Heartwood's solutions, generating 3 additional synergy cases beyond the one already mentioned: the "down case", the "base case" and the "up case".

It was decided there would be different customers' conversion rates for each of the four cases, and they were different for existing and future customers. For example, in the "base case", it was assumed 14.8% of the 1,517 existing customers (225 customers) and 11.1% of the 2,258 (250 customers) new customers would convert to Heartwood.

This total of 475 customers would follow an annual phasing, as it was assumed some lag time in converting Handelsbanken's customers to Heartwood. It was assumed that the conversion would start slowly and increase in pace over the years: 5% in the first year, 10% in the second, 20% in the third, 30% in the fourth and 35% in the fifth.

Table 4 – Customer Conversion Rates

Regarding customer conversion rates, they were as follows in the several cases:

Conversion Rate	Existing Customers	New Customers
Down Case	6.8%	5.1%
Base Case	14.8%	11.1%
Up Case	22.5%	16.9%
Heartwood Syn. Case	25.0%	18.8%

With this information, the bank used the share of wallet distributions to estimate the amount of assets under management that would flow to Heartwood due to the access to Handelsbanken's customers and, using an estimated fee schedule, estimated how much revenue these synergies would generate. On average, a customer's share of wallet was £1mn.

At this point, Handelsbanken had four possible cases for revenue synergies, being the “down case” the most conservative one and the “Heartwood synergies case” the most optimistic, by assuming Heartwood's estimates.

In summary, there are two revenue synergies' streams being accounted for the DCF purpose: Handelsbanken's IFA referrals (revenue synergies stream number 3) and Handelsbanken's customer referrals (revenue synergies stream number 1), both contributing to the assets under management expansion. Per the authors' decision, on the “Heartwood synergies case”, the AuM expansion is assumed to follow 100% of Heartwood's initial estimates, and then 80%, 60% and 40% for the “up”, “base” and “down” cases, respectively.

All these different four cases are relevant for the scenario under which synergies are considered in the valuation. This corresponds to “scenario 2”. However, for the purposes of a stand-alone valuation, it is important to have a base case income statement which only assumes a growth of 2% per year on Heartwood's 2012 values. This corresponds to “scenario 1”. Further details on the resulting income statements under each scenario and case can be found in *Appendix 8.2*.

Cost synergies and additional costs resulting from the acquisition, to which we will globally call “cost synergies” from here on, were also accounted for in the DCF analysis, for both scenarios. Naturally, in “scenario 1” no costs related to the acquisition are considered in the income statement. However, in “scenario 2”, several adjustments are made. To be noted that the revenue synergies' cases under this scenario have no impact on the cost synergies, i.e. costs are assumed to behave independently from revenue synergy realization.

Three different costs were considered: integration costs, Handelsbanken's adjustments to DPA, IT and others, and Heartwood's estimate of the cost of the new IFA client directors as a result of access to capital and that would allow for the expansion of the AuM. The integration costs totaled £2.6mn and would be incurred in 2013. These comprised of IT development in

£700k, creation of an independent risk control function for £1.7mn and other costs, such as staff training, for £200k.

Handelsbanken's goal to transform Heartwood's remuneration policy to fit with the bank's implied removing most of variable compensation, but also involved other benefits (e.g. moving the firm staff to the bank's pension policy). Heartwood's estimates of new hires costs can also be found in the original statements, as is displayed in *Appendix 8.1*.

Table 5 – Additional Staff Costs

Based on an in-depth analysis of each Heartwood employee, the additional staff costs (including the expected increase in headcount of 20 FTEs) had been calculated as follows:

Additional Staff Costs, £mn	2013	2014	2015	2016	2017
New remuneration policy	1.4	1.4	1.5	1.6	1.7
Hiring new staff	0.6	1.2	1.3	1.3	1.4
Reduced DPA	(0.7)	(1.0)	(1.5)	(1.9)	(2.5)
Total staff costs added	1.3	1.7	1.3	1.0	0.6

Handelsbanken's projections also included forecasted additional yearly IT costs of £355k, reduced yearly amortization costs of £440k and additional interest costs averaging £515k per year.

Discount Rate

With this information, even though Handelsbanken did not provide its own DCF analysis, we decided it would still be relevant to proceed with our own computations for the purpose of this thesis. To do so, it was necessary to estimate an appropriate discount rate. We decided for the weighted-average cost of capital (WACC) method, which gives a weighted-average of the cost of equity and cost of debt for the firm according to its target capital structure and taking into consideration the effects of the tax shield, i.e. the benefit from interest expense being tax deductible.

For the computation of cost of debt, the risk-free rate was obtained from the UK's sovereign yield curve as of September 28th, 2012 for a 40 years maturity, as can be seen in *Appendix 8.3*. The beta of debt was assumed to be 0.15, which is a value we deemed as appropriate (in line with investment grade companies), and the market risk premium was assumed to be 5.5%, as it corresponds to an average value used in 2012 (Fernandez, Aguirreamalloa & Corres, 2013). To compute the cost of equity it was necessary to obtain the beta of equity from peers, which can be found in *Appendix 8.3* together with each company's business description. The beta of equity for Heartwood was then computed by leveraging the selected peers' average asset beta.

Assuming a tax rate of 26.3% in the UK (in line with Handelsbanken's estimate) and a target capital structure of 100% equity, the computed WACC was of 8.5%.

However, we decided for a discount factor of 12% instead. The basis was that Handelsbanken's cost of equity was around 9% at that time, implied by the stock market valuation. Also, this WACC of 8.5% is the implied cost of equity on listed wealth managers. Heartwood's business is deemed to be at the higher end compared to Handelsbanken's more stable mortgage lending and other operations, and its income is much more sensitive to employee turnover and client loss than Handelsbanken's business. In addition, Heartwood's private status makes it riskier than publicly listed comparables (e.g. reliability of financials or information asymmetry). Therefore, a riskiness and liquidity premium of 3.5% was applied.

Discounted Cash Flow Analysis

For the stand-alone valuation the “scenario 1” is to be considered. Since Heartwood's year-end was April, inconsistent with Handelsbanken's year-end in December, we decided to calendarize all the income statement metrics necessary for the computation of free cash flow. For the synergies' valuation the “scenario 2” is to be considered, with the four different cases resulting in four different synergies' NPV.

Table 6 – Sensitivity Analysis and Synergies' Results for Each Case

A sensitivity analysis was performed to both WACC and terminal growth rate, deeming the following equity value for Heartwood as a stand-alone company, under “Scenario 1” (in £mn), and an NPV of net revenue and cost synergies under each Case under “Scenario 2”, as follows:

		Growth rate of stand-alone Heartwood (%)					Scenario 2	NPV Synergies, £mn
		1.0%	1.5%	2.0%	2.5%	3.0%		
WACC (%)	10%	68.8	72.1	75.8	80.0	84.7	Case 1	11.7
	11%	61.1	63.7	66.5	69.7	73.2	Case 2	30.8
	12%	54.8	56.8	59.1	61.5	64.3	Case 3	50.5
	13%	49.6	51.2	53.0	55.0	57.1	Case 4	66.3
	14%	45.2	46.6	48.0	49.6	51.3		

6.1.6. The Deal

The Bidding Process

The acquisition process followed the steps of any normal bidding process.

First, Heartwood sent a letter to all bidders requiring each party to send a brief letter outlining the vision for Heartwood post-acquisition, the proposal on how to achieve this vision, the future of Heartwood's employees, the initial valuation of Heartwood, and how the transaction would be financed. In September 2012, Handelsbanken sent a very detailed letter which clearly outlined the vision that the bank had for Heartwood and its employees as a subsidiary of Handelsbanken. In the letter, Handelsbanken also made its initial non-binding offer. This initial bid heavily relied on comparable multiples calculated based on public

information, though the bank always knew that this bid would need to be increased if they ever wanted to win the bidding process.

Once the first round was concluded, Handelsbanken progressed to the second round in which, after the signing of non-disclosure agreements, Heartwood made more financial and operational information available through a virtual data room (VDR) and by making available the Information Memorandum, as previously mentioned. After conducting a more detailed analysis of the potential of Heartwood as a fully-owned subsidiary of Handelsbanken, the bank sent the second non-binding offer in the last week of November 2012. At this point, Handelsbanken felt that they were unofficially the chosen buyer. In fact, the due diligence process was so time-consuming that the firm did not have the resources to engage multiple bidders in this process. This increased the bank's bargaining power while reducing Heartwood's, but the bank decided not to take advantage of it as it would jeopardize the future relationship with the firm.

Formally, Heartwood then evaluated all binding offers received as of November 29th, 2012 and had a board meeting on December 4th in which they decided on the acquirer. Following a positive response to Handelsbanken's proposal, further due diligence was performed to confirm important areas, negotiations regarding price, earn-out structure, and share purchase agreement (SPA) took place, a press release and how information flow should be structured was planned, and applications to the FSA in the UK and Sweden were prepared. Handelsbanken formally announced the deal on February 6th, 2013.

On the post-signing process, the applications to the regulators were submitted shortly after signing. This approval was expected to take 3 months and was given on May 24th, 2013. At closing, Heartwood presented a closing balance which was the basis for any adjustment due to changes in net cash and working capital (in this case, the most important issue was to handle the accrual of bonuses for payment after completion).

A graphic chronological representation with further details on the bidding process is available in *Appendix 9*.

Due Diligence

Even though Handelsbanken was at the forefront of the bidding process, the bank required the assistance of third parties who would take care of the different aspects of the transaction. The due diligence had been divided into 8 different work streams, including Legal, Accounting & Tax, IT, Business Case (to build a 100-day plan on Heartwood's integration), Human Resources, Compliance & Risk, Information, Valuation & Synergies.

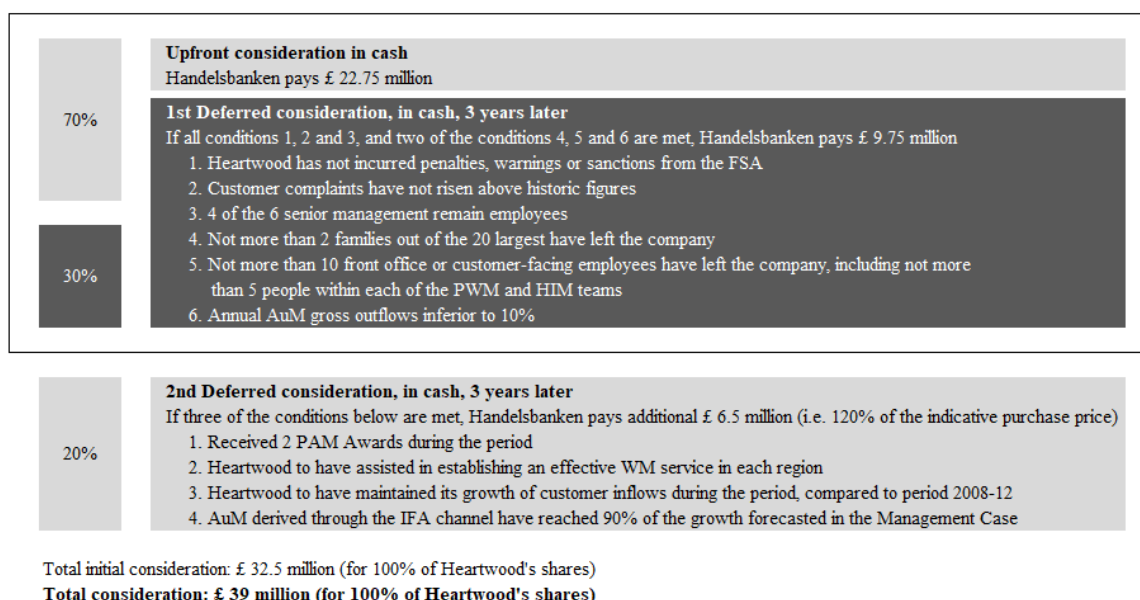
The bank retained the services of a law firm, White & Case, that assisted in the contract negotiations as well as the legal due diligence. In addition, the accounting firm Deloitte was hired to conduct the financial due diligence. Finally, Handelsbanken mandated Europa Partners to lead the execution of the transaction and maintained contact with Heartwood's executives and financial advisers Spencer House Partners.

Representing Handelsbanken, Tracey Davidson, Magnus Berglund and an employee from the legal department worked with these outside parties to finalize terms of the contracts and successfully execute the acquisition.

Price & Consideration

Figure 6 – Consideration Structure

In summary, the initially proposed consideration was structured as follows:



The negotiations of the final price went very smoothly as both parties were heavily invested in successfully closing the deal. However, the structure of the consideration was a point of negotiation that generated tensions between both parties. Such tensions arose from the fact that some of Heartwood's shareholders were not working in the company or wanted to exit, so these shareholders' focus was on maximizing their return as opposed to on the future of the firm post-acquisition. For this reason, Handelsbanken execution team and Ian Macfarlane proposed a unique consideration structure to deal with two types of shareholders separately:

- Both types of shareholders were paid in cash; however
- Shareholders who were not involved in the company were given the payment immediately after closing the deal;

- On the other hand, shareholders who were staying within the company did not receive their payment in full immediately after the closing of the deal. Instead, these shareholders received their money in tranches over a couple of years.

In this way, Handelsbanken would be able to retain these executives for at least two to three years. In addition, the deferred consideration of the shareholders who stayed was not just sitting in the bank but was invested in the fund of their choice that Heartwood managed. By investing these payments in the firm's funds, Heartwood's shareholders were not only incentivized to stay but also motivated to contribute to the growth and success of the fund so that their deferred consideration would appreciate. However, the bank also needed to clearly define what success of the fund meant given that this would be key to distribute the deferred payments.

After key negotiations between Handelsbanken and Heartwood, slightly different milestones and requirements for the consideration pay-out structure were agreed. In the final SPA, both parties agreed on two conditions. First, 11 key employees were subject to a minimum term of 3 years in their contract. Second, no more than 50% of the employees at the time of the acquisition should leave the company, unless in agreement with the bank (for example, work in Handelsbanken, retirement, death).

Handelsbanken committed to honoring the deferred consideration and its potential appreciation if the fund's customer and employee retention rates did not decrease and all compliance regulations were met. By focusing on these simple metrics, Handelsbanken assured itself that Heartwood's employees would make the right investment decisions that would benefit the fund and its clients in the long-term. If the bank had put a higher emphasis on complicated profitability and cost metrics, Heartwood's directors would most likely have been incentivized to fire personnel and invest in riskier opportunities to achieve higher short-term returns and thus increase the value of their deferred compensation.

Financing

Handelsbanken financed the acquisition with 100% cash given that the transaction was relatively small. However, to evaluate whether the deal was enhancing profitability for the bank, the transaction was assumed to be financed with equity. As in any M&A transaction, Handelsbanken paid a significant amount of goodwill; however, banks are required to deduct goodwill from the capital base of the bank, thus reducing the capital coverage of the bank. For this reason, the execution team assumed that the transaction was financed with equity to restore the capital coverage of the bank, and to avoid complaints from the board of directors and

shareholders who could instead compare the effects of the transaction with receiving a dividend of the size of the transaction.

6.1.7. Communications

To Staff

Given the confidential nature of the transaction, only few members of both parties were made aware of it or were involved in the negotiations. However, the day before the deal was announced, Simon Lough, Tracey Davidson, and Heartwood's Head of Human Resources met with Heartwood's board members as well as the other 11 key employees to inform them of the closing of the deal and offer their lock-in and confidentiality contracts. The remaining employees from both the bank and the firm were informed on the morning of February 6th only.

To Customers

Many of Heartwood's clients had been with the firm for many years, even decades. For this reason, it was not uncommon to find Heartwood's client directors becoming friends, or respected confidants, with their clients. Such close relationships allowed the firm to have exploratory conversations before the deal was agreed with long-term clients regarding the potential sale of the firm, without mentioning any names. Soon enough, some of Heartwood's clients made it very clear that they would not like to have their funds managed by a big, traditional bank. These conversations allowed Heartwood's executives to have an informed view on the type of potential buyer that they would be willing to sell to, without losing their clients. This helped them prepare for their calls to advise clients of the sale.

Between Management

It is important to notice that while Magnus Berglund and his team worked on finding the right price of Heartwood, Tracey Davidson and Anders Bouvin initiated contact with Heartwood's executives during the summer of 2012. These initial discussions focused on the business plan of Heartwood and how Handelsbanken could contribute to the achievement of the forecasts. In short, the meetings focused on how to work together, putting Handelsbanken in a leading position to win the auction process. Heartwood's shareholders cared deeply about the firm, making the thought of giving up their shares frightening, so Handelsbanken's focus on working together and launching Heartwood even farther helped the firm's shareholders to trust in the bank and its good intentions, as evidenced by the development of a business plan parallel to the due diligence process, even before the deal was announced, as previously mentioned. On the other hand, other bidders were focusing their initial meetings with Heartwood's executives on revenue and profitability metrics, which made shareholders uncomfortable with the future of the firm.

Anders Bouvin was intentionally left outside the main execution team for negotiation purposes. While Tracey Davidson and Magnus Berglund had the difficult negotiation conversations, Anders Bouvin's task was to alleviate tensions between the two parties with a softer approach. Toward the end of negotiations, Anders became increasingly involved in discussions with Simon Lough. Ultimately, Anders recalls Simon calling him on a rainy day, as he left a restaurant after having lunch in London. During this phone call, they decided the price together.

6.2. Post-closing Developments

6.2.1. Integration

The integration plan was centered around the following key actions:

- Introducing the Handelsbanken model to all Heartwood's employees in a structured manner;
- Additional efforts to engage some key employees of Handelsbanken in the Heartwood organization to assist with changes and cultural development;
- Matching remuneration and employee benefits with the bank's policy;
- Facilitating interaction between Handelsbanken and Heartwood staff to achieve customer referrals;
- Establishing an independent risk control function for Heartwood's operations.

Staff & Key Management

On the morning of February 6th, 2013 Handelsbanken announced the transaction to the markets through a press release.

Immediately after the announcement of the transaction, Tracey Davidson left her job at Handelsbanken to work at Heartwood, even before the transaction had been approved by regulatory agencies. It is important to note that neither Handelsbanken nor Heartwood executives ever saw U.K. regulators as a threat to the deal being successful. For this reason, Tracey Davidson joined Heartwood after the announcement with the goal of "making it happen". Her initial task was to successfully integrate the business, grow and develop the firm, and be part of the board of directors and management team.

Since the first day of the integration of both companies, Handelsbanken hoped to achieve perfection, while it prepared for *Armageddon*. Contingency plans were established in case employees quit, clients took out their funds, or management would leave the company. Even though no formal 100-day plan was ever devised or put in place, everyone at Handelsbanken was ready to act to keep things under control, especially Tracey Davidson.

One of the first initiatives of the bank to achieve a successful integration was to openly communicate with employees and customers from both companies. All employees from Heartwood were quickly given a deep introduction to Handelsbanken's culture and operation philosophy. There were no representatives from Handelsbanken at the first meetings, it was just the Heartwood staff explaining. These meetings were followed by a presentation by Anders, Magnus, and Tracey to explain who Handelsbanken was and why they wanted to buy Heartwood, to calm people's fears about the future. For example, by simply letting people know Handelsbanken planned to keep Heartwood's office, Tracey sensed an immediate feeling of relief. As part of the induction, all employees were invited into local branch offices and received the "Our Way" guidelines booklet to get a perspective on Handelsbanken's unique business model. In addition, several workshops were conducted by Tracey to clearly transmit the culture across the firm.

A second key strategy that Handelsbanken applied was to offer long-term contracts to key personnel including the Human Resources and Finance directors to run operations smoothly. Handelsbanken's main goal was to keep Heartwood's key senior and client facing personnel, given that if they left, clients would worry about Heartwood losing its investment strategy and culture. For this reason, making sure that a smooth transition with Heartwood executives was achieved was a pivotal factor of the transaction.

A meaningful change concerning personnel post-acquisition was Handelsbanken's policies of limited variable pay. Handelsbanken had the belief that bonus compensation did not always create the right incentives for employees, especially within wealth management; for this reason, the company decided to only give base salaries to Heartwood's personnel and little to no variable compensation, limited only to a few specialist employees with no involvement with end clients in line with group policy. This compensation policy was unique to Handelsbanken, and most wealth managers in the UK provided incentives through performance bonuses, so the combined entity knew that a challenge to overcome was maintaining personnel within the company in the absence of bonuses. Simon Dixon oversaw the communication to key personnel regarding variable pay. Surprisingly, most employees complied with the new policy as they understood the misaligned incentives between performance bonuses and the long-term benefits of their clients. Even though keeping personnel satisfaction was important, Handelsbanken also needed to have a healthy relationship with the executive suite of Heartwood.

To keep good relations with Simon Lough, Heartwood's CEO at the time, Tracey Davidson ensured that ego and seniority were not part of the equation when working together, and so did Simon. In addition to him, Tracey quickly engaged in conversations with all senior members of management to ensure their thoughts and concerns were heard and addressed, as

there was a real possibility of them leaving the firm if the integration of both companies was not done correctly. This would create a significant issue for the bank. For this reason, Handelsbanken knew that a dominant attitude would not work with Heartwood's management; instead, both parties turned their focus to the drivers of any asset management firm: clients and employees. With their sole focus on clients and employees, Tracey and Simon were able to work together to make the transaction a success. As a team, both dealt with problems that arose in the integration. As it usually happens in acquisitions, employees of Heartwood would fear rumors coming from the new parent company, Handelsbanken, and this would put pressure on Tracey and Simon. However, Tracey's attitude was of listening to the firm's employees and being flexible to their suggestions. There were few occasions in which Handelsbanken imposed some sort of rule or policy on Heartwood's employees.

Key Clients – Telephone Calls & Dinners

In the evening before the deal was announced, (after markets had closed), and throughout the announcement day, Heartwood's client directors reached out to some of their key clients, i.e. the biggest ones and the ones who were potentially the most worried about being bank-owned. Across the firm, client directors telephoned their clients to advise them of the news. Alastair Briggs telephoned 20 out of his 98 clients, letting them know the reason for the sale, why Heartwood had chosen Handelsbanken, and how different Handelsbanken was. According to Alastair, a total of 100 key clients were contacted personally that evening. Some of these key clients were formally invited to dinner with Anders Bouvin and Tracey Davidson and joined by Simon Lough, Alastair Briggs and other key client directors, and on occasion David Lough the retiring Chairman.

“What was imperative for us was to keep the staff and keep the customers. (...) It was key! If these customers were to feel comfortable and stay, the other ones would follow. Very good move.” (Anders Bouvin, October 12th, 2018)

There was a total of 50 invited clients, arranged over 6 different dinners, as they either were very big or still showed a high concern over being bank-owned. These happened in a small restaurant, in a private room, in London and allowed Handelsbanken to better understand how clients felt about Heartwood and its executives. A clear message stemmed from these meetings, Heartwood's clients were amazed by the firm's integrated products and services and considered it to be fabulous, so it was Handelsbanken's responsibility not to ruin it. While these dinners were very civil affairs, Anders played a critical part when conversations became more challenging, listening quietly to all the concerns, and only then politely replying by inviting the clients to visit one of the bank's local branches so that they could get a better understanding of Handelsbanken's culture. After these visits, some clients decided to not only continue using

Heartwood as their investment management firm but also use Handelsbanken's service offerings related to consumer banking.

All clients – Written Communications

On February 6th, besides the press release, Heartwood decided to send a letter to all clients. It was a two pages long document which started with:

“I am writing to let you know that it has been announced today that Heartwood will be acquired by Handelsbanken, a leading Swedish bank, with a strong and rapidly growing presence throughout the UK”

This letter was designed to explain as simply as possible the reason for the transaction, which was Heartwood's need for expansion and continued intention to attract very high-quality staff, and further capital for improvement of IT systems. It also reinforced the close cultural fit, how unusual Handelsbanken was as a bank and it was also made clear there was no pressure for Heartwood clients to become a banking client.

The third paragraph, on what it means for the client, states:

“Heartwood will be wholly owned by Handelsbanken, one of the soundest financial institutions in the world”

And it went on picking up on the stability of Handelsbanken. It also reinforced that the senior management and key employees of Heartwood made a commitment to stay on. It was then emphasized how the investment management process would not change, but that new high-quality client directors would be hired. The last part of the letter pointed out to the fact that David Lough, the chairman, would be retiring. That was important because many of Heartwood clients knew him personally, as he had been there all the time since the company was founded, and he was highly respected and much admired.

On May 2nd, a new letter was sent to all Heartwood customers, this time a more formal letter, but just confirming that the UK regulator had approved the acquisition. It also stated that senior management and key employees had committed to staying in the company and there was a paragraph thanking Heartwood's clients on the positive response to the announcement. The final paragraphs thanked David Lough for his many years of service.

After this initial written communication, clients received Simon Lough's yearly Christmas letter. It had a brief review of the year and talked about how well the change to Handelsbanken had gone by then. It was a one-page letter and mentioned how positive it was that they were able to offer their services through every branch in the country.

6.2.2. Brand Management

Brand management can be considered one of the most contested issues of an acquisition. One of the first questions in the integration stage of Handelsbanken and Heartwood was whether the firm would be able to keep their brand. Handelsbanken did not put much focus into this; in fact, the bank's goal was to do whatever would make feel employees and clients more comfortable. After gathering feedback from employees and customers, the bank decided to keep Heartwood's brand, sending a positive subliminal message to clients.

A few years later, Handelsbanken and Heartwood unanimously decided to change Heartwood's name. In practice, most initiatives to change the name or brand of the target normally come from parent companies. This time, however, Heartwood's longest-serving client directors pushed for the brand change to be done. Supporting it was the fact that Handelsbanken had already a widespread presence in the UK, whereas Heartwood did not. Client directors at Heartwood realized that having Handelsbanken name would allow them to create higher brand awareness in the country.

For strategic reasons, it was decided to name its client-facing advisory arm Handelsbanken Wealth Management while keeping Heartwood's name on the investment product. As a result, as of 2018, Handelsbanken Wealth Management is a trading name of Heartwood Wealth Management Ltd, and Heartwood Investment Management is a division of the latter.

6.2.3. Investment Management Philosophy and Operations Integration

Even though keeping key personnel and preserving the brand would initially result in key clients staying within the firm, both Handelsbanken and Heartwood executives knew that the investment strategy and philosophy of the firm was fundamental to not lose clients in the medium and long-term. If the clients' portfolio performance was not the same as pre-acquisition, clients would gradually leave to find better returns with another firm.

Heartwood's directors did not look at Handelsbanken's dominant asset management investment operation in Stockholm as a threat, as Tracey Davison spent a significant amount of time managing their expectations and assuring them that, consistent with Handelsbanken's decentralized model, Heartwood's autonomy and independence would not be a matter. In fact, the strong capability in Sweden was only seen as reassuring. If Handelsbanken would have to step in if problems occurred with Heartwood's business model and investment management philosophy, the operations in Sweden had shown proof of a valid back-up plan.

Handelsbanken knew that to have a successful acquisition, there needed to be confidence that independence would be granted and accepted. Through its decentralized

business model, the bank was able to offer Heartwood and its directors independence in their investment approach. Directors of the firm quickly understood that they could still be independent post-acquisition, so they would be free to fulfil their client's mandates in the way they saw fit. Even though Heartwood was required to follow Handelsbanken compliance and audit processes and guidelines, the firm was given full control over investment decisions and philosophy. This independence allowed investment directors to have full control of their business and operations, but it also made them fully accountable for any positive or negative results from their investment decisions. A challenge that every employee at Heartwood was excited to face.

7. Market-based Valuation Additional Analysis

7.1. Motivation

As it is clear in the case narrative, Handelsbanken seemed to have paid a relatively low price for Heartwood, based on the intrinsic valuation of the company's cash flows. In other words, there seems to be a wide gap between the multiples' valuation and the DCF valuation. For this reason, we are compelled to investigate deeper the reasons for such divergence. A starting point of this analysis is to understand whether the average multiples in 2012 were different from the average multiples at different periods of time. If indeed the multiples in 2012 were significantly different than other years, one could easily argue that the price divergence between cash flow valuation and multiples valuation stems from negative investor sentiment regarding the wealth management industry, thus creating an industry-wide undervaluation of wealth managers on that specific year. On the other hand, if no significant difference is found, then other reasons underly the justification for the price divergence which could be explored in further research.

7.2. Methodology

Statistical Inference Analysis

Statistical inference allows researchers to learn or assert something regarding the wider population based on information available on a representative sample of that population. Through statistical inference, researchers can create estimates of the wider population or answer hypothesis questions such as whether crime rates are associated with income-levels and how statistically significant this relationship is (Wooldridge 2012). However, it is important to note that the accuracy of the end result is heavily dependent on the quality and properties of the data itself. For example, if a data set does not present a normal distribution and the sample size is not large enough, applying a traditional hypothesis test via the t-test would provide inaccurate results. For this reason, not all research questions can be answered by using the same statistical

tool or method; instead, different tools are available to evaluate data depending on its properties. For the purposes of this thesis, only two methods will be used as these are the relevant methods to be used for the data in question: t-test and Mann-Whitney U test. Please refer to *Appendix 10* for a brief review on both tests and the variance and normality statistical tests needed to check the data sets' properties.

Recollection of Data

The first step in the evaluation of the multiples is to recollect the appropriate data. In this case, the one-year-forward EV/SALES and EV/EBITDA multiples were recollected for all companies in the asset management industry, which includes both wealth management and investment management. Given that Heartwood is both a wealth and investment manager, we believe appropriate to include both types of companies in the analysis. In addition, we decided to include the global universe of companies (i.e. including companies from both developed and developing countries), as our aim is to understand in a more general view the level of multiples in asset management as a whole. On the other hand, and to avoid some selection issues, we recollected data for Heartwood's comparable companies that were used by Handelsbanken in the valuation of the firm. All multiples data has been extracted from Bloomberg and, given that the aim of the analysis is to understand whether 2012's multiples were on average different from other time periods, multiples information has been extracted from 2005 to 2018.

Classification of Time Periods

Given that data has been recollected from 2005 to 2018, the data has been separated in different time periods to reflect the fact that multiples in recession times have probably been different from multiples in boom times. For this reason, 5 periods or groups have been identified for the purposes of the analysis:

Group 1: 2012 – the time-period in question

Group 2: 2005-2007 – Pre US-financial crisis

Group 3: 2008-2009 – Financial crisis period

Group 4: 2010-2013 – Euro crisis period

Group 5: 2014-2018 – Post Euro crisis period

Data Manipulation and Outliers Check

After collecting and classifying the data in its respective categories, group 1 had 158 observations (Mean EV/Revenue = 5.61, Mean EV/EBITDA = 13.11), group 2 had 308 observations (Mean EV/Revenue = 7.43, Mean EV/EBITDA = 14.37), group 3 had 293 (Mean EV/Revenue = 9.43, Mean EV/EBITDA = 12.85), group 4 had 493 observations (Mean

EV/Revenue = 16.33, Mean EV/EBITDA = 12.42), and group 5 had 1,081 observations (Mean EV/Revenue = 120.11, Mean EV/EBITDA = 25.59). After carefully reviewing these results and some data points, it was suspected – by economic intuition – that some outliers or incorrect numbers were included when downloading the data. In fact, a graphical representation of the data showed some outliers (i.e. extremely negative or positive values). For this reason, we decided to exclude some outliers by applying the following procedure:

1. Identify the first quartile (a) and third quartile (b)
2. Calculate the Interquartile range ($c = b - a$)
3. Calculate the upper bound ($X = b + 1.5 * c$)
4. Calculate the lower bound ($Y = b - 1.5 * c$)
5. Eliminate all data points, p, if $p > X$ or $p < Y$

After this procedure, 12, 29, 21, 37, and 69 outliers were deleted from Groups 1, 2, 3, 4, and 5 respectively. It is important to note that no data points were deleted from the data set containing only the comparable companies used by Handelsbanken.

Data Distribution Characteristics and Assumptions Check

Once the time-period groups were established, the correct hypothesis testing tool needed to be selected. However, in order to select the appropriate test, an understanding of the data's distribution is required. Therefore, a Shapiro-Wilk test has been conducted on R in order to test for normality. In addition, a Levene's test of variances was performed on R in order to understand whether the distributions had equal or unequal variances, a test required in order to apply the proper t-test.

The Actual Hypothesis Tests

After checking for normality, the right significance test can be applied. Therefore, a Mann-Whitney U significance test will be applied to all non-normal distributions. However, the samples in each time-period are large enough – at least 100 observations – so the Central Limit Theorem can be invoked to assume normality. For this reason, the t-test will also be applied and presented to all significance tests to identify if there are any differences in the results from both the nonparametric and parametric test. Regardless of the significance test applied the hypothesis is set up as follows:

H_0 : The means of each group are equal to each other.

H_A : The means of each group are not equal to each other.

In addition, the significance level used will be $\alpha = 0.05$ or a two-tailed 95% confidence interval. For this reason, if the test – conducted on R – yields a p-value of < 0.05 the H_0 will be rejected in favor of H_A .

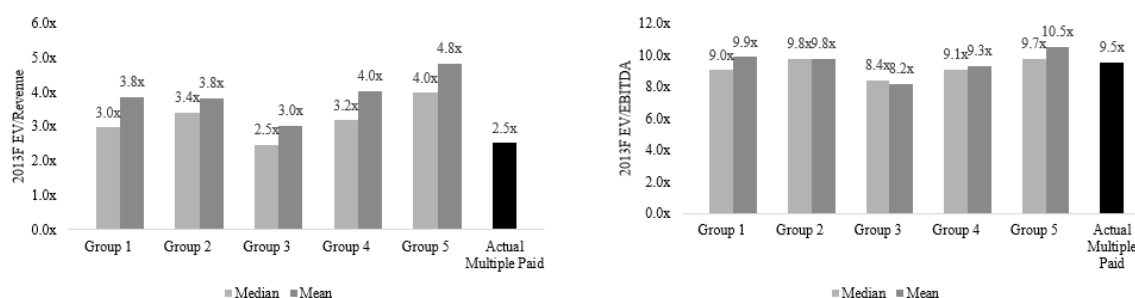
7.3. Results

Broad Asset Management Industry

By looking at descriptive statistics, there is some indication to believe that average 1-year-forward EV/Revenue multiples in 2012 (Group 1 = 3.8x) in the global asset management industry are not significantly lower than in other periods. As economic logic dictates, the multiples in 2012 are slightly higher than the multiples in the 2008 financial crisis (Group 3 = 3.0x); conversely, the 2012 multiples are slightly lower than the multiples post-euro crisis (Group 5 = 4.8x). It is worth pointing out that when performing the same descriptive statistics on EV/EBITDA multiples, the results are similar and follow the same pattern. An interesting finding but far from surprising is that the average 2012 multiples do not seem to be dramatically different from the most recent multiples from 2010 to 2013 (Group 4 = 4.0x), thus we fail to reject the H_0 for these two groups, which is the comparison that we are most interested in. The detailed results on the broad asset management industry can be found in *Appendix 11*.

Figure 7 – Graphic Representation of the Results on the Broad Asset Management Industry

Median and mean of the forecasted 2013 EV/EBITDA multiple, for each of the Groups, in comparison with the actual multiple paid by Handelsbanken.



Even though descriptive statistics provide a good starting point to answer the research question, inferential statistics must be conducted to understand how statistically significant these results are. As outlined above, both a t-test and a Mann-Whitney U significant test have been performed to test the significance of the differences found.

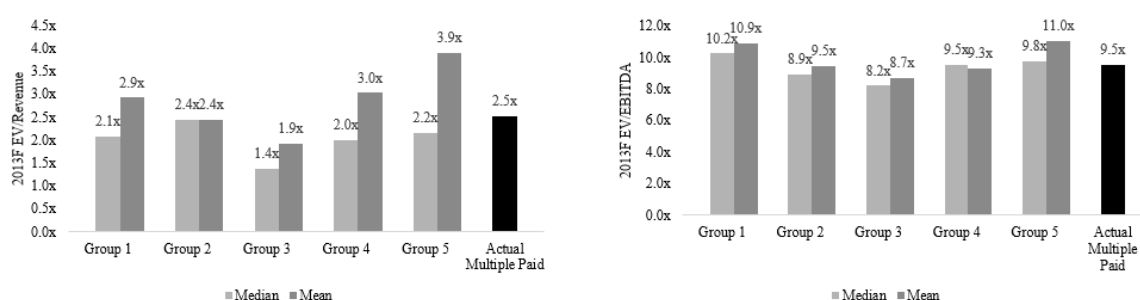
As the descriptive statistics indicated for EV/Revenue multiples, there seems to be little statistically significant differences in the average multiples across different periods of times (Groups 2 with 279 observations and 4 with 456 observations) and 2012 (Group 1 with 146 observations). In addition, there seems to be statistical significance on the remaining groups 3 (272 observations) and 5 (1,012 observations). In the case of EV/EBITDA multiples, there is only statistical significance between group 1 and 3. Even though this data set provides important

insights into the research question, arguments can be made against deciding to include companies across the globe that might not be exactly comparable to the multiples used in asset management in the UK. For this reason, the same test has been performed on the average multiples of only the trading comparable companies that were used to value Heartwood. By conducting this second test, we can get closer to answer whether lower than average multiples can explain the divergence in price between multiples and DCF valuations.

Trading Comparable Companies

Figure 8 – Graphic Representation of the Results on the Selected Trading Comparables

Median and mean of the forecasted 2013 EV/EBITDA multiple for the selected trading comparables, for each of the Groups, in comparison with the multiple paid by Handelsbanken.



Strikingly, both descriptive statistics and hypothesis testing tools yield similar returns to the first test conducted. Even though descriptive statistics do show slight differences in the average multiples used to value these companies at different points in time, the hypothesis tests yield no significant differences in the average multiples at any time-period relative to 2012. The detailed results can be found in *Appendix 11*.

7.4. Limitations and Scope of Results

The initial goal of the statistical test conducted was to test whether 2012 multiples were on average lower than the average industry multiples. For this reason, multiples from different time periods were collected and grouped; however, one limitation is in the selection of companies and time periods. One could argue that aggregating all asset management companies could cause multiples to be heavily disturbed. Grouping such companies into one category could cause very dissimilar companies to be included in the analysis. For example, high growth – thus higher trading multiples – emerging markets companies could drive up the average multiples. Conversely, low growth companies could drive down the average multiples. For this reason, the analysis also tried to only evaluate the truly comparable companies' multiples. However, this presents a statistical issue with a very small sample population of $n < 10$, so its results need to be analyzed carefully.

8. Discussion

8.1. Deal Evaluation – Suggested Alternative Indicators

As shown above, evaluating Handelsbanken's acquisition of Heartwood through conventional metrics such as stock price reaction proves difficult since there are many factors affecting the bank's share price. Besides, it is a relatively small transaction. For this reason, we have identified the following alternative evaluation metrics that could provide valuable information to assess whether the deal has created or destroyed value for Handelsbanken and all its stakeholders.

8.1.1. Employee and Client Turnover Ratios

Table 7 – Results on Voluntary Employee and Client Leavers

As can be seen in the table above, the yearly employee and client leaves were very low, which was in line with expectations and the result of continuous measures to maintain or improve customer and staff satisfaction, especially after the acquisition.

Voluntary Employee Leavers¹	2014A	2015A	2016A
Number	3	3	4
Percentage	2.50%	2.29%	3.14%
Percentage of Clients Leaving²			
Percentage	1.60%	1.50%	1.39%

It could be argued that these two metrics might not be as significant to look at post-acquisition in other industries such as manufacturing or product driven industries. However, Asset Management is a service-driven industry in which client interaction and satisfaction is important to have a successful business, so these two metrics are key.

Heartwood's business model relies on clients trusting their money to the firm. For the business to work, clients need to fully trust the firm and its employees given that they can withdraw their money at any time. However, developing a trustworthy employee-client relationship requires Heartwood and Handelsbanken to keep the employees who already have long-standing relationships with clients. For this reason, employee and client turnovers metrics can be an interesting metric to evaluate after the transaction closed to make sure that few to no employees or clients left the firm post-acquisition.

8.1.2. Revenue and Assets Under Management Growth

A second performance indicator that can be evaluated is the assets under management growth as well as revenue growth. As Heartwood's executives indicated, the healthy, constant growth

¹ Excludes retirements/dismissal/ contracts ending

² Includes deceased clients

of assets under management is an important metric to look at to evaluate the performance of any wealth manager given that larger funds generate larger revenues and it sends a positive signal to clients that the firm is providing good returns. At the time of the acquisition, Heartwood had £1.5bn assets under management, and five years later the firm manages over £3.6bn assets, more than double, as per Annual Reports.

Figure 9 – Heartwood’s AuM Evolution Between 2012 and 2018

The results on Heartwood’s AuM evolution show a CAGR of 16% between 2012 and 2018.

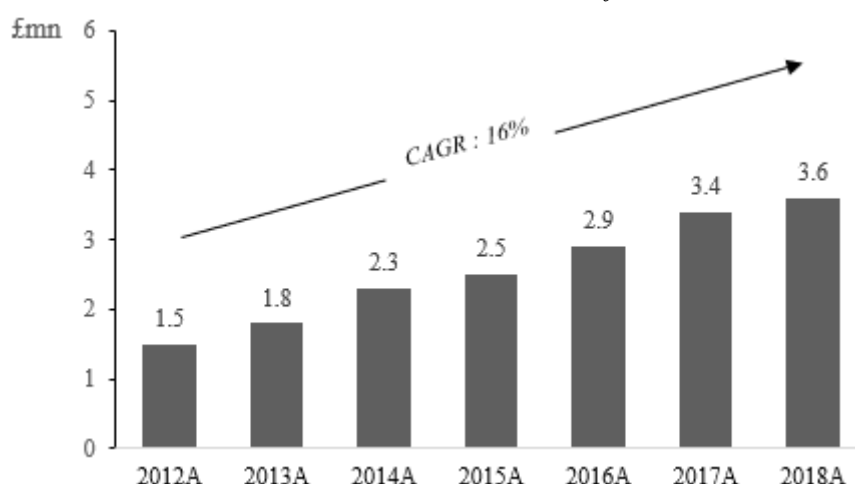
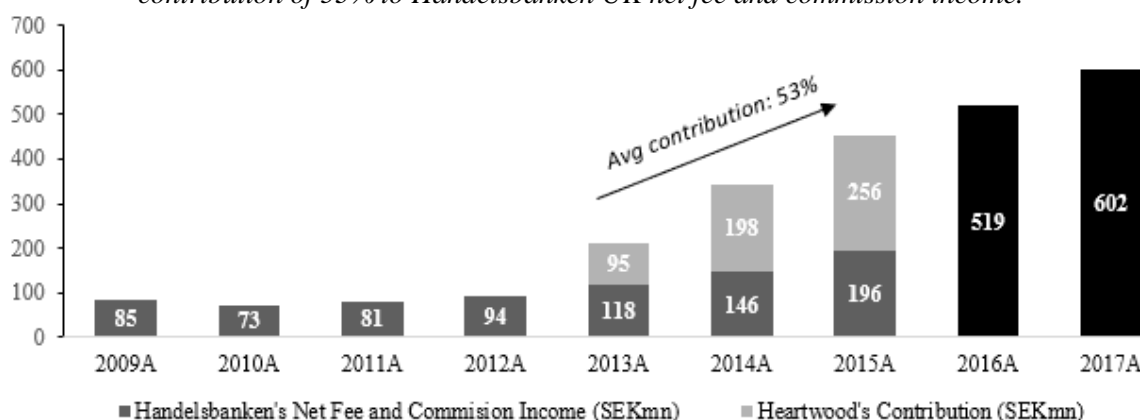


Figure 10 - Handelsbanken UK Net Fee & Commission Income Evolution

There is enough data to conclude that, between 2013 and 2015, Heartwood had an average contribution of 53% to Handelsbanken UK net fee and commission income.



According to internal estimates, 80% of new Heartwood’s clients and 80% of new volume came through the distribution network and geographical reach that Handelsbanken had in the UK. Heartwood’s ability to grow had become extremely limited as client directors were fully employed. However, upon hiring the 12 new client directors, since they had no clients at all, they could spend 100% of their time marketing and winning new clients. In addition, all 208 local branches of Handelsbanken in the UK saw a positive impact of commission revenue stemming from Heartwood’s clients.

Because of the need to hire more client directors across the UK, people had to be hired from all different competitors. That provided a unique chance to learn about competitors' practices and strategies. Surprisingly, new employees were surprised with how low the charges for advice were. As such, Handelsbanken did start to increase those charges over the first 2 years, generating higher revenue. It is important to notice this was a result of the acquisition, but not a requirement imposed by Handelsbanken. It was simply the result of getting to know better what competitors were doing, made possible by the acquisition.

8.1.3. Impact on ROE

Table 8 – Estimated Impact on Return on Equity from the Acquisition

As can be seen in the last two rows of the table presented, the net income of Handelsbanken UK is higher in every year due to the acquisition of Heartwood, positively impacting the ROAE².

	2012	2013	2014	2015	2016	2017
Allocated Equity (£k) ¹	5,878	7,644	9,430	10,452	11,426	13,106
Net Income (NI) (£k)	817	1,009	1,433	1,756	1,760	1,337
Return on Allocated Equity (£k) ¹	13.9%	13.2%	15.2%	16.8%	15.4%	10.2%
Number of UK Branches ¹	133	161	178	197	207	208
Estimated NI, exc. Heartwood (£k)	817	989	1,093	1,210	1,272	1,278
Estimated ROAE, exc. Heartwood	-	12.9%	11.6%	11.6%	11.1%	9.7%
<i>Difference in Net Income (£k)</i>	-	20	340	546	488	59
<i>Difference in ROAE</i>	-	0.3%	3.6%	5.2%	4.3%	0.5%

Another metric we consider informative of the acquisitions' positive or negative impact on the acquirer is return on equity (ROE). The results of our proposed analysis, independent from Handelsbanken, are shown above in *Table 8*. For this analysis, it is important to note that Handelsbanken's equity can be allocated to their several markets, i.e. for the UK home market there is a specific allocated equity for which a return on allocated equity (ROAE) can be computed based on the Handelsbanken UK's net income.

For each year we present the actual allocated equity, net income and ROAE for Handelsbanken UK. Considering that the acquisition occurred in 2013, only from this year onward does Heartwood affect the financial statements. To estimate the ROAE for this market as if Heartwood had never been acquired, we decided to compute Handelsbanken UK's net

¹ As presented in Handelsbanken's Annual Reports of each year, as of December 31st.

² It is worth mentioning that although there is a positive impact of the acquisition on ROAE, the magnitude of the impact could be overestimated. For example, the ROAE could be lower given that when opening a lot of branches, the profitability decreases since the new branches only have break-even after two years. In addition, Heartwood's contribution came from few branches in the beginning.

income from 2013 to 2017 as a proportion of the number of branches in the UK, which has been growing over the years and is independent from the acquisition.¹

8.1.4. Realization of All Revenue Synergies

Another indicator of success for the transaction is the achievement of all revenue synergies. As has been mentioned earlier, out of the four expected revenue synergy streams, only one was computed and considered in the valuation models, which was the result of offering Heartwood's wealth management products to UK Handelsbanken clients. Not only the accounted effects realized, but numbers above the expected were achieved. Due to the difficulty of computing the other three revenue synergies, Handelsbanken decided to assume a scenario in which they would not materialize, in a conservative way. These corresponded to the potential of achieving customer referrals from Heartwood to Handelsbanken, the potential from IFA referrals from Handelsbanken to Heartwood, and the potential of the IT platform which would be built and developed over time.

Firstly, as Alastair Briggs (October 12th, 2018) shared, most of Heartwood clients eventually signed up with Handelsbanken. Heartwood's clients should be looked at as two groups, one the wealthy City clients and another the average clients. The latter would typically have a portfolio between £700k and £800k and would roughly follow a normal distribution curve. The City clients, however, did not follow a normal distribution. There was a lot of people between £6mn and £10mn, and then there was a long tail out to some very big portfolios, with one individual in specific with more than £100mn, and around 25 families with more than £25mn. Five years later, of this group, over half (approximately 60%) had become bank clients. Of the smaller group, who were mostly non-city clients, that percentage is much lower, not surpassing the 25%. In general, the bank was very successful in getting Heartwood's clients, especially the ones who belonged in the wealthy group.

Secondly, Handelsbanken was successfully able to contribute to the IFA growth, helping to accelerate the hiring of the new client directors by leveraging on their own nationwide network, to which Heartwood did not previously have access to.

Lastly, and as Simon Dixon (October 25th, 2018) shared, the IT development was the area that the combined entity struggled the most with. Despite the bank having various IT resources, experience, and the capital to support the development, it was felt that there was not enough bandwidth in the business to support all the desired IT projects, as more attention than expected was being given to developing the business nationwide. However, even though slower

¹ There are several limitations to this methodology, and it can be argued that other factors could have impacted the net income. However, for this sole analysis, we assume 2012 as a representative year and that Handelsbanken's expansion in the UK can be properly traduced by the expansion of the number of branches.

than expected, a very good progress has been achieved five years later. For example, the bank has launched in 2018 a dynamic client reporting tool that allows customers to consult their positions on their smartphones and better IT systems are in place.

In summary, the revenue synergy stream that had been accounted for in the valuation proved to be larger than expected, and the other three revenue synergies, which had been assumed as non-realizable for valuation purposes, despite some delays, showed positive results.

8.1.5. Employee Mobility

In addition to keeping employees of Heartwood, Handelsbanken executives imagined a successful acquisition to be one in which Heartwood and Handelsbanken's employees could freely move across the bank. For Handelsbanken, employee mobility signified that a successful integration of both businesses and their cultures was accomplished, which could be argued, increases the chance of a highly successful combined entity post-merger. Even though data is limited, Handelsbanken's executives claim that a good number of Heartwood's long-serving members moved to different roles within Handelsbanken to progress their careers.

8.1.6. Higher Customer Satisfaction

Another factor that is important to analyze post-merger is customer satisfaction. As previously mentioned, the success of wealth managers is highly dependent on how satisfied clients are, both in terms of investment returns and in terms of customer satisfaction. When evaluating client satisfaction post-merger, Handelsbanken has achieved greater customer satisfaction than pre-acquisition levels. Internal customer satisfaction surveys indicate positive post-acquisition results. For example, in an independently carried-out client satisfaction survey from 2014, only one year after the acquisition, it is already possible to see a high recognition of the attractions of the acquisition to Heartwood customers. The effects from the acquisition grew over time and are noticeable, as from 2017's independent survey of the merged entity customers' satisfaction it is possible to conclude that Handelsbanken's customers who also use the wealth management services show higher levels of satisfaction and loyalty.

8.1.7. Acquisition Experience & Applicability in Future Transactions

Finally, although difficult to quantify, we have identified this acquisition as a success because of how valuable it has become for the bank when it embarks in future acquisitions. The bank has recently completed a similar acquisition in the Netherlands, and the M&A team at Handelsbanken used Heartwood's acquisition as a template for valuation purposes and integration best practices. In addition, Handelsbanken's M&A team set up meetings between long-serving Heartwood employees and the management team of the target in the Netherlands to have honest conversations regarding the acquisition. Handelsbanken's willingness to set up

these meetings was a clear sign of the immeasurable value that this acquisition brought to the bank.

8.2. Keys to Success – Pre-merger Characteristics

As it is possible to observe from the positive results obtained when applying the metrics that we suggest for a post-merger analysis in the case of Handelsbanken's acquisition of Heartwood, this could be considered as a successful deal. As a matter of fact, the two companies are performing better together than in a stand-alone basis, based on the results obtained in the previous chapter.

The literature suggests that further research would be important for exploring the obscure variables that could positively affect M&A deals. In trying to understand the main motives for this success, we propose that the following characteristics of the transaction were key.

8.2.1 Heartwood Was not Treated as a Commodity

Handelsbanken did not treat the acquisition of Heartwood as a commodity, as putting Heartwood's clients and employees first showed. For example, the consideration had an earn-out built into it, with the main objective being the retention of key employees. Another example of how much the client retention was important for the bank are the dinners held with the key clients who were the most representative on Heartwood's portfolio or who showed the most concern about Heartwood being acquired by a bank.

As such, the bank did not treat the acquisition of Heartwood as a commodity in which clients and employees are bought and supposed to produce incremental top line growth. As Tracey Davidson (September 21st, 2018) puts it:

“We are talking about a third-party, which is the customer of Heartwood. And this third-party is an independent individual who has trusted you to look after their money and give them financial advice. And they can take the money away. There is no legal obligation to Heartwood, and even less to Handelsbanken. (...) There is no way you can treat this sector as a commodity. I know there are a series of larger firms that do, and you can see that in the most recent deals in the UK. In our deal, however, the clients were always at the center of everything, so we had to make sure we did that right.”

No corporate decisions were ever made without considering its impact on clients and employees. By putting the employees and clients as the center of attention and as key drivers

of the deal, the bank managed to achieve very high client and employee retention ratios, which is very important for any company in the services industry.

8.2.2. Price Was not a Top Concern for Any of the Parties

Since the deal was not seen as a simple commodity-like transaction, both parties put higher emphasis on trust and the outlook of the combined company instead of the price and consideration aspects of the deal. This was a distinguishing feature of Handelsbanken, as other bidders would focus the discussions throughout the bidding process on price, while the bank would shift the attention toward building a joint business plan.

Upon doing the valuation of Heartwood, which can be seen in *Chapter 6.1.5. Valuation*, we were initially intrigued by the lower market-based multiples' price range compared to the DCF price range, as well as by the fact that the price agreed on by both parties was within the former and not the latter. This implied the price paid was based on market value rather than intrinsic value.

One of the biggest disadvantages of using multiples to do valuation is that they are static, i.e. they do not take into consideration different points in time. Therefore, it could be the case that the multiples' valuation was providing a lower price range because the multiples could be depressed in 2012 when compared to other time periods. As explained earlier in our thesis, this motivated us to do an additional analysis that can be seen in *Chapter 7. Market-based Valuation Additional Analysis*, from which we were able to fail to reject the H_0 that the means of each group are equal to each other, implying the multiples were not significantly lower in 2012.

Even though we do not know whether Handelsbanken's bid was the highest in the binding round, we believe that there was room for a higher price to be paid for Heartwood. Our analysis suggests, therefore, that Heartwood possibly accepted a lower price than the company's intrinsic value due to the confidence established in the bank, which at all times focused on assuring Heartwood that their investment strategy, clients, and employees would be kept and would be the main focus. There was no intention by Handelsbanken to separate the well-integrated businesses of Heartwood, which was its main distinguishing feature, and this was highly valued by Heartwood's founder and other key stakeholders.

Not relying on price and contractual details was crucial in allowing both parties to start a trustworthy relationship that facilitated the successful integration of both businesses. In fact, Tracey Davidson asserts that overreliance on price might cause parties to be disgruntled post-acquisition. Few are the acquisitions in which both parties are fully satisfied with the price and consideration paid; one party will always argue for paying less while the other will argue for

receiving more than what was offered. Therefore, it is important that this is not at the core of the discussions and that the focus is shifted towards the business and its future.

8.2.3. Integration Meant Working Together, not Imposing Ideas

Integration started way before the closing of the transaction, with the planning of a joint business plan and the discussions between management parallel to the due diligence process. As Magnus Berglund (September 21st, 2018) mentioned, the key word to the discussions was “together”:

“That summer the discussions regarding the business plan started immediately: how to work together.”

Upon the announcement of the deal, the bank took its time to fully integrate both companies in the best possible way. Instead of trying to change policies, rules, investment practices or even the brand, the bank focused all its resources and efforts into understanding the working culture of both parties to identify the best way to integrate and fully combine both. As mentioned earlier in our thesis, one of the initiatives of the bank to achieve a successful integration was to openly communicate with employees and customers from both companies. A second key strategy that the bank applied was to offer long-term ‘tie-in’ contracts – three-year contracts – to key personnel including the Human Resources and Finance directors to run operations smoothly. Thirdly, decisions regarding branding and the change of name were unanimously decided and not imposed by Handelsbanken, as is typically done by acquirers.

Another example of how cooperation was preferred to taking-over is well illustrated by how managerial matters were handled in the first meeting between Heartwood’s management and Tracey Davidson, who was representing Handelsbanken:

“I came to my first management meeting with all of Heartwood’s management team. It was only me [from Handelsbanken] sitting at the table, and they were all excited because our application to the regulator included my title as Deputy CEO. (...) I explained that this was so that, if Armageddon happened, I would step in. However, they said that indirectly implied that they didn’t know how to run the company. I responded with “that’s no problem, I don’t have to be called Deputy CEO, I will just be a Director, I know what job I am here to do, is that ok?”. And with that issue solved, we moved to the next item on the agenda”. (Tracey Davidson, September 21st, 2018)

This lack of competition allowed both parties to take a pragmatic approach in which both companies’ goals were initially aligned and ultimately the same.

8.2.4. Handelsbanken and Heartwood Were Complementary Businesses

The two parties had very little to none overlap, which can be considered as a positive factor leading to the deal's success. As Alastair Briggs (October 12th, 2018), former Client Director at Heartwood, pointed:

“Another very important thing was that there was no overlap: we did not provide any banking services and they did not provide any service that we did, so there were no redundancies.”

This is consistent with the literature, as in the article by King et al, it is argued that complementary business could explain the creation of synergies and therefore the positive returns from M&A transactions. In Handelsbanken's view, this allowed both parties to unlock revenue synergies which would otherwise be difficult to achieve. Furthermore, as opposed to many other acquisitions, Handelsbanken did not have investment management operations in the UK pre-acquisition, so this allowed the bank to avoid firing personnel, closing branches, and most importantly, there was not any kind of competition between both parties. In this acquisition, Handelsbanken allowed and expected Heartwood to become the center of excellence in asset and investment management in the UK for its clients.

9. Concluding Remarks

As stated in the introductory section of this thesis, evaluating Handelsbanken's acquisition of Heartwood does not aim to argue against the idea of evaluating M&A transactions by analyzing stock price performance and accounting measures such as the ones used by King et al. Instead, this thesis aims to provide alternative evaluation methods that could prove to be useful in particular cases such as when acquirers are private, or the acquisition is considered to be of small magnitude to create any kind of effect on its stock price, the latter being Handelsbanken's case in its acquisition of Heartwood. The idea of investigating alternative evaluation metrics to decide whether M&A transactions create value for the parties involved has been suggested by multiple finance scholars. As outlined above, King et al suggest that unidentified variables – or *modifiers* – could explain the difference between successful or unsuccessful deals. In addition, Das & Kapil contend that the rationale behind a transaction must be understood in order to apply the appropriate key performance indicators when evaluating the deal.

Through a number of interviews ranging from chief executives, to board members and investment bankers, we have been able to recount the events that occurred pre, during, and post-acquisition. In addition, we collected sufficient data in order to conduct and closely replicate the valuation methodologies used by Handelsbanken in its assessment of Heartwood's value.

Furthermore, this thesis provides the reader with an interesting perspective on the post-closing events of the acquisition. From an educational perspective, it is the authors' belief that much emphasis is placed on the pre-acquisition considerations such as strategic rationale and valuation, while the post-acquisition analysis – integration of the combined entity and evaluation of the deal – is left in the background. For this reason, this thesis provides the reader with a detailed account of the efforts and challenges endured by both parties in order to achieve a successful integration of the combined entity, efforts which could very well be argued contributed to the long-term success of the transaction.

As its main goal of the thesis, this thesis also provides interesting metrics to evaluate M&A transactions and whether they create value or not. After conducting this analysis, which is presented in depth in *Chapter 8. Discussion*, it is clear to see that some or most of the key performance indicators used to evaluate Handelsbanken's acquisition of Heartwood might not be applicable to other industries or business models. A finding that resonates with Das & Kapil's argument that deals cannot be evaluated without truly understanding the context in which they happen. It is easy to realize that employee and client retention rates, metrics which are arguably the most important factors of success in the wealth management industry, might not be of any relevance in a product-based industry such as consumer goods. With this example, it is the author's intention to clearly state that the findings of this thesis should not be evaluated under the light of generalization to the broader population; instead, it is the hope of the authors that this M&A case study serves as an educational tool that broadens the readers understanding of the key considerations of M&A pre, during, and post-closing. In addition, even though no cross-industry generalizations should be made based on these findings, this thesis provides an important general framework or philosophy when conducting M&A transactions in the wealth management industry and service industries that rely heavily on client-employee interactions, thus equipping the reader with a comprehensive set of tools needed in both academic and professional areas of corporate finance specializing in financial institutions.

After reading this thesis, it is the hope of the authors that the reader will have a stronger understanding of valuation methodologies for both banks and non-bank financial institutions such as wealth management, as well as a broader perspective on key performance indicators of successful M&A transactions of financial institutions and its drivers or so-called “keys to success.”

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Appendix

1. Pedagogical Development – Bank’s Valuation Case Study

Regarding the potential to write a case on bank’s valuation, with the literature review provided in *Chapter 2. Previous Research*, especially the one dedicated to the specificities of bank valuation, we believe a case writer could create a fictional case study on, for example, “Handelsbanken considers a merger – finding the right price”.

For example, the student could be told he is an analyst working for a bulge bracket investment bank whose boss needs to give advice on bids Handelsbanken will receive for a possible future merger to the bank’s Board of Directors. Most of the background information on Handelsbanken could already be found in this thesis, and it would only have to be adapted for the purpose of this specific case.

Naturally, the case would be simplified such that a business as big as Handelsbanken could be appropriately and easily valued using a DDM (or other methods such as regression analysis, GGM, etc. as mentioned in *Chapter 2. Previous Research*). Otherwise, and as seen in public broker reports, Handelsbanken is typically valued using the sum-of-the-parts method. We suggest the focus of the case would be on finding the right range of prices for Handelsbanken in order to properly assess the bids the bank would receive, and not on the motives or rationale for the merger.

We believe there is already enough material and discussion on this, but that there is a lack of cases focusing on how to find the value of a bank. This is of extreme relevance for students who intend to follow a career path involving financial institutions and to demystify bank’s valuation. A starting point would be the historical financials of Handelsbanken, which are publicly available, so we are not including them in this thesis.

2. Derivation of the Modified GGM Formula

The simple GGM formula corresponds to an infinite geometric progression for an infinite stream of dividends paid end-of-period, which grow by a constant growth rate (g) and are discounted by a constant cost of capital (r_E):

$$P_0 = \frac{Div_1}{r_E - g}$$

Using basic algebra one can derive the modified GGM for P/B, i.e. the price to book value multiple:

$$\begin{aligned} P_0 &= \frac{Div_1}{r_E - g} \quad (=) \quad P_0 = \frac{Net\ income_0 \times P/O \times (1+g)}{r_E - g} \quad (=) \quad P_0 = \frac{BV_0 \times ROE_0 \times P/O \times (1+g)}{r_E - g} \quad (=) \\ (=) \quad \frac{P_0}{B} &= \frac{ROE_1 \times P/O}{r_E - g} \quad (=) \quad \frac{P_0}{B} = \frac{ROE_1 \times [1 - (g / ROE)]}{r_E - g} \quad (=) \quad \frac{P_0}{B} = \frac{ROE - g}{r_E - g} \end{aligned}$$

Note: since the intention is to determine the Equity value at $t = 0$ (P_0), the first dividend comes in as of end of $t = 1$. Therefore, when substituting Div_1 with $BV_0 \times ROE_0 \times P/O$ a growth parameter of $(1 + g)$ is introduced. However, some formulas assume ROE as of $t = 1$ and thus do not include a growth parameter.

3. News at the Day of the Announcement

3.1. Handelsbanken's Press Release

Figure A1 – Handelsbanken's Press Release

On February 6th, 2013, Handelsbanken publicly announced it would acquire Heartwood through a press release.

Handelsbanken

Press release

Stockholm, 6 February 2013

Handelsbanken buys UK wealth manager

Handelsbanken has acquired Heartwood, a UK wealth and investment manager.

"Handelsbanken is steadily growing and maturing in the UK, particularly amongst customers with high requirements for qualified asset management. This acquisition makes it possible for us to widen our offering to current and future customers," says Anders Bouvin, Head of Handelsbanken UK.

With operations in London and Tunbridge Wells, Heartwood currently manages around SEK 15 billion of assets. Its services to private individuals range from discretionary investment management, to offering financial advice on pensions and retirement planning. The acquisition gives Handelsbanken an important platform for additional growth in the savings area.

"We have followed the progress of Heartwood for a while and have been impressed by their approach to wealth and investment management. Just like Handelsbanken, Heartwood values satisfied customers more than the number of sold products. This is the best way to build up profitable business," continues Anders Bouvin.

The UK is Handelsbanken's fastest growing market. There are currently 147 branches there with a new one being added every eighth business day.

The purchase of Heartwood – which will become a wholly- owned subsidiary of Handelsbanken – requires the formal approval of the UK financial regulator as well as Heartwood's shareholders. The acquisition will initially have a marginal impact on Handelsbanken's financial position.

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This information is of the type which Handelsbanken must make public according to the Swedish Securities Market Act. The information was submitted for publication on 6 February 2013 at 06.48.

For more information about Handelsbanken, see: www.handelsbanken.se

Source: Bloomberg. Consulted October 26th, 2018

3.2. Bloomberg News

Figure A2 – Bloomberg's Piece of News

On February 6th, 2013, Bloomberg's Niklas Magnusson reports on Handelsbanken's acquisition of Heartwood and the fact that the bank raised its dividend less than its Swedish rivals.

News: News Story

02/06/2013 10:02:59 [BN]

Handelsbanken Falls Most in Six Months as Dividend Disappoints

By Niklas Magnusson

Feb. 6 (Bloomberg) -- Svenska Handelsbanken AB, Sweden's second-largest bank, fell the most in more than six months in Stockholm trading after the European Union's best-capitalized lender raised its dividend less than its Swedish rivals.

Handelsbanken dropped as much as 10.3 kronor, or 3.9 percent, to 252.3 kronor, its steepest intraday decline since July 17 last year. The bank's shares decreased 2.3 percent to 256.5 kronor as of 9:20 a.m. local time, with trading volumes at 43 percent of the daily average in the past three months.

The Stockholm-based bank proposed raising its dividend by 10 percent to 10.75 kronor (\$1.7) a share for 2012, compared with 9.75 kronor a year earlier, according to a [statement](#) today. Swedbank AB targets an 87 percent dividend increase to 9.9 kronor a share while SEB AB is raising its payment by 57 percent to 2.75 kronor a share. Nordea Bank AB stepped up its proposed payout for last year by 31 percent to 0.34 euro.

The dividend was "somewhat lower than expected," which "is a disappointment in our view as expectations have been set higher after the previous Swedish bank reports that have all beaten on capital policies," [Pawel Wyszynski](#), an analyst at Nordea in Stockholm, said in a note to clients today.

Handelsbanken, Swedbank and SEB are the best capitalized major lenders in the EU, giving them scope to distribute more to shareholders at a time when other banks in Europe are trying to preserve cash to meet stricter capital rules.

U.K. Purchase


Handelsbanken's capital strength is also helping it expand in Europe. The bank announced today the purchase of U.K. investment manager Heartwood, and named the Netherlands as one of its main markets as it targets growth abroad.

"We see major opportunities for continued growth here in the Netherlands," [Mikael Soerensen](#), head of the bank's Dutch unit, said in a [statement](#). "The market is similar to the U.K., with a few large, centralised banks. We're opening branches and working close to the customer in a decentralised manner."

Handelsbanken is expanding even as it faces some of Europe's strictest regulatory standards. Sweden's government is pushing through tougher capital rules than those set elsewhere. The country's four largest banks already fulfill this year's 10 percent core Tier 1 capital requirement of risk-weighted assets, and also top a 12 percent minimum rule effective from 2015. Handelsbanken's core Tier 1 ratio rose to 18.4 percent in the fourth quarter, from 17.9 percent in the third quarter.


Handelsbanken's profit in the three months through December jumped 49 percent to 4.54 billion kronor, beating the average 4.51 billion-krona estimate of 16 analysts survey by Bloomberg. The bank's net interest income rose 2 percent to 6.48 billion kronor in the fourth quarter, while net fee and commission income rose 1.8 percent to 1.91 billion kronor in the period.

Photo



Svenska Handelsbanken
Increases Dividend 10%
After Profit Soars

Function



Quarterly Earnings

Source: Bloomberg. Consulted October 26th, 2018

4. Biographies of Key Persons Involved in the Deal

Table A1 – Biographies of Key Persons Involved in the Deal

Detailed biographies of key persons involved in the deal, both buy and sell side.

Buy Side

Anders Bouvin Handelsbanken	Anders was at the time of the acquisition Head of Handelsbanken UK. In 2016 Anders was appointed as the new President and Group Chief Executive of Handelsbanken. Previously, Anders had been Executive Vice President at Handelsbanken since 2002 and his background includes positions as Branch Manager in New York and General Manager of Handelsbanken Denmark.
Tracey Davidson Handelsbanken	As Head of Handelsbanken Northern UK, Tracey was responsible for the banking operation in the northern half of the UK and a member of group management. Per the acquisition, Tracey became Heartwood's Director and later on CEO as Simon Lough retired.
Magnus Berglund Handelsbanken	Magnus was at the time, and still currently is, the Head of Corporate Development at Handelsbanken, since the summer of 2011. Previously worked for more than 17 years at Handelsbanken Capital Markets.
Richard Winder Handelsbanken	Richard, at the time of the acquisition, was Handelsbanken UK's Chief Communications Officer. Later, in 2016 Richard was appointed the Group Head of Brand Reputation and, in late 2018, Global Head of External Affairs.
Ian Macfarlane Handelsbanken's financial advisor	Ian is a Mergers & Acquisitions advisor with over 30 years' investment banking experience gained at Schroders, Swiss Bank Corporation, Enskilda Securities, Europa Partners (partnership boutique where Ian worked at the time of the acquisition) and Mirabaud. Since 2017, Ian is the founder and a Director at the advisory firm Luberon Capital Ltd.

Sell Side

David Lough Heartwood	Heartwood's founder and chairman at the time of the acquisition. Work experience in investment banking in Japan, Hong Kong and Australia, before becoming Managing Director of County NatWest Investment Bank.
Simon Lough Heartwood	Brother of David Lough. Became Chief Executive of Heartwood on November 2008 having previously headed both the client and investment teams. Previous experience in investment banking in Tokyo and London.
Noland Carter Heartwood	Noland started in institutional asset management and moved to private wealth management upon his appointment as Barclays Private Banking's Global CIO in 1997. Between 1999 and 2005 he established and was CEO of Investment Services at Barclays Wealth, and later he was appointed CEO of Rothschild Private Management and Global CIO of Rothschild Private Banking and Trust. Noland joined Heartwood in May 2008 as Chief Investment Officer, leading Heartwood Investment Management.
Simon Dixon Heartwood	Chartered Tax Adviser and qualified Financial Planner. Joined Heartwood in 1998 and his career progressed through the leadership of tax, pension and client focused teams. At the time of the deal, he was the head of Private Wealth Management.
Gary Rogerson Heartwood	After graduating in law from Oxford University, Gary qualified as a solicitor at Cripps Harries Hall in 1984 and was a Partner from 1989 to 2002. He moved to join Cripps Portfolio (Heartwood) in May 2002. At the time of the acquisition, Gary was Director in Private Wealth Management.

5. Case Study Research Quality Areas

Yin (2014) presents four areas that challenge the research quality of case studies, both in terms of validity and reliability, as follows:

1. “Construct validity” is defined as the extent to which the study measures what it claims to be measuring. This is a particularly difficult area to tackle, as interviews are affected by the setting in which they take place and are subject to subjective interpretation, as Flyvberg (2006) argues. According to Yin (2009), there are three strategies for meeting this requirement:
 - a. Using multiple sources of evidence - following Yin (2014), Patton (2002) and McMillan & Schumacher (2009) recommendations, we used triangulation (in this case data source triangulation), i.e. multiple information sources in the data collection process, by including the internal perspectives of Heartwood and Handelsbanken managers, but also the external perspective of Ian Macfarlane, the independently hired buy-side investment banker.
 - b. Having key informants review the case study report – The case study has been reviewed by some of the interviewees, ensuring accuracy, completeness and appropriate presentation.
 - c. Maintaining a chain of evidence – The case was designed such that it is possible to trace from conclusions back to the initial research questions, or from questions to the conclusions, enhancing the case study’s accuracy (Sarker & Lee, 1998).
2. “Internal validity”, which is concerned with justifying causal relationships, only applies to explanatory and not to descriptive or exploratory case studies (GAO, 1990). As mentioned earlier, we classify our case study as descriptive.
3. “External validity” deals with the problem of guaranteeing that the findings are generalizable to other cases and is normally associated to statistical generalization. Thus, Silverman (2000) highlights that a single case study is an insufficient sample. However, Siggelkow (2007) argues that a single case can be powerful without fulfilling the 16 requirements of statistical generalizability, as it can provide analytical generalization if the case-based research is used properly, i.e. even though conclusions from data to a population cannot be drawn, a comparison between the results of the case to developed academic theory is done in *Chapter 8. Discussion*, fulfilling this requirement. In other words, “case studies, like experiments, are generalizable to theoretical propositions and not to populations or universes. In this sense, the case study, like the experiment, does not represent a ‘sample’, and the investigator’s goal is to expand and generalize theories [analytical generalization] and not to enumerate

frequencies [statistical generalization]” (Yin, 2009, p.10). Nevertheless, it is worth noting that the methodological literature provides little consensus regarding how exactly analytical generalization may be achieved (Halkier, 2011).

4. “Reliability” refers to “demonstrating that the operations of a study - such as the data collection procedures - can be repeated, with the same results” (Yin, 2014). The interview-based methodology affects the reliability of our study. First, the use of semi-structured interviews makes it unlikely that these could be replicated with the same results. Second, since the interviews were conducted five years after the deal occurred, it is possible that a recollection of the event would change as time passes and opinions change. The interviews have been transcribed, dated and stored to reduce these reliability-related issues.

6. Heartwood's Organizational Charts

Figure A3 – Board of Directors – Heartwood

Heartwood's Board of Directors as of 2012

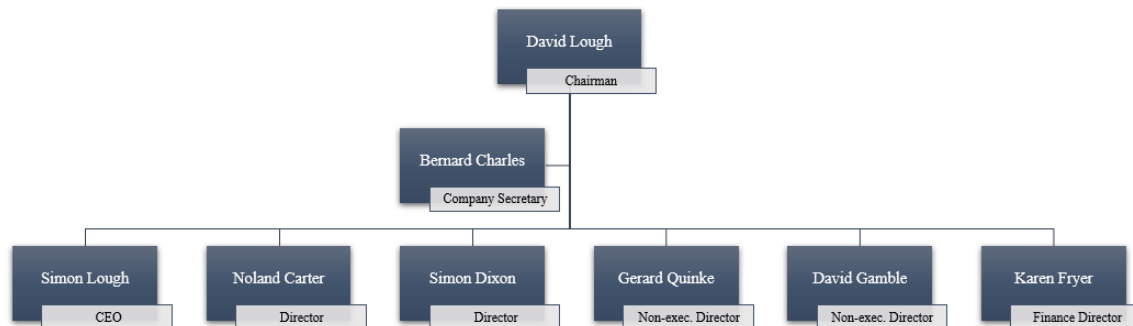
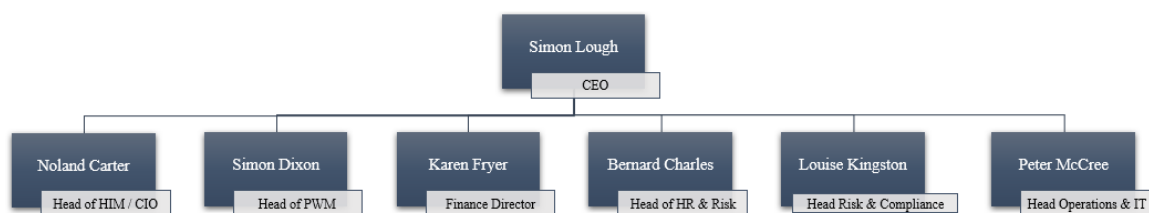


Figure A4 – Executive Committee – Heartwood

Heartwood's Executive Committee as of 2012



7. Details on Market-based Valuation Multiples

Table A2 – Precedent Transactions: Multiples and Key Statistics

Multiples and key statistics on the precedent transactions considered for Heartwood's valuation.

Date	Target	Bidder	EV £mn	EV / Revenue	EV / EBITDA	EV / EBIT	EV / AuM
nov-12	Spearpoint	Brooks Macdonald	32	2.8x	-	-	2.9%
nov-12	Cheviot Asset Management	Quilter	100	3.5x	-	-	2.4%
jan-12	Quilter	Bridgepoint	175	2.2x	9.7x	10.6x	2.3%
jun-11	JM Finn (70%)	Ackermans & Van Haaren / Delen	86	2.3x	-	-	1.4%
apr-11	Cavanagh	Close Brothers	27	1.7x	16.9x	29.9x	1.8%
nov-10	BDO Investmt. Mgmt (84%)	Oakley Capital PE LP	14	0.9x	-	-	0.7%
sep-10	Chartwell Group	Close Brothers	17	2.4x	-	-	2.6%
mar-10	Rensburgh Sheppards (52%)	Investec	412	3.8x	12.9x	16.2x	3.2%
dec-09	Thornhill Holdings	Cazenove Capital Mgmt.	13	2.0x	-	-	1.9%
feb-08	Principal Investmt. Holdings (86%)	Sanlam	46	3.2x	11.3x	14.9x	4.1%
<i>Average</i>				2.5x	12.7x	17.9x	2.3%
<i>Max</i>				3.8x	16.9x	29.9x	4.1%
<i>75th</i>				3.1x	13.9x	19.6x	2.8%
<i>Median</i>				2.4x	12.1x	15.6x	2.4%
<i>25th</i>				2.1x	10.9x	13.8x	1.8%
<i>Min</i>				0.9x	9.7x	10.6x	0.7%

*Source: Company accounts, press releases and Mergermarket.
Consulted in November 19th, 2012.*

Which generated the following equity values for Heartwood as a stand-alone company, assuming a net debt of £1.3mn:

	Heartwood's, £000s	Multiple					Equity Value, £000s				
		Min	25th	Median	75th	Max	Min	25th	Median	75th	Max
Trailing EV / Revenue	14,203	0.9x	2.1x	2.4x	3.1x	3.8x	11,483	27,816	32,077	42,729	52,671
Trailing EV / EBITDA	3,213	9.7x	10.9x	12.1x	13.9x	16.9x	29,866	33,722	37,577	43,361	53,000
Trailing EV / EBIT	2,347	10.6x	13.8x	15.6x	19.6x	29.9x	23,578	31,147	35,196	44,760	68,875
Trailing EV / AuM (%)	1,466,000	0.7%	1.8%	2.4%	2.8%	4.1%	8,962	25,455	33,151	40,115	58,806

Table A3 – Public Company Comparables: Multiples and Key Statistics

Multiples and key statistics on the public company comparables considered for Heartwood's valuation.

Name	EV £m	EV / AuM (%) ³				EV / Revenue (x)				EV / EBITDA (x)				P/E (x)			
		2011A	2012A	2013E	2014E	2011A	2012A	2013E	2014E	2011A	2012A	2013E	2014E	2011A	2012A	2013E	2014E
Brewin Dolphin ¹	375	1.5%	1.5%	1.4%	-	1.5x	1.4x	1.3x	1.1x	7.8x	9.1x	7.5x	-	23.0x	14.3x	11.6x	9.1x
Brooks Macdonald ¹	134	4.2%	3.6%	3.2%	3.0%	2.5x	2.3x	2.0x	1.9x	15.0x	12.4x	10.3x	8.5x	23.8x	20.1x	16.6x	14.9x
Charles Stanley ¹	96	0.7%	0.6%	0.6%	-	0.8x	0.8x	0.7x	0.7x	7.0x	7.7x	6.1x	4.7x	19.2x	16.5x	12.9x	10.5x
Rathbones	500	3.2%	2.9%	2.6%	-	3.2x	3.3x	3.1x	2.7x	9.5x	10.7x	9.5x	8.2x	18.9x	16.8x	15.4x	13.0x
Schroders	2,863	1.5%	1.4%	1.3%	1.2%	1.9x	2.5x	2.3x	2.1x	7.1x	8.0x	7.1x	6.3x	13.4x	15.7x	13.9x	12.6x
St James' Place	1,629	5.7%	-	-	-	2.5x	2.3x	2.0x	1.8x	-	-	-	-	18.2x	20.1x	16.4x	13.6x
Hargreaves Lansdown ¹	3,522	15.1%	12.1%	10.0%	8.3%	15.8x	13.5x	11.7x	10.2x	25.2x	20.8x	17.7x	15.1x	34.8x	28.5x	24.0x	20.7x
Ashcourt Rowan ¹	24	2.2%	-	-	-	0.7x	0.7x	0.7x	0.6x	-76.7x	9.7x	6.0x	4.9x	-10.0x	4.5x	7.7x	13.8x
W. H. Ireland ²	7	0.5%	-	-	-	0.3x	-	-	-	2.4x	-	-	-	7.0x	-	-	-
Close Brothers ¹	909	10.6%	10.5%	9.6%	8.8%	1.6x	1.6x	1.5x	1.3x	6.0x	-	-	-	18.4x	11.4x	9.6x	8.2x
<i>Average</i>		2.8%	2.0%	1.8%	2.1%	2.1x	2.1x	1.9x	1.7x	9.3x	9.6x	8.1x	6.9x	19.4x	17.3x	14.5x	12.3x
<i>Max</i>		5.7%	3.6%	3.2%	3.0%	3.2x	3.3x	3.1x	2.7x	15.0x	12.4x	10.3x	8.5x	23.8x	20.1x	16.6x	14.9x
<i>75th</i>		4.0%	2.9%	2.6%	2.6%	2.5x	2.5x	2.2x	2.1x	9.5x	10.7x	9.5x	8.3x	22.1x	19.3x	16.2x	13.5x
<i>Median</i>		2.4%	1.5%	1.4%	2.1%	2.2x	2.3x	2.0x	1.9x	7.8x	9.1x	7.5x	7.3x	19.1x	16.7x	14.7x	12.8x
<i>25th</i>		1.5%	1.4%	1.3%	1.7%	1.6x	1.6x	1.5x	1.3x	7.1x	8.0x	7.1x	5.9x	18.4x	15.9x	13.2x	11.0x
<i>Min</i>		0.7%	0.6%	0.6%	1.2%	0.8x	0.8x	0.7x	0.7x	7.0x	7.7x	6.1x	4.7x	13.4x	14.3x	11.6x	9.1x

*Source: Company accounts and press releases, Brokers' Reports and Bloomberg.
Consulted in November 19th, 2012.*

Which generated the following equity values for Heartwood as a stand-alone company, assuming a net debt of £1.3mn:

	Heartwood's, £000s	Multiple					Equity Value, £000s				
		Min	25th	Median	75th	Max	Min	25th	Median	75th	Max
EV / AuM (%) 2013F	1,495,320	0.0x	0.0x	0.0x	0.0x	0.0x	7,672	18,139	19,634	37,578	46,550
EV / AuM (%) 2014F	1,525,226	0.0x	0.0x	0.0x	0.0x	0.0x	17,003	23,866	30,730	37,593	44,457
EV / Revenue (x) 2013F	15,521	0.7x	1.5x	2.0x	2.2x	3.1x	9,565	21,593	29,742	33,234	46,815
EV / Revenue (x) 2014F	16,864	0.7x	1.3x	1.9x	2.1x	2.7x	10,505	20,201	29,898	33,271	44,233
EV / EBITDA (x) 2013F	4,091	6.1x	7.1x	7.5x	9.5x	10.3x	23,657	27,749	29,385	37,568	40,841
EV / EBITDA (x) 2014F	4,668	4.7x	5.9x	7.3x	8.3x	8.5x	20,640	26,242	32,544	37,328	38,379
P/E (x) 2013F	2,127	11.6x	13.2x	14.7x	16.2x	16.6x	24,672	27,969	31,159	34,350	35,307
P/E (x) 2014F	2,510	9.1x	11.0x	12.8x	13.5x	14.9x	22,842	27,673	32,129	33,760	37,400

¹ Calendarized to December year end.

² November year end.

³ 2011 AUM as at 31 December 2011 except for W. H. Ireland, as at 30 November 2010, Close Brothers, as at 31 January 2012 and Ashcourt Rowan, calendarized.

8. Detailed Information and Results on Heartwood's Valuation

8.1. Original Information Provided by Heartwood

Table A4 – Stand-alone Heartwood Balance Sheet as of April 30th, 2012

Detailed balance sheet of Heartwood, as originally provided.

£mn			
Tangible assets	1.0	Trade creditors	0.2
Intangible assets	6.2	Corporation tax	0.4
Total fixed assets	7.2	Other taxation and social security	0.5
		Subordinated loans	0.4
Accrued income	1.8	Finance lease	0.0
Trade debtors	0.3	Other creditors and accruals	2.4
Other debtors and prepayments	0.8	Short-term creditors	4.0
Cash at bank and in hand	6.1		
Current assets	8.9	Deferred rent and other	0.1
		Long-term creditors	0.1
		Total Liabilities	4.1
		Called up share capital	0.1
		Share premium account	2.2
		Other reserve	0.5
		Merger reserve	5.1
		P&L account	4.9
		Investment in own shares	-0.7
		Shareholders' funds	12.1
Total Assets	16.1	Total Equity + Liabilities	16.1

Table A5 – Projected New Business for Heartwood (Stand-alone)

Detail of “new business” projections. AMC @100 bps equivalent basis. As originally provided.

Gross New Business						
YE April, £mn	2012A	2013E	2014E	2015E	2016E	2017E
PWM	120	134	163	189	216	245
HIM	21	55	98	177	264	328
Total	141	189	261	366	480	573
Withdrawals / Losses						
YE April, £mn	2012A	2013E	2014E	2015E	2016E	2017E
PWM	-69	-51	-59	-68	-78	-90
HIM	-2	-3	-8	-17	-32	-55
Total	-71	-54	-66	-84	-110	-144
Net New Business						
YE April, £mn	2012A	2013E	2014E	2015E	2016E	2017E
PWM	50	83	104	121	138	156
HIM	19	52	90	161	232	273
Total	69	135	194	282	370	428

Table A6 – Detailed Projected AuM Expansion for Heartwood (Stand-alone)

Detail of AuM expansion projections, as originally provided.¹

YE April, £mn	2012A	2013E	2014E	2015E	2016E	2017E	5y CAGR
FUM Movement							
Opening	1,380	1,466	1,643	1,791	2,130	2,567	
3rd party closed	0	0	-94	0	0	0	
New business	70	135	194	282	370	428	
Market movement	16	42	48	56	68	82	
Closing	1,466	1,643	1,791	2,130	2,567	3,077	16%
<i>Growth</i>	<i>6%</i>	<i>12%</i>	<i>9%</i>	<i>19%</i>	<i>21%</i>	<i>20%</i>	
FUM Analysis							
Segregated	643	697	760	832	917	1,014	
Funds - discretionary	589	678	785	908	1,046	1,201	
Total discretionary	1,232	1,375	1,545	1,740	1,963	2,216	12%
Funds - IFA	4	18	44	111	220	356	
Models - IFA	1	17	60	133	236	353	
Total IFA	5	35	104	244	456	709	166%
C&E	112	115	119	122	126	130	
3rd Party	94	94	0	0	0	0	
Advisory	23	23	23	23	23	23	
Total	1,466	1,643	1,791	2,130	2,567	3,077	16%

Table A7 – Detailed Projected Cash Flow Statement by Heartwood (Stand-alone)

Detail of cash flow statement projections, as originally provided.

YE Apr (£000s)	2012A	2013E	2014E	2015E	2016E	2017E
Net cash flow from operating activities	3,196	3,718	4,487	5,907	8,164	10,984
Interest net receivable / (payable)	2	27	45	68	98	139
Taxation	-692	-785	-888	-1,148	-1,611	-2,259
Net cash generated	2,506	2,959	3,644	4,826	6,651	8,864
Capital expenditure	-291	-417	-422	-827	-400	-430
Increase/(reduction) in finance leases	-32	-30	-16	-12	0	0
Dividends	-350	-470	-584	-859	-1,316	-1,961
Employment Benefit Trust related	-263	-462	-569	-719	-960	-1,366
Increase / (Decrease) in cash	1,569	1,580	2,053	2,408	3,974	5,107

¹ Of HIM's funds, only IFA-related AuM have been separately presented.

Table A8 – Detailed Projected P&L by Heartwood (Stand-alone)

Detail of income statement projections, as originally provided.

YE Apr (£000s)	2012A	2013E	2014E	2015E	2016E	2017E	5y CAGR
Asset Management Income	11,343	12,259	14,228	17,137	21,051	25,809	18%
Advisory Income	2,860	3,262	3,596	3,934	4,292	4,669	10%
Total Revenue	14,203	15,521	17,824	21,071	25,343	30,478	16%
<i>Growth</i>		9%	15%	18%	20%	20%	
Staff	6,481	7,334	8,283	9,217	9,906	10,626	
Premises	771	783	792	801	825	850	
IT	286	345	357	508	528	548	
Communications	198	231	233	235	242	250	
Market Data	242	268	326	339	349	360	
Marketing	199	260	357	474	634	762	
Other	1,577	1,582	1,717	1,873	1,969	2,066	
Total Costs ex DPA	9,754	10,803	12,065	13,447	14,453	15,462	
<i>Growth</i>		11%	12%	11%	7%	7%	
DPA	1,236	1,350	1,671	2,365	3,471	4,943	32%
Total Costs	10,990	12,153	13,736	15,812	17,924	20,405	13%
<i>Growth</i>		11%	13%	15%	13%	14%	
EBITDA	3,213	3,368	4,088	5,259	7,419	10,073	26%
<i>Growth</i>	0%	5%	21%	29%	41%	36%	
<i>Margin</i>	23%	22%	23%	25%	29%	33%	
Depreciation	426	512	606	496	503	487	
Amortisation	440	440	440	440	440	440	
Interest net payable / (receivable)	-2	-27	-45	-68	-98	-139	
PBT	2,349	2,443	3,087	4,391	6,574	9,285	32%
<i>Growth</i>		4%	26%	42%	50%	41%	
<i>Margin</i>	17%	16%	17%	21%	26%	30%	
Tax	724	802	974	1,323	1,897	2,620	
Tax Rate	31%	33%	32%	30%	29%	28%	
Net income	1,625	1,641	2,113	3,068	4,677	6,665	33%
<i>Growth</i>		1%	29%	45%	52%	43%	

8.2. Resulting P&L Under Each Scenario and Case

Table A9 – Resulting Income Statement – Scenario 1 (No Acquisition)

Detail of income statement estimates by the authors under Scenario 1.

YE Apr (£000s)	2012A	2013E	2014E	2015E	2016E	2017E	5Y CAGR
Asset Management & Advisory	14,203	15,521	16,222	17,944	18,510	18,841	
Synergies: AuM expansion	0	0	0	0	0	0	
Synergies: customer base expansion	0	0	0	0	0	0	
Total Revenue	14,203	15,521	16,222	17,944	18,510	18,841	6%
<i>Growth</i>		9%	5%	11%	3%	2%	
Staff	6,481	6,611	6,743	6,878	7,015	7,156	
New hires with access to new capital	0	0	0	0	0	0	
Adjustments by Handelsbanken to Staff	0	0	0	0	0	0	
Premises	771	783	792	801	825	850	
IT	286	345	357	508	528	548	
Additional IT Costs	0	0	0	0	0	0	
Communications	198	231	233	235	242	250	
Market Data	242	268	326	339	349	360	
Marketing	199	260	357	474	634	762	
Other	1,577	1,582	1,717	1,873	1,969	2,066	
Total Costs exc. DPA	9,754	10,080	10,525	11,108	11,562	11,992	10%
DPA	1,236	1,350	1,671	2,365	3,471	4,943	32%
Reduced DPA Costs	0	0	0	0	0	0	
Total Running Costs	10,990	11,430	12,196	13,473	15,033	16,935	13%
<i>Growth</i>		4%	7%	10%	12%	13%	
Integration Costs	0	0	0	0	0	0	
EBITDA	3,213	4,091	4,026	4,472	3,477	1,906	26%
<i>Growth</i>		27%	-2%	11%	-22%	-45%	
<i>Margin</i>	23%	26%	25%	25%	19%	10%	
Depreciation	426	512	606	496	503	487	
Amortisation	440	440	440	440	440	440	
Reduced Amortisation Costs	0	0	0	0	0	0	
Interest net payable / (receivable)	-2	-27	-45	-68	-98	-139	
Additional Interest Costs	0	0	0	0	0	0	
PBT	2,349	3,166	3,025	3,604	2,632	1,118	32%
Amount of Tax	724	1,039	954	1,086	760	315	
<i>Tax Rate, depending on Scenario</i>	30.8%	32.8%	31.6%	30.1%	28.9%	28.2%	
Net income	1,625	2,127	2,071	2,518	1,873	803	33%
<i>Growth</i>		31%	-3%	22%	-26%	-57%	

For the following AuM development (Scenario 1 – assumed growth rate is GDP):

YE Apr (£mn)	2012A	2013E	2014E	2015E	2016E	2017E
AuM	1,466	1,495	1,525	1,556	1,587	1,619
<i>Growth</i>		2%	2%	2%	2%	2%

Table A10 – Resulting Income Statement – Scenario 2 – Case 1

Detail of income statement estimates by the authors under Scenario 2 – Case 1.

YE Apr (£000s)	2012A	2013E	2014E	2015E	2016E	2017E	5Y CAGR
Asset Management & Advisory	14,203	15,521	16,222	17,944	18,510	18,841	
Synergies: AuM expansion	0	0	450	788	1,868	3,163	
Synergies: customer base expansion	0	106	207	418	930	1,443	
Total Revenue	14,203	15,627	16,879	19,150	21,309	23,447	11%
<i>Growth</i>		10%	8%	13%	11%	10%	
Staff	6,481	6,611	6,743	6,878	7,015	7,156	
New hires with access to new capital	0	723	1,540	2,339	2,891	3,470	
Adjustments by Handelsbanken to Staff	0	1,966	2,698	2,783	2,994	3,099	
Premises	771	783	792	801	825	850	
IT	286	345	357	508	528	548	
Additional IT Costs	0	355	355	355	355	355	
Communications	198	231	233	235	242	250	
Market Data	242	268	326	339	349	360	
Marketing	199	260	357	474	634	762	
Other	1,577	1,582	1,717	1,873	1,969	2,066	
Total Costs exc. DPA	9,754	13,124	15,118	16,585	17,802	18,916	10%
DPA	1,236	1,350	1,671	2,365	3,471	4,943	32%
Reduced DPA Costs	0	-682	-1,021	-1,465	-1,949	-2,543	
Total Running Costs	10,990	13,792	15,768	17,485	19,324	21,316	13%
<i>Growth</i>		25%	14%	11%	11%	10%	
Integration Costs	0	2,600	0	0	0	0	
EBITDA	3,213	-765	1,111	1,665	1,985	2,131	26%
<i>Growth</i>		-124%	-245%	50%	19%	7%	
<i>Margin</i>	23%	-5%	7%	9%	9%	9%	
Depreciation	426	512	606	496	503	487	
Amortisation	440	440	440	440	440	440	
Reduced Amortisation Costs	0	-440	-440	-440	-440	-440	
Interest net payable / (receivable)	-2	-27	-45	-68	-98	-139	
Additional Interest Costs	0	527	505	468	538	539	
PBT	2,349	-1,777	45	769	1,042	1,244	32%
Amount of Tax	724	-467	12	202	274	327	
<i>Tax Rate, depending on Scenario</i>	30.8%	26.3%	26.3%	26.3%	26.3%	26.3%	
Net income	1,625	-1,310	33	567	768	917	33%
<i>Growth</i>		-181%	-103%	1622%	35%	19%	

For the following AuM development, which assumes only 40% of the originally projected (by Heartwood) AuM expansion materializes:

YE Apr (£mn)	2012A	2013E	2014E	2015E	2016E	2017E
AuM	1,466	1,537	1,592	1,713	1,853	2,001
<i>Growth</i>		5%	4%	8%	8%	8%

Table A11 – Resulting Income Statement – Scenario 2 – Case 2

Detail of income statement estimates by the authors under Scenario 2 – Case 2.

YE Apr (£000s)	2012A	2013E	2014E	2015E	2016E	2017E 5Y CAGR	
Asset Management & Advisory	14,203	15,521	16,222	17,944	18,510	18,841	
Synergies: AuM expansion	0	0	834	1,552	3,446	5,767	
Synergies: customer base expansion	0	230	450	910	2,025	3,140	
Total Revenue	14,203	15,751	17,506	20,407	23,981	27,747	14%
<i>Growth</i>		<i>11%</i>	<i>11%</i>	<i>17%</i>	<i>18%</i>	<i>16%</i>	
Staff	6,481	6,611	6,743	6,878	7,015	7,156	
New hires with access to new capital	0	723	1,540	2,339	2,891	3,470	
Adjustments by Handelsbanken to Staff	0	1,966	2,698	2,783	2,994	3,099	
Premises	771	783	792	801	825	850	
IT	286	345	357	508	528	548	
Additional IT Costs	0	355	355	355	355	355	
Communications	198	231	233	235	242	250	
Market Data	242	268	326	339	349	360	
Marketing	199	260	357	474	634	762	
Other	1,577	1,582	1,717	1,873	1,969	2,066	
Total Costs exc. DPA	9,754	13,124	15,118	16,585	17,802	18,916	10%
DPA	1,236	1,350	1,671	2,365	3,471	4,943	32%
Reduced DPA Costs	0	-682	-1,021	-1,465	-1,949	-2,543	
Total Running Costs	10,990	13,792	15,768	17,485	19,324	21,316	13%
<i>Growth</i>		<i>25%</i>	<i>14%</i>	<i>11%</i>	<i>11%</i>	<i>10%</i>	
Integration Costs	0	2,600	0	0	0	0	
EBITDA	3,213	-641	1,738	2,922	4,657	6,431	26%
<i>Growth</i>		<i>-120%</i>	<i>-371%</i>	<i>68%</i>	<i>59%</i>	<i>38%</i>	
<i>Margin</i>	<i>23%</i>	<i>-4%</i>	<i>10%</i>	<i>14%</i>	<i>19%</i>	<i>23%</i>	
Depreciation	426	512	606	496	503	487	
Amortisation	440	440	440	440	440	440	
Reduced Amortisation Costs	0	-440	-440	-440	-440	-440	
Interest net payable / (receivable)	-2	-27	-45	-68	-98	-139	
Additional Interest Costs	0	527	505	468	538	539	
PBT	2,349	-1,653	672	2,026	3,714	5,544	32%
Amount of Tax	724	-435	177	533	977	1,458	
<i>Tax Rate, depending on Scenario</i>	<i>30.8%</i>	<i>26.3%</i>	<i>26.3%</i>	<i>26.3%</i>	<i>26.3%</i>	<i>26.3%</i>	
Net income	1,625	-1,218	495	1,493	2,738	4,086	33%
<i>Growth</i>		<i>-175%</i>	<i>-141%</i>	<i>201%</i>	<i>83%</i>	<i>49%</i>	

For the following AuM development, which assumes only 60% of the originally projected (by Heartwood) AuM expansion materializes:

YE Apr (£mn)	2012A	2013E	2014E	2015E	2016E	2017E
AuM	1,466	1,572	1,657	1,845	2,073	2,320
<i>Growth</i>		<i>7%</i>	<i>5%</i>	<i>11%</i>	<i>12%</i>	<i>12%</i>

Table A12 – Resulting Income Statement – Scenario 2 – Case 3

Detail of income statement estimates by the authors under Scenario 2 – Case 3.

YE Apr (£000s)	2012A	2013E	2014E	2015E	2016E	2017E	5Y CAGR
Asset Management & Advisory	14,203	15,521	16,222	17,944	18,510	18,841	
Synergies: AuM expansion	0	0	1,218	2,332	5,101	8,588	
Synergies: customer base expansion	0	350	685	1,385	3,081	4,777	
Total Revenue	14,203	15,871	18,125	21,661	26,692	32,206	18%
<i>Growth</i>		<i>12%</i>	<i>14%</i>	<i>20%</i>	<i>23%</i>	<i>21%</i>	
Staff	6,481	6,611	6,743	6,878	7,015	7,156	
New hires with access to new capital	0	723	1,540	2,339	2,891	3,470	
Adjustments by Handelsbanken to Staff	0	1,966	2,698	2,783	2,994	3,099	
Premises	771	783	792	801	825	850	
IT	286	345	357	508	528	548	
Additional IT Costs	0	355	355	355	355	355	
Communications	198	231	233	235	242	250	
Market Data	242	268	326	339	349	360	
Marketing	199	260	357	474	634	762	
Other	1,577	1,582	1,717	1,873	1,969	2,066	
Total Costs exc. DPA	9,754	13,124	15,118	16,585	17,802	18,916	10%
DPA	1,236	1,350	1,671	2,365	3,471	4,943	32%
Reduced DPA Costs	0	-682	-1,021	-1,465	-1,949	-2,543	
Total Running Costs	10,990	13,792	15,768	17,485	19,324	21,316	13%
<i>Growth</i>		<i>25%</i>	<i>14%</i>	<i>11%</i>	<i>11%</i>	<i>10%</i>	
Integration Costs	0	2,600	0	0	0	0	
EBITDA	3,213	-521	2,357	4,176	7,368	10,890	26%
<i>Growth</i>		<i>-116%</i>	<i>-552%</i>	<i>77%</i>	<i>76%</i>	<i>48%</i>	
<i>Margin</i>	<i>23%</i>	<i>-3%</i>	<i>13%</i>	<i>19%</i>	<i>28%</i>	<i>34%</i>	
Depreciation	426	512	606	496	503	487	
Amortisation	440	440	440	440	440	440	
Reduced Amortisation Costs	0	-440	-440	-440	-440	-440	
Interest net payable / (receivable)	-2	-27	-45	-68	-98	-139	
Additional Interest Costs	0	527	505	468	538	539	
PBT	2,349	-1,533	1,291	3,280	6,425	10,003	32%
Amount of Tax	724	-403	339	863	1,690	2,631	
<i>Tax Rate, depending on Scenario</i>	<i>30.8%</i>	<i>26.3%</i>	<i>26.3%</i>	<i>26.3%</i>	<i>26.3%</i>	<i>26.3%</i>	
Net income	1,625	-1,130	951	2,417	4,735	7,372	33%
<i>Growth</i>		<i>-170%</i>	<i>-184%</i>	<i>154%</i>	<i>96%</i>	<i>56%</i>	

For the following AuM development, which assumes only 80% of the originally projected (by Heartwood) AuM expansion materializes:

YE Apr (£mn)	2012A	2013E	2014E	2015E	2016E	2017E
AuM	1,466	1,608	1,723	1,984	2,310	2,677
<i>Growth</i>		<i>10%</i>	<i>7%</i>	<i>15%</i>	<i>16%</i>	<i>16%</i>

Table A13 – Resulting Income Statement – Scenario 2 – Case 4

Detail of income statement estimates by the authors under Scenario 2 – Case 4.

YE Apr (£000s)	2012A	2013E	2014E	2015E	2016E	2017E	5Y CAGR
Asset Management & Advisory	14,203	15,521	16,222	17,944	18,510	18,841	
Synergies: AuM expansion	0	0	1,602	3,127	6,833	11,637	
Synergies: customer base expansion	0	389	761	1,539	3,425	5,312	
Total Revenue	14,203	15,910	18,585	22,610	28,768	35,790	20%
<i>Growth</i>		<i>12%</i>	<i>17%</i>	<i>22%</i>	<i>27%</i>	<i>24%</i>	
Staff	6,481	6,611	6,743	6,878	7,015	7,156	
New hires with access to new capital	0	723	1,540	2,339	2,891	3,470	
Adjustments by Handelsbanken to Staff	0	1,966	2,698	2,783	2,994	3,099	
Premises	771	783	792	801	825	850	
IT	286	345	357	508	528	548	
Additional IT Costs	0	355	355	355	355	355	
Communications	198	231	233	235	242	250	
Market Data	242	268	326	339	349	360	
Marketing	199	260	357	474	634	762	
Other	1,577	1,582	1,717	1,873	1,969	2,066	
Total Costs exc. DPA	9,754	13,124	15,118	16,585	17,802	18,916	10%
DPA	1,236	1,350	1,671	2,365	3,471	4,943	32%
Reduced DPA Costs	0	-682	-1,021	-1,465	-1,949	-2,543	
Total Running Costs	10,990	13,792	15,768	17,485	19,324	21,316	13%
<i>Growth</i>		<i>25%</i>	<i>14%</i>	<i>11%</i>	<i>11%</i>	<i>10%</i>	
Integration Costs	0	2,600	0	0	0	0	
EBITDA	3,213	-482	2,817	5,125	9,444	14,474	26%
<i>Growth</i>		<i>-115%</i>	<i>-685%</i>	<i>82%</i>	<i>84%</i>	<i>53%</i>	
<i>Margin</i>	<i>23%</i>	<i>-3%</i>	<i>15%</i>	<i>23%</i>	<i>33%</i>	<i>40%</i>	
Depreciation	426	512	606	496	503	487	
Amortisation	440	440	440	440	440	440	
Reduced Amortisation Costs	0	-440	-440	-440	-440	-440	
Interest net payable / (receivable)	-2	-27	-45	-68	-98	-139	
Additional Interest Costs	0	527	505	468	538	539	
PBT	2,349	-1,494	1,751	4,229	8,501	13,587	32%
Amount of Tax	724	-393	461	1,112	2,236	3,573	
<i>Tax Rate, depending on Scenario</i>	<i>30.8%</i>	<i>26.3%</i>	<i>26.3%</i>	<i>26.3%</i>	<i>26.3%</i>	<i>26.3%</i>	
Net income	1,625	-1,101	1,291	3,117	6,266	10,013	33%
<i>Growth</i>		<i>-168%</i>	<i>-217%</i>	<i>142%</i>	<i>101%</i>	<i>60%</i>	

For the following AuM development, which assumes 100% of the originally projected (by Heartwood) AuM expansion materializes:

YE Apr (£mn)	2012A	2013E	2014E	2015E	2016E	2017E
AuM	1,466	1,643	1,791	2,130	2,567	3,077
<i>Growth</i>		<i>12%</i>	<i>9%</i>	<i>19%</i>	<i>21%</i>	<i>20%</i>

8.3. Comparable Companies' Information & Risk-free Rate

Table A14 – I22 Mid YTM GBP United Kingdom Sovereign Yield Curve

Risk-free rate for different maturities, from 1 month to 50 years.

Tenor	rf
1M	0.26%
3M	0.28%
6M	0.30%
1Y	0.18%
2Y	0.19%
3Y	0.24%
4Y	0.43%
5Y	0.72%
6Y	0.77%
7Y	1.06%
8Y	1.28%
9Y	1.46%
10Y	1.73%
12Y	1.91%
15Y	2.23%
20Y	2.63%
25Y	2.87%
30Y	3.07%
40Y	3.21%
50Y	3.16%

Source: Bloomberg. Data presented as at September 28th, 2012.

Table A15 – Comparable Companies' Information

Detailed information on the comparable companies used for valuing Heartwood, in £.

Name	Market Cap	Debt (BV)	Beta Equity	Tax rate¹	Beta Assets
Brewin Dolphin	418,921,956	243,000	0.918	26.3%	0.918
Brooks Macdonald ²	127,750,026	0	0.812	26.3%	0.812
Charles Stanley	123,941,707	157,000	0.663	26.3%	0.662
Hargreaves Lansdown	2,981,092,423	0	1.308	26.3%	1.308
Rathbones ²	582,571,143	518,000	0.843	26.3%	0.842
Schroders	4,096,943,068	2,650,950,000	1.284	26.3%	0.869
St James' Place	1,850,573,865	56,250,000	1.164	26.3%	1.138
Ashcourt Rowan ³	40,356,776	30,000	0.375	26.3%	0.375
W. H. Ireland ³	16,397,220	2,141,500	0.596	26.3%	0.544
Close Brothers ³	1,226,175,209	1,410,300,000	1.048	26.3%	0.567

<i>Average ³</i>	0.936
<i>Median</i>	0.869
<i>Average (selected)</i>	0.827
<i>Median (selected)</i>	0.827

Source: Bloomberg. Data presented as at September 28th, 2012.

¹ Assumed tax rate of UK, as all companies are in the UK.

² Brooks Macdonald and Rathbones are the most comparable companies to Heartwood.

³ Ashcourt Rowan, W.H. Ireland and Close Brothers are the least comparable companies and have been excluded from the averages.

Table A16 – Comparable Companies' Business Descriptions

Summarized business descriptions of the comparable companies considered for valuing Heartwood

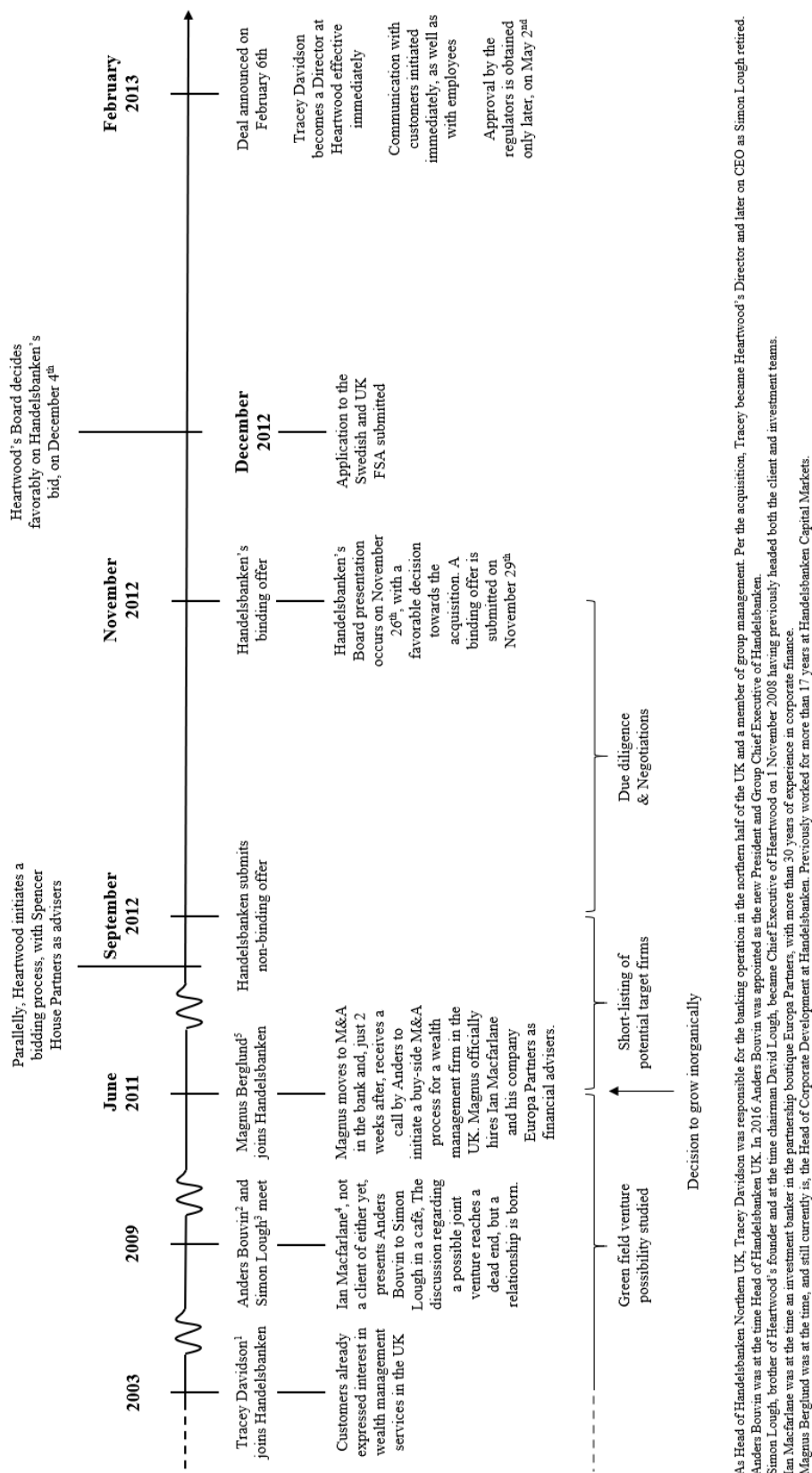
Brewin Dolphin	Provides personalized, discretionary wealth management services. The Company offers a combination of financial planning and investment management services to create wealth for investors and intermediaries. Brewin Dolphin Holdings serves private clients, trusts, charities and pension funds in the United Kingdom, Channel Islands and Ireland.
Brooks Macdonald	Provides investment management services. The Company offers fund management, administration, and financial advisory services to individuals, pension funds, institutions, charities, and trusts. Brooks Macdonald Group serves clients worldwide.
Charles Stanley	Charles Stanley Group PLC is a financial services company. The Company offers stockbroking, corporate finance, asset management, and investment advice to individual and institutional investors. Charles Stanley Group serves customers in the United Kingdom. Through primary subsidiary Charles Stanley & Co., the firm offers asset management and investment advice to individual and institutional investors through more than 30 offices.
Hargreaves Lansdown	Hargreaves Lansdown PLC provides investment management services. The Company offers its services in stock brokerage, pension fund management, financial planning, and asset and wealth management. Hargreaves Lansdown serves investors in the United Kingdom
Rathbones	Rathbone Brothers Plc provides investment management services. The Company offers financial planning, legal advisory, tax management, pension funds, and banking and trust services. Rathbone Brothers serves customers in the United Kingdom.
Schroders	Schroders plc is an international asset management group. The Group manages funds across all asset categories, including equities, bonds, cash, and alternative investments and venture capital. Schroders serves charities, insurance companies, public authorities, pension funds, and unit trust holders. London-based Schroders operates more than 35 offices across 25-plus countries in Europe, the Asia/Pacific region, the Americas, and the Middle East.
St James' Place	St. James's Place Plc is a financial services holding company with interests in life insurance and unit trust management. The Group's products also include pensions, offshore products, mortgage advisory services, and banking services through St. James's Place Bank. St. James's Place and its subsidiaries serve the United Kingdom.
Ashcourt Rowan	Ashcourt Rowan plc is a wealth management company in the United Kingdom. The Company provides personalized financial planning and investment management advice to private and corporate clients, trusts, pension funds and charities throughout the UK. The Company's investment management business offers Bespok Portfolio Service and Managed Portfolio Service.
W. H. Ireland	W.H. Ireland Group plc offers a comprehensive range of stockbroking and investment management services. The Group's brokerage operations encompass discretionary and advisory portfolio management and professional intermediary services, in addition to advisory and execution only dealing services. They also administer both a managed Personal Equity Plan (PEP) and a self-select PEP.
Close Brothers	Close Brothers Group PLC is a specialist financial services group. The Company makes loans, trades securities and provides advice and investment management solutions to a wide range of clients. Close Brothers operates through three divisions: Banking, Securities and Asset Management.

Source: Bloomberg and own analysis. Data presented as at September 28th, 2012.

9. Chronological Representation of Main Events

Figure A5 – Chronological Representation of Main Events

Detailed chronological representation of main events that led to Handelsbanken's acquisition of Heartwood.



¹ As Head of Handelsbanken Northern UK, Tracey Davidson was responsible for the banking operation in the northern half of the UK and a member of group management. Per the acquisition, Tracey became Heartwood's Director and later on CEO as Simon Lough retired.
² Anders Bouvri was at the time Head of Handelsbanken UK. In 2016 Anders Bouvri was appointed as the new President and Group Chief Executive of Handelsbanken.
³ Simon Lough, brother of Heartwood's founder and at the time chairman David Lough, became Chief Executive of Heartwood on 1 November 2008 having previously headed both the client and investment teams.
⁴ Ian Macfarlane was at the time an investment banker in the partnership boutique Europa Partners, with more than 30 years of experience in corporate finance.
⁵ Magnus Berglund was at the time, and still currently is, the Head of Corporate Development at Handelsbanken. Previously worked for more than 17 years at Handelsbanken Capital Markets.

10. Statistical Inference – Detailed Methodology

10.1. Parametric Statistical Significance Method (SSM): t-test

Commonly used by researchers and finance professionals, the statistical significance t-test is used to determine significant difference between the means of two groups. By using the t-test, key assumptions around the distribution of the data need to be made. Specifically, the distribution of the data is assumed to be normally distributed. In addition, the t-test relies on key assumptions in regard to its data in order to provide an accurate result. One of the most important assumptions of the t-test is that its data is normally distributed given that it simplifies probability calculations. In addition, when the sample size is large enough – $n > 20$ – data sets can be assumed to be normally distributed as a result of the Central Limit Theorem (Woolridge 2012). Furthermore, there are several versions of the t-test that need to be considered depending on the relationship of both groups – paired or independent – and on the variances of both groups – equal or unequal. As outlined above, checking for normality, and equal variances is important in order to obtain accurate results in hypothesis testing.

Checking for Normality: Shapiro-Wilk Test

The Shapiro-Wilk test is used to test whether a random sample – x_1, x_2, \dots, x_n – comes specifically from a normal distribution. The test calculates a W statistic as follows:

$$W = \frac{(\sum_{i=1}^n a_i x_i)^2}{(\sum_{i=1}^n (x_i)^2)}$$

Where the x_i are ordered values and a_i are constants generated from the means, variances, and covariances of the order statistics of a sample size n from a normal distribution. A small value of W is evidence of departure from normality (Shapiro & Wilk 1965).

Checking for Equal or Unequal Variances

The Levene's test is used to examine if k samples have equal variances. This test is an alternative method to Bartlett Test, which is arguably more sensitive to departures from normality. Based on Levene's initial proposition, the test statistic is as follows given a variable Y with sample size N , divided into subgroups, k , where N_i is the sample size of the i -th subgroup.

$$W = \frac{(N - k)}{(k - 1)} \frac{\sum_{i=1}^k N_i (\bar{Z}_i - \bar{Z})^2}{\sum_{i=1}^k \sum_{j=1}^{N_i} (\bar{Z}_{ij} - \bar{Z}_i)^2}$$

Where $\bar{Z}_{ij} = |\bar{Y}_{ij} - \bar{Y}_i|$, where \bar{Y}_i is the mean of the i -th subgroup. The Levene test rejects the hypothesis that the variances are equal if $W > F_{\alpha, k-1, N-k}$, where $F_{\alpha, k-1, N-k}$ is the upper critical value of the F distribution with $k-1$ and $N-k$ degrees of freedom at a significance level of α (NIST/SEMATECH 2012).

Once a normal distribution has been asserted and the variances have been found to be equal or unequal, the right t-test can be applied. However, if the data is not normally distributed, other hypothesis testing tests need to be applied in order to arrive to an accurate result. Alternatively, if the sample size is big enough, the researcher can then assume normality by invoking the Central Limit Theorem.

10.2. Nonparametric SSM: The Mann-Whitney U Test

A popular nonparametric test that compares outcomes between two groups is the Mann-Whitney U test. The test is used to test whether two samples come from the same population. This test is widely used in behavioral sciences given that data can sometimes be limited – sample size can be too small – making it more difficult for the researcher to establish a normal distribution. To conduct this test, some assumptions need to be met. First, the two groups must be randomly drawn from the target population. Second, there needs to be independence within groups and mutual independence between groups. Finally, the dependent variable should be measured at the ordinal or continuous level. The test (H_0) itself stipulates that the two independent groups are homogeneous and have the same distributions. Conversely, the alternative hypothesis H_1 states that the first group of data is different from the second group of data. In the test, the researcher is able to reject the H_0 if the t statistic falls to the right or left of the critical value thresholds which are dependent on the significance level (Sheskin 2007). In many ways, the test can be comparable to a normal t-test but the calculation of the t statistic varies dramatically.

Procedure of the Test

The test involves pooling the observations from the two samples into one combined sample. Subsequently, the observations are ordered and given a ranking, while keeping track of which observations belong to which sample. After the observations have been accurately ranked, a summation of the ranks for each group is done, yielding R_1 and R_2 . If the H_0 – the two populations are equal -- is true, then one would expect to see R_1 and R_2 to be similar. On the other hand, if R_1 and R_2 are different, then it is likely to be enough evidence to reject H_0 (Sheskin 2007). In order to test whether the difference in R is significant a test statistic is computed as follows for each group and the smaller between U_1 and U_2 is chosen as the t statistic.

$$U_1 = n_1 n_2 + \frac{n_1(n_1+1)}{2} - R_1 ; \quad U_2 = n_1 n_2 + \frac{n_2(n_2+1)}{2} - R_2$$

Once the t statistic is computed, the same approach as in parametric testing is conducted. A critical value is determined such that if the observed value of U is less than or equal to the critical value, the H_0 is rejected and if the value of U is higher than the critical value then H_0 is not rejected.

11. Market-based Valuation Analysis – Detailed Results

Table A17 – Detailed Results – Broad Asset Management Industry

Detailed results on the broad asset management industry, for the market-based valuation additional analysis

EV/REVENUE Assumptions and Hypothesis Testing for Asset Management Companies												
Group	Normality Test					Paired Group			Equal Variance Test			
	T Statistic (W)	P-value	Significance	Normal (Y/N)		1 vs 2	1 vs 3	1 vs 4	T Statistic (F)	P-value	Significance	Equal Variance (Y/N)
1	0.946	0.000	0.050	N					10.788	0.001	0.050	N
2	0.946	0.000	0.050	N					9.361	0.002	0.050	N
3	0.928	0.000	0.050	N					0.156	0.693	0.050	Y
4	0.934	0.000	0.050	N					2.133	0.144	0.050	Y
5	0.950	0.000	0.050	N								
Mann-Whitney U Test												
Paired Group	T-Test					Paired Group			Mann-Whitney U Test			
	Group 1 Mean	Group x Mean	Difference of Means	T Statistic (Z)	P-value	1 vs 2	1 vs 3	1 vs 4	T Statistic (W)	P-value	Significance	Significantly Different (Y/N)
1 vs 2	3.841	3.822	0.019	0.059	0.933				19,462	0.452	0.050	N
1 vs 3	3.841	3.023	0.819	2.483	0.014				22,548	0.022	0.050	Y
1 vs 4	3.841	4.027	-0.186	-0.386	0.569				32,066	0.504	0.050	N
1 vs 5	3.841	4.810	-0.969	-2.969	0.002				62,629	0.003	0.050	Y

EV/EBITDA Assumptions and Hypothesis Testing for Asset Management Companies												
Group	Normality Test					Paired Group			Equal Variance Test			
	T Statistic (W)	P-value	Significance	Normal (Y/N)		1 vs 2	1 vs 3	1 vs 4	T Statistic (F)	P-value	Significance	Equal Variance (Y/N)
1	0.972	0.022	0.050	N					4.451	0.036	0.050	N
2	0.994	0.479	0.050	Y					0.018	0.894	0.050	Y
3	0.994	0.562	0.050	Y					0.411	0.522	0.050	Y
4	0.980	0.000	0.050	N					0.524	0.469	0.050	Y
5	0.968	0.000	0.050	N								
Mann-Whitney U Test												
Paired Group	T-Test					Paired Group			Mann-Whitney U Test			
	Group 1 Mean	Group x Mean	Difference of Means	T Statistic (Z)	P-value	1 vs 2	1 vs 3	1 vs 4	T Statistic (W)	P-value	Significance	Significantly Different (Y/N)
1 vs 2	9.878	9.757	0.121	0.243	0.808				11,629	0.705	0.050	N
1 vs 3	9.878	8.183	1.694	3.271	0.001				14,566	0.005	0.050	Y
1 vs 4	9.878	9.277	0.600	1.272	0.224				21,098	0.277	0.050	N
1 vs 5	9.878	10.519	-0.641	-1.294	0.177				37,732	0.269	0.050	N

Table A18 – Detailed Results – Selected Trading Comparable Companies

Detailed results on the selected trading comparable companies, for the market-based valuation additional analysis

EV/REVENUE Assumptions and Hypothesis Testing for Trading Comparable Companies

Group	Normality Test				Equal Variance Test			
	T Statistic (W)	P-value	Significance	Normal (Y/N)	Paired Group	T Statistic (F)	P-value	Significance
1	0.861	0.154	0.050	Y	1 vs 2	1.321	0.268	0.050
2	0.978	0.951	0.050	Y	1 vs 3	0.496	0.490	0.050
3	0.873	0.057	0.050	Y	1 vs 4	0.030	0.863	0.050
4	0.758	0.000	0.050	N	1 vs 5	0.453	0.505	0.050
5	0.737	0.000	0.050	N				
T-Test								
Paired Group	Group 1 Mean	Group x Mean	Difference of Means	T Statistic (Z)	P-value	Significance	Significantly Different (Y/N)	Mann-Whitney U Test
1 vs 2	2.918	2.445	0.473	0.402	0.693	0.050	N	P-value 0.887
1 vs 3	2.918	1.913	1.005	0.802	0.433	0.050	N	Significance 0.050
1 vs 4	2.918	3.022	-0.104	-0.060	0.953	0.050	N	Significantly Different (Y/N) N
1 vs 5	2.918	3.888	-0.970	-0.455	0.652	0.050	N	P-value 0.438
								Significance 0.050
								Significantly Different (Y/N) N

EV/EBITDA Assumptions and Hypothesis Testing for Trading Comparable Companies

Group	Normality Test				Equal Variance Test			
	T Statistic (W)	P-value	Significance	Normal (Y/N)	Paired Group	T Statistic (F)	P-value	Significance
1	0.846	0.147	0.050	Y	1 vs 2	0.076	0.787	0.050
2	0.943	0.615	0.050	Y	1 vs 3	0.021	0.886	0.050
3	0.939	0.480	0.050	Y	1 vs 4	1.371	0.254	0.050
4	0.889	0.037	0.050	N	1 vs 5	1.818	0.188	0.050
5	0.938	0.117	0.050	Y				
T-Test								
Paired Group	Group 1 Mean	Group x Mean	Difference of Means	T Statistic (Z)	P-value	Significance	Significantly Different (Y/N)	Mann-Whitney U Test
1 vs 2	10.866	9.463	1.403	0.750	0.467	0.050	N	P-value 0.388
1 vs 3	10.866	8.701	2.165	1.470	0.161	0.050	N	Significance 0.050
1 vs 4	10.866	9.317	1.549	0.584	0.565	0.050	N	Significantly Different (Y/N) N
1 vs 5	10.866	11.006	-0.140	-0.043	0.966	0.050	N	P-value 0.251
								Significance 1.000
								Significantly Different (Y/N) N