


**FINANCIAL ANALYSIS AND VALUATION OF SELECTED UK LISTED COMPANY: A
CASE STUDY**

Akindele Babatunde Omotesho^A, Ayodeji Michael Obadire^B



ARTICLE INFO	ABSTRACT
<p>Article history: Received: January, 22nd 2024 Accepted: March, 22nd 2024</p>	<p>Objective: The objective of this study is to investigate the financial analysis and valuation of UK listed companies, with the aim of gaining insight into the financial performance and operational position of Hill and Smith Plc and other key players in the industry.</p>
<p>Keywords: Capital Asset Pricing Model; Valuation; Discounting; Risk Premium; Weighted Average Cost of Capital.</p> 	<p>Theoretical Framework: In this study, the main concepts and theories that underpin the research include the irrelevance theory, trade off theory, pecking order theory and market timing theory. These theories explain the underlying factors that determine the financing and valuation choices of listed firms.</p> <p>Method: The study adopted the net assets valuation, dividend discount model, free cashflows, earnings model, comparative companies, and comparative transactions valuation methodologies. The study adopted Hill and Smith Plc as a case study, extracting relevant data from its annual financial records.</p> <p>Results and Discussion: The study revealed a +4.17% abnormal return, suggesting an exceptional performance. It compared financial positions with peers like Morgan Advanced Materials and Keller Group, employing multiple valuation methods. The earnings model indicated a share price of £14.1, suggesting a potential overvaluation in the stock market at £10.0 per share.</p> <p>Research Implications: The practical and theoretical implications of this research are discussed, providing insights into how the results can be applied or influence practices in the field of corporate finance and valuation. These implications impact various stakeholders such as the researched firms, investors, and academia.</p> <p>Originality/Value: This study contributes to the literature by highlighting the valuation methodologies employed in the study, emphasizing the importance of accurate valuation techniques in informing investment decisions.</p> <p>Doi: https://doi.org/10.26668/businessreview/2024.v9i4.4540</p>

**ANÁLISE FINANCEIRA E AVALIAÇÃO DE UMA EMPRESA SELECIONADA LISTADA NO
REINO UNIDO: UM ESTUDO DE CASO**

RESUMO

Objetivo: O objetivo deste estudo é investigar a análise financeira e a avaliação de empresas listadas no Reino Unido, com o intuito de obter informações sobre o desempenho financeiro e a posição operacional da Hill and Smith Plc e de outros participantes importantes do setor.

Estrutura Teórica: Neste estudo, os principais conceitos e teorias que sustentam a pesquisa incluem a teoria da irrelevância, a teoria do trade off, a teoria da pecking order e a teoria do market timing. Essas teorias explicam os fatores subjacentes que determinam as escolhas de financiamento e avaliação das empresas listadas.

^A MSc in Finance. Department of Finance, University of Strathclyde Business School. Glasgow, United Kingdom. E-mail: akin.omotesho@gmail.com

^B PhD in Accounting and Finance. School of Finance and Professional Studies, Botswana Accountancy College. Gaborone, Botswana. E-mail: ayodeji@bac.ac.bw Orcid: <https://orcid.org/0000-0003-4710-2680>

Método: O estudo adotou as metodologias de avaliação de ativos líquidos, modelo de desconto de dividendos, fluxos de caixa livres, modelo de lucros, empresas comparativas e avaliação de transações comparativas. O estudo adotou a Hill and Smith Plc como um estudo de caso, extraindo dados relevantes de seus registros financeiros anuais.

Resultados e Discussão: O estudo revelou um retorno anormal de +4,17%, sugerindo um desempenho excepcional. Ele comparou as posições financeiras com as de seus pares, como Morgan Advanced Materials e Keller Group, empregando vários métodos de avaliação. O modelo de ganhos indicou um preço de ação de £ 14,1, sugerindo uma possível supervalorização no mercado de ações de £ 10,0 por ação.

Implicações da Pesquisa: As implicações práticas e teóricas desta pesquisa são discutidas, fornecendo insights sobre como os resultados podem ser aplicados ou influenciar as práticas no campo de finanças e avaliação corporativas. Essas implicações afetam várias partes interessadas, como as empresas pesquisadas, os investidores e o meio acadêmico.

Originalidade/Valor: Este estudo contribui para a literatura ao destacar as metodologias de avaliação empregadas no estudo, enfatizando a importância de técnicas de avaliação precisas para informar as decisões de investimento.

Palavras-chave: Modelo de Precificação de Ativos de Capital, Avaliação, Desconto, Prêmio de Risco, Custo Médio Ponderado de Capital.

ANÁLISIS FINANCIERO Y VALORACIÓN DE UNA EMPRESA BRITÁNICA COTIZADA EN BOLSA: ESTUDIO DE UN CASO PRÁCTICO

RESUMEN

Objetivo: El objetivo de este estudio es investigar el análisis financiero y la valoración de las empresas que cotizan en bolsa en el Reino Unido, con el fin de conocer el rendimiento financiero y la posición operativa de Hill and Smith Plc y otros actores clave del sector.

Marco Teórico: En este estudio, los principales conceptos y teorías que sustentan la investigación incluyen la teoría de la irrelevancia, la teoría del trade off, la teoría del pecking order y la teoría del market timing. Estas teorías explican los factores subyacentes que determinan las decisiones de financiación y valoración de las empresas cotizadas.

Método: El estudio adoptó las metodologías de valoración de activos netos, modelo de descuento de dividendos, flujos de caja libres, modelo de beneficios, empresas comparativas y valoración de transacciones comparativas. El estudio adoptó Hill and Smith Plc como caso de estudio, extrayendo los datos pertinentes de sus registros financieros anuales.

Resultados y Discusión: El estudio reveló una rentabilidad anormal del +4,17%, lo que sugiere un rendimiento excepcional. Se compararon las posiciones financieras con las de empresas similares como Morgan Advanced Materials y Keller Group, empleando múltiples métodos de valoración. El modelo de beneficios indicó un precio de la acción de 14,1 libras, lo que sugiere una posible sobrevaloración en bolsa de 10,0 libras por acción.

Implicaciones de la Investigación: Se discuten las implicaciones prácticas y teóricas de esta investigación, proporcionando una visión de cómo los resultados pueden aplicarse o influir en las prácticas en el campo de las finanzas corporativas y la valoración. Estas implicaciones afectan a diversas partes interesadas, como las empresas investigadas, los inversores y el mundo académico.

Originalidad/Valor: Este estudio contribuye a la literatura destacando las metodologías de valoración empleadas en el estudio, haciendo hincapié en la importancia de las técnicas de valoración precisas para informar las decisiones de inversión.

Palabras clave: Capital Asset Pricing Model, Valoración, Descuento, Prima de Riesgo, Coste Medio Ponderado del Capital.

1 INTRODUCTION

In the dynamic world of business, pursuing growth often necessitates substantial capital injections. But before investors open their wallets, a crucial question arises: how much is this business or project worth? This is where the art and science of business valuation comes into play. By estimating the fair market value of a company or project, stakeholders gain invaluable

insights that fuel informed investment decisions and propel strategic growth (Damodaran, 2024). When a company envisions expanding its operations, acquiring new assets, or entering new markets, valuation helps determine the capital required to fuel these ambitions (Gornall & Strebulaev, 2020). By understanding their true worth, companies can attract investors with realistic funding requests, laying the groundwork for sustainable growth.

More so, Rosenbaum and Pearl (2021) argued that businesses are rarely static. Mergers, acquisitions, and divestitures are common occurrences, each demanding accurate valuations to ensure fairness and transparency for all parties involved. In these situations, a valuation ensures that buyers pay a just price and sellers maximize their returns, safeguarding interests and fostering trust. Hence, beyond specific transactions, valuations equip companies with a clear understanding of their market position relative to competitors. This knowledge empowers them to make informed decisions on pricing strategies, resource allocation, and operational efficiency, ultimately enhancing their overall competitiveness and profitability (Obadire, 2022). Business valuation is not just an accounting exercise; it's a strategic tool that unlocks growth, facilitates fair transactions, and empowers informed decision-making. By understanding its diverse applications, both companies and investors gain the leverage to navigate the ever-evolving business landscape with confidence and clarity.

Researchers such as Damodaran (2024), Pinto (2020), Palepu et al (2020), Pascual et al (2017), and Deandra (2005) bucket the valuation approaches into three including the asset approach, income approach and market approach. The assets approach to valuation emphasizes the intrinsic value of the asset itself, taking into account its physical characteristics, tangible properties, and any associated liabilities (Pinto, 2020). This method assesses the worth of the asset based on its individual components and liabilities, providing a snapshot of its underlying value (Pinto, 2020; Palepu et al., 2020)

Conversely, the income approach to valuation focuses on the future earning potential of the asset, estimating the present value of expected future income streams. This method capitalizes on the anticipated cash flows generated by the asset over its projected lifespan, discounting these future earnings back to their present value (Pascual et al., 2017). By quantifying the asset's income-generating capacity, this approach provides insight into its potential long-term value based on anticipated cash flows. On the other hand, the market approach to valuation relies on comparing the asset to similar assets that have recently been sold in the market. This method leverages market transactions as a benchmark for valuation, considering the prices at which comparable assets have been bought or sold (Damodaran, 2024).

This approach provides a valuable reference point for assessing the asset's worth based on prevailing market conditions and buyer perceptions.

Bhagat and Bolton (2019) pointed out that the primary distinction between the asset and market approaches (comparable companies and comparable transactions) is their exclusion of the company's future values from the valuation process. In contrast, the discounted cash flow (DCF) model relies on future cash flows, discounted at a predetermined rate, to ascertain the company's valuation.

Empirically, Bhagat and Bolton (2019) noted that theories and practices of corporate finance have evolved from normative approach to positive approach providing explanation for the reasons and the basis of investor's reactions to companies' decisions (financial and investment) as well as announcements of prospective mergers or acquisitions. With the Enron case, most prominently exacerbating the loopholes of classical and neo-classical valuation methods, the basis of valuation methodologies for determining companies' share price have grown to become a major theme in the corporate finance industry. This paper's objective is to analyse Hill & Smith Plc's profitability, liquidity, leverage and investment capacities. The investment value of Hill & Smith's shares was analysed to give an investment recommendation for prospective investors.

More so, the study conducted an analysis of Hill & Smith Plc's financial performance to provide strategic insights aimed at informing the company's decision-making process and enhancing shareholder value. Operating primarily in the industrials sector, Hill & Smith's activities span across construction, basic materials, and metals and mining industries. Amidst a challenging economic backdrop, characterized by a contraction in the UK industrial sector growth rate and ongoing supply chain disruptions exacerbated by geopolitical tensions, Hill & Smith faces both immediate challenges and future opportunities. Despite the current challenges, there are positive indicators for Hill & Smith's future prospects. While industrial material prices are expected to remain high in the short term, a potential decrease is anticipated in the coming years, offering some relief. Furthermore, the transition towards green initiatives presents opportunities for UK miners, with increased capital expenditure directed towards decarbonization efforts. However, stricter environmental, social, and governance (ESG) standards and potential government interventions pose risks, necessitating adaptation to emerging trends.

The analysis of Hill & Smith's financial performance involved comparing it to a group of peer companies carefully selected based on similarity in products and services, sensitivity to

business cycles, and statistical similarities. Companies such as Morgan Advanced Materials Plc, Keller Group Plc, Chemring Group Plc, Morgan Sindall Group, and Clipper Logistics Group were included in the peer group, offering a diverse yet relevant comparison. While past correlations within the peer group may not guarantee future alignment, the methodology employed provides a robust foundation for meaningful analysis, contributing to a comprehensive understanding of Hill & Smith's competitive position. Following the brief introduction, the rest of the paper is organised as follows: literature review, methodology, empirical discussion of results and, lastly, the conclusions.

2 LITERATURE REVIEW

There is no gainsaying that financial management policies adopted by companies have a major effect on their financial performance. In this section, the study analysed existing empirical literature and theoretical underpinning of financial management and valuation methodologies under three sub-heading namely, the financing policy, investing policy and dividends policy.

2.1 FINANCING POLICY

There are two major ways companies finance their business operations – debt financing and equity financing. While most firm's capital structure is dependent on their business strategy, Abeywardhana (2017) noted that firms opt to use more debt to raise capital in order to maximize shareholder's wealth due to interest on debt being tax deductible. There are four main theories of financing policy – irrelevance theory, trade off theory, pecking order theory and market timing theory.

The Modigliani and Miller irrelevance structure theory highlights that the capital structure (mix of debt and equity) of a company does not increase or decrease its shareholders value. According to them, they postulated that there is no optimal point mix of debt and equity selection by a firm which implies that managers are at liberty to choose the mix of debt and equity that works for them. As Luigi and Sorin (2011) and Obayagbona and Omodamwen (2022) further corroborated, a weak firm would typically borrow more debt because it is “cheap”, regardless of the transaction costs compared to equity capital.

The trade-off theory as Abeywardhana (2017) noted, seems to justify moderate debt ratios. He further explained that the market timing theory stated that companies time their equity issuance at periods when the share price is perceived to be overestimated and would buy back shares during periods that share price are perceived to be underestimated. Companies would typically issue equity when there is a release of positive information which would eliminate information asymmetry between the company's stakeholders. While it is unclear the process by which managers "time" the market, Graham and Harvey (2001) posited in their research that manager seemed very confident about their ability to time the market but could not differentiate the asymmetric information and mispricing forms of timing the market.

Myers and Majluf's (1984) pecking order theory posits that firms tend to minimize their adverse selection costs over time by relying more on internal funding. The theory suggests that the costs associated with information asymmetry in issuing securities outweigh other financing considerations. Accordingly, companies aim to maximize value by prioritizing the use of internally generated funds, such as retained earnings, to finance new investments before resorting to external financing options (Barclay & Smith, 2020). Leary and Roberts (2010) and Obadire et al (2023) further elaborate that when firms face a shortage of internal funds and external financing becomes necessary, they prefer debt over equity due to the lower information costs associated with debt issuance. Essentially, firms view equity issuance as a last resort because the market perceives equity instruments negatively, and firms associate higher information costs with equity issuance.

2.2 INVESTMENT POLICY

Investment policies have major effect on companies' growth opportunities and operational capacities. There are many factors that influence the investment policy of a company, the most significant of them being agency conflict. Jensen and Meckling (1976) highlighted that the main result of agency conflict is that management tend to overinvest. The way they do this is to overinvest the free cashflow (FCF) in non-profitable investments, as described by Jensen (1986). Sometimes, managers withhold excess cashflows in order to prevent investors from monitoring them and the project funds when capital is raised externally for investment purposes.

Some empirical reports suggest that there might be differences in the reaction of companies towards investment policies. Asker et al (2014), in their work on examining

investment behaviours of private and public companies in the United States, noted that public companies typically invest lesser than private companies and thus show very little reactions to investment opportunities being undertaken by management. This is however the opposite for their European counterpart, as highlighted by Mortal et al (2020) who noted that the public companies, used in their data, were more inclined to investing more than private companies which then led to a sharper sensitivity on growth opportunities.

The theories on investment policy includes information asymmetry, overinvestment theory and opposite effect theory. Just as with financing policies, investment policies are sometimes driven by the information asymmetry between managers and external shareholders. Drobertz et al (2016) highlighted that there is a high reluctance to use external capital for investment, especially for private companies when there is a huge information asymmetry between internal and external stakeholders. Myers and Majluf (1984) explained that due to the negative signal of using external capital for investment purpose, managers would most times chose to invest in negative net present value (NPV) projects than decide to issue new shares for investment.

The overinvestment theory arises as a result of differences in managers and shareholders incentives. This theory implies that managers would invest in projects with negative net present value in order to increase their control on company's resources. Liu et al (2018) noted that when there is availability of excess capital and low discount rates, that capital qualifies as "free cashflow" which then increases the possibility of overinvestment. Agha (2016) and Kryolainen (2013) suggested that proper executive remuneration, issuance of debt and optimum optimal structure would easily solve the problem of overinvestment. However, Foronda et al (2019) seem to disagree on corporate debt alleviation the problem of investment as he noted that corporate debt actually increases overinvestment when the company has high level of liquidity.

Another investment management theory is the opposite effect theory. Narayanan (1985) explains that the listing of stocks on the stock exchange markets put subtle pressure on company's managers to meet shareholders' short-term returns expectations. This pressure mostly makes managers make unsound investment decisions that would lead to overinvestment, a term called "short termism".

2.3 DIVIDEND POLICY

One of the most leading theories on dividend policy is the Modigliani and Miller (1961) dividend hypothesis. They posited that the dividend policy of a Company has zero effect on the shareholder's value. Researchers are inconclusive as to whether a Company should pay dividend to its shareholders or not. For instance, Graham and Dodd (1934), in their book on security analysis, highlighted that the sole purpose of establishing companies is to simply pay dividends with such firms using that to justify their share price being "expensive". This, however, disagrees with the irrelevance theory which states that a company's share price is only influenced by its income generating capacities, and not dividends payout. Although Ball et al (1979) noted that proving the dividend irrelevance theory might be difficult to achieve, some research work still appears to support the hypothesis. Black and Scholes (1974) investigated the effect of dividend yield on stock prices of 25 listed stocks in the New York Stock Exchange and noted that the dividend yield effect was not significant for stocks between 1936 and 1966. Hess (1981) and Bernstein (1996) were also in support of the irrelevance theory from their findings. On the flip side, Baker et. Al (1985) in their survey of 526 listed firms' CFOs on New York Stock Exchange explained that the CFOs believed that their dividend policies had a positive impact on their share prices as shareholders feel compensated by the payout. Partington (1985), in his research on listed Australian companies also highlighted that the senior managers opined that their dividend policies affected their Company's value as well as their cost of capital.

Another dividend theory is the bird in hand hypothesis. This alternative theory posits that payout policies (dividends) increase a company's value. As Al-Malkawi and Pillai (2010) put it, "investors prefer the 'bird in hand' cash dividends to 'two in the bush' future capital gains. Graham and Dodd (1934), in their research, argued that a dollar in dividends paid led to a four time increase in share price. Modigliani and Miller (1961), countered the bird in hand theory, stating that a company's cashflows volatility, not the dividends payout is what determine its business risks. Rozeff (1982) however recorded a completely different result in his research, noting that he had a negative relationship between dividends payout and a company's firm value.

On the other hand, the tax effect hypothesis states that capital gains are preferred to dividends because of its lower taxation. Brennan (1970) researched the effect of risk adjusted returns on dividend yield by developing a capital asset pricing model (CAPM) that incorporates taxation. He discovered a positive relationship between systematic risk and dividends yield. In

other words, as pre-tax returns increase, there is higher dividends yield to compensate for the tax disadvantages of the returns. Keim (1985), using Lintner's model on six portfolios with dividend yield, also recorded the existence of a non-linear relationship between dividends and return on stock. These theories and polices underpins the underlying factors that explains the financing and valuation choices of listed firms.

3 DATA, SAMPLE AND MODELS

The study adopted the net assets valuation, dividend discount model, free cashflows, earnings model, comparative companies and comparative transactions valuation methodologies. In carrying out Hill & Smith's valuation, the researchers obtained a general understanding of the historical performance, position and cash flows of Hill & Smith forming the basis of the underlying assumptions; and assessed the reasonableness of forecast assumptions and aligned with historical performance, industry trends and outlook where appropriate.

To analyse the stock price performance of Hill & Smith's Plc, the study adopted the Abnormal Buy-and-Hold Return (ABHR) methodology. The ABHR calculates the compounding returns of stock and benchmark returns individually. It can be mathematically represented as:

$$ABHR_i = \prod_{t=1}^N (1 + r_{i,t}) - \prod_{t=1}^N (1 + r_{benchmark,t}) \quad (1)$$

In determining Hill & Smith Plc abnormal performance, the study used the FTSE 250 index as the stock price performance benchmark.

Table 1

Hill & Smith Plc's abnormal returns

Company	Abnormal returns
Hill & Smith Plc	4.17%

Based on the analysis shown in Table 1, Hill & Smith Plc's stock index has performed better than investors expectation, yielding a positive 4.17% abnormal returns.

3.1 PEER SELECTION

The study used Hill & Smith's peer companies based on CFA's proposed peer selection criteria: products and services offerings, business cycle sensitivities and statistical similarities as explained in detail below as the selection criteria.

3.1.1 Products and services offerings

Modern classification approaches are commonly based on clustering companies based on the similarity of their products and service offerings. Hill & Smith offers supply of infrastructure products to global markets and is categorized as part of the basic materials, industrial metals, constructions and mining industry. The basic materials industry consists of several related sub-sectors which has been included in the peer companies' selection. These industries include construction and materials, electronic and electrical equipment and industrial transportation.

3.1.2 Business cycle sensitivities

Another major factor in the selection of Hill & Smit's peer companies is the nature of the industry's business cycle sensitivity that the Company operates in. The two types of business cycle sensitivities are cyclical and non-cyclical. Hill & Smith operates in the cyclical industry, which implies that the performance of the Company is in high correlation with the overall economy of the country it operates in. A major characteristic of the cyclical business industry is that there is a high demand of goods and services during periods of economic expansion.

3.1.3 Statistical similarities

The study used a cluster analysis technique to select Hill & Smith's peer companies. The clustering algorithm selected the peer companies based on financial features (such as revenue, profitability, total assets, equity and leverage) and operational features (such as R&D, production capacities and staff headcount). The study relied on historical data for the selection of the peer companies and do not guarantee that past correlation within the companies would

continue into the future. The following financial criteria has been chosen to determine the peer companies of Hill & Smith Plc:

- Revenue: £350m - £3,320m
- EBITDA: £35m - £150m
- Total Assets: £450m - £1,700m

Based on these three factors, Hill & Smith Plc's peer companies used for the financial analyses are Morgan Advanced Materials Plc, Keller Group Plc, Chemring Group Plc, Morgan Sindall Group and Clipper Logistics Group.

4 EMPIRICAL FINDINGS AND DISCUSSIONS

4.1 FINANCIAL PERFORMANCE OF HILL & SMITH

Table 2 below shows the income statement of Hill & Smith's which was extracted from Hill & Smith's audited financial statements for FY17 to FY21 and unaudited financial statement for period ending 30 June 2022. Full-year FY22 balances have been estimated based on YTD22's (June 2022) actual results with the assumption that balances accrue evenly over the period.

Table 2

Income statement of Hill & Smith's

Hill & Smith Income statement								
£'m	2017	2018	2019	2020	2021	CAGR	HY '22	Ann. 2022
Revenue	585.1	637.9	694.7	660.5	705.0	5%	349.9	699.8
Cost of sales	(365.8)	(409.3)	(438.2)	(415.9)	(442.7)	5%	(218.5)	(437.0)
Gross profit	219.3	228.6	256.5	244.6	262.3	5%	131.4	262.8
Distribution cost	(32.1)	(35.8)	(36.8)	(34.1)	(36.5)	3%	(17.1)	(34.2)
Administrative expenses	(114.6)	(129.1)	(138.2)	(120.8)	(125.1)	3%	(68.7)	(137.4)
Other operating income	1.5	1.5	1.9	1.6	0.7	(17%)	0.5	1.0
EBITDA	74.1	65.2	83.4	91.3	101.4	7%	46.1	92.2
Depreciation and amortisation	(4.0)	(4.8)	(14.2)	(48.5)	(44.4)	83%	(11.3)	(22.6)
EBIT	70.1	60.4	69.2	42.8	57.0	(6%)	34.8	69.6
Financial income	0.6	0.6	1.4	0.6	0.6	-	0.2	0.4
Financial expenses	(4.5)	(6.0)	(8.8)	(7.9)	(6.7)	10%	(3.6)	(7.2)
Profit before taxation	66.2	55.0	61.8	35.5	50.9	(8%)	31.4	62.8
Taxation	(16.3)	(12.6)	(13.4)	(11.5)	(16.7)	1%	(7.9)	(16.7)
Profit for the year	49.9	47.2	42.4	24.0	34.2	(11%)	23.5	46.1

Extracted from Hill & Smith Plc's income statement.

The reported revenue consists of income derived from roads & security (36%), utilities (35%), and galvanizing services (29%). Revenue growth throughout the assessed period was primarily fueled by several factors, including a robust recovery across all divisions marked by margin improvement and trading well ahead of COVID-affected periods. Additionally, there was an uptick in demand for US engineered composite solutions and successful management of supply chain challenges. Moreover, the implementation of increased pricing actions helped offset input cost inflation, contributing to revenue growth.

Moreover, the UK, US, and rest of Europe markets have significantly contributed to total revenue, accounting for 43%, 36%, and 17% respectively from 2017 to 2021. Notably, Hill & Smith's acquisition of Prolectric, a leading UK provider of off-grid solar energy solutions in March 2021, has substantially bolstered the Group's performance, particularly evident in the UK market's notable revenue contribution. Revenue growth remained steady from 2017 to 2019 but experienced a decline in 2020 due to COVID-19 disruptions, followed by a 7% growth in 2021. Forecasts suggest a 12% growth rate for FY '22 and a 5% year-on-year increase across the projection period. The gross margin has remained relatively stable, averaging 24%.

Despite the consistent revenue growth, the cost of sales has consistently represented approximately 63% of revenue, resulting in an average gross profit margin of around 37% from 2017 to 2021. However, a lack of detailed breakdown in the Company's financials hinders deeper insights into the drivers of the cost of sales. EBITDA has shown a compound annual growth rate (CAGR) of 8% over the assessed period, with a notable 242% increase in depreciation and amortisation from 2019 to 2020, attributed to significant plant and machinery additions.

Hill & Smith Plc has effectively managed opex margin and adopted a greenhouse gas emissions strategy to enhance operations. Despite this, return on assets and return on equity have seen a decline from 22% in 2017 to 10% in 2019. While pandemic disruptions have contributed to this decrease, strategic decisions such as increased financial leverage may be necessary to bolster return on equity. Overall, while the company's operations have demonstrated consistent growth, there remains significant potential for improvement and optimization to enhance returns.

4.2 FINANCIAL POSITION OF HILL & SMITH PLC

The statement of financial position has been extracted from Hill & Smith Plc's audited financial statements for FY19 – FY21. In preparing the income statement and statement of financial position, Hill & Smith Plc applies the recognition, measurement and disclosure requirements of International Financial Reporting Standards as adopted by the European Union ('Adopted IFRSs') but has made appropriate amendments where necessary in order to comply with Companies Act 2006.

Table 3

Hill & Smith Plc' statement of financial position for the historical period.

Hill & Smith Plc Statement of financial position						
£'m	2017	2018	2019	2020	2021	CAGR
Non-current assets						
Intangible assets	163.9	183.8	212.8	188.5	177.4	2%
Property, plant and equipment	145.1	170.2	190.0	183.6	193.3	7%
Right-of-use assets	-	-	37.9	30.9	38.2	nm
Corporate tax receivables	-	-	-	-	1.6	nm
Deferred tax assets	-	0.5	1.0	1.4	1.4	nm
Total non-current assets	309.0	354.5	441.7	404.4	411.9	7%
Current assets						
Assets held for sale	0.7	0.8	-	-	3.6	51%
Inventories	84.6	96.6	100.7	96.3	108.1	6%
Trade and other receivables	116.5	142.0	144.1	122.7	130.2	3%
Current tax assets	-	-	-	1.3	0.7	nm
Cash and short-term deposits	16.4	36.9	26.0	22.0	18.8	3%
Total current assets	218.2	276.3	270.8	242.3	261.4	5%
Total assets	527.2	630.8	712.5	646.7	673.3	6%
Current liabilities						
Liabilities held for sale	-	-	-	-	1.9	nm
Trade and other liabilities	104.8	120.9	120.3	116.7	132.7	6%
Current tax liabilities	11.7	10.4	10.7	5.5	4.3	(22%)
Provisions	2.1	1.3	0.8	3.3	4.0	17%
Lease liabilities	-	-	10.6	8.6	8.8	nm
Loans and borrowings	0.3	0.4	0.4	8.6	1.9	59%
Total current liabilities	118.9	133.0	142.8	142.7	153.6	7%
Net current assets	99.3	143.3	128.0	99.6	107.8	2%
Non-current liabilities						
Other liabilities	0.5	2.7	1.3	1.4	1.5	32%
Provisions	2.9	2.7	2.5	2.5	2.4	(5%)
Deferred tax liabilities	5.6	6.8	8.7	9.0	12.8	23%
Retirement benefit obligations	25.6	23.0	19.9	19.6	12.3	(17%)
Lease liabilities	-	-	29.4	23.8	30.1	nm
Loans and borrowings	115.1	169.4	200.9	127.2	121.0	1%
Total non-current liabilities	149.7	204.6	262.7	183.5	180.1	5%
Total liabilities	268.6	337.6	405.5	326.2	333.7	6%
Net assets	258.6	293.2	307.0	320.5	339.6	7%
Equity						

Share capital	19.7	19.8	19.9	19.9	20.0	0%
Share premium	34.1	35.5	37.4	38.4	40.9	5%
Other reserves	4.9	4.9	4.9	4.9	4.9	-
Translation reserves	22.9	29.9	19.7	17.2	15.5	(9%)
Retained earnings	177.0	203.1	225.1	240.1	258.3	10%
Total equity	258.6	293.2	307.0	320.5	339.6	7%

Extracted from Hill & Smith Plc's Statement of financial position.

Hill & Smith Plc's intangible assets encompass goodwill stemming from acquisitions, along with customer lists, patents, and brand value. The notable 16% increase in intangible assets observed in 2019 can be attributed to the Company's full acquisition of Signpost Solutions Limited. Property, plant, and equipment include various assets such as lands, buildings, plant and machinery (including assets under construction), and vehicles. The uptick in property, plant, and equipment values reflects capital expenditures aimed at expanding the US temporary barrier fleet, a £2.8 million investment in US manufacturing and distribution expansion, and a £3.6 million initiative for UK off-grid solar lighting and power rental fleet expansion.

Assets held for sale pertain to Hill & Smith Plc's decision to divest its ATA Hill & Smith AB's rental division. Within the liabilities section, provisions are allocated for environmental provisions, restructuring provisions, and £2.6 million in contractual dilapidation obligations related to two leased properties. Retirement benefit obligations comprise pension schemes, providing employee benefits through both defined benefit and defined contribution plans. Management has indicated that the scheme is overseen by Trustees, with the defined benefit obligation averaging a duration of 15 years. Share capital and share reserves have remained stable throughout the historical period.

4.3 VALUATION APPROACH

The study employed the net assets valuation, dividend discount model, free cash flows, earnings model, comparative companies, and comparative transactions valuation methodologies. In conducting Hill & Smith's valuation, the researchers performed the following: Firstly, obtained a general understanding of Hill & Smith's historical performance, position, and cash flows, forming the basis of the underlying assumptions and lastly, assessed the reasonableness of forecast assumptions, ensuring alignment with historical performance, industry trends, and outlook where appropriate.

Table 4

The forecast income statement of Hill & Smith for five years (2022-2026).

Hill & Smith Plc's income statement (Forecast)					
£'m	2022	2023	2024	2025	2026
Revenue	738.6	773.9	810.8	849.5	890.0
Cost of sales	(466.1)	(488.3)	(511.6)	(536.1)	(561.6)
Gross profit	272.5	285.5	299.1	313.4	328.4
Distribution cost	(38.5)	(40.3)	(42.3)	(44.3)	(46.4)
Administrative expenses	(139.3)	(146.0)	(152.9)	(160.2)	(167.9)
Other operating income	1.8	1.9	2.0	2.1	2.2
EBITDA	96.5	101.1	105.9	111.0	116.3
Depreciation and amortisation	(24.8)	(26.1)	(27.4)	(28.8)	(30.3)
EBIT	71.8	75.1	78.5	82.2	86.0
Financial income	0.8	0.9	0.9	1.0	1.0
Financial expenses	(7.2)	(7.6)	(7.9)	(8.3)	(8.7)
Profit before taxation	65.4	68.4	71.5	74.8	78.3
Taxation	(17.1)	(17.9)	(18.8)	(19.6)	(20.5)
Profit for the year	48.2	50.4	52.7	55.2	57.8

Extracted from Hill & Smith Plc's forecast income statement.

The researchers have grown each line item of the income statement across the forecast period based on series of assumptions as explained in Table 5 below:

Table 5

SOCI line items and forecast basis

Line item	Forecast basis
Revenue	% CAGR between 2017 and 2021
Cost of sales	Average % contribution to revenue across the historical period
Distribution, operating expenses and other income	Average % contribution to revenue across the historical period
Depreciation	Average % contribution of opening balance of capital expenditure (PPE) across the historical period
Finance income and finance cost	Interest income and expenses from forecast loans & borrowings amortization schedule
Tax¹	19% UK Corporation tax rate plus adjustment for overseas tax at prevailing local rates

¹The study have also factored into the tax computation, a £1.6m charge served by HM Revenue and Customs to Hill & Smith Plc in line with the UK Controlled Foreign Company legislation.

4.4 NET ASSETS VALUATION

The net assets valuation approach operates on the premise that a company's worth equals the sum of its net assets value, representing its tangible value. In the absence of any fair market valuations for Hill & Smith's assets and liabilities, the reported book values as of the valuation date (December 31, 2021) served as the foundation for our valuation. This method does not account for any contingent or off-balance sheet liabilities. According to the NAV method, Hill & Smith's equity value stands at £339.6 million (£4.25 per share).

Table 6

Net asset valuation

Net asset value (NAV) as at FY21	
£'m	FY21
Assets	
Property, plant and equipment	193.3
Intangible assets	177.4
Rights-of-use assets	38.2
Tax assets	3.7
Assets held for sale	3.6
Inventories	108.1
Trade and other receivables	130.2
Cash and cash equivalents	18.8
Total assets – [a]	673.3
Liabilities	
Liabilities held for sale	1.9
Trade and other liabilities	132.7
Deferred tax liabilities	12.8
Current tax liabilities	4.3
Provisions	6.4
Lease liabilities	38.9
Loans and borrowings	122.9
Retirement obligations	12.3
Other liabilities	1.5
Total liabilities – [b]	333.7
Net asset value – [c] = [a-b]	339.6
Ordinary shares (£'m) – [d]	80
Value per share (£) – [c/d]	4.2

Source: Authors computation (2023)

4.5 DIVIDEND DISCOUNT MODEL

The dividend discount model is a valuation method that predicts a Company's share price by discounting its future dividend payment forecasts into its present value, using a predetermined discount rate. Table 7 shows the summary of Hill & Smith's share price valuation using the dividend discount model.

Table 7

Dividend discount model valuation

	2022	2023	2024	2025	2026	2026
£'m	1	2	3	4	5	5
Dividends	22.3	23.4	24.5	25.8	27.1	265.8
Cost of equity	6.28%					
Growth rate	2.00%					
Discount factor	0.94	0.89	0.83	0.78	0.74	0.74
Present value	20.9	20.7	20.4	20.2	20.0	489.0
Value of equity (£'m)						591.2
Number of shares (#'mn)						80
Value per share (£)						7.4

Source: Authors computation (2023)

The forecasted dividends are based on the financial forecast of Hill & Smith's Plc between 2022 to 2027. We have assumed a dividend payout ratio of 47% which is the average payout ratio of Hill & Smith's historical performance. The growth rate used represents UK's average GDP forecast growth rate between 2022 and 2027, according to United Kingdom's Office for Budget Responsibility. Based on Table 7, Hill & Smith's share price using the dividend valuation method is £591.2 (£7.4 per share).

4.6 EARNINGS MODEL

The earnings valuation model incorporates the return on equity, earnings retention ratio and discount rate in assuming a basis for a company's valuation. Table 8 shows the valuation of Hill & Smith based on the earnings model.

Table 8*Earnings model valuation*

Earnings model valuation	
	£'m
Earnings retention ratio (b)	38%
Return on equity (i)	0.10
Discount rate (r)	8.35%
Equity value	14.06
Number of shares (#'mn)	80
Equity value (£'m)	1,124.7

Source: Authors computation (2023)

Based on the earnings model valuation, Hill & Smith has been valued at £1,124.7m (£14.06 per share), the highest among the valuation methods used.

4.7 FREE CASHFLOW VALUATION

This methodology entails estimating Hill & Smith's projected FCFE over a forecast period and discounting same at an estimated discount rate. This method is widely considered to be a more accurate valuation methodology and the discount rate applied takes account of the underlying business risk profile.

Table 9*Free cashflow WACC component and assumptions*

Ke	Meaning	Comment
Rf	Risk-free rate	This is based on the US government 30-year bond yield as at 31 December 2021 adjusted for country risk premium and inflation delta for the UK.
B	Sector beta	We adopted a beta of 1.258 in the valuation of Hill & Smith, based on sector beta for Metals and mining industry as at January 2022 according to Damodaran.
MRp	Market risk premium	We have adopted 4.84%, determined by Damodaran.
CRp	Country risk premium	This relates to country risk premium for the UK in order to account for the sovereign risk of the country. For the purpose of this valuation, we have adopted a determined by Damodaran.
g	Terminal growth rate	Terminal growth rate of 2.0% is based in based on UK's long-term real GDP growth forecast by United Kingdom's Office for Budget Responsibility.

Source: Authors computation (2023)

Table 10 shows the valuation of Hill & Smith using the free cashflow method. In determining the terminal value, we have normalised the cash flows for the terminal period,

particularly relating to depreciation and capex. We thereafter applied a terminal growth rate of 1.10% in line with the UK's long-term GDP growth forecast by EIU.

Table 10

Present value of free cashflow to firm

	2022	2023	2024	2025	2026	2026
£'m	1	2	3	4	5	TV
EBITDA	96.5	101.1	105.9	111.0	116.3	116.3
Income tax	(18.3)	(19.2)	(20.1)	(21.1)	(22.1)	(22.1)
Changes in working capital	(20.6)	(6.0)	(6.3)	(6.6)	(6.9)	(6.9)
Net operating cash flow	63.5	71.0	74.2	80.3	79.5	114.5
CAPEX	(34.9)	(36.6)	(38.3)	(40.1)	(42.1)	(42.1)
FCFF	98.4	107.6	112.6	120.5	121.6	114.5
Terminal value						1,645.0
WACC	6.28%					
Terminal growth rate	2%					
Discount factor	0.94	0.89	0.83	0.78	0.74	0.74
Present value	21.3	34.8	34.3	33.8	33.3	793.7

Source: Authors computation (2023)

Table 10 shows the present value of free cashflow to firm, discounted using a weighted average cost of capital of 6.28%.

Table 11

Summary of free cashflow valuation

Summary	£'m
PV of explicit forecast period	157.6
PV of terminal value	793.7
	951.1
Net debt	(104.1)
Equity value (£'m)	847.1
Number of shares (#'m)	80
Equity shares per price	10.6

Source: Authors computation (2023)

The resulting equity value, after taking out the net debt element, as shown in Table 11 is £841.7m (£10.6 per share).

4.8 PRICE EARNINGS MULTIPLIER

The price earnings multiplier valuation determines the equity value of a company by multiplying the P/E multiples of comparable companies and the EPS of that company. This method assumes that a Company's fair value of share price should be similar to what is obtainable in comparative companies.

Table 12

Price earnings valuation

Summary of P/E multiple valuation		
	Mean	Median
P/E multiples of comparable companies	10.0	11.3
EPS as at valuation date (pence)	77.9	77.9
Equity value (£)	7.8	8.8
Number of shares (#'m)	80.0	80.0
Total equity value (£'m)	623.2	704.2

Source: Authors computation (2023)

Based on the analysis shown on Table 12, the equity value of Hill & Smith as at the valuation date is between £623.2 (£7.8 per share) and £704.2m (£8.8 per share).

4.9 COMPARABLE COMPANIES AND TRANSACTIONS

The comparable companies' valuation method entails applying the average EV/EBITDA multiple of similar companies to the Last Twelve Months (LTM) EBITDA of a target company to determine its equity value. Table 13 presents a summary of the comparable company's valuation. To assess the value of Hill & Smith, the study applied the EV/LTM EBITDA multiples of comparable firms to Hill & Smith's LTM EBITDA as of December 31, 2021. The LTM EBITDA data was sourced from Capital IQ for the comparable companies.

In selecting the comparable companies for our analysis, the study considered various factors such as the broader dynamics of the industrials sector, including geographical location, size, and operational characteristics. The companies deemed most comparable to Hill & Smith, along with their respective multiples, were utilized in the analysis.

Table 13*Comparable companies' valuation*

Summary of EV/LTM EBITDA multiple analysis - Comparable companies		
£'m	Mean	Median
LTM EBITDA (a)	148.6	136.5
Comparable multiple (b)	6.1	5.6
Enterprise value (a*b)	906.5	764.4
Net debt	(104.1)	(104.1)
Equity value before control premium and liquidity discount	802.4	764.4
Control premium (5%)	80.2	66.0
Liquidity discount (12.5%)	(100.3)	(82.5)
Equity value after control premium	782.3	643.8
Number of shares (#'mn)	80	80
Value per share (£)	9.8	8.0

Source: Authors computation (2023)

The study applied a control premium of 5% to reflect the pricing for acquisition of controlling shares of Hill & Smith as the multiples considered in this valuation approach relate to trading multiples. The study also applied a liquidity discount of 12.5% to reflect the non-marketable nature possibility of the company's shares. Using the comparable company's multiples approach, the equity value for Hill & Smith as at 31 December 2021 is approximately between £643.8m (£8.0 per share) and £782.3m (£9.8 per share).

For the comparable transactions' valuation method, the study adopted the average Enterprise Value/Revenue (EV/Revenue) multiple of selected comparable companies to the Last Twelve Months (LTM) Revenue of Hill & Smith to derive its equity value.

Table 14*Comparable transactions valuation*

Summary of EV/LTM Revenue multiple analysis - Comparable transactions		
£'m	Mean	Median
Revenue	1127.6	986.3
Comparable multiple (b)	0.73	0.80
Enterprise value (a*b)	817.5	789.0
Net debt	(104.1)	(104.1)
Equity value before control premium	713.4	684.9
Control premium (5%)	35.7	34.2
Equity value after control premium	749.1	719.2
Number of shares (#'mn)	80.0	80.0
Value per share (N)	9.4	9.0

Source: Authors computation (2023)

The study adopted the EV/LTM Revenue multiples as against the EV/EBITDA multiples due to paucity of data. We also applied a control premium of 5% to reflect the pricing for acquisition of controlling shares of the Company as the multiples considered relate to acquisition of minority stakes. Using the comparable transaction multiples approach, the equity value for Hill & Smith as at 31 December 2021 is approximately between £719.2m (£9.0 per share) and £749.1m (£9.4 per share).

4.10 MODEL COMPARISON

Table 15 below shows the valuation summary of the methodologies we have used in our analysis, including the multiples.

Table 15

Valuation summary

Valuation summary				
Methodology	Multiples	LTM EBITDA / Revenue* (£'m)	Equity value (£'m)	Value per share (£)
Net asset value				
Value			339.6	4.2
Dividend method				
Value			591.2	7.4
Earnings model				
Value			1,124.7	14.1
P/E multiple				
Mean value	10.0x	77.9	623.2	7.8
Median value	11.3x	77.9	704.2	8.8
Comparable companies (Implied EV/LTM EBITDA)				
Mean value	6.1x	148.6	782.3	9.8
Median value	5.6x	136.5	643.8	8.0
Comparable transactions (Implied EV/LTM Revenue)				
Mean value	0.73x	1127.6	749.1	9.4
Median value	0.80x	986.3	719.2	9.0
Discounted cash flow model				
Value			847.1	10.6

Source: Authors computation (2023)

While the study recognized that there is no one valuation method that is appropriate and specifically for companies, the study estimated the most appropriate valuation method in determining Hill & Smith Plc share price to be the Free cashflow valuation method. The free

cashflow incorporates profitability by taking the forecast cash from operations into account. Although a major limitation to the valuation method is that since the operating cashflow (EBITDA), working capital movements and capital expenditure are forecasted based on series of assumptions, it is subject to change and there might be deviations from actual numbers.

Also, the free cashflow model, and even the dividend discount model accommodates two types of growth phases – a fixed period where growth is abnormal and an infinite growth. In order to determine the long-term growth rate, we have assumed the growth rate to be the long-term forecasted GDP growth rate.

From the analysis, the study noted that Hill & Smith Plc's share price is overvalued in the stock market. Hill & Smith Plc's average share price from our valuation methods is £9.1 per share and £10.0 per share if we exclude the net assets valuation method while its share price was £17.96 as at the valuation date. There are some theories that explain why a share might be overvalued such as the fixation hypothesis and agency hypothesis. The agency hypothesis, which seems to be the most logical explanation, describes the overvalued company has being resistant to the market's "corrections" and prolonging the overvaluation for as long as possible. It also predicts that managers of overvalued companies generate signals because they benefit from the overvaluation and growth and also get some incentives from the managerial labour markets.

5 CONCLUSION AND RECOMMENDATIONS

This study aimed to conduct a comprehensive analysis of Hill & Smith Plc, a company operating in a highly regarded industry that contributed £1.7 trillion to the UK economy as of December 2021. Despite the challenges posed by the COVID-19 pandemic, Hill & Smith demonstrated resilience, with a steady increase in profitability index over the historical period. However, the company's forecasted underlying operating profit for FY22 falls slightly below our projected EBITDA, indicating potential areas for improvement.

Utilizing peer companies such as Morgan Advanced Materials Plc, Keller Group Plc, Chemring Group Plc, Morgan Sindall Group, and Clipper Logistics Group, we compared Hill & Smith's financial performance within the industry. Our analysis suggests that Hill & Smith's ratios are generally in line with industry averages, suggesting room for enhancement. Hill & Smith Plc's expansion initiatives, including the acquisitions of National Signal Inc. and Widnes Galvanising Limited, underscore the company's strategic growth plans. However, the decision

to divest its steel lighting and galvanizing division (France Galva SA) raises considerations regarding the impact on the company's underlying profitability. Looking ahead, Hill & Smith Plc holds promise for its stakeholders, particularly shareholders. Despite projected economic challenges in the UK over the next two years, we recommend that the company's management develop strategies to maintain robust performance. Our valuation methodologies, including the net assets valuation and earnings model, present varying perspectives on Hill & Smith's share price value, suggesting potential market corrections in the future. Overall, considering Hill & Smith's history, projections, and market dynamics, we recommend a BUY stance for prospective investors at current levels.

Despite the uniqueness of the study, the study experienced some limitations. Firstly, the study was limited by the data needed to carry out a more detailed and accurate analysis. While the study sourced its data from a wide range of market intelligence companies including Fitch Solutions, Data EIU, Euromonitor, Capital IQ and the UK Government, the researchers were unable to accurately articulate some of Hill & Smith Plc's financial numbers. We recommend that subsequent research should incorporate visits to the company being valued in order to get more specific information about the company.

Secondly, the valuation of Hill & Smith Plc is riddled with series of assumptions based on the researchers understanding of the company and the multi-cultural environment it operates in. While the researchers took extra diligence to provide basis for their assumptions, a tweak or modification of these assumptions may have significant impact on the equity valuation of Hill & Smith Plc. Given that addressing sustainability issues, promoting diversity and inclusion, and maintaining high ethical standards can contribute to long-term value creation and resilience of a company, the study recommends that further research should consider the effects of integrating environmental, social, and governance factors into a company's decision-making processes and operations and how it affects valuation. Lastly, it is important to note that the research did not include a sensitivity analysis of Hill & Smith Plc. The study suggest that future studies should incorporate sensitivity analysis when analysing and valuing a company. This approach will allow researchers to assess the comprehensive picture of the company across various economic and business scenarios, thereby enhancing the depth and accuracy of their evaluations.

The findings of this study hold several practical implications for stakeholders of Hill & Smith Plc. Firstly, the analysis indicates areas of potential improvement for the company, particularly in enhancing its profitability index and aligning its forecasted operating profit with

projected EBITDA. Stakeholders, including shareholders and management, can utilize this information to prioritize strategies aimed at optimizing operational efficiency and financial performance. Secondly, the comparison with peer companies sheds light on Hill & Smith's standing within the industry. Stakeholders can leverage this insight to benchmark the company's performance against competitors and identify opportunities for strategic differentiation. By adopting best practices observed among peer companies, Hill & Smith can further strengthen its market position and sustain long-term growth. Lastly, the valuation methodologies employed in this study highlight the importance of accurate valuation techniques in informing investment decisions. Stakeholders, particularly investors, can use these insights to make informed judgments about the company's intrinsic value and potential market dynamics. Additionally, the recommendation to adopt a BUY stance at current levels underscores the potential for value creation and capital appreciation, providing stakeholders with actionable guidance in navigating the investment landscape.

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