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ASCENDING TO EXCELENCE: KONE'S PATH TO
SERVICE LEADERSHIP

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Abstract: Amidst the formidable challenges facing the manufacturing sector—ranging from supply chain disruptions to escalating costs and interest rate hikes—this equity research paper zeroes in on the elevator and escalator industry, a unique subsector distinguished by its specific market dynamics. Within this industry, a focused analysis is conducted on Kone Corporation, examining its strategic positioning and valuation. The aim is to provide investors with comprehensive insights into Kone's resilience and growth potential in the face of the dynamic market conditions. Functioning as a vital resource, this paper is designed for potential investors aiming to gain profound insights not only into Kone Corporation but also the broader Elevator and Escalator Industry. In a climate where making well-informed investment decisions is critical, the study is crafted to shed light on pivotal considerations. By integrating qualitative and quantitative analyses, it empowers investors to confidently navigate the intricate landscape of equity investments, facilitating sound decision-making.

Keywords: Elevators & Escalators; Big 4; Valuation; ESG

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This report is part of the KONE Equity research report (annexed), developed by Tim Philip Ulmer and Daniel Wagner and should be read as an integral part of it.

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Introduction

The joint equity research paper aims to provide a comprehensive understanding of Kone and the elevator and escalator industry, empowering investors, financial analysts, and stakeholders to make well-informed investment decisions. Our exhaustive research leads us to recommend a buy position for Kone shares, driven by a number of key considerations outlined below.

Kone operates in a challenging market environment, marked by a focus on the Chinese market and challenges in the European and American construction segments. As a result, limited growth opportunities are foreseen in the next 2-3 years. However, Kone, positioned in a growth market aligned with megatrends, demonstrates innovativeness and sustainability leadership, ensuring long-term market resilience. Anticipating the expansion of its service business, we expect Kone to reduce reliance on the crisis-prone new equipment business, ultimately improving long-term profitability. Despite our conservative assumptions for the initial years of our forecast, we therefore arrive at a target price of EUR 51.9, representing a 21.33% premium over Kone's current share price.

Our recommendation is supported by a systematic 6-step approach outlined in the joint report. The initial steps provide a comprehensive overview of Kone, detailing its history, development, shareholding & governance structure, and financial segmentation. The subsequent step delves into the Elevators & Escalators industry, analyzing sub-segments, market dynamics, competitive landscape, as well as industry trends and the resulting growth prospects.

The third step involves an in-depth analysis of KONE's financial historic and current statements, scrutinizing key financial figures to assess the company's financial prospects and risks. This includes examining sales development, order book, cost structure, profitability, capital structure, investments, and income generation for various capital providers. The fourth step utilizes the gathered insights for a well-founded forecast of future financial statements, incorporating opportunities, risks, and dynamics.

In the fifth quantitative step, various valuation methods, including intrinsic DCF valuation and relative valuation, are employed to derive a comprehensive valuation of Kone. The results are consolidated to compare with the current share price, forming the basis for our buy recommendation. Finally, the last step highlights key risks faced by Kone, accompanied by a brief examination of the company's ESG performance.

The individual report at hand, follows a very similar structure, deviating in the absence of a forecast section. It primarily concentrates on presenting the company, general market dynamics, and the macroeconomic environment, along with a detailed valuation of Kone. Additional insights are provided through a segment exploring Kone's historical and current financials, however only covering an excerpt of the joint report. These core elements are supplemented by a last section analyzing Kone's key risks faced. The sequence of topics covered does not change from the joint report described above.

Company Overview

Company Description



Transforming from a machine repair shop to a conglomerate, KONE now stand as a leading player in the elevator and escalator industry.

Kone stands as a prominent figure in the global elevators and escalators sector, with robust market positions in the Americas the EMEA region, and the Asia-Pacific. Their extensive array of services encompasses the conceptualization, production, installation, maintenance, and modernization of passenger and freight elevators, escalators and automatic building doors. Kone meticulously oversees the entire lifecycle of these products, from the initial planning and installation phases to ongoing maintenance and comprehensive modernization efforts. Service excellence remains at the forefront of their operational philosophy, underscored by a considerable portfolio of installations under their purview. Founded in 1910 in Finland, Kone maintains its headquarters in Helsinki and has steadily evolved into an international market leader through a combination of organic growth and strategic acquisitions. Presently, the company boasts a presence in 60 countries and a global workforce of over 60,000 employees.¹

KONE Corporation's ascendancy to market leadership is characterized by strategic decisions and transformative milestones that have shaped its trajectory. Originating as a modest machine repair shop in 1908, KONE underwent a significant incorporation in 1910, followed by pivotal ownership changes in 1924 under the stewardship of Harald Herlin, setting the stage for its subsequent evolution. However, the true turning point emerged in 1968 when Kone acquired ASEA's elevator business. This strategic move propelled the company to market leadership in Northern Europe, serving as the forerunner of a series of forward-looking acquisitions.

Undergoing a transformative phase in the 1980s, Kone expanded its operations to become a conglomerate, diversifying into various sectors. However, recognizing the challenges associated with managing a diverse portfolio, particularly in the late 1980s, the company strategically divested all businesses except elevators and escalators during the 1990s. This decisive move marked a pivotal shift in focus, enabling Kone to streamline operations and concentrate resources on its core competencies.²

Year	Acquisition/Alliance
1981	Kone expands its presence in the United States market through the acquisition of Armor Elevator Co
1985	The Canadian division of Montgomery Elevator becomes part of Kone's portfolio through acquisition
1989	Kone secures complete ownership of Elevators Pty Ltd, operating in Australia and New Zealand. Kone had initially held a 10% stake since 1986
1994	Kone's ownership of Montgomery in Canada paves the way for a strategic alliance with Montgomery in the U.S., eventually leading to Kone's complete acquisition of Montgomery. Following five years of collaboration in producing elevator and escalator products, Montgomery is fully integrated into Kone US
1995	A collaborative effort emerges as Kone and MacGregor join forces to develop elevators tailored for passenger traffic on modern cruise ships
1998	Kone establishes an alliance with Toshiba (now divided into Toshiba Elevator And Building Systems Corp.) in Japan
2001	Kone and Toshiba formalize a historic agreement, involving the exchange of shares and an extension of Toshiba's license to market elevators based on Kone EcoDisc technology
2002	Kone adds the industrial engineering company Partek to its portfolio through acquisition
2009	Kone enters the modernization market in Philadelphia by acquiring Fairway Elevator Company
2011	Kone acquires Long Elevator Company, headquartered in Springfield, IL, serving St. Louis, Peoria, Chicago, and NW Indiana
2013	Kone expands its global presence by acquiring Isralift, its distributor in Israel
2014	Kone acquires the elevator and escalator business of Marrayat & Scott (Kenya) Ltd. and Marrayats East Africa Limited, its authorized distributors in East and Central Africa
2017	Kone further strengthens its position by acquiring the UK elevator company 21st Century Lifts, subsequently merging its business operations with Kone's UK operations

¹ KONE Corporation Annual Review, 2022

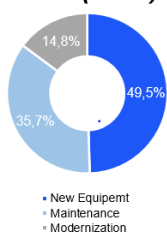
² <https://www.kone.com/en/company/history/>

Figure 1: machine-room-less elevator



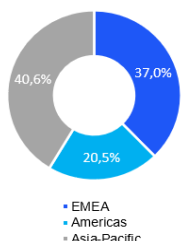
Furthermore, Kone's commitment to technological innovation played a pivotal role in solidifying its leadership position. The introduction of the machine-room-less elevator in 1996 revolutionized the industry, setting new benchmarks for efficiency and spatial utilization. The subsequent groundbreaking introduction of KONE UltraRope® technology in 2013 further underscored the company's commitment to pushing the boundaries of elevator technology, with implications for sustainability and operational efficiency in high-rise settings. In combination with its technological prowess, Kone has demonstrated a proactive commitment to sustainability and digitalization, aligning with contemporary market imperatives. The launch of the KONE Care™ DX carbon-neutral maintenance service in 2021 represents a paradigm shift in the industry. This strategic push into carbon-neutral maintenance positions Kone not only as an industry leader but also as a trailblazer in integrating environmental consciousness into its operational approach.³

Figure 2: Sales by business (2022)



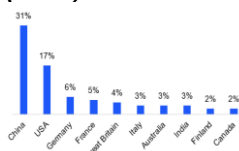
Today, Kone's core business activities are categorized under the following pillars: New Equipment (49.5% of sales): This division takes charge of the design, manufacturing, and installation of elevators, escalators, and moving walks, catering to diverse markets and industries, including commercial and residential projects, with customized solutions tailored to specific customer requirements. Maintenance (35.7% of sales): The Maintenance division offers a broad spectrum of maintenance services, encompassing both Kone's proprietary products and those sourced from third-party suppliers. The primary focus lies in ensuring the safety, performance, and efficiency of elevators, escalators, and moving walks throughout their operational lifespan. Maintenance services are adaptable, ranging from basic upkeep to comprehensive full-service packages that encompass spare parts and their installation. Modernization (14.8% of sales): The Modernization division provides comprehensive solutions, addressing the needs of Kone's own product line as well as those sourced from third-party suppliers. These solutions range from partial modernization to the complete replacement of existing elevator and escalator systems, all executed with meticulous attention to quality and efficiency.

Figure 3: Sales by area (2022)



Within the operational domains of Kone, the Asia Pacific region emerges as a key focal point, significantly driving the company's overall performance with a substantial share of total sales, amounting to 40.6% in the fiscal year 2022. Following closely is the EMEA region, contributing 37% to the company's sales during the same period. In contrast, the Americas region plays a comparatively modest role, constituting only 20.5% of Kone's total sales in 2022. Upon a closer examination of individual country contributions, China stands out prominently as a pivotal market for Kone, commanding a noteworthy 31% share of the company's total sales in 2022. In comparison, the United States, while less prominent, still commands a significant share of 17%, underlining its importance within Kone's global market portfolio⁴

Figure 4: Top 10 countries by sale (2022)



Kone Shares

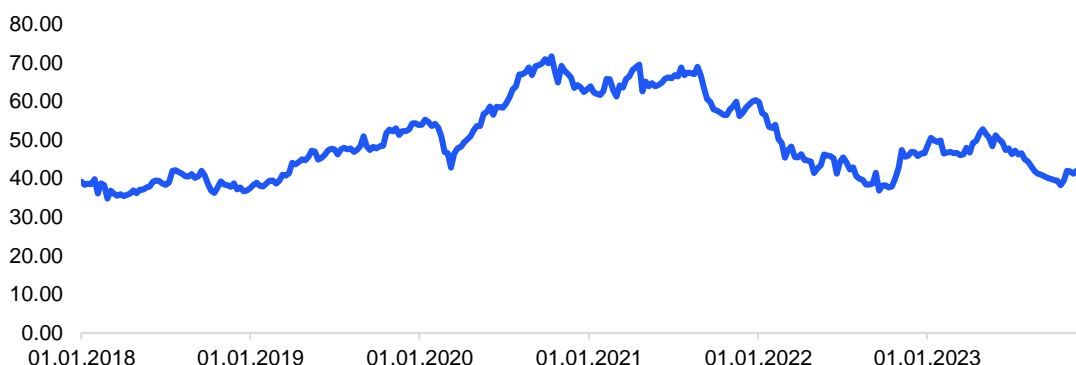
Kone has been listed on the Helsinki stock exchange since June 1, 1967. The company has two share classes: A and B. Only B-class shares are listed on the OMX Helsinki Stock Exchange.

³ <https://www.kone.com/en/company/history/>

⁴ KONE Corporation Annual Review, 2022

Currently, the stock is part of the OMX Helsinki 25 representing the 25 largest publicly traded companies listed on the Helsinki stock exchange. Kone's market capitalization as of 15th December 2023 amounts to €21.70bn compared to €24.98bn in December 2022. The decrease in market capitalization can be primarily attributed to the adverse impact of the current interest rate environment on the construction industry, which in turn has had negative effects on the elevator and escalator industry. As 15th December 2023, 2023 Kone's stock is trading at 41,96€.

Price evolution of KONE class B shares



The past 5 years show a fluctuating price movement

Major Shareholders on Dec 31, 2022

	A-series	B-series	Total	% of shares	% of votes
1 Herlin Antti	70,561,608	51,180,608	121,742,216	23.0%	62.3%
Holding Manutas Oy	54,284,592	41,405,254	95,689,846	18.1%	48.1%
Security Trading Oy	16,277,016	8,082,516	24,359,532	4.6%	14.1%
Herlin Antti	0	1,692,838	1,692,838	0.3%	0.1%
2 Polttina Oy	0	17,271,928	17,271,928	3.3%	1.4%
3 Wipunen Varainhallinta Oy	0	16,350,000	16,350,000	3.1%	1.3%
4 KONE Foundation	5,647,104	9,859,632	15,506,736	2.9%	5.5%
5 Heikintorppa Oy	0	10,210,743	10,210,743	1.9%	0.8%
6 Varma Mtutal Pension Insurance Company	0	7,751,222	7,751,222	1.5%	0.6%
7 Ilmarinen Mututal Pension Insurance Compar	0	5,798,977	5,798,977	1.1%	0.5%
8 Riikantorppa Oy	0	5,500,000	5,500,000	1.0%	0.5%
9 Blaberg Olo Edvard	0	5,120,000	5,120,000	1.0%	0.4%
10 Elo Mutual Pension Insurance company	0	2,876,000	2,876,000	0.5%	0.2%
10 largest shareholders total	76,208,712	131,919,110	208,127,822	39.3%	73.5%
Foreign / nominee registered shareholders	0	234,414,154	234,414,154	44.3%	19.3%
Repurchased own shares	0	12,306,640	12,306,640	2.3%	1.0%
Others	0	74,547,244	74,547,244	14.1%	6.1%
Total	76,208,712	453,187,148	529,395,860	100.0%	100.0%

Figure 5: Class A shares

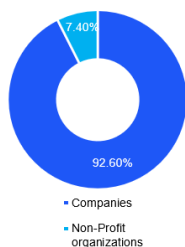
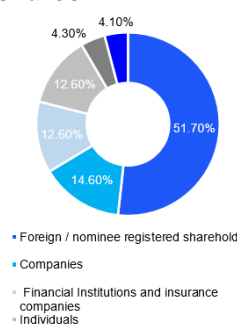


Figure 6: Class B shares



The Herlin family's significant shareholding positions them as key stakeholders. In 2022, Kone's shareholder structure reflects a diverse ownership landscape, with notable concentrations of shares among key individual and institutional investors. The Herlin family, particularly represented by Antti Herlin, holds a substantial stake of 23%, accompanied by significant voting rights of 62.30%. This underscores the family's pivotal role in influencing corporate decisions. The top 10 shareholders collectively wield 39.3% of shares and hold 73.5% of voting rights, indicating concentrated decision-making power. Foreign/nominee registered shareholders contribute significantly, holding 44.30% of shares, portraying global investor interest. The company's repurchased own shares and other categories demonstrate strategic financial moves. Overall, the intricate shareholder structure highlights the Herlin family's centrality, alongside a diverse array of stakeholders, in shaping Kone's corporate trajectory.⁵

⁵ KONE Corporation Annual Review, 2022

Board of Directors

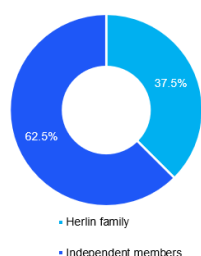
A fusion of industry veterans and technological pioneers, anchored by the Herlin family

The composition of Kone's Board of Directors reveals a blend of experienced professionals from diverse industries, contributing to a rich set of perspectives. Matti Alahuhta and Ravi Kant, with extensive leadership roles in Nokia Corporation and Tata Motors, respectively, offer valuable industry-specific knowledge. The recent additions of Krishna Mikkilineni and Jennifer Xin-Zhe Li bring technological and international expertise, enhancing the board's competency. Furthermore, The notable presence of Herlin family members, particularly Antti Herlin and Jussi Herlin, in key governance roles at Kone is a salient feature of the company's director structure.⁶

Board of Directors

Name	Age	Role	Start date	Prior roles
Antti Herlin	67	Chairman of the Board	1991	Executive Chairman of the Board of Kone, CEO of Kone, Deputy Chairman of Kone
Jussi Herlin	39	Vice Chair of the Board	2012	Senior Business Analyst and Strategy Development Manager at Kone, Consultant at Accenture, Deputy Member of the Board of Kone
Matti Alahuhta	71	Member of the Board	2012	President and CEO of Kone, Executive Vice President of Nokia Corporation
Susan Duinhoven	58	Member of the Board	2020	CEO of Kononklijke Wegener N.V., CEO of Western Europe Thomas Cook Group Plc
Iiris Herlin	34	Member of The Board	2015	Deputy Member of the Board at Kone
Ravi Kant	79	Member of the Board	2014	Managing Director and CEO at Tata Motors, Director at Philips India, Director at LML Ltd.
Krishna Mikkilineni	64	Member of the board	2022	CTO and CIO at Honeywell International Inc, President of Honeywell Technology Solutions
Jennifer Xin-Zhe Li	56	Member of the Board	2021	CEO and CFO of Baidu Capital, Controller and CFO at General Motors

Figure 7: Board composition



Industry analysis

Market Overview

The elevator and escalator sector, is a significant component within the field of mechanical engineering. Over time, a notable shift within the industry has occurred, transitioning from a primary focus on production to a service-oriented model. The essence of most companies now revolves around service provisions, encompassing maintenance, repairs, and the supply of spare parts. This pivotal aspect is complemented by the sale and installation of new systems and the modernization of existing ones. Presently, global strategies govern the value creation processes for elevators, escalators, and their components, with limited production occurring in select domestic facilities. The industry landscape is characterized by the dominance of four major corporate entities, commonly referred to as the Big Four. However, the sector's framework also encompasses numerous small and medium-sized enterprises specializing in elevators. The most prominent players known as the Big Four (Kone, Otis, Schindler, TK Elevator) collectively represent the largest companies globally within the elevator and escalator industry. Beyond the primary sector involving the Big Four and elevator SMEs, the broader elevator industry encompasses additional stakeholders such as suppliers (manufacturers and component

A shift from production to service-centric business models is evident

Dominance of the "Big 4" with new players emerging within sustainability

⁶ KONE Corporation Annual Review, 2022

providers), and emerging participants like digital startups and Internet of Things (IoT)-based service providers. The industry exhibits distinctive characteristics, including a prolonged emphasis on service, corporate concentration trends, the adoption of international value creation strategies and the proliferation of unconventional employment models such as subcontracting.⁷

- Segments

In general terms, the elevator and escalator industry is delineated into three key subsegments: the New Equipment segment, the Modernization segment, and the Maintenance segment. Each subsegment plays a distinct role within the industry, contributing to its overall dynamics and economic landscape. In the high-volume markets for standard elevators, the New Equipment segment is characterized by fierce competition. However, companies strategically leverage this segment to secure lucrative maintenance contracts, often accepting lower margins or aiming for a "black zero" in the pursuit of long-term gains. Contrastingly, the Modernization segment has emerged as a growth area within the industry. It operates somewhat independently of the construction sector and exhibits resilience during economic downturns. The real estate industry, when faced with a slowdown in new building construction, tends to shift its focus towards modernizing existing structures and enhancing energy efficiency. Elevator and escalator modernization, in this context, has proven to be a pivotal aspect of this industry segment. The Maintenance segment, comprising maintenance, repair, and spare parts services, serves as the core business area for the majority of companies in the elevator and escalator industry. Throughout the 2010s, the service business experienced consistent growth, driven by the increasing number of elevators in operation. The stability of the maintenance sector persists even during periods of economic crisis, as maintenance and repair activities are essential and relatively resistant to economic fluctuations.⁸

Companies strategically leverage the new equipment segment to secure lucrative maintenance contracts

Figure 8: Elevators in operation globally 2010s in millions (Statista, 2023)



Figure 9: Share of different regions out of total service market



Around half of service in mature markets, biggest growth potential in developing markets

Figure 10: Share of different regions out of total new market



- Geographies

In the global arena of the elevator and escalator industry, discernible geographical differentiations are evident, underscoring the multifaceted nature of market dynamics. North America's sector manifests maturity, notably in its service-oriented focus, with a substantial emphasis on modernization opportunities facilitated by an aging installed base, particularly in non-residential domains. In the expansive EMEA region, a dichotomy emerges between mature markets and evolving regions, with Europe commanding precedence as the largest market. The service market, buoyed by a significant installed base, is pivotal, and the aging elevator infrastructure in Europe serves as a catalyst for growth in modernization initiatives, especially within the residential segment. Conversely, China emerges as the epicenter of unprecedented growth, assuming the mantle of the world's largest market for new equipment. This paradigm shift is underscored by a robustly expanding service sector, where China is poised to represent approximately 50% of the global service market by 2025, fueled predominantly by the residential segment. The nation's ascendancy underscores a strategic focus on innovation and adaptability to meet burgeoning demands. In the broader Asia-Pacific region, excluding China, a nuanced tapestry unfolds, characterized by a spectrum of developing and mature markets. India, in particular, occupies a

⁷ Amosun, THE LOGIC OF BUSINESS STRATEGY: A case study of Kone Group, 2017

⁸ Franco, Servitization of Manufacturing Firms Over Time: An Empirical Investigation in the Elevator Industry, 2020

significant position as the second-largest new equipment market globally, with a pronounced emphasis on residential segments. Each geographic region, through its distinctive characteristics, contributes uniquely to the global elevator and escalator industry, thereby shaping the trajectory of this vital sector within an increasingly interconnected and dynamic global landscape.⁹

- **Macroeconomic environment**

The elevators and escalators industry in 2023 finds itself entangled in a complex and challenging macroeconomic milieu that significantly influences its operational dynamics. The sector's struggles with supply chain disruptions in 2022, compounded by the ongoing conflict in Ukraine, have extended into the current year, resulting in considerable price increases for crucial components like electronic constituents, steel, and plastic. This lingering impact reflects the industry's vulnerability to global geopolitical events and trade disruptions. Moreover, key regions vital to the industry, including Europe, China, and North America, are facing a convergence of adverse factors that collectively cast a shadow on its growth prospects. In Europe, financing constraints are impeding construction projects, while inflation and rising interest rates contribute to a climate of economic uncertainty. Similarly, the Chinese market, a significant player in the elevators and escalators industry, is grappling with formidable challenges. China is currently contending with a real estate crisis that has had widespread repercussions. This crisis has led to decreased consumer spending, heightened caution in investment projects, and an increase in the abandonment of existing ventures, creating a complex and challenging environment for the elevators and escalators industry. The adverse macroeconomic conditions outlined above are particularly impactful on the new equipment segment of the industry. The attenuated construction projects, exacerbated by financing constraints, translate into diminished demand for new installations. The increased costs associated with inflation and rising interest rates further dissuade potential buyers from investing in new equipment. The real estate crisis in China exacerbates this situation, as leading project developers grapple with financial challenges, resulting in a reluctance to commit to new elevator and escalator installations.¹⁰

Figure 11: European Central Bank fixed interest (Statista, 2023)

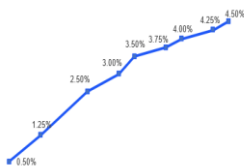


Figure 8: Floor space construction started by property developers in China in million square meters (Statista, 2023)

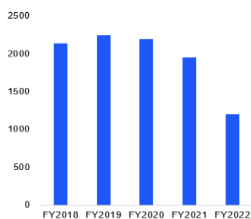
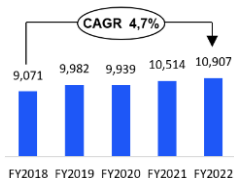


Figure 9: Total sales evolution in mEUR (2018-2022)



Historical Financial Analysis

Income Statement

- **Evolution of sales**

Over the last five fiscal years (FY18 – FY22), Kone has experienced a CAGR of 4.7% in total revenue. Notably, the company faced a stagnant growth phase in 2020, attributed to the disruptions caused by the COVID-19 pandemic. However, growth rebounded in 2021, primarily fueled by an uptick in servicing revenues,

⁹ KONE Corporation Equity Story, 2023

¹⁰ International Monetary Fund, World Economic Outlook, 2023

Figure 10: Evolution of sales by business (2018- 2022)

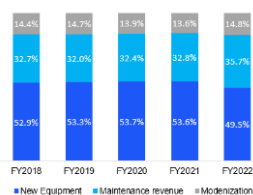


Figure 11: Evolution of sales by area (2018- 2022)

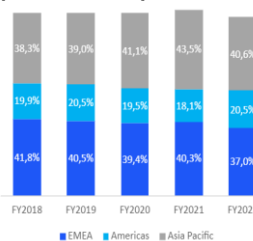


Figure 26: Evolution of total costs as % of core revenue (2018- 2022)



Figure 12: Evolution of COGS and wages as % of core revenue (2018- 2022)

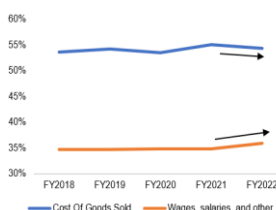
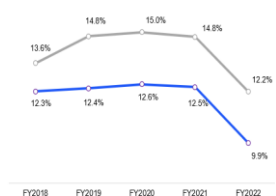


Figure 13: Evolution of margins (2018- 2022)



specifically driven by maintenance revenues. Examining the individual revenue streams, the CAGR for new equipment sales over the past five years stands at 3%, while maintenance revenue has demonstrated a robust CAGR of 7%, and modernization revenues have grown at a CAGR of 5.5%. Consequently, the proportion of revenue derived from new equipment has slightly decreased from 53% in 2018 to 49% in 2022. In contrast, the share of revenue from maintenance has increased from 33% in FY18 to 36% in FY22, and modernization revenue has seen a rise from 14% in 2018 to 15% in 2022. This evolution culminates in the Services category now commanding a total revenue share of 51%, up from 47% in 2018. This strategic shift aligns with Kone's growth strategy, as outlined by company management. Kone seeks to establish leadership in Services, recognizing the segment's resilience to economic cycles, its predictable revenue streams, and the appealing profit margins associated with services. In 2018, the most substantial market for Kone was the EMEA region, contributing to approximately 42% of the total revenue. Following closely, the Asia Pacific region held 38% of the revenue, while the Americas accounted for 20%. Since then, all three geographical segments have witnessed growth in sales. Notably, the Asia Pacific region has surpassed the EMEA region in growth, constituting 40.6% of the total revenue in FY22, while the EMEA region comprised 37%. Meanwhile, the Americas maintained a relatively stable share of revenue, standing at 20.5%.

▪ Evolution of Costs / Margin development

Over the preceding five fiscal years, the cost of goods sold (COGS) for Kone displayed a consistent upward trajectory, except for the anomalous year of 2020, primarily attributed to the disruptions caused by the COVID-19 pandemic. Despite this, the company's profit margin remained relatively stable within the range of 51% to 53%, as the increase in revenue mirrored the growth in COGS. Personnel costs demonstrated a similar pattern, although with a marginal decline of 0.2% in 2020, highlighting their "sticky" nature relative to COGS. Nevertheless, there was an overall increase in wages at a CAGR of 5.8% between FY18 and FY22. Especially FY21 and FY22 are noteworthy, as Kone's personnel costs increased by 5.9% and 9.7% respectively. This development can be attributed to the rise in inflation and Kone's subsequent need to adjust wages, as well as increase workforce to support growth. The adjacent chart highlights the relative increase in wages of the total cost base. Meanwhile, Selling, General, and Administrative expenses (SG&A) exhibited a steady increase over the same period, maintaining a proportional stability relative to revenue. Over the assessed period, EBITDA experienced a CAGR of 2.1%, the EBITDA margin remained relatively constant until 2022, where it dropped by 2.6% to 12.2%. Among other things, the cost pressure caused by supply chain disruption and cost inflation becomes clear here. The share of costs in revenue is increasing tremendously from 2021, which in turn adversely impacts margins in 2022.

Balance sheet & Cash flow Items

▪ Cash Flow & Liquidity management

Kone has maintained a consistently low and stable average holding period over the past five fiscal years, indicating the efficiency of its production cycle. The essential components used in the

Figure 14: DPO, DSO, DIO and CCC (2018-2022)

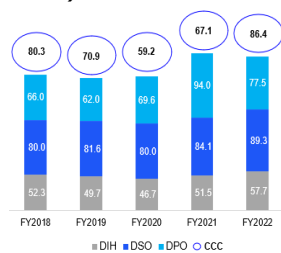


Figure 30: free cash flow in mEUR (2018-2022)

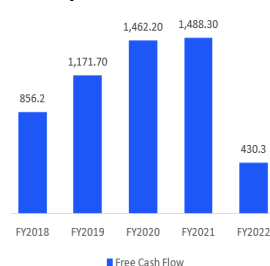


Figure 15: Quick-, Current- and Cash ratio (2018-2022)

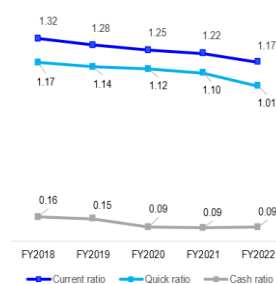


Figure 16: NWC in mEUR (2018-2022)

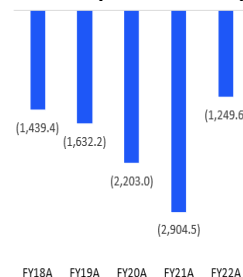
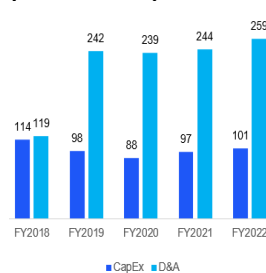


Figure 17: CapEx and D&A in mEUR (2018-2022)



manufacturing of core products have a brief storage duration before undergoing processing. Moreover, the processing period itself is relatively short, suggesting the adoption of a just-in-time or similar production methodology. On average, Kone takes approximately 52 days to convert raw materials into finished products and fulfill deliveries. Over the analysed period, Days Sales Outstanding (DSO) averaged 83 days. This metric exhibits some variability based on project size, duration, and pre-payments received from customers. Nevertheless, Kone has successfully maintained relative stability in DSO over the past five years. Days Payables Outstanding (DPO) remained relatively steady until 2021, when increased raw material prices and a change payment timing led to a substantial increase in DPO. However, in 2022, DPO decreased once again. In summary, Kone has generally sustained a stable cash conversion cycle, with 2021 serving as a notable and favorable outlier for the company. This consistent management of the cash conversion cycle underscores Kone's adept cash flow management practices, reflecting its resilience in navigating dynamic market conditions. Table 30 highlights Kone's strong cash flow generation and cash conversion. Throughout the examined years, Kone consistently maintained a Current Ratio exceeding 1, underscoring the company's sustained ability to meet short-term obligations and affirming its financial stability. The Quick Ratio, which excludes inventory due to its varying liquidity, consistently surpassed 1 for all assessed years. This indicates that in Kone's case, inventory has a limited impact on the ratios, affirming the company's capacity to settle short-term debt without relying on liquidating inventory. While both quick and current ratio have been decreasing over the analysed period, both remain above 1, indicating the robustness of the business. In all the years assessed, Kone reported a cash ratio between 0.1 and 0.2. While this suggests that the company cannot solely cover its short-term debt with cash, it's noteworthy that the low cash ratio can be perceived favorably, if the allocated cash is strategically used to create value. This nuanced perspective considers the potential value creation aspect associated with the company's cash position rather than focusing solely on its immediate debt coverage.

- Net Working Capital

Net Working capital further highlights Kone's capital light business model, as it has been negative throughout the analysed period. Kone works extensively with component suppliers to complement its own manufacturing capacity, enabling a quick inventory turnover. The company further employs an efficient accounts receivable collection which is complemented by significant advanced payments throughout the duration of a project. Furthermore, Kone manages to delay payments to suppliers due to its buying power and subsequent negotiating leverage.

- CAPEX and D&A

Kone operates an asset-light business model, evident in its minimal capital expenditure (CAPEX) demands. Throughout the last five fiscal years, the company has refrained from engaging in substantial expansion projects, dedicating CAPEX primarily to stable maintenance requirements. Notably, in each year spanning FY18 to FY22, the depreciation figure exceeded the actual CAPEX spent. This underscores Kone's prudent approach to capital allocation and its emphasis on maintaining and optimizing existing assets.

- Capital Structure

Kone exhibits a distinctive capital structure marked by a negative net debt, resulting in

Figure 18: Total equity and net debt in mEUR (2018- 2022)

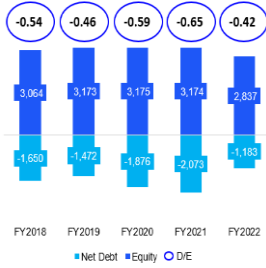


Figure 19: Net PP&E and total Assets in mEUR (2018- 2022)

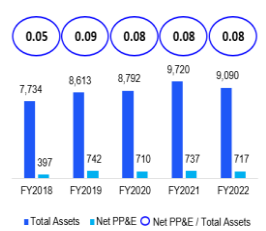


Figure 20: Split-adjusted dividend per class B share in EUR (2015- 2022)



Figure 21: Initial Peer group

Company	Fit
Industrials	
ABB Ltd	●
Alfa Laval AB	●
Atlas Copco AB	●
Epiroc AB	●
Konecranes Abp	●
Legrand SA	●
Sandvik AB	●
Schneider Electric SE	●
SKF AB	●
Valmet Oyj	●
Kongsberg Gruppen ASA	●
E&E	
Schindler Holding AG	●
Otis Worldwide Corp	●
Hyundai Elevator Co Ltd	●
Fujitec Co Ltd	●

consistently negative gearing ratios throughout the analyzed financial years. This underscores the company's restrained use of financial leverage. Despite a slight increase in the gearing ratio in FY22, it has remained negative, highlighting Kone's conservative financial approach. This approach is further evidenced by the company's tax strategy, forgoing the tax shield benefit associated with debt by consistently paying taxes above its statutory tax rate. Similar trends are observed in the Net Debt to Equity and Net Debt to EBITDA ratios, both sustaining negative values over the entire analyzed period. Although there is a nominal increase in these ratios in FY22, the persistent negativity reflects the company's steadfast commitment to a conservative capital structure, emphasizing prudent financial management by Kone's leadership. Kone's solvency ratio, standing at 0.42 in FY22, reinforces the company's financial robustness. Despite a gradual decline over recent years, the ratio remains substantial, affirming Kone's ability to service its debts and indicating readiness for future investments, should strategic opportunities arise. Furthermore, Kone maintains a notably low Net PPE to total assets ratio, underscoring its asset-light business model. While Kone has not explicitly outlined a specific target for its capital structure, the overarching goal is to uphold strong credit quality, ensuring access to external funding sources and supporting ambitious business growth. The current capital structure is regarded as a strength by Kone's management, offering the flexibility to seize potential value-creating opportunities. In instances of significant and attractive investment or acquisition possibilities, Kone is poised to utilize its borrowing capacity. Overall, Kone is employing a very conservative approach to its capital structure, with potential room for optimization. While Kone has not established a formal dividend policy, the company has consistently either increased or maintained a steady dividend in nominal terms each year since 2005. In 2022, the company distributed a dividend of 1.75€ per Class B share, holding it steady (without accounting for extraordinary dividends) from the previous year, 2021.

Valuation

Multiples analysis – Comparable companies

In the process of constructing a robust peer group for Kone, a meticulous approach was adopted to overcome the limitation of only two publicly traded companies, Otis and Schindler, among its immediate peers. To enhance the inclusivity of the peer group, the decision was made to broaden the scope by incorporating general industrials with a specific emphasis on the Nordic region. This expansion led to the establishment of two distinct peer groups: Industrials on the one side and elevator and escalator companies (E&E) on the other. Notably, the elevators and escalators group were further enriched by the inclusion of a conglomerate, Fujitec, which shares a corresponding business line and holds a modest yet noteworthy market share in the Asian market. A subsequent in-depth analysis of business models and a comparison of selected multiples to the elevator and escalator peer group prompted a refinement of the Industrials peer group. This refinement aimed at eliminating outliers and selecting industrial entities whose business models closely align with the risk profile inherent in Kone's different business endeavours. The refined Industrials peer group included ABB Ltd, Alfa Laval AB, Schneider Electric SE and Kongsberg Gruppe ASA. This peer group comprises entities specializing in industrial automation,

engineering, manufacturing, and technology - essential components mirroring Kone's business model. Moreover, this peer group was deemed appropriate for comparison due to its congruence with Kone's strategic emphasis on innovation and sustainability. Their shared focus on automation, energy-efficient solutions, and continuous innovation positions them as strategic peers.

Company	Enterprise Value /									Price /		
	2022 Sales	2023E Sales	2024E Sales	2022 EBITDA	2023E EBITDA	2024E EBITDA	2022 EBIT	2023E EBIT	2024E EBIT	2022 EPS	2023E EPS	2024E EPS
Industrials												
ABB Ltd	2.1x	2.5x	2.4x	12.3x	13.4x	13.0x	14.7x	15.6x	15.2x	30.9x	20.5x	19.5x
Alfa Laval AB	2.7x	2.7x	2.5x	14.4x	14.3x	12.5x	19.1x	17.7x	15.1x	30.9x	22.6x	19.6x
Schneider Electric SE	2.4x	3.1x	3.0x	11.7x	15.3x	14.4x	14.8x	18.4x	17.3x	23.5x	22.1x	20.4x
Kongsberg Gruppen ASA	2.3x	2.1x	1.9x	16.2x	13.8x	12.4x	22.3x	17.7x	15.7x	26.1x	21.3x	18.5x
E&E												
Schindler Holding AG	1.4x	1.6x	1.6x	11.6x	12.2x	11.5x	15.5x	15.1x	14.1x	32.4x	23.9x	21.9x
Otis Worldwide Corp	2.8x	2.9x	2.8x	16.8x	17.0x	16.0x	18.3x	18.3x	17.2x	27.6x	24.5x	22.5x
Fujitec Co Ltd	1.1x	1.0x	0.9x	15.2x	10.1x	11.9x	20.7x			26.4x	17.4x	20.8x

Figure 22: Valuation results CCA

EV (in EURm)	
FY22-24	Median
EV/EBITDA	21,486.8
EV/EBIT	22,971.5
P/E	28,296.7
EqV (in EURm)	
FY22-24	Median
EV/EBITDA	22,669.4
EV/EBIT	24,154.2
P/E	27,114.1
Implied Share Price (in EUR)	
FY22-24	Median
EV/EBITDA	€ 43.83
EV/EBIT	€ 46.70

Initially, the CCA valuation employed for Kone involved the utilization of widely accepted multiples, namely EV/Sales, EV/EBITDA, EV/EBIT, and P/E. To ensure a comprehensive assessment that incorporates both the current standing and future earnings potential of peer companies, the analysis considered not only the year 2022 but also estimates for 2023 and 2024 regarding these multiples. The average of these multiples was then computed to establish the basis for the actual valuation. The determination of the multiple range initially involved isolating the ranges within the two previously defined peer groups. Subsequently, these ranges were assigned equal weightage (50% each) to derive a consolidated final multiple range. Due to notable disparities in the EV/Sales multiple, resulting in an exceptionally high price range, a decision was made to exclude this metric. Consequently, the valuation focused exclusively on the remaining three multiples.

Weighted	22-24E	Min	25th Percentile	Median	75th Percentile	Max	Mean
	EV/EBITDA		11.8x	11.8x	13.2x	15.8x	16.0x
EV/EBIT		15.0x	15.4x	16.8x	19.8x	19.0x	16.9x
P/E		21.2x	21.4x	23.9x	25.5x	25.5x	23.6x

By applying these, the following implied share prices were obtained: EUR 43.83 (EV/EBITDA), EUR 46.70 (EV/EBIT), and EUR 52.42 (P/E). The summation of these values yields an implied mean **share price of EUR 47.65** for Kone.

Multiples analysis – Comparable transactions

Figure 23: Valuation results CTA

Enterprise Value (EURm)		Median
EV/EBIT		24,648.61
EV/EBITDA		24,852.39
P/E		26,402.53
Equity Value (EURm)		Median
EV/EBITDA		25,774.1
EV/EBIT		25,977.9
P/E		27,528.0
Share Price (EURm)		Median
EV/EBITDA		49.8
EV/EBIT		50.2
P/E		53.2

When valuing Kone through comparable transactions (CTA), we again expanded the scope of comparables to include transactions from the established industrial peer group. This expansion was necessary due to the limited availability of transactions within the E&E peer group. Subsequently, the multiple ranges identified within the respective peer groups were each weighted at 50%, contributing to the formulation of a comprehensive final range. The EV/Sales multiple exhibited a parallel trend to the CCA, necessitating a focus on EV/EBITDA, EV/EBIT, and P/E multiples.

Weighted	Multiples	Min	25th Percentile	Median	75th Percentile	Max	Mean
	EV/EBIT		14.9x	15.0x	18.0x	19.5x	22.5x
EV/EBITDA		13.0x	13.4x	15.3x	16.7x	17.0x	15.2x
P/E		23.4x	23.4x	24.2x	28.6x	28.6x	25.4x

Consequently, the valuation of Kone through comparable transactions yielded implied share prices of EUR 49.8 (EV/EBITDA), EUR 50.2 (EV/EBIT), and EUR 53.2 (P/E). In total, these figures result in an implied mean **share price of EUR 51.1** for Kone.

Discounted cash flow (DCF)

In our valuation of KONE, we employed a Discounted Cash Flow (DCF) Model, chosen for its perceived efficacy in accurately representing the value accruing to shareholders. This selection was informed by the DCF's capacity to accommodate detailed assumptions, thereby leveraging our detailed understanding of the company and its industry. Furthermore, the model facilitates the examination of key assumptions through scenario analysis, enhancing its applicability to the dynamic landscape of the company's future performance. The valuation process involved the utilization of unlevered cash flows, derived from our forecast period extending until 2033. Subsequently, a terminal value (TV) was computed using two approaches. Both were discounted using the computed WACC.

In mEUR	FY24P	FY25P	FY26P	FY27P	FY28P	FY29P	FY30P	FY31P	FY32P	FY33P
Fiscal Year-End	31.12.2024	31.12.2025	31.12.2026	31.12.2026	31.12.2026	31.12.2026	31.12.2026	31.12.2026	31.12.2026	31.12.2026
EBITDA	1,740.1	1,845.8	1,955.3	2,030.0	2,098.0	2,162.3	2,222.5	2,278.2	2,328.9	2,328.9
Depreciation & Amortization	(246.1)	(238.6)	(227.1)	(217.3)	(205.9)	(193.0)	(178.6)	(162.9)	(145.8)	(145.8)
Core Result before taxes	1,493.9	1,609.2	1,728.2	1,812.8	1,892.1	1,969.3	2,043.9	2,115.4	2,183.1	2,183.1
Taxes	(298.8)	(321.8)	(345.6)	(362.6)	(378.4)	(393.9)	(408.8)	(423.1)	(436.6)	(436.6)
Statutory Tax Rate (in %)	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
NOPLAT	1,195.1	1,287.3	1,382.6	1,450.2	1,513.6	1,575.4	1,635.1	1,692.3	1,692.3	1,746.5
Depreciation & Amortization	246.1	238.6	227.1	217.3	205.9	193.0	178.6	162.9	145.8	145.8
Change in Net Working Capital	(25.4)	(32.1)	(37.5)	(45.2)	(43.4)	(41.1)	(38.5)	(35.6)	(32.4)	(32.4)
CapEx	(115.2)	(118.7)	(122.6)	(127.1)	(131.3)	(135.3)	(139.1)	(142.6)	(145.8)	(145.8)
Unlevered Free Cash Flow	1,300.6	1,373.2	1,448.6	1,495.2	1,544.8	1,592.0	1,636.1	1,677.0	1,714.1	1,714.1
% Growth Rate (YOY)		5.6%	5.6%	3.1%	3.3%	3.1%	2.8%	2.5%	2.2%	2.2%

To arrive at the TV two approaches were used. On the one hand we employed the Gordon Growth Model (GGM) using a perpetuity growth rate of 2.2%.¹¹ This growth rate aligns with the average global Gross Domestic Product (GDP) growth rate projected from 2030 onward, as sourced from the World Bank. On the other hand, the determination of the TV was executed through the application of an exit multiple methodology. In this regard, the median EV/EBITDA multiple of 15.3x, as derived in the CTA, was employed. These valuation methodologies were systematically applied across all scenarios determined within the forecasting framework. Within the base case scenario, the application of the GGM yielded an enterprise value of mEUR 25,800.4, while the employment of the Exit Multiple approach resulted in an enterprise value of nEUR 27,798.79. Subsequent considerations of net debt and outstanding shares facilitated the derivation of implied **share prices** for KONE, amounting to **EUR 52.1 (GGM) and EUR 55.9 (Exit Multiple)**.

Figure 24: Valuation results CTA

Case	GGM		
	EV (mEUR)	EV (nEUR)	Share Price (EUR)
Base	25,800.4	26,925.8	52.1
Upside	30,114.6	31,254.5	60.4
Conservative	21,880.7	23,006.2	44.5

Case	Exit Multiple		
	EV (mEUR)	EV (nEUR)	Share Price (EUR)
Base	27,798.8	28,924.3	55.9
Upside	32,343.2	33,483.2	64.7
Conservative	23,655.5	24,761.0	47.9

Figure 25: WACC

Cost of Equity	7.4%
Weighted Cost of debt pre-tax	3.5%
Tax rate	20.0%
After-tax cost of debt	2.9%
Impt. Debt / Total Capitalization	-5.8%
WACC	7.71%

Figure 26: unlevered Beta calculation

Peers	Unl. Beta D/E	Unl. Beta EV-weighted
Schindler Holding AG	1.14	0.34
Dis Worldwise Corp	0.60	0.39
Hyundai Elevator Co Ltd	0.89	0.02
Fujitsu Co Ltd	1.12	0.03
Average	0.94	0.78
Average unl. Beta		0.86
Epiroc AB	1.02	0.07
Legrand SA	1.10	0.08
SKF AB	1.04	0.03
Konecranes Abp	1.30	0.01
Sandvik AB	0.84	0.07
Alfa Laval AB	1.11	0.05
Atlas Copco AB	1.14	0.22
ABB Ltd	1.28	0.25
Valmet Oyj	0.97	0.02
Kongsberg Gruppen ASA	0.54	0.01
Schneider Electric SE	0.87	0.24
Average	1.02	0.04
Average unl. Beta		1.03
Weighted Average		
Average	0.98	0.91
Average unl. Beta		0.94

WACC Calculation

The calculation of the WACC is divided into 3 steps, which are explained in more detail below: Beta determination, cost of equity and cost of debt calculation. By using the variables obtained in this way, a WACC of 7.71% was ultimately obtained for KONE using the following formula:

$$WACC = \frac{E}{D+E} * rE + \frac{D}{D+E} * rD * (1 - T)$$

▪ Beta

In determining the unlevered beta for our peer group, we followed a method that considered both the financial structure and operational risk of individual companies. First, we computed the debt-to-equity (D/E) ratio for each peer by their net debt to market capitalization. Using the leveraged beta and applicable tax rates, we then derived the unlevered beta, extracting core

¹¹ World Bank, 2023

operational risk by excluding the impact of debt. Recognizing the influence of company size on risk, we introduced enterprise value (EV) weighting to accommodate the varying market significance of each peer. Specifically, we assessed the proportion of each company's EV in the total EV of their peer group (E&E / Industrials) Multiplying the unlevered beta by the EV weighting allowed us to consider both inherent risk and market presence. This process yielded average unlevered betas (E&E manufacturers: 0.94; industrial companies: 1.02) and EV-weighted unlevered betas (E&E manufacturers: 0.78; industrial companies: 1.04). Combining these averages provided a comprehensive final estimate of the average unlevered beta (E&E manufacturers: 0.86; industrials: 1.03), capturing both the intrinsic risk of individual companies and their collective impact on the broader market. To identify the final unlevered beta for KONE, we incorporated the average unlevered betas of the two peer groups at 50% each, resulting in an unlevered beta of 0.94. Based on the market capitalization and net debt of Kone (D/E ratio: -4.7%) at the time of valuation, a levered beta of 0.90 was derived.

Figure 27: levered Beta calculation

Tax rate	20.0%
D/E ratio	-5.4%
Implied unl. Beta	0.94
Implied levered Beta	0.90

Figure 28: Cost of Equity calculation

Risk Free Rate	2.9%
Market Risk Premium	5.0%
Levered Beta	0.9
Cost of Equity	7.4%

Utilizing the Capital Asset Pricing Model (CAPM), we conducted an assessment to ascertain the cost of equity for Kone. For the risk-free rate component, the yield of a German government bond maturing in 2033 (2.9%) was selected as it was deemed a robust benchmark for a risk-free instrument. This choice aligns with the scholarly precedent of referencing long-term government bonds in determining risk-free rates. Furthermore, adhering to established academic studies pertaining to the historical levels of the market risk premium (MRP), an MRP of 5% was employed in our calculations.¹² The CAPM formula, incorporating the risk-free rate, the market risk premium, and the levered beta coefficient of Kone, yielded a calculated cost of equity of 7.4% for the company.

Figure 29: Cost of debt calculation

Company	YTM	YTM default-adj	Weighted YTI
OTIS WORLDWIDE CORP	4.0%	3.7%	3.81
Average	4.0%	3.7%	3.81

Company	YTM	YTM default-adj	Weighted YTI
ATLAS COPCO AB	2.5%	2.4%	2.41
ALFA LAVAL TREASURY INTERNATI	2.7%	2.4%	2.01
ABB LTD	2.2%	2.1%	2.11
SKF AB	3.2%	2.9%	2.91
KONGSBERG GRUPPEN ASA	5.2%	5.0%	4.81
SCHNIEDER ELECTRIC SE	2.7%	2.6%	2.51
SANDVIK AB	5.0%	4.9%	3.91
LEGRAND SA	3.7%	3.5%	3.41
EPRI/OC AB	4.2%	3.9%	3.71
Average	3.5%	3.3%	3.71

Weighted Average	YTM	YTM default-adj	Weighted YTI
Average	3.8%	3.6%	3.51

Cost of debt

Given KONE's lack of outstanding debt instruments, internal computation of the cost of debt was unattainable. Instead, we opted for an approach wherein the cost of debt was determined by referencing the Yield to Maturity (YTM) of bonds issued by comparable peers. This choice was predicated on the assumption that these peers, characterized by similar business models, exhibit analogous risk profiles. Adjustments were made to the respective YTM, factoring in annual default rates in relation to debt ratings and the corresponding ratings of each peer. The adjusted YTM's underwent a weighted computation, with weights assigned based on the proportion of the outstanding bond class relative to the total bonds of each peer entity. The cumulative sum of these weighted YTM's was computed across all peers with outstanding bonds. Within the specified peer categories (E&E and industrials), the average of the weighted YTM's was calculated. Consistent with the methodology employed in the beta calculation, these averages were given equal weighting (50%), yielding a cost of debt of 3.5% for KONE.

¹² Caporale, Persistence in the market risk premium: evidence across countries, 2020

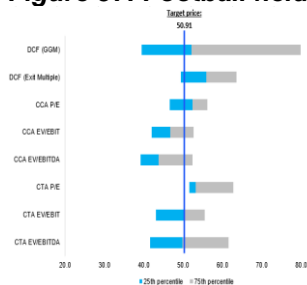
Risks and ESG Performance

Key risks

Kone grapples with strategic challenges arising from inflation, rising interest rates, and disruptions in the supply chain. The global geopolitical landscape, exemplified by events like the conflict in Ukraine, adds complexity to Kone's supply chain dynamics. To navigate these challenges, the company must implement adaptive strategies such as dynamic pricing, flexible contracts, and productivity enhancements. A potential slowdown in China's construction industry poses a strategic risk to Kone's growth, requiring a nuanced approach despite a diversified customer base. Operational risks emerge from a scarcity of skilled workers, necessitating a focus on capability development and retention. Furthermore, Kone needs to recognize the vulnerability of its brand and reputation to safety, cybersecurity, and delivery issues. Implementing robust risk management strategies is essential to preserving the company's standing and maintaining customer trust. In the era of digitalization, Kone is exposed to risks related to its IT infrastructure. The vulnerability of operational systems to cyber threats necessitates a focus on vigilance and defense mechanisms against data manipulation and interruptions, safeguarding its critical IT infrastructure. Financial risks also warrant attention at Kone, with a majority of sales conducted in currencies other than the euro. The company needs to manage exposure to exchange rate risks through strategic hedging strategies, ensuring stability in its financial performance. Additionally, local financial and taxation regulatory shifts pose financial risks, requiring ongoing reviews and adaptability initiatives to ensure compliance and resilience to evolving regulatory landscapes.

Recommendation

Figure 57: Football field



Based on a comprehensive evaluation of various valuation methods and subsequent weighting, we have derived a final price target for Kone. Considering our calculated **price target of EUR 50.91** in comparison to the current share price of EUR 41.96, we identify significant upside potential (21.33%). Further analysis supports our conclusion that Kone is well positioned for long-term growth, attributed to its innovative business model, robust capital structure, and cash-generative operations, aligned with upcoming market trends. Our assessment suggests that the broader market underestimates Kone's long-term potential, and the current share price inadequately reflects its true value.

Consequently, we recommend a **BUY** rating for the stock.

KONE OYJ

INDUSTRIAL MACHINERY

STUDENT: TIM PHILIP ULMER

COMPANY REPORT

20 DECEMBER 2023

54458@novasbe.pt

Ascending to excellence

Kone strengthens its position in service

- Our recommendation is to **BUY** Kone Oyj considering a **target price of €50.91** for the fiscal year 2024 reflected in an upside potential of 21.33% to the current share price of €41.96
- Market trends, such as the **anticipated rise in urbanization and an increasing digitalization**, create a robust foundation for sustained growth in the market for mobility solutions.
- **High barriers to entry**, characterized by substantial initial capital requirements and significant research and development costs, serve as **substantial hurdles for potential competitors aiming to enter the industry**.
- **Strong liquidity and an exceptional cash conversion rate** provide sufficient funding for strategic investments and serve as compelling factors for conservative investors considering Kone
- An expected **further shift in the revenue mix towards the service segment** is anticipated to make Kone **less reliant on regional and macroeconomic trends, increase its margins, and offer plannable, recurring revenue streams**.
- **Potential headwinds** for Kone's growth include a **further weakening of the real estate market in China** and persistently **weak construction activity in North America and Europe**

Company description

Kone is a leading company in the elevator and escalator industry, and offers products such as elevators, escalators and automatic building doors, as well as solutions for maintenance and modernization. It has roughly 60,000 employees.

Recommendation: BUY

Price Target FY24: 50.91 €

Price (as of 15-Dec-23) 41.96 €

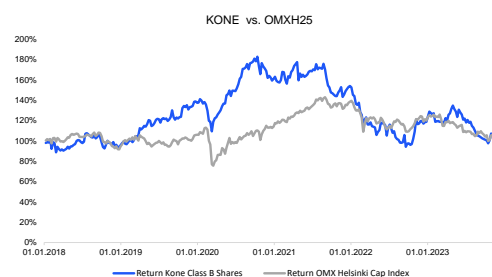
Bloomberg: KNEBV

52-week range (€) 37.20-53.34

Market Cap (€m) 21.703

Outstanding Shares (m) 517

Source: Thomson Reuters REFINITIV



Source: Yahoo Finance

(Values in € millions)	2022	2023E	2024F
Revenues	10,907	11,157	11,320
EBITDA	1,336	1,562	1,673
EBIT	1,077	1,317	1,384
Capex	101	98	98
FCF	255	926	1,039

Source: Annual report 2022, Analyst Estimation

THIS REPORT WAS PREPARED EXCLUSIVELY FOR ACADEMIC PURPOSES BY [INSERT STUDENT'S NAME], A MASTER IN FINANCE STUDENT OF THE NOVA SCHOOL OF BUSINESS AND ECONOMICS. THE REPORT WAS SUPERVISED BY A NOVA SBE FACULTY MEMBER, ACTING IN A MERE ACADEMIC CAPACITY, WHO REVIEWED THE VALUATION METHODOLOGY AND THE FINANCIAL MODEL. (PLEASE REFER TO THE DISCLOSURES AND DISCLAIMERS AT END OF THE DOCUMENT)

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Company Overview

Company Description

Kone stands as a prominent figure in the global elevators and escalators sector, with robust market positions in the Americas the EMEA region, and the Asia-Pacific. Their extensive array of services encompasses the conceptualization, production, installation, maintenance, and modernization of passenger and freight elevators, escalators and automatic building doors. Kone meticulously oversees the entire lifecycle of these products, from the initial planning and installation phases to ongoing maintenance and comprehensive modernization efforts. Service excellence remains at the forefront of their operational philosophy, underscored by a considerable portfolio of installations under their purview. Founded in 1910 in Finland, Kone maintains its headquarters in Helsinki and has steadily evolved into an international market leader through a combination of organic growth and strategic acquisitions. Presently, the company boasts a presence in 60 countries and a global workforce of over 60,000 employees.¹



***Transforming
from a machine
repair shop to a
conglomerate,
Kone now stands
as a leading
player in the
elevator and
escalator
industry***

Kone Corporation's ascendancy to market leadership is characterized by strategic decisions and transformative milestones that have shaped its trajectory. Originating as a modest machine repair shop in 1908, Kone underwent a significant incorporation in 1910, followed by pivotal ownership changes in 1924 under the stewardship of Harald Herlin, setting the stage for its subsequent evolution. However, the true turning point emerged in 1968 when Kone acquired ASEA's elevator business. This strategic move propelled the company to market leadership in Northern Europe, serving as the forerunner of a series of forward-looking acquisitions.

Undergoing a transformative phase in the 1980s, Kone expanded its operations to become a conglomerate, diversifying into various sectors. However, recognizing the challenges associated with managing a diverse portfolio, particularly in the late 1980s, the company strategically divested all businesses except elevators and escalators during the 1990s. This decisive move marked a

¹ KONE Corporation Annual Review, 2022

pivotal shift in focus, enabling Kone to streamline operations and concentrate resources on its core competencies. ²

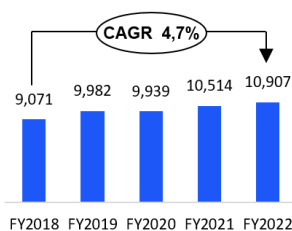
Year	Acquisition/Alliance
1981	Kone expands its presence in the United States market through the acquisition of Armor Elevator Co
1985	The Canadian division of Montgomery Elevator becomes part of Kone's portfolio through acquisition
1989	Kone secures complete ownership of Elevators Pty Ltd, operating in Australia and New Zealand. Kone had initially held a 10% stake since 1986
1994	Kone's ownership of Montgomery in Canada paves the way for a strategic alliance with Montgomery in the U.S., eventually leading to Kone's complete acquisition of Montgomery. Following five years of collaboration in producing elevator and escalator products, Montgomery is fully integrated into Kone US
1995	A collaborative effort emerges as Kone and MacGregor join forces to develop elevators tailored for passenger traffic on modern cruise ships
1998	Kone establishes an alliance with Toshiba (now divided into Toshiba Elevator And Building Systems Corp.) in Japan
2001	Kone and Toshiba formalize a historic agreement, involving the exchange of shares and an extension of Toshiba's license to market elevators based on Kone EcoDisc technology
2002	Kone adds the industrial engineering company Partek to its portfolio through acquisition
2009	Kone enters the modernization market in Philadelphia by acquiring Fairway Elevator Company
2011	Kone acquires Long Elevator Company, headquartered in Springfield, IL, serving St. Louis, Peoria, Chicago, and NW Indiana
2013	Kone expands its global presence by acquiring Isralift, its distributor in Israel
2014	Kone acquires the elevator and escalator business of Marryat & Scott (Kenya) Ltd. and Marryats East Africa Limited, its authorized distributors in East and Central Africa
2017	Kone further strengthens its position by acquiring the UK elevator company 21st Century Lifts, subsequently merging its business operations with Kone's UK operations

Furthermore, Kone's commitment to technological innovation played a pivotal role in solidifying its leadership position. The introduction of the machine-room-less elevator in 1996 revolutionized the industry, setting new benchmarks for efficiency and spatial utilization. The subsequent groundbreaking introduction of KONE UltraRope® technology in 2013 further underscored the company's commitment to pushing the boundaries of elevator technology, with implications for sustainability and operational efficiency in high-rise settings. In combination with its technological prowess, Kone has demonstrated a proactive commitment to sustainability and digitalization, aligning with contemporary market imperatives. The launch of the KONE Care™ DX carbon-neutral maintenance service in 2021 represents a paradigm shift in the industry. This strategic push into carbon-neutral maintenance positions Kone not only as an industry leader but also as a trailblazer in integrating environmental consciousness into its operational approach.³

Figure 1: machine-room-less elevator



Figure 2: Total sales evolution In mEUR



Today, Kone's core business activities are categorized under the following pillars: New Equipment (49.5% of sales): This division takes charge of the design, manufacturing, and installation of elevators, escalators, and moving walks, catering to diverse markets and industries, including commercial and residential projects, with customized solutions tailored to specific customer requirements. Maintenance (35.7% of sales): The Maintenance division offers a broad spectrum

² <https://www.kone.com/en/company/history/>

³ <https://www.kone.com/en/company/history/>

Figure 3: Sales by business (2022)

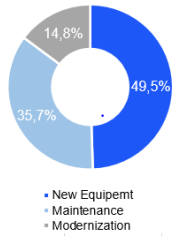


Figure 4: Sales by area (2022)

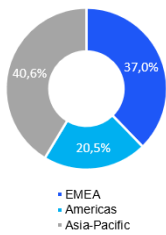
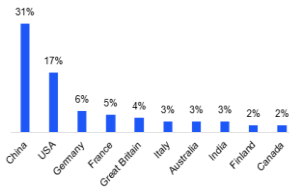
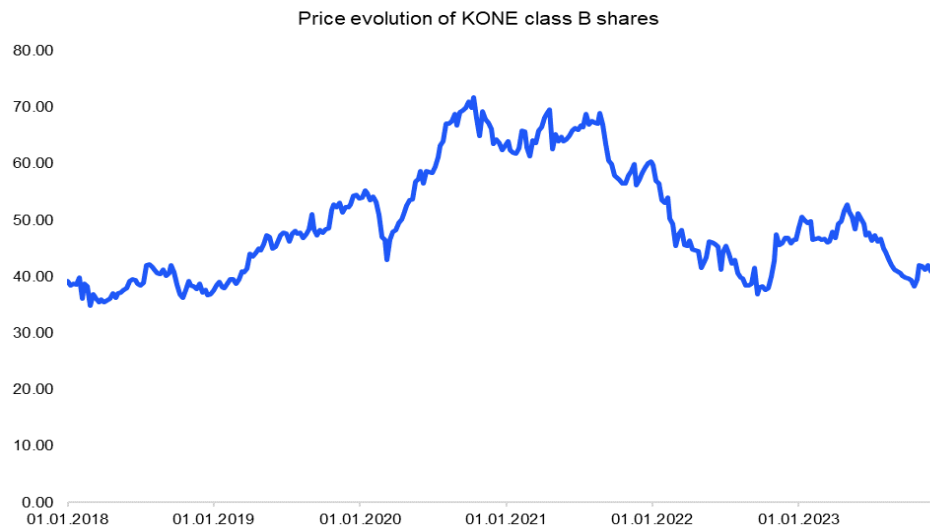


Figure 4: Top 10 countries by sales (2022)



The past 5 years show a fluctuating price movement

Kone Shares



of maintenance services, encompassing both Kone's proprietary products and those sourced from third-party suppliers. The primary focus lies in ensuring the safety, performance, and efficiency of elevators, escalators, and moving walks throughout their operational lifespan. Maintenance services are adaptable, ranging from basic upkeep to comprehensive full-service packages that encompass spare parts and their installation.

Modernization (14.8% of sales): The Modernization division provides comprehensive solutions, addressing the needs of Kone's own product line as well as those sourced from third-party suppliers. These solutions range from partial modernization to the complete replacement of existing elevator and escalator systems, all executed with meticulous attention to quality and efficiency.

Within the operational domains of Kone, the Asia Pacific region emerges as a key focal point, significantly driving the company's overall performance with a substantial share of total sales, amounting to 40.6% in the fiscal year 2022. Following closely is the EMEA region, contributing 37% to the company's sales during the same period. In contrast, the Americas region plays a comparatively modest role, constituting only 20.5% of Kone's total sales in 2022. Upon a closer examination of individual country contributions, China stands out prominently as a pivotal market for Kone, commanding a noteworthy 31% share of the company's total sales in 2022. In comparison, the United States, while less prominent, still commands a significant share of 17%, underlining its importance within Kone's global market portfolio.⁴

⁴ Kone Corporation Annual Review, 2022

Kone has been listed on the Helsinki stock exchange since June 1st, 1967. The company has two share classes: A and B. Only B-class shares are listed on the OMX Helsinki Stock Exchange. Currently, the stock is part of the OMX Helsinki 25 representing the 25 largest publicly traded companies listed on the Helsinki stock exchange. Kone’s market capitalization as of 15th December 2023 amounts to €21.70bn compared to €24.98bn in December 2022. The decrease in market capitalization can be primarily attributed to the adverse impact of the current interest rate environment on the construction industry, which in turn has had negative effects on the elevator and escalator industry. As 15th December 2023, 2023 Kone’s stock is trading at 41.96€.

Major Shareholders on Dec 31, 2022

	A-series	B-series	Total	% of shares	% of votes
1 Herlin Antti	70,561,608	51,180,608	121,742,216	23.0%	62.3%
Holding Manutas Oy	54,284,592	41,405,254	95,689,846	18.1%	48.1%
Security Trading Oy	16,277,016	8,082,516	24,359,532	4.6%	14.1%
Herlin Antti	0	1,692,838	1,692,838	0.3%	0.1%
2 Polttina Oy	0	17,271,928	17,271,928	3.3%	1.4%
3 Wipunen Varainhallinta Oy	0	16,350,000	16,350,000	3.1%	1.3%
4 KONE Foundation	5,647,104	9,859,632	15,506,736	2.9%	5.5%
5 Heikintorppa Oy	0	10,210,743	10,210,743	1.9%	0.8%
6 Varma Mtutal Pension Insurance Company	0	7,751,222	7,751,222	1.5%	0.6%
7 Ilmarinen Mututal Pension Insurance Compar	0	5,798,977	5,798,977	1.1%	0.5%
8 Riikantorppa Oy	0	5,500,000	5,500,000	1.0%	0.5%
9 Blaberg Ollo Edvard	0	5,120,000	5,120,000	1.0%	0.4%
10 Elo Mutual Pension Insurance company	0	2,876,000	2,876,000	0.5%	0.2%
10 largest shareholders total	76,208,712	131,919,110	208,127,822	39.3%	73.5%
Foreign / nominee registred shareholders	0	234,414,154	234,414,154	44.3%	19.3%
Repurchased own shares	0	12,306,640	12,306,640	2.3%	1.0%
Others	0	74,547,244	74,547,244	14.1%	6.1%
Total	76,208,712	453,187,148	529,395,860	100.0%	100.0%

Figure 5: Class A shares

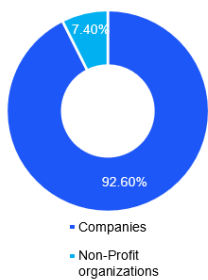
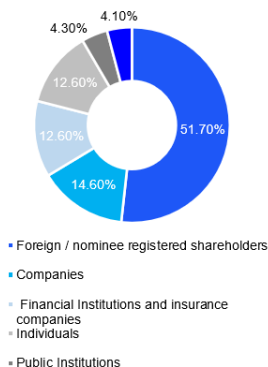


Figure 6: Class B shares



The Herlin family's significant shareholding positions them as key stakeholders. In 2022, Kone's shareholder structure reflects a diverse ownership landscape, with notable concentrations of shares among key individual and institutional investors. The Herlin family, particularly represented by Antti Herlin, holds a substantial stake of 23%, accompanied by significant voting rights of 62.30%. This underscores the family's pivotal role in influencing corporate decisions. The top 10 shareholders collectively wield 39.3% of shares and hold 73.5% of voting rights, indicating concentrated decision-making power. Foreign/nominee registered shareholders contribute significantly, holding 44.30% of shares, portraying global investor interest. The company's repurchased own shares and other categories demonstrate strategic financial moves. Overall, the intricate shareholder structure highlights the Herlin family's centrality, alongside a diverse array of stakeholders, in shaping Kone's corporate trajectory.⁵

⁵ Kone Corporation Annual Review, 2022

Board of Directors

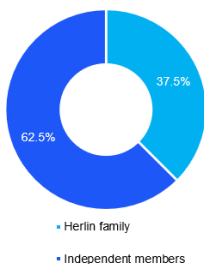
A fusion of industry veterans and technological pioneers, anchored by the Herlin family

The composition of Kone's Board of Directors reveals a blend of experienced professionals from diverse industries, contributing to a rich set of perspectives. Matti Alahuhta and Ravi Kant, with extensive leadership roles in Nokia Corporation and Tata Motors, respectively, offer valuable industry-specific knowledge. The recent additions of Krishna Mikkilineni and Jennifer Xin-Zhe Li bring technological and international expertise, enhancing the board's competency. Furthermore, the notable presence of Herlin family members, particularly Antti Herlin and Jussi Herlin, in key governance roles at Kone is a salient feature of the company's director structure.⁶

Board of Directors

Name	Age	Role	Start date	Prior roles
Antti Herlin	67	Chairman of the Board	1991	Executive Chairman of the Board of Kone, CEO of Kone, Deputy Chairman of Kone
Jussi Herlin	39	Vice Chair of the Board	2012	Senior Business Analyst and Strategy Development Manager at Kone, Consultant at Accenture, Deputy Member of the Board of Kone
Matti Alahuhta	71	Member of the Board	2012	President and CEO of Kone, Executive Vice President of Nokia Corporation
Susan Duinhoven	58	Member of the Board	2020	CEO of Koninklijke Wegener N.V., CEO of Western Europe Thomas Cook Group Plc
Iiris Herlin	34	Member of The Board	2015	Deputy Member of the Board at Kone
Ravi Kant	79	Member of the Board	2014	Managing Director and CEO at Tata Motors, Director at Philips India, Director at LML Ltd.
Krishna Mikkilineni	64	Member of the board	2022	CTO and CIO at Honeywell International Inc, President of Honeywell Technology Solutions
Jennifer Xin-Zhe Li	56	Member of the Board	2021	CEO and CFO of Baidu Capital, Controller and CFO at General Motors

Figure 7: Board composition



Industry analysis

Market Overview

A shift from production to service-centric business models is evident

The elevator and escalator sector, is a significant component within the field of mechanical engineering. Over time, a notable shift within the industry has occurred, transitioning from a primary focus on production to a service-oriented model. The essence of most companies now revolves around service provisions, encompassing maintenance, repairs, and the supply of spare parts. This pivotal aspect is complemented by the sale and installation of new systems and the

⁶ Kone Corporation Annual Review, 2022

Dominance of the “Big 4” with new players emerging within sustainability and digitalization niches

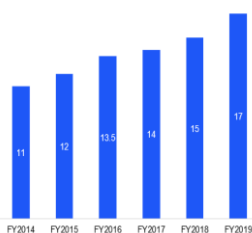
modernization of existing ones. Presently, global strategies govern the value creation processes for elevators, escalators, and their components, with limited production occurring in select domestic facilities. The industry landscape is characterized by the dominance of four major corporate entities, commonly referred to as the Big Four. However, the sector's framework also encompasses numerous small and medium-sized enterprises specializing in elevators. The most prominent players known as the Big Four (Kone, Otis, Schindler, TK Elevator) collectively represent the largest companies globally within the elevator and escalator industry. Beyond the primary sector involving the Big Four and elevator SMEs, the broader elevator industry encompasses additional stakeholders such as suppliers (manufacturers and component providers), and emerging participants like digital startups and Internet of Things (IoT)-based service providers. The industry exhibits distinctive characteristics, including a prolonged emphasis on service, corporate concentration trends, the adoption of international value creation strategies and the proliferation of unconventional employment models such as subcontracting.⁷

▪ **Segments**

In general terms, the elevator and escalator industry is delineated into three key subsegments: the new equipment segment, the modernization segment, and the maintenance segment. Each subsegment plays a distinct role within the industry, contributing to its overall dynamics and economic landscape. In the high-volume markets for standard elevators, the new equipment segment is characterized by fierce competition. However, companies strategically leverage this segment to secure lucrative maintenance contracts, often accepting lower margins or aiming for a "black zero" in the pursuit of long-term gains. Contrastingly, the Modernization segment has emerged as a growth area within the industry. It operates somewhat independently of the construction sector and exhibits resilience during economic downturns. The real estate industry, when faced with a slowdown in new building construction, tends to shift its focus towards modernizing existing structures and enhancing energy efficiency. Elevator and escalator modernization, in this context, has proven to be a pivotal aspect of this industry segment. The maintenance segment, comprising maintenance, repair, and spare parts services, serves as the core business area for the majority of companies in the elevator and escalator industry. Throughout the 2010s, the service business experienced consistent growth, driven by the increasing number of elevators in operation. The stability of the maintenance sector persists even

Companies strategically leverage the new equipment segment to secure lucrative maintenance contracts

Figure 8: Elevators in operation globally 2010s in millions (Statista, 2023)



⁷ Amosun, THE LOGIC OF BUSINESS STRATEGY: A case study of Kone Group, 2017 <https://www.statista.com/statistics/1201896/elevators-escalators-operation-worldwide/>

during periods of economic crisis, as maintenance and repair activities are essential and relatively resistant to economic fluctuations.⁸

▪ Geographies

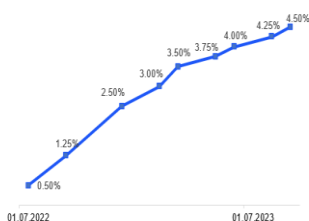
Around half of service in mature markets, biggest growth potential in developing markets

Figure 10: Share of different regions out of total new market



In the global arena of the elevator and escalator industry, discernible geographical differentiations are evident, underscoring the multifaceted nature of market dynamics. North America's sector manifests maturity, notably in its service-oriented focus, with a substantial emphasis on modernization opportunities facilitated by an aging installed base, particularly in non-residential domains. In the expansive EMEA region, a dichotomy emerges between mature markets and evolving regions, with Europe commanding precedence as the largest market. The service market, buoyed by a significant installed base, is pivotal, and the aging elevator infrastructure in Europe serves as a catalyst for growth in modernization initiatives, especially within the residential segment. Conversely, China emerges as the epicentre of unprecedented growth, assuming the mantle of the world's largest market for new equipment. This paradigm shift is underscored by a robustly expanding service sector, where China is poised to represent approximately 50% of the global service market by 2025, fuelled predominantly by the residential segment. The nation's ascendancy underscores a strategic focus on innovation and adaptability to meet burgeoning demands. In the broader Asia-Pacific region, excluding China, a nuanced tapestry unfolds, characterized by a spectrum of developing and mature markets. India, in particular, occupies a significant position as the second-largest new equipment market globally, with a pronounced emphasis on residential segments. Each geographic region, through its distinctive characteristics, contributes uniquely to the global elevator and escalator industry, thereby shaping the trajectory of this vital sector within an increasingly interconnected and dynamic global landscape.

Figure 11: European Central Bank fixed interest (Statista, 2023)

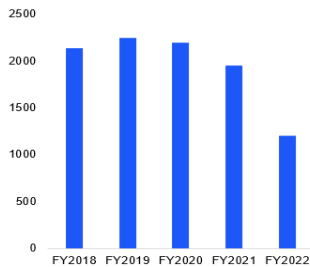


▪ Macroeconomic environment

The elevators and escalators industry in 2023 finds itself entangled in a complex and challenging macroeconomic environment that significantly influences its operational dynamics. The sector's struggles with supply chain disruptions in 2022, compounded by the ongoing conflict in Ukraine, have extended into the current year, resulting in considerable price increases for crucial components like electronic constituents, steel, and plastic. This lingering impact reflects the industry's vulnerability to global geopolitical events and trade disruptions. Moreover, key regions vital to the industry, including Europe, China, and North America, are facing a convergence of adverse factors that collectively cast a

⁸ Kone Corporation Annual Review, 2022

Figure 12: Floor space construction started by property developers in China in million square meters (Statista, 2022)

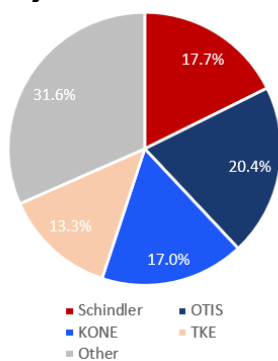


shadow on its growth prospects. In Europe, financing constraints are impeding construction projects, while inflation and rising interest rates contribute to a climate of economic uncertainty. Similarly, the Chinese market, a significant player in the elevators and escalators industry, is grappling with formidable challenges. China is currently contending with a real estate crisis that has had widespread repercussions. This crisis has led to decreased consumer spending, heightened caution in investment projects, and an increase in the abandonment of existing ventures, creating a complex and challenging environment for the elevators and escalators industry. The adverse macroeconomic conditions outlined above are particularly impactful on the new equipment segment of the industry. The attenuated construction projects, exacerbated by financing constraints, translate into diminished demand for new installations. The increased costs associated with inflation and rising interest rates further dissuade potential buyers from investing in new equipment. The real estate crisis in China exacerbates this situation, as leading project developers grapple with financial challenges, resulting in a reluctance to commit to new elevator and escalator installations.

Competitive Landscape

- The Big Four

Figure 13: Market shares (2022) Analyst estimates



As already briefly discussed in the market overview, the elevators and escalator industry exhibits a distinctive feature marked by the prominence of the four prominent players, commonly referred to as the "Big 4." This group comprises industry leaders Otis, Kone, TKE, and Schindler. Collectively, these four entities command a substantial market share, totaling 68.4%. Their formidable presence is underscored by an ongoing strategic rivalry as they actively vie to augment their respective market positions. Otis (20.4% market share), established on March 1st, 2020, following its separation from United Technologies Corporation on April 3rd, 2019, has swiftly risen to become the world's leading escalator and elevator manufacturing, installation, and service company. Operating in over 200 countries and territories globally, Otis maintains a unique blend of global scale and local focus through its extensive network of more than 1400 branches and offices, establishing a direct physical presence in approximately 80 countries. With a strong reliance on its service activities, accounting for 57% of sales and 83% of operating profit in 2022, Otis boasts a maintenance portfolio of approximately 2.2 million units worldwide. The company stands as a pioneer in leveraging technology for remote elevator performance monitoring, connecting over 800,000 units in its global portfolio. In China, Otis operates through two



<https://www.statista.com/statistics/242666/annual-construction-of-residential-real-estate-in-china>

principal joint ventures: Otis Elevator (China) Investment Company Limited ("Otis China") and Otis Electric Elevator Company Limited ("Otis Electric"). Otis is the majority owner of Otis China, partnering with Tianjin Tai Kang Investment Co. Ltd. in this joint venture.⁹



Schindler

Established in 1874 by Robert F. Schindler in Ebikon near Luzern, Switzerland, Schindler Holding Ltd. (17.7% market share) has become a global force in the manufacturing, installation, and servicing of elevators, escalators, and moving walkways. With over 69,000 employees spanning more than 100 countries, Schindler is instrumental in moving a billion people daily. As a Swiss multinational publicly traded on the SIX Swiss Exchange, Schindler Holding Ltd. operates through numerous subsidiaries globally, including production facilities in Brazil, China, Slovakia, Spain, Switzerland, India, and the United States. Notably, the company pioneered joint ventures with state-owned enterprises in China in 1980 and strengthened its presence in South America with the acquisition of Atlas in Brazil in 1999. Schindler's commitment to innovation, combined with strategic acquisitions, has positioned it as a global leader in the vertical transportation industry.¹⁰



The origins of the TKE trace back to a small workshop founded in 1865 by the locksmith Heinrich Conrad Ernst Eggers in Hamburg, which was later acquired by Rheinstahl in 1952. Following the acquisition of Rheinstahl by August Thyssen-Hütte AG in 1974, the company was renamed Thyssen Aufzüge GmbH and eventually became ThyssenKrupp Elevator AG in 1999 after merging with Friedrich Krupp AG. A pivotal acquisition in Germany occurred in 1984 with the takeover of M.A.N.-Aufzugbau. The company expanded its footprint in China in 1995 with a specialized facility in Zhongshan. The acquisition of Dover Elevators in 1998, the leading manufacturer of hydraulic elevators in North America, propelled the company to become the world's third-largest elevator manufacturer. The 2000s witnessed further acquisitions in South America and continued expansion in the Asian region. The company's evolution continued with significant developments. On February 27th, 2020, ThyssenKrupp marked a transformative moment by selling its elevator division for a staggering 17.2 billion euros to a consortium led by Advent International, Cinven, and the RAG-Stiftung. This strategic move positioned the company for a new era. On February 25th, 2021, the announcement was made that the company would be renamed TK Elevator, concurrently introducing the global brand TKE (13.3% market share).¹¹

⁹ <https://www.otis.com/en/us/our-company/history>

¹⁰ <https://group.schindler.com/en/company/history.html>

¹¹ <https://www.tkelevator.com/global-en/company/history/>

Internal competition

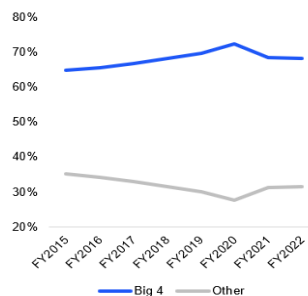
Figure 14: Kone's competitive positioning

KONE's position	2022	
	New Equipment	Maintenance
North America	#3	#4
EMEA	#2	#3
China	#2	#2
Rest of Asia Pacific	#1	#2

KONE's market share in new equipment market in 2022	
In China	~20%
Globally	~19%

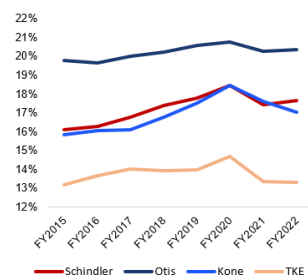
There are many similarities between the corporate strategies of the major elevator players. One of these is profitable growth, which is the overarching goal to be achieved. Other core elements of the corporate strategies can be summed up with the keywords digitalization and sustainability. The overall objective of the Big Four's strategies is profitable growth. The four large, multinational companies in the sector have set themselves ambitious growth targets and combine a corresponding growth strategy with a clear focus on returns. As a result, there is still strong competition among the Big Four for the top position in terms of the number of maintenance contracts and profit. The importance of growth and profit can be seen in the high significance of the corresponding key figures in the companies alone. The decisive factor in achieving these growth targets is the development of maintenance contracts - the strategies of all the Big Four focus on market expansion in service. This expansion is to be achieved in three main ways: (1) new equipment sales and expansion of the growing modernization business to subsequently enter into maintenance contracts; (2) acquisition of companies by taking over their maintenance portfolios; (3) third-party equipment maintenance through aggressive marketing to operators.¹²

Figure 15: market share Big 4 vs. others (2017-2022)



The second aspect of this strategy is evident when we look at how much of the market is controlled by the Big Four, compared to other companies. The ascendancy in market share of the Big Four manifested a consistent upward trajectory from 2015 to 2020, propelled by strategic acquisitions of smaller enterprises. Subsequently, a discernible decline in market share commenced in the initial phases of the COVID-19 pandemic.

Figure 16: market share evolution (2017-2022)



	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022
HHI	0.1075	0.1097	0.1138	0.1188	0.1243	0.1330	0.1203	0.1195

The trend of consolidation leading up to 2020 is also evident through the lens of the Herfindahl Index (HHI). The HHI, demonstrating an incessantly ascending trajectory from 2015 to 2020, serves as an illustrative metric encapsulating the augmenting market concentration during this temporal span. It is noteworthy, however, that the Big Four, despite this consolidation, maintain a semblance of equilibrium in their respective market shares, thereby contributing to an overall HHI value indicative of a fundamentally moderate market concentration. A closer examination of the strategic competition for market share within the Big Four reveals Kone's rapid ascension from 2017 onward. The company successfully expanded its market share, culminating in a 17% share by the year 2020, positioning it on par with Schindler. A collective contraction in market share

¹² De Jong, Vertical Transportation: The Past 50 and Next 50 Years of Development

among the Big Four is evident in the years coinciding with the global pandemic. While the market share of Otis, Schindler, and TKE exhibited stabilization from 2021 onward, Kone's strategic emphasis on the Chinese market is discernible between 2021 and 2022, contributing to a further decline in its market share during this period. In the assessment of profitability among the leading entities in the elevator industry, Otis emerges as particularly noteworthy within the Big Four. The company has achieved a notable shift in revenue composition by emphasizing services, resulting in a commensurately positive impact on profit margins. Notably, the resilience of Otis's service-oriented revenue model becomes evident when scrutinizing margin dynamics during periods of economic challenges. Comparative analysis underscores the discernible decline in profit margins for Schindler, TKE and Kone in the challenging economic climate post-2020, whereas Otis not only withstood these conditions but further augmented its profitability during the same period.

High entry barriers, from stringent safety standards to capital requirements pose challenges for new participants in the elevator industry

Buyers grapple with high switching costs, as enduring investments, safety standardization, and limited bargaining power extend from installation to ongoing services



▪ Threat of new entrants

The industry, characterized by its intricate technological requirements and safety standards, poses formidable barriers to entry. New market participants encounter substantial capital demands for research and development, as well as the establishment of manufacturing facilities and an efficient distribution network. Moreover, stringent safety regulations necessitate intricate certifications, elevating the complexity and cost associated with entering the market. Furthermore, established entities within the industry reap the benefits of economies of scale, leveraging their capacity to distribute fixed costs over a large volume of production. This reality not only establishes a cost advantage for incumbents but also erects a significant barrier for new entrants seeking to achieve comparable cost-efficiency. Additionally, brand loyalty plays a pivotal role, with longstanding companies enjoying robust brand recognition and customer allegiance. Building trust and credibility becomes a monumental challenge for newcomers in such an environment. The industry's high entry barriers, extend to the service segment.

▪ Bargaining Power of buyers

Buyers within the elevators & escalators industry grapple with elevated switching costs. These systems, once installed, represent enduring investments, and altering suppliers entails substantial financial outlays and potential operational disruptions. The standardization of safety regulations and technical specifications further curtails buyer options, diminishing their bargaining power in terms of core functionalities. Large-scale projects, such as commercial buildings or infrastructure development, afford buyers a degree of negotiation power based

on the volume of their purchase. However, individual consumers find their bargaining power restricted in comparison. Buyers' elevated switching costs are not confined to initial installation but extend to the service domain. Changing service providers involves substantial costs and potential disruptions. The standardization of service protocols, aligned with safety and regulatory standards, restricts buyer options, particularly in the context of ongoing maintenance.

- **Bargaining power of suppliers**

Suppliers of specialized components wield a moderate level of bargaining power within the industry. High-quality materials and advanced technology integral to elevators and escalators provide suppliers with a certain degree of negotiation leverage. Additionally, the concentration of suppliers for critical components further amplifies their influence. To mitigate risks associated with supply chain disruptions, diversification of suppliers becomes imperative. The cost associated with changing suppliers can be substantial, particularly when dealing with unique or proprietary components. This aspect introduces a dimension of bargaining power for suppliers, as manufacturers seek to maintain production continuity. Also within the service domain, the cost of changing service component suppliers is a significant consideration for manufacturers. Seamless integration of new suppliers into service networks is crucial to avoid disruptions.

Suppliers exert moderate bargaining power, leveraging quality materials and concentrated critical components

- **Threat of substitute products or services**

In the rapidly evolving landscape of this industry, characterized by technological advancements and shifting consumer preferences, companies face the imperative of consistently evaluating potential substitutes that could impact its market position. As the industry witnesses the advent of smart building technologies, artificial intelligence, and alternative modes of vertical transportation, participants must stay ahead of the curve to anticipate and respond to changing customer expectations. Moreover, the rising emphasis on sustainability and energy efficiency introduces an additional layer of complexity, as environmentally conscious alternatives may pose a threat to traditional elevator systems. To effectively navigate this landscape, it is crucial to continue the commitment to innovation and to invest in research and development to maintain a technological edge.¹³

A commitment to innovation is crucial for steering clear of substitutes

¹³ Amosun, THE LOGIC OF BUSINESS STRATEGY: A case study of Kone Group, 2017

▪ Kone SWOT

Figure 19: SWOT Summary

Strengths	<ul style="list-style-type: none"> - Global leader in elevators and escalator sector with wide regional coverage - Global growth industry driven by megatrends - Strong R&D capabilities with impressive track record of innovative products - Strong standing in sustainability with variety of benchmark setting products - High brand recognition - Life cycle business model with service accounting for 49.5% of sales - Strong acquisition strategy
Weaknesses	<ul style="list-style-type: none"> - No own operations in South America, Japan or South Korea - Moderate pricing power through focus on costly machine room less elevators - Reliance on China in terms of revenue share
Opportunities	<ul style="list-style-type: none"> - Improving construction activity growth in Europe and in North America - Significant pent-up demand for modernization in Europe - Further market share gains in China - Digitalization trend in E&E industry
Threats	<ul style="list-style-type: none"> - Further weakening real estate market in China - Soft non-residential building construction in Europe and the U.S. - Sudden changes in regulation - Rising raw material prices, cost inflation - Product cannibalization through innovative and sustainable product offering - Further declining market shares

Kone’s strengths encompass a myriad of aspects. Its innovative research and development capabilities have consistently delivered cutting-edge products. Moreover, Kone’s commitment to sustainability, evident in benchmark-setting initiatives, aligns with evolving consumer expectations and regulatory standards, reinforcing its brand image. Furthermore, the adoption of a life cycle business model, where services contribute significantly to sales, establishes a stable revenue stream and fosters enduring customer relationships. Additionally, Kone’s successful acquisition strategy has played a pivotal role in expanding capabilities and market reach, contributing to its overall growth and competitiveness. Nevertheless, Kone faces certain challenges and vulnerabilities. The underrepresentation in North America limits its market share in a region with substantial growth potential in the service segment. The absence of direct operations in South America, Japan, and South Korea may hinder the company’s ability to fully capitalize on opportunities in these markets. Additionally, a focus on costly machine room-less elevators may limit pricing power, especially in markets sensitive to price considerations. Finally, the dependence on China for a significant share of revenue exposes the company to potential economic uncertainties in the region. Opportunities abound for Kone to further solidify its market position. The significant pent-up demand for modernization in Europe provides an opportunity to enhance revenue through upgrading existing installations. Further market share gains in China and embracing the digitalization trend in the elevator and escalator industry position Kone to capitalize on emerging trends and technological advancements. While the company navigates these opportunities, it must also address potential threats. The risk of a further weakening real estate market in China and soft non-residential building construction in Europe and the U.S. poses challenges to revenue growth. Sudden changes in regulations may necessitate adaptability and adjustments to business operations. Rising raw material prices and overall cost inflation can impact profit margins, requiring strategic cost management. Finally, The potential for product cannibalization through innovative and sustainable product offerings requires careful product positioning to avoid market share erosion.

Market Trends

Three main market trends will shape the future of the elevator and escalator industry: technology (i.e. internet of things integration), urbanization (increasing population concentration in urban areas, and growing need for elevators and escalators), and sustainability (green elevator technologies an energy efficiency).

Technology fundamentally changes the way in which elevators are operated and maintained

▪ Technology

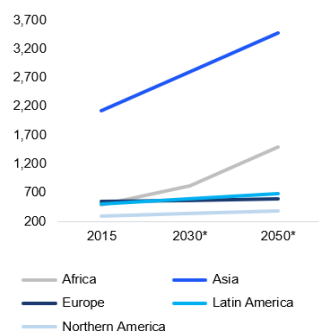
The integration of technology into elevator systems has fundamentally changed the way elevators are operated and maintained. Smart elevators are equipped with a variety of sensors that enable permanent monitoring. These sensors record data on speed, load, temperature and other relevant parameters. This proactivity enables targeted maintenance that minimizes downtime and increases safety for users. The use of artificial intelligence (AI) is a further step towards increasing efficiency. By analysing traffic data and user behaviour, AI can optimize the operation of elevators. Elevators can anticipate when and where demand is expected to be high and adjust their journeys accordingly. This reduces waiting times and increases the overall efficiency of the elevator system. The development of ropeless elevators and maglev elevators opens up completely new possibilities. These technologies eliminate conventional ropes and rails, making the construction of buildings more flexible.

Both manufacturers and operators are striving to develop more environmentally friendly solutions

▪ Sustainability

Sustainability is a key concern in the elevator industry. In light of growing concerns about climate change and resource consumption, manufacturers and operators are striving to develop more environmentally friendly solutions. One focus is on improving the energy efficiency of elevators. This is achieved through the introduction of energy-efficient drive systems that significantly reduce energy consumption. Regenerative drive systems, which feed the energy generated during braking manoeuvres back into the power grid, are also an important step towards reducing energy consumption. The choice of sustainable materials and construction methods helps to reduce the environmental footprint of elevator production. This includes the use of recyclable materials, the minimization of waste and the introduction of environmentally friendly production processes. In addition, increased attention is being paid to the recycling of elevator components and parts in order to optimize the use of resources. The introduction of environmental certificates and sustainability assessments for elevators promotes the selection of more environmentally friendly solutions. This enables building owners and operators to certify their buildings according to ecological criteria and minimize their environmental impact.

Figure 20: Number of people living in urban areas in millions (Statista, 2023)



▪ Urbanisation

Increasing urbanization and the growing trend towards ever taller buildings pose a particular challenge. In city centres, where space is limited, elevators are indispensable for transporting people and goods upwards. The elevator industry therefore plays a crucial role in meeting the demands of vertical mobility in urban

Figure 21: Forecast market size in mEUR (Euromonitor, 2023)

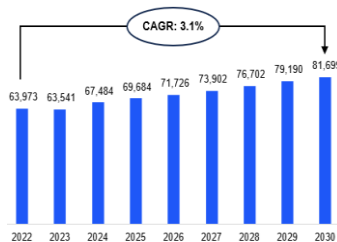


Figure 22: Total sales evolution in mEUR (2018-2022)

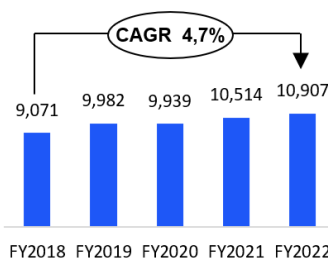


Figure 23: Evolution of sales by business (2018-2022)

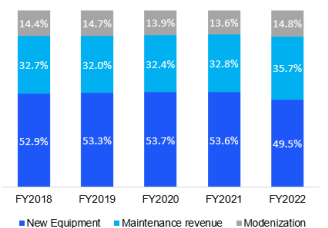
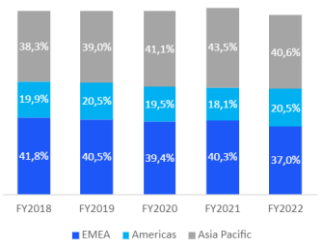


Figure 24: Evolution of sales by area (2018-2022)



environments. To meet the requirements, the industry has developed innovative solutions, including intelligent traffic guidance systems. These systems use advanced algorithms to optimize the flow of traffic in buildings. They can predict when and where the demand for elevators is highest to minimize waiting times and maximize efficiency gains. In busy urban environments, such systems help to reduce congestion and bottlenecks, which in turn improves the quality of life in cities.¹⁴

- Growth prospects

In conclusion, the elevator and escalator industry is poised for substantial growth, driven by the outlined key market trends. These trends collectively propel the industry forward, enabling it to play a pivotal role in meeting the demands of vertical mobility in urban environments and contributing to the overall improvement of urban living conditions. Despite a turbulent environment in 2023, the total market is therefore expected to increase steadily from 2023 onwards leading to a CAGR of 3.1% between 2022 and 2030.

Historical Financial Analysis

Income Statement

- Evolution of sales

Over the last five fiscal years (FY18 – FY22), Kone has experienced a CAGR of 4.7% in total revenue. Notably, the company faced a stagnant growth phase in 2020, attributed to the disruptions caused by the COVID-19 pandemic. However, growth rebounded in 2021, primarily fueled by an uptick in servicing revenues, specifically driven by maintenance revenues. Examining the individual revenue streams, the CAGR for new equipment sales over the past five years stands at 3%, while maintenance revenue has demonstrated a robust CAGR of 7%, and modernization revenues have grown at a CAGR of 5.5%. Consequently, the proportion of revenue derived from new equipment has slightly decreased from 53% in 2018 to 49% in 2022. In contrast, the share of revenue from maintenance has increased from 33% in FY18 to 36% in FY22, and modernization revenue has seen a rise from 14% in 2018 to 15% in 2022. This evolution culminates in the Services category now commanding a total revenue share of 51%, up from 47% in 2018. This strategic shift aligns with Kone's growth strategy, as outlined by company management. Kone seeks to establish leadership in Services, recognizing the segment's resilience to economic cycles, its predictable revenue

¹⁴ Bialy, Elevators 2030 – A Global View, 2022

streams, and the appealing profit margins associated with services. In 2018, the most substantial market for Kone was the EMEA region, contributing to approximately 42% of the total revenue. Following closely, the Asia Pacific region held 38% of the revenue, while the Americas accounted for 20%. Since then, all three geographical segments have witnessed growth in sales. Notably, the Asia Pacific region has surpassed the EMEA region in growth, constituting 40.6% of the total revenue in FY22, while the EMEA region comprised 37%. Meanwhile, the Americas maintained a relatively stable share of revenue, standing at 20.5%.

Figure 26: Evolution of total costs as % of core revenue (2018- 2022)



Figure 27: Evolution of COGS and wages as % of core revenue (2018- 2022)

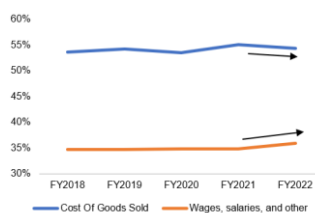
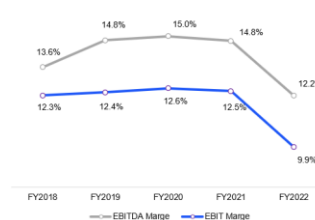


Figure 28: Evolution of margins (2018- 2022)



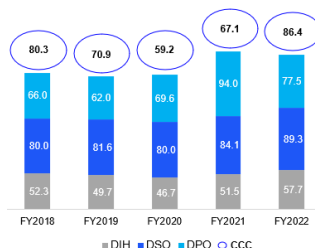
▪ Evolution of Costs / Margin development

Over the preceding five fiscal years, the cost of goods sold (COGS) for Kone displayed a consistent upward trajectory, except for the anomalous year of 2020, primarily attributed to the disruptions caused by the COVID-19 pandemic. Despite this, the company's profit margin remained relatively stable within the range of 51% to 53%, as the increase in revenue mirrored the growth in COGS. Personnel costs demonstrated a similar pattern, although with a marginal decline of 0.2% in 2020, highlighting their “sticky” nature relative to COGS. Nevertheless, there was an overall increase in wages at a CAGR of 5.8% between FY18 and FY22. Especially FY21 and FY22 are noteworthy, as Kone’s personnel costs increased by 5.9% and 9.7% respectively. This development can be attributed to the rise in inflation and Kone’s subsequent need to adjust wages, as well as increase workforce to support growth. The adjacent chart highlights the relative increase in wages of the total cost base. Meanwhile, Selling, General, and Administrative expenses (SG&A) exhibited a steady increase over the same period, maintaining a proportional stability relative to revenue. Over the assessed period, EBITDA experienced a CAGR of 2.1%, the EBITDA margin remained relatively constant until 2022, where it dropped by 2.6% to 12.2%. Among other things, the cost pressure caused by supply chain disruption and cost inflation becomes clear here. The share of costs in revenue is increasing tremendously from 2021, which in turn adversely impacts margins in 2022.

Balance sheet & Cash flow Items

▪ Cash flow & Liquidity management

Figure 29: DPO, DSO, DIO and CCC (2018- 2022)



Kone has maintained a consistently low and stable average holding period over the past five fiscal years, indicating the efficiency of its production cycle. The essential components used in the manufacturing of core products have a brief storage duration before undergoing processing. Moreover, the processing period itself is relatively short, suggesting the adoption of a just-in-time or similar production methodology. On average, Kone takes approximately 52 days to

Figure 30: free cash flow in mEUR (2018-2022)

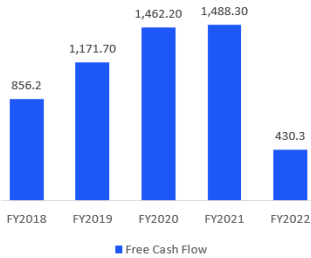
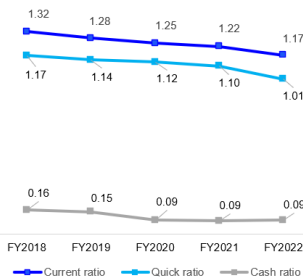


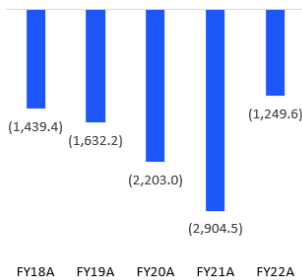
Figure 31: Quick-, Current- and Cash ratio (2018- 2022)



convert raw materials into finished products and fulfill deliveries. Over the analysed period, Days Sales Outstanding (DSO) averaged 83 days. This metric exhibits some variability based on project size, duration, and pre-payments received from customers. Nevertheless, Kone has successfully maintained relative stability in DSO over the past five years. Days Payables Outstanding (DPO) remained relatively steady until 2021, when increased raw material prices and a change payment timing led to a substantial increase in DPO. However, in 2022, DPO decreased once again. In summary, Kone has generally sustained a stable cash conversion cycle, with 2021 serving as a notable and favorable outlier for the company. This consistent management of the cash conversion cycle underscores Kone's adept cash flow management practices, reflecting its resilience in navigating dynamic market conditions. Figure 31 highlights Kone's strong cash flow generation and cash conversion. Throughout the examined years, Kone consistently maintained a Current Ratio exceeding 1, underscoring the company's sustained ability to meet short-term obligations and affirming its financial stability. The Quick Ratio, which excludes inventory due to its varying liquidity, consistently surpassed 1 for all assessed years. This indicates that in Kone's case, inventory has a limited impact on the ratios, affirming the company's capacity to settle short-term debt without relying on liquidating inventory. While both quick and current ratio have been decreasing over the analysed period, both remain above 1, indicating the robustness of the business. In all the years assessed, Kone reported a cash ratio between 0.1 and 0.2. While this suggests that the company cannot solely cover its short-term debt with cash, it's noteworthy that the low cash ratio can be perceived favorably, if the allocated cash is strategically used to create value. This nuanced perspective considers the potential value creation aspect associated with the company's cash position rather than focusing solely on its immediate debt coverage.

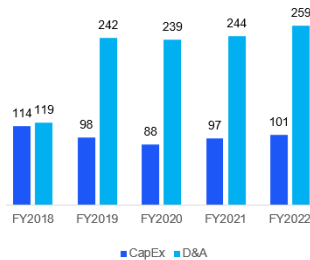
▪ Net working capital

Figure 33: NWC in mEUR (2018- 2022)



Net Working capital further highlights Kone's capital light business model, as it has been negative throughout the analysed period. Kone works extensively with component suppliers to complement its own manufacturing capacity, enabling a quick inventory turnover. The company further employs an efficient accounts receivable collection which is complemented by significant advanced payments throughout the duration of a project. Furthermore, Kone manages to delay payments to suppliers due to its buying power and subsequent negotiating leverage.

Figure 34: CapEx and D&A in mEUR (2018-2022)

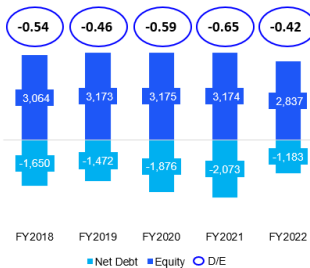


▪ CapEx and D&A

Kone operates an asset-light business model, evident in its minimal capital expenditure (CapEx) demands. Throughout the last five fiscal years, the company has refrained from engaging in substantial expansion projects, dedicating CapEx primarily to stable maintenance requirements. Notably, in each year spanning FY18 to FY22, the depreciation figure exceeded the actual CapEx spent. This underscores Kone's prudent approach to capital allocation and its emphasis on maintaining and optimizing existing assets.

▪ Capital structure

Figure 35: Total equity and net debt in mEUR (2018-2022)



Kone exhibits a distinctive capital structure marked by a negative net debt, resulting in consistently negative gearing ratios throughout the analyzed financial years. This underscores the company's restrained use of financial leverage. Despite a slight increase in the gearing ratio in FY22, it has remained negative, highlighting Kone's conservative financial approach. This approach is further evidenced by the company's tax strategy, forgoing the tax shield benefit associated with debt by consistently paying taxes above its statutory tax rate. Similar trends are observed in the Net Debt to Equity and Net Debt to EBITDA ratios, both sustaining negative values over the entire analyzed period. Although there is a nominal increase in these ratios in FY22, the persistent negativity reflects the company's steadfast commitment to a conservative capital structure, emphasizing prudent financial management by Kone's leadership. Kone's solvency ratio, standing at 0.42 in FY22, reinforces the company's financial robustness. Despite a gradual decline over recent years, the ratio remains substantial, affirming Kone's ability to service its debts and indicating readiness for future investments, should strategic opportunities arise. Furthermore, Kone maintains a notably low Net PPE to total assets ratio, underscoring its asset-light business model. While Kone has not explicitly outlined a specific target for its capital structure, the overarching goal is to uphold strong credit quality, ensuring access to external funding sources and supporting ambitious business growth. The current capital structure is regarded as a strength by Kone's management, offering the flexibility to seize potential value-creating opportunities. In instances of significant and attractive investment or acquisition possibilities, Kone is poised to utilize its borrowing capacity. Overall, Kone is employing a very conservative approach to its capital structure, with potential room for optimization. While Kone has not established a formal dividend policy, the company has consistently either increased or maintained a steady dividend in nominal terms each year since 2005. In 2022, the company distributed a dividend of 1.75€ per Class B share,

Figure 36: Net PP&E and total Assets in mEUR (2018-2022)

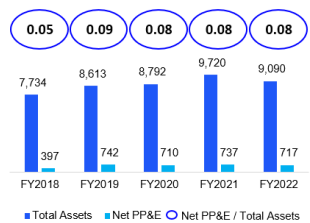


Figure 37: Split-adjusted dividend per class B share in EUR (2015-2022)



holding it steady (without accounting for extraordinary dividends) from the previous year, 2021.

Financial statement reformulation

To conduct a more in-depth analysis of Kone's financial performance, the companies income statement and balance sheet have been reformulated. The corresponding analyses are discussed in more detail below.

- Evolution of invested capital

The adjacent table offers a summary of Kone's key capital investments and the factors that drove them during the fiscal years from 2018 and 2022. Additionally, the graph below illustrates the primary drivers of Kone's capital investments in FY22, ranked by their relative weight on the total invested capital. Given that Kone is a player in the elevator industry, where it both manufactures and sells its elevators and escalators, it is not surprising that its core invested capital is predominantly influenced by its account receivables. As Kone runs a very asset light business model, inventory and PPE do not contribute as much to total invested capital as is common in other industries (e.g. Automotive). Goodwill within Kone's financial structure signifies the incorporation of businesses obtained abroad that align with Kone's business model and organizational framework. It is a reflection of the acquired market share, business expertise, and synergies achieved through these acquisitions. Unlike many other items, goodwill isn't subject to amortization but is regularly assessed for impairment. Given the relatively modest levels of various other components, goodwill holds significant weight within the framework of invested capital. Overall, invested capital has been very stable in relation to the sales development of Kone. The adjacent chart highlights the components of core invested capital. Accounts receivable and goodwill are the greatest contributors, while advanced payments and accounts payable are reducing invested capital as expected.

Figure 39: Core invested capital in mEUR (2018-2022)

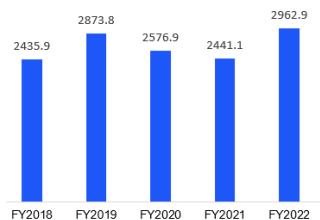


Figure 38: Core invested capital components in mEUR (2022)

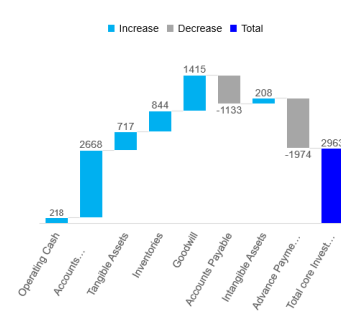
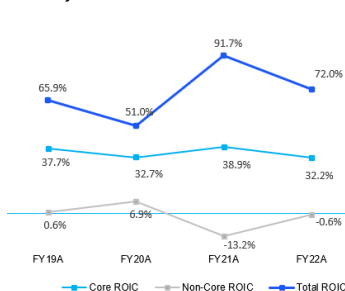


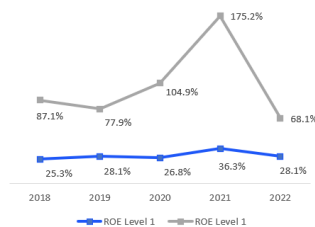
Figure 40: ROIC (2018-2022)



Kone's core ROIC has been fluctuating, ranging from 32% to 39% in recent years. A noticeable decline occurred in 2020, attributed to the impact of the COVID-19 pandemic. Despite Kone maintaining a stable operating margin during the pandemic, a decrease in asset turnover led to an approximately 5% reduction in ROIC. Remarkably, Kone swiftly rebounded, surpassing pre-COVID levels. In 2022, the core ROIC experienced another decline, primarily stemming from a decrease in the operating margin. This decrease can be explained by the challenges faced in the Chinese market, as described earlier in this report. The non-core ROIC demonstrated considerable fluctuations over the evaluation

period. This variance is attributed to the limited non-core revenue streams at Kone, where the non-core result is predominantly influenced by other comprehensive income. Conversely, non-core invested capital remained relatively steady. Throughout the assessed timeframe, the total ROIC consistently remained positive. Despite the noticeable impacts of the COVID-19 pandemic in 2020 and the challenges in the Chinese market, Kone has demonstrated a consistent ability to generate substantial returns on its invested capital over the years. This resilience underscores the company's adaptability and capacity to navigate through diverse market conditions, ultimately contributing to its sustained positive ROIC performance.

Figure 41: Evolution of ROE (2018- 2022)



Similarly to the ROIC, the ROE has generally shown an upward trend. However, the repercussions of the pandemic in 2020, and the current slowdown in Chinese business activity have both negatively impacted the ROE through reductions in comprehensive income. Upon closer examination of the level 2 breakdown, the impact of ROIC becomes evident, while the Debt to Equity ratio remained relative stability. The cost of external financing, a factor that had been consistent until 2022, saw a decline in that year, further contributing to the subsequent reduction in ROE compared to 2021. Level 3 ROE assigns weights to the core and non-core ROIC and highlights that the non-core ROIC doesn't negatively influence the overall ROE.

▪ Value Creation Analysis

The adjacent table evaluates Kone's core business and overall performance in terms of value creation, utilizing the company's WACC set at 7.71% (further described in the valuation section). Observing both Kone's Core Return on Invested Capital (ROIC) and the general ROIC consistently surpassing its WACC throughout the analyzed period, it can be deduced that Kone consistently generates significant value for its shareholders. However, a nuanced perspective emerges when we narrow our focus to more recent investments. Given that ROIC reflects the comprehensive value creation of the company, encompassing an extensive history of past investments, a more appropriate comparison for recent investments is the Return on New Invested Capital (RONIC) against WACC. Analyzing the period from FY18 to FY21, WACC consistently exceeds RONIC, with only in 2022 RONIC surpassing WACC. This suggests that Kone's value creation in recent investments became favorable only in the very recent past, demonstrating the evolving dynamics of its shareholder value creation.

Value Creation Analysis	2019	2020	2021	2022
ROIC	66%	51%	92%	72%
RONIC	n.a.	-23%	-81%	201%
Investment Rate (Total Capital)	115%	86%	141%	53%
Growth Rate	10%	-7%	37%	-33%
WACC	8%	8%	8%	8%
Value Creation	58%	43%	84%	64%

Value Creation Analysis - Core Business	2019	2020	2021	2022
ROIC	38%	33%	39%	32%
RONIC	n.a.	5%	-21%	159%
Investment Rate (Total Capital)	136%	107%	117%	33%
Growth Rate	13%	2%	7%	-22%
WACC	8%	8%	8%	8%
Value Creation	30%	25%	31%	25%

Forecast

Income statement

- Revenue Model

Figure 42: YoY growth by business (2023E – 2028P)

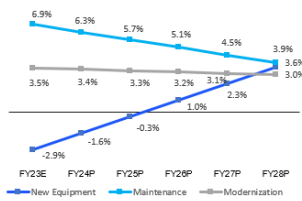


Figure 43: Business as % of revenue (2023E – 2028P)

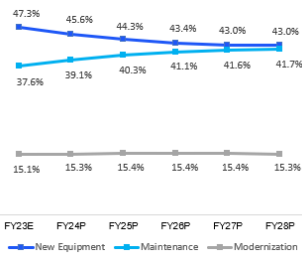


Figure 44: EBIT margin and service as % of revenue (2023E – 2028P)

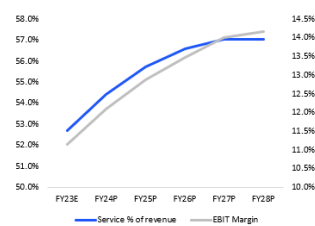
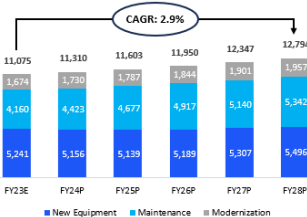
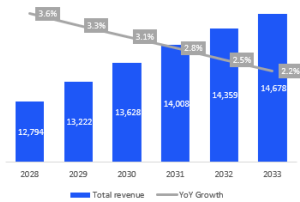


Figure 43: Sales by business in mEUR (2023E – 2028P)



To project revenue, our analysis focuses on two distinct time frames for Kone. The first period spans from 2023 to 2028, emphasizing short-term projections. During this phase, we anticipate Kone's revenue mix to shift further towards Services due to the expanding installed base and the expected slowdown in market growth for new equipment. The latter is attributed to elevated inflation and interest rates over the upcoming years. Consequently, short-term growth is anticipated to derive primarily from the services segment, particularly the maintenance business, given its more frequent occurrence compared to modernizations. The new equipment market is notably affected by the recent deceleration in China and global macroeconomic conditions, resulting in a decline in 2022. While an immediate return to growth is not expected in the short term, we anticipate the market to stabilize, forecasting a year-over-year growth increase of 1.3%. This projection indicates a return to positive growth in new equipment sales starting from 2026. In the short term, our expectation is for new equipment sales to exhibit a CAGR of 0.3%. Maintenance services are anticipated to maintain their growth momentum, aligning with the average rate of the last three years in 2023. We project continuous growth, albeit at a decreasing rate of 0.6% thereafter. Hence, in the short term, our expectation is for Maintenance services to grow at a CAGR of 5.4%. While we also anticipate growth in Modernizations in the short term, the rate is expected to be more subdued. For 2023, we forecast Modernizations to grow at the average rate of the preceding three years. Subsequent years are expected to maintain positive growth but slow down by 0.11% annually. Overall, in the short term, our projection is for Modernizations to grow at a CAGR of 3.2%. By the conclusion of the short-term growth projection, the Services segment's share of revenue is anticipated to rise from 50.5% in 2022 to 57% in 2028. This increase is expected to enhance Kone's EBIT margin, as illustrated in the adjacent chart. Revenue from services incurs minimal material costs, and generally incurs higher margins which is part of the reason why Kone wants to focus on that revenue stream. We further cross-checked our short-term forecast assumptions with the analyst forecasts of a range of financial institutions, which showed our forecasted revenue to be just below average analyst consensus in 2025. Furthermore, we gave our revenue forecast a sensecheck with the overall market growth, especially in the outer years, not covered by analyst estimates. Overall, we project Kone to

Figure 44: Total sales in mEUR and YoY growth (2023E – 2028P)

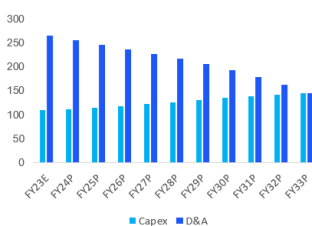


grow at a CAGR of 2.9% during our short-term forecast. In the second period, our analysis shifts towards the long-term growth outlook for Kone spanning from 2029 to 2033. Unlike the earlier period, where we anticipated a shift in the relative proportions of new equipment and service revenue, we now project these proportions to remain stable post-2028. Therefore, the growth of the respective business segments is determined by overall sales growth. We assume that total sales will decrease at a constant rate to reach our terminal growth rate of 2.2% in the final forecast year. In summary, our long-term forecast envisions Kone to grow at a CAGR of 2.6%. Anticipating consistent costs relative to revenue, we forecast Kone's EBIT margin to remain unchanged after 2028.

- Other items

In our base-case scenario, we project revenue as detailed in the preceding section. Due to the forecasted relative change in the revenue mix, direct material costs, forecasted as a percentage of sales, are expected to decrease slightly until 2027, from where on we forecasted no further changes of the revenue mix. While maintaining other production costs as constant relative to sales, we infer a slight decline in COGS in relation to total revenue until 2027, consequently boosting Kone's gross profit margin. Employee Wages and SG&A are forecasted to remain a constant percentage of sales, calculated as an average of the previous five years, as both have historically grown with revenue. Items impacting comparability are forecasted as zero, as these typically consist of one time events which we are not able to forecast accurately. Other operating expenses/(income), although a relatively minor position, have been forecasted as a percentage of sales, as they consist of predictable subsidies and other small financial items that have been showing a stable relationship to sales over the past five years. Significant increases in CAPEX have not been factored into our projections. However, considering that depreciation exceeded CAPEX over the past five years, forecasting depreciation as an average would be unsustainable. Instead, we project a constant decrease in depreciation until it reaches 100% of CAPEX by 2033. Share of associated companies net income have been forecasted as zero, as there has been no income over the past four years. Other comprehensive income was forecasted as the average percentage of sales of the past five years, to align projected OCI with the expected growth of sales. Dividend income, other financing income, exchange rate gains, and exchange rate losses have been left constant at zero, as they often constitute one-time events and are therefore not accurately forecastable. Interest income was forecasted as the average percentage of sales over the past five years, as they exhibit a proportional relationship. Interest expenses and other financing expenses were forecasted as a percentage of debt from the previous year, to

Figure 45: Capex and D&A in mEUR (2023E – 2033P)

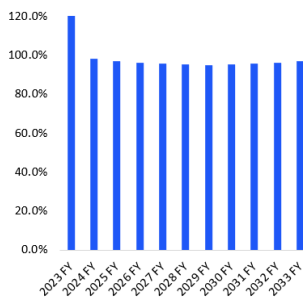


incorporate fluctuations in interest rates. Statutory tax rate remained at 20%, as no change of the tax code is expected in the future.

Balance sheet

Operating Cash is forecasted as 2% of total revenues. The forecasts for accounts receivable, accounts payable, and inventories are derived by inversely applying the respective Day Sales Outstanding (DSO), Day Payables Outstanding (DPO), and Days Inventory Outstanding (DIO) formulas, utilizing the average days from previous years as the input. Tangible Assets have been forecasted as the average of the percentage of sales, as this position predominately consists of PPE. While no significant expansion projects are planned throughout the forecast period, small amounts of investments and maintenance are needed to facilitate growth. Goodwill and Intangible assets were forecasted as a percentage of sales, as both positions stand in a direct relationship to small-scale strategic acquisitions with the aim to increase revenue. Advanced Payments Received, Deferred Revenues and Deferred Assets were as a percentage of sales, to reflect their positive correlation. Deferred Tax Assets and Deferred Tax Liabilities were forecasted as a percentage of sales as well, due to their correlation with profitability. Income Tax receivable, Income Tax payable, and Provisions were forecasted as a percentage of sales, to align with other forecasting methodologies and ensure that the relationships within the model are coherent and logical. Accruals, among other things, consists of deferred income on maintenance contracts and was therefore forecasted as a percentage of sales as well. Net Debt and other claims was calculated using total invested capital and shareholder equity. Our valuation assumes a consistent capital structure, achieved by utilizing Kone's dividend as a "plug." Consequently, the Debt-to-Equity (D/E) ratio remains at its FY22 level of -41.7% throughout the forecasting period. The payout ratio may experience slight variations over the years but generally aligns with Kone's flexible dividend strategy of maintaining or incrementally increasing it annually. Non-controlling interests are anticipated to remain stable over the forecasted period.

Figure 46: Payout ratio (2023E – 2033P)



Scenario analysis

In order to test our analysis and evaluate our valuation we have conducted a scenario analysis with an upside and downside case. In the income statement of our upside case, we have assumed a further and quicker shift to increase the service segment of our sales mix, combined with a stronger annual y-o-y growth of 0,5% above the base case. The subsequent stronger and faster decreasing rate of COGS, causes significant improvement of margins and hence after-tax

result. All other assumptions were left equal in terms of forecasted in percentage of sales. In our downside scenario, we have assumed that Kone does not manage to increase the share of services of its revenue in combination with a weaker annual revenue y-o-y growth of 0.5% below the base case. As a result, direct materials were assumed to remain at a constant rate, thus decreasing core result significantly. On the balance sheet and NWC forecasts, no individual items were adjusted, however the changes from the income statement are reflected in the respective versions

Valuation

Multiples analysis – Comparable companies

In the process of constructing a robust peer group for Kone, a meticulous approach was adopted to overcome the limitation of only two publicly traded companies, Otis and Schindler, among its immediate peers. To enhance the inclusivity of the peer group, the decision was made to broaden the scope by incorporating general industrials with a specific emphasis on the Nordic region. This expansion led to the establishment of two distinct peer groups: Industrials on the one side and elevator and escalator companies (E&E) on the other. Notably, the elevators and escalators group were further enriched by the inclusion of a conglomerate, Fujitec, which shares a corresponding business line and holds a modest yet noteworthy market share in the Asian market. A subsequent in-depth analysis of business models and a comparison of selected multiples to the elevator and escalator peer group prompted a refinement of the Industrials peer group. This refinement aimed at eliminating outliers and selecting industrial entities whose business models closely align with the risk profile inherent in Kone's different business endeavours. The refined Industrials peer group included ABB Ltd, Alfa Laval AB, Schneider Electric SE and Kongsberg Gruppe ASA. This peer group comprises entities specializing in industrial automation, engineering, manufacturing, and technology - essential components mirroring Kone's business model. Moreover, this peer group was deemed appropriate for comparison due to its congruence with Kone's strategic emphasis on innovation and sustainability. Their shared focus on automation, energy-efficient solutions, and continuous innovation positions them as strategic peers.

Figure 47: Initial Peer group

	Company	Fit
Industrials	ABB Ltd	●
	Alfa Laval AB	●
	Atlas Copco AB	●
	Epiroc AB	●
	Konecranes Abp	●
	Legrand SA	●
	Sandvik AB	●
	Schneider Electric SE	●
	SKF AB	●
	Valmet Oyj	●
Kongsberg Gruppen ASA	●	
E&E	Schindler Holding AG	●
	Otis Worldwide Corp	●
	Hyundai Elevator Co Ltd	●
	Fujitec Co Ltd	●

Company	Enterprise Value /						Price /						
	2022 Sales	2023E Sales	2024E Sales	2022 EBITDA	2023E EBITDA	2024E EBITDA	2022 EBIT	2023E EBIT	2024E EBIT	2022 EPS	2023E EPS	2024E EPS	
Industrials	ABB Ltd	2.1x	2.5x	2.4x	12.3x	13.4x	13.0x	14.7x	15.6x	15.2x	30.9x	20.5x	19.5x
	Alfa Laval AB	2.7x	2.7x	2.5x	14.4x	14.3x	12.5x	19.1x	17.7x	15.1x	30.9x	22.6x	19.6x
	Schneider Electric SE	2.4x	3.1x	3.0x	11.7x	15.3x	14.4x	14.8x	18.4x	17.3x	23.5x	22.1x	20.4x
	Kongsberg Gruppen ASA	2.3x	2.1x	1.9x	16.2x	13.8x	12.4x	22.3x	17.7x	15.7x	26.1x	21.3x	18.5x
E&E	Schindler Holding AG	1.4x	1.6x	1.6x	11.6x	12.2x	11.5x	15.5x	15.1x	14.1x	32.4x	23.9x	21.9x
	Otis Worldwide Corp	2.8x	2.9x	2.8x	16.8x	17.0x	16.0x	18.3x	18.3x	17.2x	27.6x	24.5x	22.5x
	Fujitec Co Ltd	1.1x	1.0x	0.9x	15.2x	10.1x	11.9x	20.7x			26.4x	17.4x	20.8x

Figure 48: Valuation results CCA

EV (in EURm)	
FY22-24	Median
EV/EBITDA	21,486.8
EV/EBIT	22,971.5
P/E	28,296.7
EqV (in EURm)	
FY22-24	Median
EV/EBITDA	22,669.4
EV/EBIT	24,154.2
P/E	27,114.1
Implied Share Price (in EUR)	
FY22-24	Median
EV/EBITDA	€ 43.83
EV/EBIT	€ 46.70
P/E	€ 52.42

Initially, the CCA valuation employed for Kone involved the utilization of widely accepted multiples, namely EV/Sales, EV/EBITDA, EV/EBIT, and P/E. To ensure a comprehensive assessment that incorporates both the current standing and future earnings potential of peer companies, the analysis considered not only the year 2022 but also estimates for 2023 and 2024 regarding these multiples. The average of these multiples was then computed to establish the basis for the actual valuation. The determination of the multiple range initially involved isolating the ranges within the two previously defined peer groups. Subsequently, these ranges were assigned equal weightage (50% each) to derive a consolidated final multiple range. Due to notable disparities in the EV/Sales multiple, resulting in an exceptionally high price range, a decision was made to exclude this metric. Consequently, the valuation focused exclusively on the remaining three multiples.

	22-24E	Min	25th Percentile	Median	75th Percentile	Max	Mean
Weighted							
EV/EBITDA		11.8x	11.8x	13.2x	15.8x	16.0x	13.6x
EV/EBIT		15.0x	15.4x	16.8x	19.8x	19.0x	16.9x
P/E		21.2x	21.4x	23.9x	25.5x	25.5x	23.6x

By applying these, the following implied share prices were obtained: EUR 43.83 (EV/EBITDA), EUR 46.70 (EV/EBIT), and EUR 52.42 (P/E). The summation of these values yields an implied mean **share price of EUR 47.65** for Kone.

Multiples analysis – Comparable transactions

When valuing Kone through comparable transactions (CTA), we again expanded the scope of comparables to include transactions from the established industrial peer group. This expansion was necessary due to the limited availability of transactions within the E&E peer group. Subsequently, the multiple ranges identified within the respective peer groups were each weighted at 50%, contributing to the formulation of a comprehensive final range. The EV/Sales multiple exhibited a parallel trend to the CCA, necessitating a focus on EV/EBITDA, EV/EBIT, and P/E multiples.

Figure 49: Valuation results CTA

Enterprise Value (EURm)	Median
EV/EBIT	24,648.61
EV/EBITDA	24,852.39
P/E	26,402.53
Equity Value (EURm)	Median
EV/EBITDA	25,774.1
EV/EBIT	25,977.9
P/E	27,528.0
Share Price (EURm)	Median
EV/EBITDA	49.8
EV/EBIT	50.2
P/E	53.2

	Multiples	Min	25th Percentile	Median	75th Percentile	Max	Mean
Weighted							
EV/EBIT		14.9x	15.0x	18.0x	19.5x	22.5x	17.7x
EV/EBITDA		13.0x	13.4x	15.3x	16.7x	17.0x	15.2x
P/E		23.4x	23.4x	24.2x	28.6x	28.6x	25.4x

Consequently, the valuation of Kone through comparable transactions yielded implied share prices of EUR 49.8 (EV/EBITDA), EUR 50.2 (EV/EBIT), and EUR 53.2 (P/E). In total, these figures result in an implied mean **share price of EUR 51.1** for Kone.

Discounted cash flow (DCF)

In our valuation of KONE, we employed a Discounted Cash Flow (DCF) Model, chosen for its perceived efficacy in accurately representing the value accruing to shareholders. This selection was informed by the DCF's capacity to accommodate detailed assumptions, thereby leveraging our detailed understanding of the company and its industry. Furthermore, the model facilitates the examination of key assumptions through scenario analysis, enhancing its applicability to the dynamic landscape of the company's future performance. The valuation process involved the utilization of unlevered cash flows, derived from our forecast period extending until 2033. Subsequently, a terminal value (TV) was computed using two approaches. Both were discounted using the computed WACC.

In mEUR	FY24P	FY25P	FY26P	FY27P	FY28P	FY29P	FY30P	FY31P	FY32P	FY33P
Fiscal Year-End	31.12.2024	31.12.2025	31.12.2026	31.12.2026	31.12.2026	31.12.2026	31.12.2026	31.12.2026	31.12.2026	31.12.2026
EBITDA		1,740.1	1,845.8	1,955.3	2,030.0	2,098.0	2,162.3	2,222.5	2,278.2	2,328.9
Depreciation & Amortization		(246.1)	(236.6)	(227.1)	(217.3)	(205.9)	(193.0)	(178.6)	(162.9)	(145.8)
Core Result before taxes		1,493.9	1,609.2	1,728.2	1,812.8	1,892.1	1,969.3	2,043.9	2,115.4	2,183.1
Taxes		(298.8)	(321.8)	(345.6)	(362.6)	(378.4)	(393.9)	(408.8)	(423.1)	(436.6)
Statutory Tax Rate (in %)		20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
NOPLAT		1,195.1	1,287.3	1,382.6	1,450.2	1,513.6	1,575.4	1,635.1	1,692.3	1,746.5
Depreciation & Amortization		246.1	236.6	227.1	217.3	205.9	193.0	178.6	162.9	145.8
Change in Net Working Capital		(25.4)	(32.1)	(37.5)	(45.2)	(43.4)	(41.1)	(38.5)	(35.8)	(32.4)
CapEx		(115.2)	(118.7)	(122.6)	(127.1)	(131.3)	(135.3)	(139.1)	(142.6)	(145.8)
Unlevered Free Cash Flow		1,300.6	1,373.2	1,449.6	1,495.2	1,544.8	1,592.0	1,636.1	1,677.0	1,714.1
% Growth Rate (YOY)			5.6%	5.6%	3.1%	3.3%	3.1%	2.8%	2.5%	2.2%

To arrive at the TV two approaches were used. On the one hand we employed the Gordon Growth Model (GGM) using a perpetuity growth rate of 2.2%.¹⁵ This growth rate aligns with the average global Gross Domestic Product (GDP) growth rate projected from 2030 onward, as sourced from the World Bank. On the other hand, the determination of the TV was executed through the application of an exit multiple methodology. In this regard, the median EV/EBITDA multiple of 15.3x, as derived in the CTA, was employed. These valuation methodologies were systematically applied across all scenarios determined within the forecasting framework. Within the base case scenario, the application of the GGM yielded an enterprise value of mEUR 25,800.4, while the employment of the Exit Multiple approach resulted in an enterprise value of mEUR 27,798.79. Subsequent considerations of net debt and outstanding shares facilitated the derivation of implied **share prices** for KONE, amounting to **EUR 52.1 (GGM)** and **EUR 55.9 (Exit Multiple)**.

WACC Calculation

The calculation of the WACC is divided into 3 steps, which are explained in more detail below: Beta determination, cost of equity and cost of debt calculation. By using the variables obtained in this way, a WACC of 7.71% was ultimately obtained for KONE using the following formula:

$$WACC = \frac{E}{D+E} * rE + \frac{D}{D+E} * rD * (1 - T)$$

Figure 50: Valuation results DCF

Case	GGM		
	EV (mEUR)	EqV (mEUR)	Share Price (EUR)
Base	25,800.4	26,925.8	52.1
Upside	30,114.6	31,254.5	60.4
Conservative	21,880.7	23,006.2	44.5

Case	Exit Multiple		
	EV (mEUR)	EqV (mEUR)	Share Price (EUR)
Base	27,798.8	28,924.3	55.9
Upside	32,343.2	33,483.2	64.7
Conservative	23,655.5	24,781.0	47.9

Figure 51: WACC

Cost of Equity	7.4%
Weighted Cost of debt pre-tax	3.5%
Tax rate	20.0%
After-tax cost of debt	2.8%
Impl. Debt / Total Capitalization	-5.8%
WACC	7.71%

▪ Beta

Figure 52: unlevered Beta calculation

Peers	Unl. Beta D/E	Unl. Beta EV-weighted
E&E Manuf.		
Schindler Holding AG	1.14	0.34
Otis Worldwide Corp	0.60	0.39
Hyundai Elevator Co Ltd	0.89	0.02
Fujitec Co Ltd	1.12	0.03
Average	0.94	0.78
Average unl. Beta		0.86
Industriale		
Epiroc AB	1.02	0.07
Legrand SA	1.10	0.08
SKF AB	1.04	0.03
Konecranes Abp	1.30	0.01
Sandvik AB	0.84	0.07
Alfa Laval AB	1.11	0.05
Atlas Copco AB	1.14	0.22
ABB Ltd	1.28	0.25
Valmet Oyj	0.97	0.02
Kongsberg Gruppen ASA	0.54	0.01
Schneider Electric SE	0.87	0.24
Average	1.02	1.04
Average unl. Beta		1.03
Total		
Weighted Average		
Average	0.98	0.91
Average unl. Beta		0.94

Figure 53: levered beta calculation

Tax rate	20.0%
D/E ratio	-5.4%
Implied unl. Beta	0.94
Implied levered Beta	0.90

Figure 54: Cost of Equity calculation

Risk Free Rate	2.9%
Market Risk Premium	5.0%
Levered Beta	0.9
Cost of Equity	7.4%

In determining the unlevered betas for our peer group, we followed a method that considered both the financial structure and operational risk of individual companies. First, we computed the debt-to-equity (D/E) ratio for each peer by their net debt to market capitalization. Using the leveraged beta and applicable tax rates, we then derived the unlevered beta, extracting core operational risk by excluding the impact of debt. Recognizing the influence of company size on risk, we introduced enterprise value (EV) weighting to accommodate the varying market significance of each peer. Specifically, we assessed the proportion of each company's EV in the total EV of their peer group (E&E / Industrials). Multiplying the unlevered beta by the EV weighting allowed us to consider both inherent risk and market presence. This process yielded average unlevered betas (E&E Manufacturers: 0.94; industrial companies: 1.02) and EV-weighted unlevered betas (E&E manufacturers: 0.78; industrial companies: 1.04). Combining these averages provided a comprehensive final estimate of the average unlevered beta (E&E manufacturers: 0.86; industrials: 1.03), capturing both the intrinsic risk of individual companies and their collective impact on the broader market. To identify the final unlevered beta for KONE, we incorporated the average unlevered betas of the two peer groups at 50% each, resulting in an unlevered beta of 0.94. Based on the market capitalization and net debt of Kone (D/E ratio: -4.7%) at the time of valuation, a levered beta of 0.90 was derived.

▪ Cost of Equity

Utilizing the Capital Asset Pricing Model (CAPM), we conducted an assessment to ascertain the cost of equity for Kone. For the risk-free rate component, the yield of a German government bond maturing in 2033 (2.9%) was selected as it was deemed a robust benchmark for a risk-free instrument. This choice aligns with the scholarly precedent of referencing long-term government bonds in determining risk-free rates. Furthermore, adhering to established academic studies pertaining to the historical levels of the market risk premium (MRP), an MRP of 5% was employed in our calculations.¹⁶ The CAPM formula, incorporating the risk-free rate, the market risk premium, and the levered beta coefficient of Kone, yielded a calculated cost of equity of 7.4% for the company.

▪ Cost of debt

Given KONE's lack of outstanding debt instruments, internal computation of the cost of debt was unattainable. Instead, we opted for an approach wherein the

¹⁵ World Bank, 2023

¹⁶ Caporale, Persistence in the market risk premium: evidence across countries, 2020

Figure 55: Cost of debt calculation

Company	YTM	YTM default-adj	Weighted YTM
E&E			
OTIS WORLDWIDE CORP	4.0%	3.7%	3.8%
Average	4.0%	3.7%	3.8%
Industrials			
ATLAS COPCO AB	2.5%	2.4%	2.4%
ALFA LAVAL TREASURY INTERNAT	2.7%	2.4%	2.0%
ABB LTD	2.2%	2.1%	2.1%
SKF AB	3.2%	2.9%	2.9%
KONGSBERG GRUPPEN ASA	5.2%	5.0%	4.8%
SCHNEIDER ELECTRIC SE	2.7%	2.6%	2.5%
SANDVIK AB	5.0%	4.9%	3.9%
LEGRAND SA	3.7%	3.5%	3.4%
EPIROC AB	4.2%	3.9%	3.7%
Average	3.5%	3.3%	3.1%
Total			
Weighted Average	3.8%	3.6%	3.5%

cost of debt was determined by referencing the Yield to Maturity (YTM) of bonds issued by comparable peers. This choice was predicated on the assumption that these peers, characterized by similar business models, exhibit analogous risk profiles. Adjustments were made to the respective YTM, factoring in annual default rates in relation to debt ratings and the corresponding ratings of each peer. The adjusted YTM's underwent a weighted computation, with weights assigned based on the proportion of the outstanding bond class relative to the total bonds of each peer entity. The cumulative sum of these weighted YTM's was computed across all peers with outstanding bonds. Within the specified peer categories (E&E and industrials), the average of the weighted YTM's was calculated. Consistent with the methodology employed in the beta calculation, these averages were given equal weighting (50%), yielding a cost of debt of 3.5% for KONE.

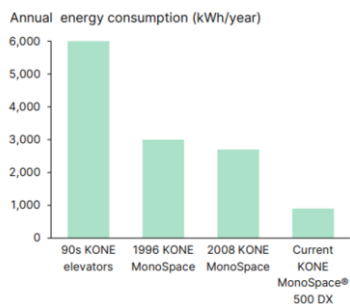
Risks and ESG Performance

Key risks

KONE grapples with strategic challenges arising from inflation, rising interest rates, and disruptions in the supply chain. The global geopolitical landscape, exemplified by events like the conflict in Ukraine, adds complexity to KONE's supply chain dynamics. To navigate these challenges, the company must implement adaptive strategies such as dynamic pricing, flexible contracts, and productivity enhancements. A potential slowdown in China's construction industry poses a strategic risk to KONE's growth, requiring a nuanced approach despite a diversified customer base. Operational risks emerge from a scarcity of skilled workers, necessitating a focus on capability development and retention. Furthermore, KONE needs to recognize the vulnerability of its brand and reputation to safety, cybersecurity, and delivery issues. Implementing robust risk management strategies is essential to preserving the company's standing and maintaining customer trust. In the era of digitalization, KONE is exposed to risks related to its IT infrastructure. The vulnerability of operational systems to cyber threats necessitates a focus on vigilance and defense mechanisms against data manipulation and interruptions, safeguarding its critical IT infrastructure. Financial risks also warrant attention at KONE, with a majority of sales conducted in currencies other than the euro. The company needs to manage exposure to exchange rate risks through strategic hedging strategies, ensuring stability in its financial performance. Additionally, local financial and taxation regulatory shifts pose financial risks, requiring ongoing reviews and adaptability initiatives to ensure compliance and resilience to evolving regulatory landscapes.

ESG

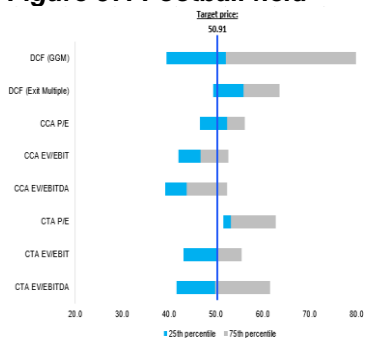
Figure 56: Energy efficiency of KONE elevators



Kone strategically excels in the environmental domain by providing highly efficient lifts and escalators, mostly in the top energy-efficiency class, contributing significantly to green building certification. The focus on digitalization and resource efficiency, along with extended product lifetimes, highlights Kone's sustainability commitment. Recognizing the urgent need for elevator and escalator modernization, particularly in aging installations in Europe and North America, Kone offers best-in-class technology, achieving substantial energy savings and constituting 15% of its sales. On the social front, Kone prioritizes a positive workplace environment, with a commendably low 7.5% voluntary turnover rate. Organizational diversity is evident with strong female representation, including 23.5% of director-level positions, showcasing Kone's dedication to inclusivity and gender diversity in governance.¹⁷

Recommendation

Figure 57: Football field



Based on a comprehensive evaluation of various valuation methods and subsequent weighting, we have derived a final price target for Kone. Considering our calculated **price target of EUR 50.91** in comparison to the current share price of EUR 41.96, we identify significant upside potential (21.33%). Further analysis supports our conclusion that Kone is well positioned for long-term growth, attributed to its innovative business model, robust capital structure, and cash-generative operations, aligned with upcoming market trends. Our assessment suggests that the broader market underestimates Kone's long-term potential, and the current share price inadequately reflects its true value.

Consequently, we recommend a **BUY** rating for the stock.

¹⁷ KONE Corporation, Equity Story, 2023

Appendix

Financial Statements

Income Statement

Core Result	FY18A	FY19A	FY20A	FY21A	FY22A	FY23E
Total Revenue	9,070.7	9,981.8	9,939.6	10,514.2	10,906.6	11,074.8
Cost Of Goods Sold	(4,353.4)	(4,767.4)	(4,670.5)	(5,086.9)	(5,332.3)	(5,375.5)
Direct materials, supplies and subcontracting	(3,614.4)	(4,022.3)	(3,957.6)	(4,297.3)	(4,458.2)	(4,526.9)
Other production costs	(739.0)	(745.1)	(712.9)	(789.6)	(874.1)	(848.5)
Wages, salaries, and other employment expenses including pensions	(2,818.4)	(3,048.4)	(3,042.9)	(3,222.5)	(3,533.4)	(3,439.2)
Selling General & Admin Exp.	(690.1)	(706.2)	(762.2)	(703.3)	(750.1)	(795.6)
Items impacting comparability	(69.6)	(45.0)	(37.7)	(14.5)	(45.4)	-
Other Operating Expense/(Income)	22.0	19.0	26.5	52.5	45.0	35.7
Total Other Expenses	(3,556.1)	(3,780.6)	(3,816.3)	(3,887.8)	(4,283.9)	(4,199.0)
Depreciation and Amortization	(118.9)	(241.5)	(239.1)	(244.1)	(259.3)	(266.2)
Core Result before taxes	1,042.3	1,192.3	1,213.7	1,295.4	1,031.1	1,234.1
Statutory Taxes on Core Result	(208.5)	(238.5)	(242.7)	(259.1)	(206.2)	(246.8)
Tax adjustments	(24.5)	(35.4)	(32.0)	(34.0)	(38.3)	-
Core Result	809.3	918.4	939.0	1,002.3	786.6	987.3

Non-Core Result	FY18A	FY19A	FY20A	FY21A	FY22A	FY23E
Share of associated companies net income	(2.5)	-	-	-	-	-
Other comprehensive income	5.4	(6.0)	(80.5)	168.8	8.0	19.2
Non-Core Result	2.9	(6.0)	(80.5)	168.8	8.0	19.2

Financing Result	FY18A	FY19A	FY20A	FY21A	FY22A	FY23E
Financial Income	61.5	51.6	41.8	52.9	51.2	46.3
Dividend income	8.9	5.9	8	5.7	0	-
Interest income	45.2	42	32.9	43.8	46.4	46.3
Other financing income	0.5	1.5	0.3	0.2	0.2	-
Exchange rate gains	6.9	2.2	0.6	3.2	4.6	-
Financial Expenses	(14.3)	(26.5)	(30.4)	(27.5)	(53.9)	(18.9)
Interest Expense	(8.5)	(19.5)	(23.3)	(21.0)	(22.8)	(14.7)
Other financing expenses	(5.7)	(6.9)	(5.4)	(5.8)	(6.5)	(4.2)
Exchange rate loss	(0.1)	(0.1)	(1.7)	(0.7)	(24.6)	-
Financing Result before Taxes	47.2	25.1	11.4	25.4	(2.7)	27.4
Statutory Taxes on Financing Result	(9.4)	(5.0)	(2.3)	(5.1)	0.5	(5.5)
Financing Result	37.8	20.1	9.1	20.3	(2.2)	22.0

Total Result	FY18A	FY19A	FY20A	FY21A	FY22A	FY23E
Total Result	850.0	932.5	867.6	1,191.4	792.4	1,028.5

FY24P	FY25P	FY26P	FY27P	FY28P	FY29P	FY30P	FY31P	FY32P	FY33P
11,309.6	11,603.0	11,949.6	12,346.7	12,794.4	13,222.5	13,627.9	14,007.5	14,358.5	14,678.2
(5,398.9)	(5,463.6)	(5,573.0)	(5,710.1)	(5,913.3)	(6,111.1)	(6,298.5)	(6,474.0)	(6,636.2)	(6,783.9)
(4,532.4)	(4,574.6)	(4,657.5)	(4,764.1)	(4,933.0)	(5,098.1)	(5,254.4)	(5,400.8)	(5,536.1)	(5,659.3)
(866.5)	(889.0)	(915.5)	(946.0)	(980.3)	(1,013.1)	(1,044.1)	(1,073.2)	(1,100.1)	(1,124.6)
(3,512.1)	(3,603.2)	(3,710.8)	(3,834.2)	(3,973.2)	(4,106.1)	(4,232.0)	(4,349.9)	(4,458.9)	(4,558.2)
(812.4)	(833.5)	(858.4)	(886.9)	(919.1)	(949.8)	(979.0)	(1,006.2)	(1,031.5)	(1,054.4)
-	-	-	-	-	-	-	-	-	-
36.4	37.4	38.5	39.8	41.2	42.6	43.9	45.1	46.3	47.3
(4,288.1)	(4,399.3)	(4,530.7)	(4,681.3)	(4,851.0)	(5,013.4)	(5,167.1)	(5,311.0)	(5,444.1)	(5,565.3)
(255.9)	(246.1)	(236.6)	(227.1)	(217.3)	(205.9)	(193.0)	(178.6)	(162.9)	(145.8)
1,366.7	1,493.9	1,609.2	1,728.2	1,812.8	1,892.1	1,969.3	2,043.9	2,115.4	2,183.1
(273.3)	(298.8)	(321.8)	(345.6)	(362.6)	(378.4)	(393.9)	(408.8)	(423.1)	(436.6)
-	-	-	-	-	-	-	-	-	-
1,093.3	1,195.1	1,287.3	1,382.6	1,450.2	1,513.6	1,575.4	1,635.1	1,692.3	1,746.5

FY24P	FY25P	FY26P	FY27P	FY28P	FY29P	FY30P	FY31P	FY32P	FY33P
-	-	-	-	-	-	-	-	-	-
19.6	20.2	20.8	21.4	22.2	23.0	23.7	24.3	24.9	25.5
19.6	20.2	20.8	21.4	22.2	23.0	23.7	24.3	24.9	25.5

FY24P	FY25P	FY26P	FY27P	FY28P	FY29P	FY30P	FY31P	FY32P	FY33P
47.3	48.5	50.0	51.7	53.5	55.3	57.0	58.6	60.1	61.4
-	-	-	-	-	-	-	-	-	-
47.3	48.5	50.0	51.7	53.5	55.3	57.0	58.6	60.1	61.4
-	-	-	-	-	-	-	-	-	-
(17.6)	(18.0)	(18.4)	(18.9)	(19.5)	(20.2)	(20.9)	(21.6)	(22.3)	(22.9)
(13.8)	(14.0)	(14.4)	(14.8)	(15.2)	(15.7)	(16.3)	(16.9)	(17.4)	(17.9)
(3.9)	(4.0)	(4.1)	(4.2)	(4.3)	(4.4)	(4.6)	(4.8)	(4.9)	(5.0)
-	-	-	-	-	-	-	-	-	-
29.7	30.6	31.6	32.7	34.0	35.1	36.1	37.0	37.8	38.5
(5.9)	(6.1)	(6.3)	(6.5)	(6.8)	(7.0)	(7.2)	(7.4)	(7.6)	(7.7)
23.7	24.5	25.3	26.2	27.2	28.1	28.9	29.6	30.2	30.8

FY24P	FY25P	FY26P	FY27P	FY28P	FY29P	FY30P	FY31P	FY32P	FY33P
1,136.7	1,239.7	1,333.4	1,430.2	1,499.6	1,564.7	1,628.0	1,689.0	1,747.5	1,802.8

Balance Sheet

Reformulated Balance Sheet (in mEUR)						
Core Business	2018 FY	2019 FY	2020 FY	2021 FY	2022 FY	2023 FY
Operating Cash1	181,4	199,6	198,8	210,3	218,1	221,5
Accounts Receivables	1.988,3	2.232,3	2.178,6	2.421,4	2.668,1	2.518,3
Tangible Assets	397,4	742,2	710,0	736,7	716,8	720,7
Inventories	624,1	648,6	597,0	717,8	843,6	759,6
Goodwill	1.333,4	1.366,5	1.327,0	1.405,2	1.414,7	1.485,0
Accounts Payable	(786,7)	(809,8)	(890,9)	(1.310,2)	(1.132,8)	(1.087,3)
Intangible Assets	260,2	248,2	223,2	216,9	208,2	256,3
Advance Payments Received and Deferred R	(1.562,2)	(1.753,8)	(1.766,8)	(1.957,0)	(1.973,8)	(1.977,5)
Invested Capital Core Business	2.435,9	2.873,8	2.576,9	2.441,1	2.962,9	2.896,7
Non Core Operations	2018 FY	2019 FY	2020 FY	2021 FY	2022 FY	2023 FY
Deferred Assets	601,5	596	638,7	780,8	709,3	720,2
Deferred Tax Assets	253,7	292,3	242,4	269,1	307,5	300,0
Deferred Tax Liabilities	(148,7)	(160,2)	(90,4)	(86,9)	(84,8)	(127,5)
Income Tax Receivable	59,0	73,6	82,2	117,3	117,6	97,6
Accruals	(1.574,0)	(1.725,0)	(1.882,6)	(2.137,4)	(2.052,2)	(2.053,7)
Income Tax payable	(73,3)	(123,0)	(113,6)	(130,9)	(129,0)	(124,3)
Provisions	(139,4)	(127,1)	(154,7)	(152,3)	(177,4)	(164,8)
Invested Capital Non-Core Business	(1.021,2)	(1.173,4)	(1.278,0)	(1.340,3)	(1.309,0)	(1.352,5)
Total Invested Capital	1.414,7	1.700,4	1.298,9	1.100,8	1.653,9	1.544,2
Net Debt and other claims	2018 FY	2019 FY	2020 FY	2021 FY	2022 FY	2023 FY
Excess Cash	454,6	462,8	259,1	280,1	277,4	
Current Deposits and Loan Receivables	1.407,0	1.589,5	2.171,4	2.394,7	1.474,9	
Employee Benefit Liabilities	(147,0)	(172,9)	(187,2)	(194,3)	(140,0)	
Other Current Loans and Liabilities	(12,7)	(17,9)	(5,6)	(8,5)	(9,9)	
Current Portion of Non-Current Loans	(15,6)	(103,7)	(258,9)	(108,3)	(106,1)	
Long-term Loans	(193,8)	(427,1)	(244,0)	(435,4)	(417,9)	
Employee Benefit Assets	29,0	21,7	19,2	22,9	10,0	
Minority Interest	(16,0)	(20,0)	(22,6)	(25,0)	(29,9)	
Shares and Other Non-current Financial Asse	143,3	139,2	143,2	144,6	121,7	
Non-current Loan Receivables	1,0	0,8	1,0	2,6	2,5	
Net Debt and other claims	1.649,8	1.472,4	1.875,6	2.073,4	1.182,7	1.104,3
Equity	2018 FY	2019 FY	2020 FY	2021 FY	2022 FY	2023 FY
Equity attributable to the shareholders of the parent company						
Share Capital	66,0	66,2	66,2	66,2	66,2	
Share premium account	100,3	100,3	100,3	100,3	100,3	
Paid-up Unrestricted Equity Reserve	259,1	322,1	345,7	374,0	393,1	
Fair Value and Hedge Reserves	27,0	9,8	41,7	40,2	21,9	
Translation Differences	64,8	110,3	(10,9)	166,1	150,1	
Remeasurements of Employee Benefits	(89,5)	(123,8)	(115,0)	(121,6)	(79,3)	
Retained Earnings	2.636,7	2.687,9	2.746,6	2.549,0	2.184,2	
Transaction with Shareholders	n/a	(824,1)	(865,8)	(1.191,8)	(1.130,1)	(1.246,4)
Payout Ratio		88,4%	99,8%	100,0%	142,6%	121,2%
D/E Ratio	-53,8%	-46,4%	-59,1%	-65,3%	-41,7%	-41,7%
Total Shareholders Equity	3.064,4	3.172,8	3.174,6	3.174,2	2.836,5	2.648,4
Non-controlling interests	16,0	20,0	22,6	25,0	29,9	29,9
Total Equity	3.080,4	3.192,8	3.197,2	3.199,2	2.866,4	2.678,3

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Report Recommendations

Buy	Expected total return (including expected capital gains and expected dividend yield) of more than 10% over a 12-month period.
Hold	Expected total return (including expected capital gains and expected dividend yield) between 0% and 10% over a 12-month period.
Sell	Expected negative total return (including expected capital gains and expected dividend yield) over a 12-month period.

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