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Ascending to Excellence: Elevating Kone's potential in vertical mobility

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Abstract

Amidst the challenges confronting the manufacturing sector, including supply chain disruptions, rising costs, and interest rate hikes, this equity research paper zooms in on the unique elevator and escalator industry. With a specific focus on Kone Corporation, the analysis delves into its strategic positioning and valuation, aiming to furnish investors with comprehensive insights. Serving as a crucial resource, this paper caters to potential investors seeking profound understanding not only of Kone Corporation but also the broader Elevator and Escalator Industry. In a climate where well-informed investment decisions are paramount, this study is meticulously crafted to illuminate pivotal considerations. Through a blend of qualitative and quantitative analyses, it empowers investors to navigate the intricate landscape of equity investments with confidence, facilitating informed decision-making.

Keywords: elevator, escalator, mobility, services

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This report is part of the Kone Equity report (annexed), developed by Time Ulmer and Daniel Wägner and should be read has an integral part of it.

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Introduction

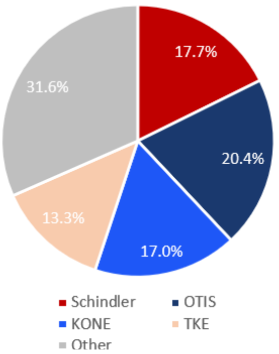
As we dissect the elevator and escalator industry, Kone, a key player among the industry's "Big Four," takes center stage. This analysis delves into Kone's competitive landscape, internal dynamics, historical financial performance, and market trends. Competitive Landscape: Kone, part of the industry's dominant "Big Four," navigates global competition alongside Otis, TKE, and Schindler. Our focus on Kone unveils strategic resilience, financial strength, and geographical emphasis. Internal Competition: Within the Big Four, common strategies center on profitable growth through digitalization and sustainability. Kone's recent market share dynamics, notably in China, contribute to internal competition nuances. Threat of New Entrants: Entering the industry proves challenging due to high capital requirements, safety standards, and research needs. The dominance of the Big Four underscores formidable barriers for new entrants. Bargaining Power: Buyers face elevated switching costs, while suppliers wield moderate power. Strategic positioning by the Big Four and limited substitute threats contribute to complex industry dynamics. Kone SWOT Analysis: A succinct analysis highlights Kone's strengths in innovation and sustainability, acknowledging challenges such as regional dependencies. Market Trends: Key trends of technology integration, urbanization, and sustainability shape the industry's future, with Kone strategically adapting to these shifts. Growth Prospects: Despite 2023 challenges, the industry anticipates steady growth (CAGR 3.1% between 2022 and 2030), fueled by technology, urbanization, and sustainability trends. Historical Financial Analysis: An exploration of Kone's financials, encompassing reformulated statements, invested capital evolution, and ROIC and ROE assessments, unveils insights into historical and recent investment performance.

Industry Analysis

Competitive Landscape

- The Big Four

Figure 13: Market shares (2022)
Analyst estimates



OTIS

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 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.[1]

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.[2]

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).[3]

Internal competition

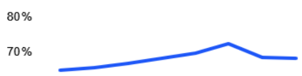
Figure 14: Kone's competitive positioning

	2022	
KONE's position	New Equipment	Maintena
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

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



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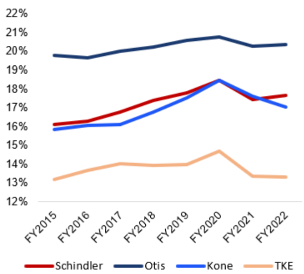
portfolios; (3) third-party equipment maintenance through aggressive marketing to operators.[4]

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)

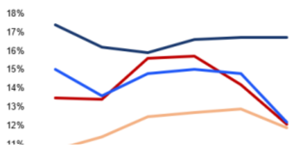


requirements pose challenges for new participants in the elevator industry

	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 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.

Figure 17: Big 4 EBITDA margins (2017-2022)



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.

Figure 18: KONE's positioning within Porter's five Forces

The Past 50 and Next 50 Years of Development

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

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.

- Threat of substitute products or services

A commitment to innovation is crucial for steering clear of substitutes

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.[5]

- Kone SWOT

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,

Figure 19: SWOT Summary

Strengths	- 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

ESS STRATEGY: A case study of Kone Group, 2017 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

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

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.

- Sustainability

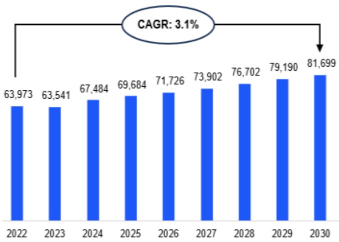
Both manufacturers and operators are striving to develop more environmentally friendly solutions

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.

- 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 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.[6]

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



- 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

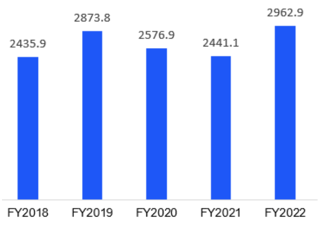
Financial statement reformulation

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

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

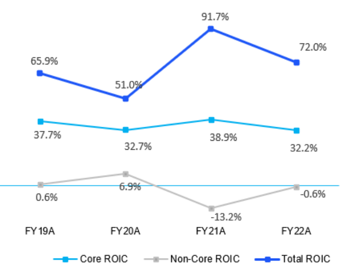


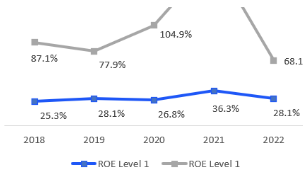
Global View, 2022

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.

- ROIC & ROE

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.

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

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%	32%

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.

Forecast

Income statement

- Revenue Model

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

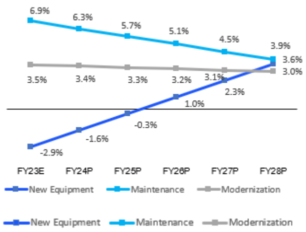
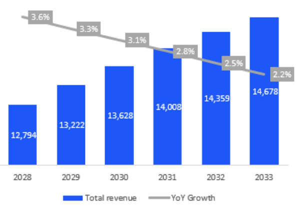


Figure 44: Total sales in mEUR and YoY growth (2023E – 2028P)



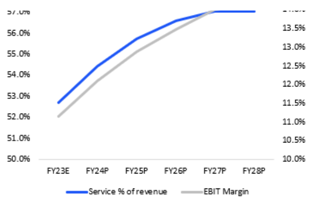
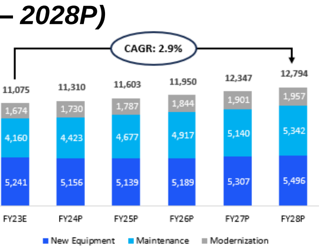


Figure 43: Sales by business in mEUR (2023E – 2028P)

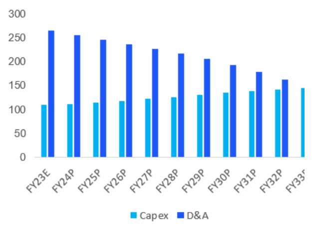


To project revenue, our analysis focuses on two distinct time frames for Kone. The first period spans from 2023 to 2028, emphasizing short-term projections. During this phase, we anticipate Kone's revenue mix to shift further towards Services due to the expanding installed base and the expected slowdown 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 or revenue forecast a sensecheck with the overall market growth, especially in the outer years, not covered by analyst estimates. Overall, we project Kone to 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. Therfore, 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 incorporate fluctuations in interest rates. Statutory tax rate remained at 20%, as no change of the tax code is expected in the future.

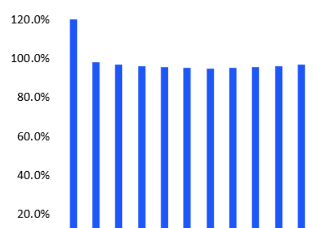
Figure 45: Capex and D&A in mEUR (2023E – 2033P)



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

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



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.

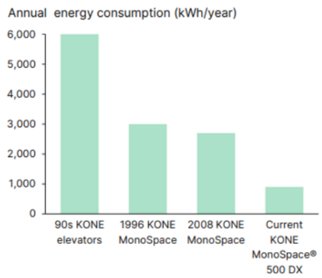
Scenario analysis

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.

Risks and ESG Performance

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.[7]

[7] KONE Corporation, Equity Story, 2023