REPORT

Global MedTech 2023 - Stem the tide

How companies can stop margins eroding with operational excellence and ESG performance

Roland Berger

Management summary

The Roland Berger Global MedTech Study 2023 takes a close look at more than 100 of the world's leading and mostly stock-listed companies in the sector. The industry saw profitability slide in 2022 and 2023 as energy and raw-material prices rose, inflation pushed wages higher and global supply chains faced disruption. To counter the continuing erosion of profit margins, companies have to reach for operational excellence in the short term – and environmental, social and governance (ESG) performance as a "license to operate" over the longer term.

Our MedTech Winners Analysis from 2019 to 2022 forms the heart of this report. It identifies winning MedTechs that saw both revenues and profits grow strongly and uses clear and robust performance indicators to differentiate between peers as "winners", "value generators", "profitless growers" and "underperformers". While the companies in the study sample are rather diverse in terms of product portfolio and service offerings , our analysis shows that winners share four crucial characteristics: 1) business leadership, 2) strategic coherence, 3) a proven ability to execute and 4) an appropriate size and financial position.

The Roland Berger Global MedTech Study 2023 highlights significant differences in profitability and margin trends. Companies headquartered in Germany are under the most pressure as their average EBITDA dropped to only 14 % of revenues in the first half (H1) of 2023 from 17 % in H1 2022. Germany had a higher share of underperforming companies than the rest of Europe, North America or Asia/Pacific – and its profitability gap to the US was stuck at eight percentage points, even as margins there dropped from 25 % to 22 % over the year to mid-2023.

Beyond a regional view, the MedTech segments of tools, lab and diagnostics solutions, dental technology, and medical aids and devices saw the highest share of winners. Companies in these segments built on favorable market conditions during the COVID-19 pandemic or on innovation-led market growth – or elements of both. Meanwhile, the surgical instruments and appliances segment took a hit during the pandemic as hospitals performed fewer elective procedures, while disposables and supplies manufacturers had to deal with inflationary pressures from early 2022.

Regardless of their sector, winning companies had a lower cost of goods sold (COGS; winners on average spent 43.7 % of revenues against underperformers' 54.6 %), longer leadership tenure (5.6 years against 3.6 years), and stronger balance sheets (with an average debt-to-EBITDA ratio of 1.8 against 5.1). These winning key performance indicators show the importance of operational excellence – but should not distract from the need to cement ESG measures.

The Roland Berger Global MedTech Study 2023 ends with some essential questions for executives:

1. Where does my company stand on the path to being a winner – and what does it need to do to deploy all winning characteristics for patients, customers, shareholders and employees?
2. How big are the gaps in operational excellence my company may display in areas from product development and manufacturing to the commercialization of products?
3. Does my company have a clear agenda for ESG performance that includes a well-defined ambition level and robust strategic initiatives that will drive it towards its goal?

By answering these questions and applying winners' best practices, all executives can steer their companies towards delivering consistently superior and rising shareholder returns again.

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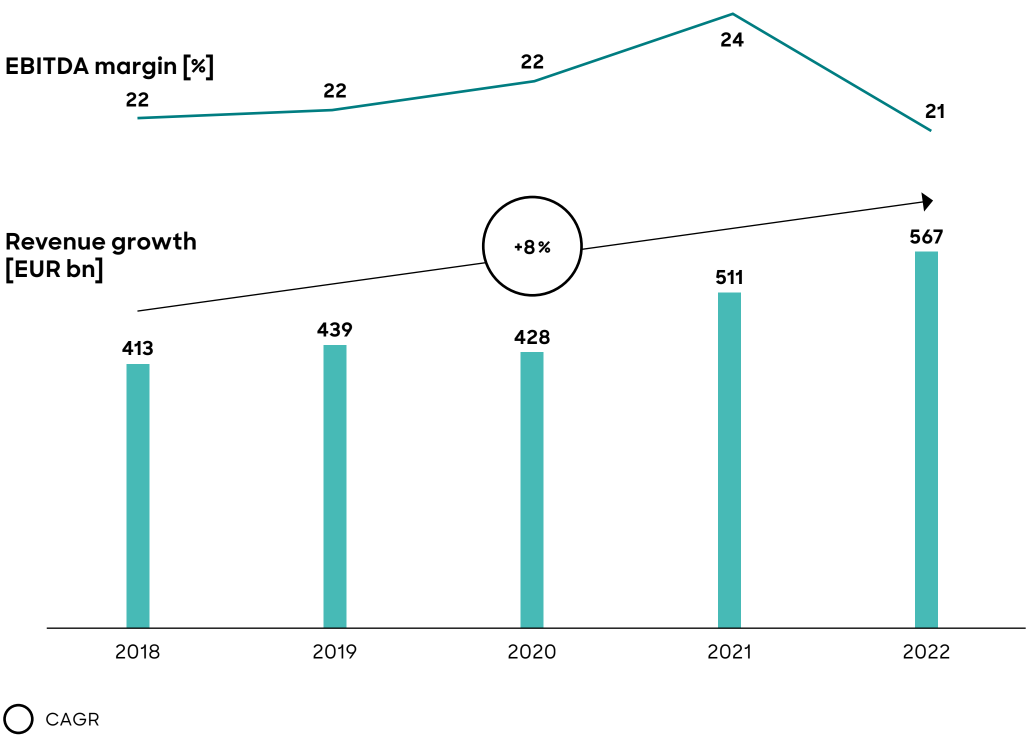
1 MedTech perspectives – Profitability remains under pressure

The global MedTech industry saw EBITDA margins drop three percentage points in 2022. As the world finally got a grip on the COVID-19 pandemic, this sharp dip was the result of geopolitically induced energy and raw-material price increases and inflation-driven salary rises. While companies tried to pass on higher production costs to customers, most did not manage to do so fully. As a result, MedTechs will have to focus even more on operational excellence and innovative pricing models that take into account product- and service-related value propositions. The MedTech industry will in the coming years be shaped by companies aiming for these goals, while unrelenting cost pressure on hospitals makes for a challenging customer environment. ▶ A

MedTech's profitability challenges have come even as overall revenues grew by just under 11% from 2021 to 2022 and average annual growth was consistently strong at 8% over the last five years. In Europe, cost increases after Russia's attack on Ukraine eroded the profits of companies with a strong footprint in the region including headquarters, major production and research and development (R&D) sites. As a result, the profitability gap between Europe-headquartered and US and Asia/Pacific competitors – which we identified in our last Global MedTech Report – widened further. European EBITDA margins averaged 17% of sales in 2022, seven points behind those of US companies and three points worse than the prior year. ▶ B

A **Post-pandemic margins dipped sharply as revenues continued to grow**
Financials of Roland Berger MedTech study sample [n=109], 2018-2022

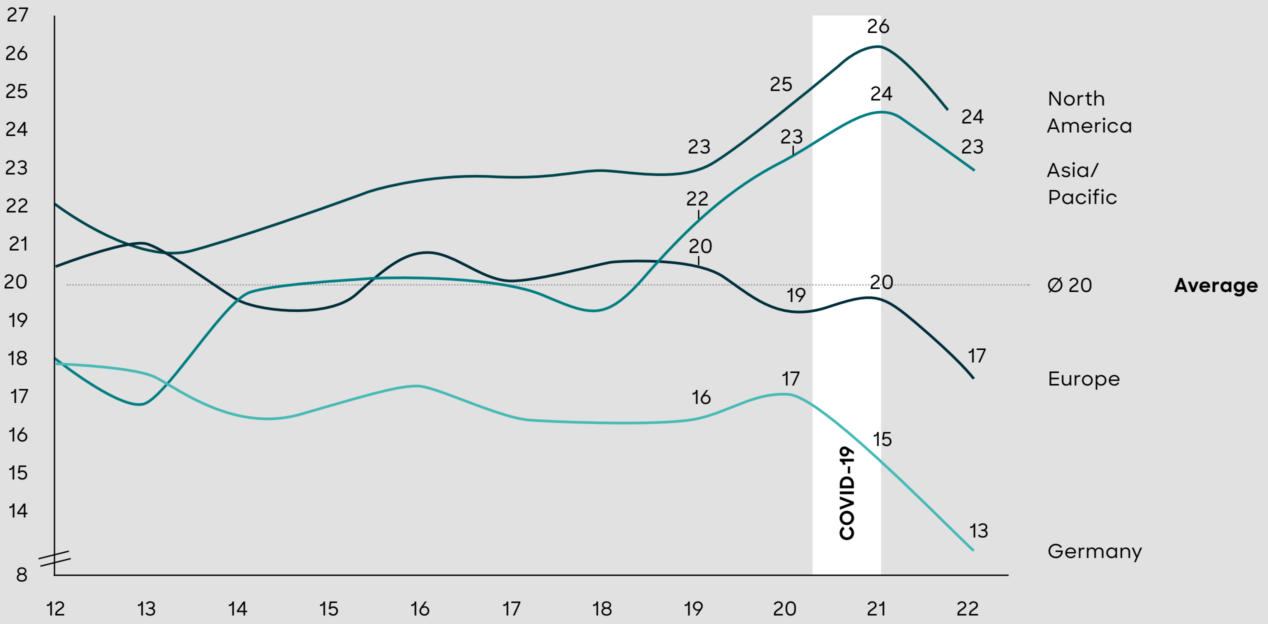


Source: CapIQ, Roland Berger

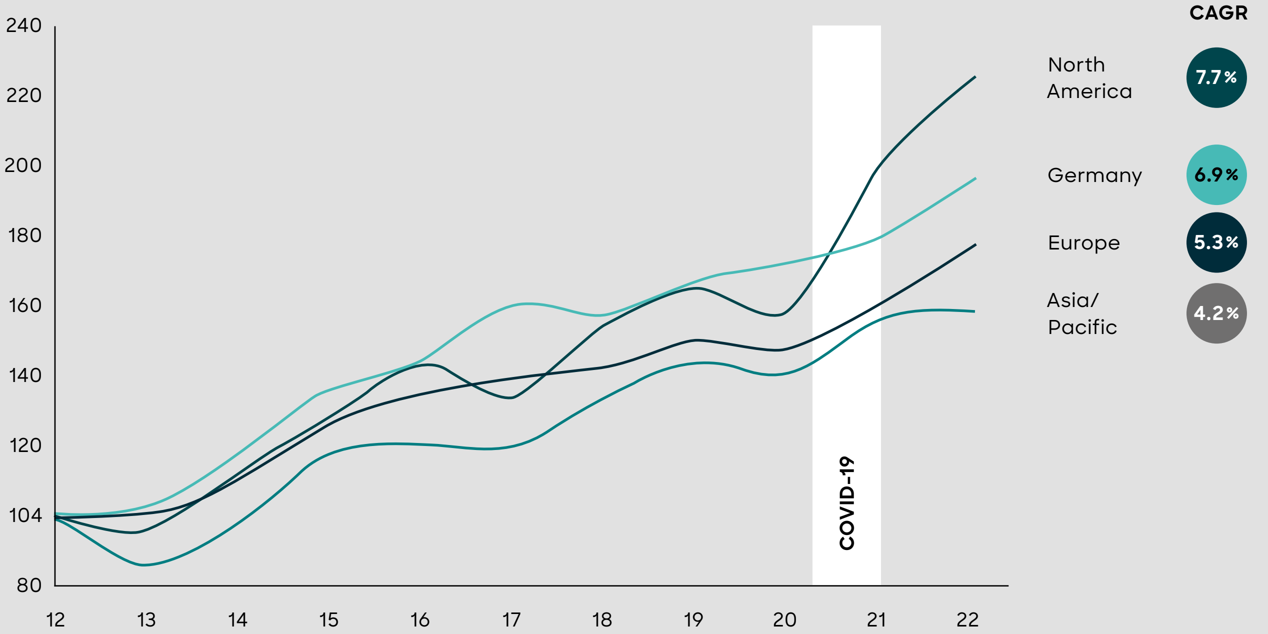
B Profitability gap: German MedTechs lag way behind North American and Asian rivals

Key performance indicators by region, 2012–2022

EBITDA margin [%]



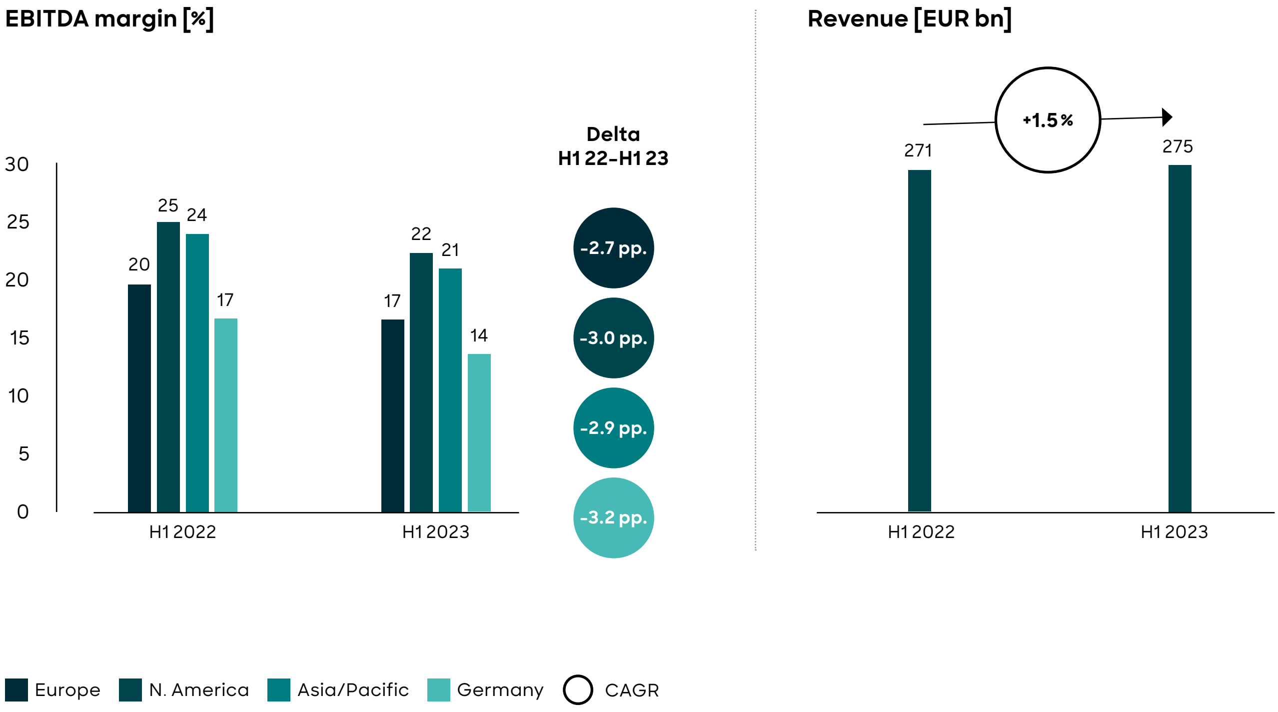
Revenue [index 100]



Source: CapIQ, Roland Berger

C Margins remain under pressure and profits look set to fall again as of 2023

Financials, H1 2022 vs. H1 2023



Source: CapIQ, Roland Berger

Germany-headquartered MedTechs face an even bigger challenge. With average EBITDA margins declining to 13% in 2022 from 15% in 2021, they boast the lowest profitability of the regional groups we identified – and the most protracted margin erosion, which started with the pandemic in 2020. With average EBITDA margin a full ten and eleven percentage points behind their Asia/Pacific and US competitors, respectively, German MedTechs have fewer means than these peers to invest in R&D, production and commercial operations.

European MedTechs absolutely have to master efficient operations, including a high degree of automation in production due to even higher inflationary pressures and energy costs. On top of this, German MedTechs can only reverse the trend by rethinking operational excellence more rigorously and focusing more resolutely on successful segments at the expense of less successful ones. Having said that, there are MedTechs based in Europe that continue to perform solidly – companies like Carl Zeiss, Siemens Healthineers, Straumann, Sonova and Tecan. Later in this study, we analyze what recipes leading MedTech companies are following to stay ahead of regional and global competitors.

MedTechs headquartered in Asia/Pacific, on the other hand, saw the smallest decline in profitability, with average EBITDA margins softening to 23% of revenues in 2022 from 24% the year before. They were able to maintain very solid profitability despite suffering the effects of a COVID-19-hit Chinese economy and the slowest revenue growth of all the MedTech regions. Companies like Mindray, IntCo Medical Technology, United Imaging and Lepu were even able to increase EBITDA margins significantly and sustain them at high levels as they continued to benefit from partly COVID-19-driven demand for product platforms launched between 2018 and 2021. All of these companies have solid margins well above 20% and could increase profitability even further as their product portfolios expand and they enter major markets across the world.

US MedTechs remained the most profitable companies in the industry, with average EBITDA margins running at 24% of revenues in 2022, down from 26% in 2021. They profited from continued revenue growth in the US, the largest MedTech market, and only modest energy-price rises. Stand-out companies boast strategic coherence and standard-setting, innovation-driven product portfolios. This allows the likes of Intuitive Surgical, Stryker and Abbott to focus on business leadership in their chosen fields – respectively, robot-assisted surgery, next-generation orthopedics and associated equipment, and (among other things) automated diabetes care. Our outlook for full-year 2023 sees a further decline in profitability. H1 2023 EBITDA margins in all regions were three percentage points lower than H1 2022, as raw material prices, energy costs and salaries continued to sap profits. Germany-headquartered MedTechs, for example, reported average margins of only 14% of revenues – and found little to cheer in the one-point increase over H2 2022, as H1 profits are traditionally higher in MedTech. Industry revenue grew only 1.5% from H1 2022 to H1 2023, considerably below the medium-term industry average of just under 8% per year. This indicates that MedTechs will have to continue dealing with a challenging market environment for the foreseeable future. ▶ C

"The profitability gap between European companies and others widened further. European EBITDA margins averaged 17% of sales in 2022, seven points behind those of US companies and one point worse than the prior year."

Marco Bühren, Principal

MedTech companies' most recent financial reporting shows that the profits of larger **electromedical and equipment** suppliers are currently under the strongest pressure. The EBITDA margins of this segment, which is reliant on significant capital expenditure by hospitals, fell by two percentage points to 15% from the end of last year to the middle of 2023. Companies such as Siemens Healthineers, Philips, Getinge and Olympus were affected by this development. ▶ D

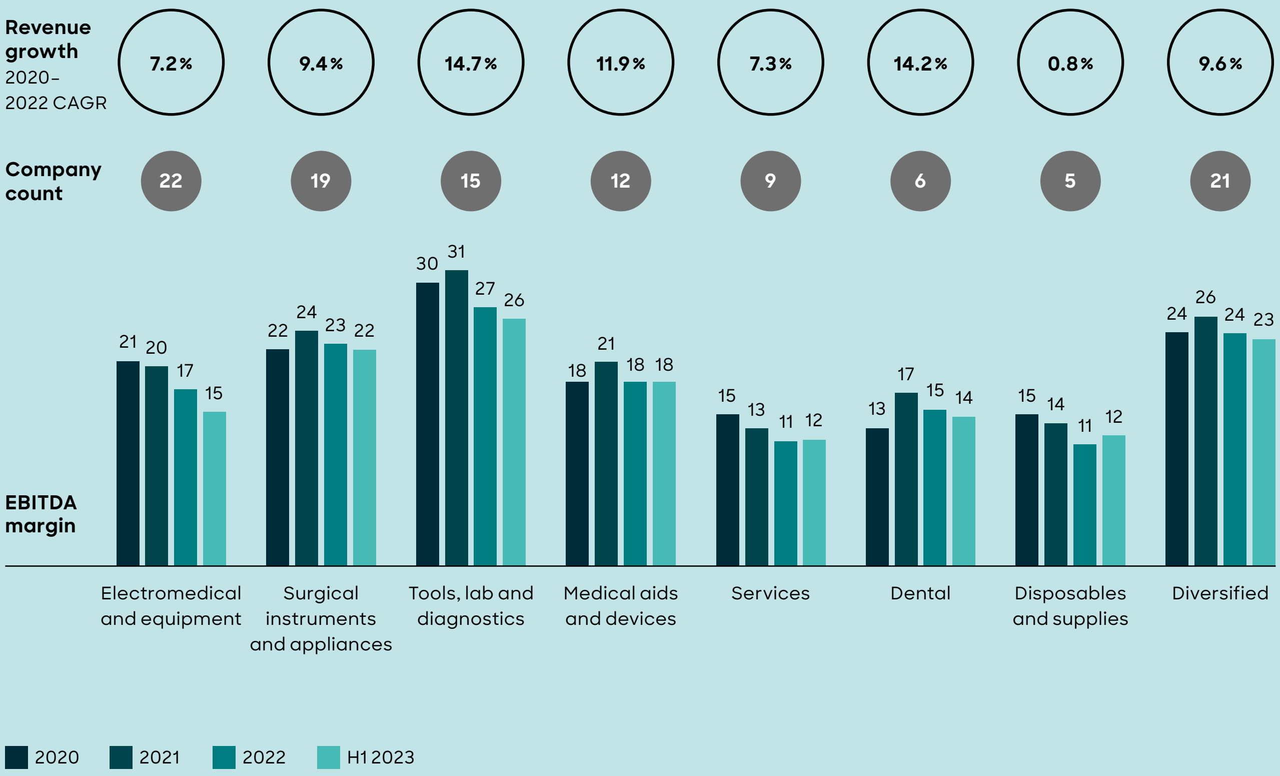
The **tools, lab and diagnostics segment** remained the most profitable part of the industry. But H1 2023 average margins of 26% were one point below 2022 margins and five points off all-time highs seen in 2021, when authorities worldwide were testing for COVID-19 infections.

Dental segment margins also fell by one point to 14%. Innovation and digitalization have, for example, seen significant improvements in companies' service portfolios. Resulting strong revenue growth has in part countered the effects of fierce competition and significant bargaining power on the customer side, which have traditionally kept margins in this segment lower.

But the segments with the lowest margins remain **services** and **disposables and supplies**, which have respectively been suffering under recent inflation-induced salary increases and limited product differentiation. Both segments were the only ones that could

D Only two of eight MedTech segments saw better margins in the first half of 2023

Key performance indicators by segment [%]



Source: CapIQ, Roland Berger

stabilize – and even slightly improve – margins in H1 2023. Companies in both fields appear to be profiting from performance-improvement programs that have, for example, led to more automation and headcount reductions.

Meanwhile, the profitability of **surgical instruments** and **medical aids and devices** suppliers has fallen from pandemic-driven highs in 2021. But both segments do appear to have stabilized recent margin declines to respectable pre-COVID levels of respectively 22% and 18% of sales.

Eroding margins are a clear sign of the increasing pressure the MedTech industry is facing – and financial results show clearly that some companies are faring better than others. This tough business environment makes the question of what leading companies do better than laggards a crucial one. The next chapter is a deep, quantitative analysis of key performance indicators. It identifies best practices and strategic characteristics that set apart the industry's "winners".

2 Industry winners – Diagnostics still on top, Asia on the rise

The most successful MedTech companies have allowed the industry to continue delivering strong returns despite declining profitability. MedTechs's total shareholder returns (TSR) from dividends and stock-price rises averaged 10.4 % a year between Q3 2018 and Q3 2023 – almost a third more than the returns of the S&P 500 index that tracks the largest US companies and almost double those of the MSCI World index comprising 1510 global large- and mid-cap companies. ▶ E

E MedTech still performs with better shareholder returns than other industries
Total shareholder returns [index 100], Q1 2018–Q3 2023

Note: N = 109 for MedTech industry study sample   Total Shareholder Return: $Price_{end}$ - $Price_{begin}$ +Dividends / $Price_{begin}$

Source: CapIQ, Roland Berger

"To increase shareholder returns, companies have to embrace operational excellence in the short term and environmental, social and governance (ESG) performance over the longer term."

Thilo Kaltenbach, Senior Partner

Quickly adjusting to the "new normal" of high raw-material and energy prices and supply chain uncertainties in 2022, top-performing MedTechs managed to recover – and even benefit – from market conditions in 2023. Roland Berger analyzed the 109 largest and mostly stock-listed MedTech companies to identify the top performers and the attributes that make them successful. The companies analyzed come from around the world and each one fits into one of eight segments:

1. Electromedical and medical equipment companies like Boston Scientific, Siemens Healthineers and Philips
2. Surgical instruments and appliances makers like Coloplast, Zimmer Biomet and Convatec
3. Tools, lab and diagnostics companies like Thermo Fisher, Qiagen and bioMerieux
4. Medical aids and devices companies like Sonova, Dexcom and Smith & Nephew
5. Services providers like Fresenius Medical Care, DaVita and Oak Stree Health
6. Disposables and supplies companies like Paul Hartmann, Owens & Minor and Hogy Medical
7. Diversified multi-segment players like Medtronic, B. Braun and Abbott
8. Dental solutions companies like Straumann, Dentsply and Align

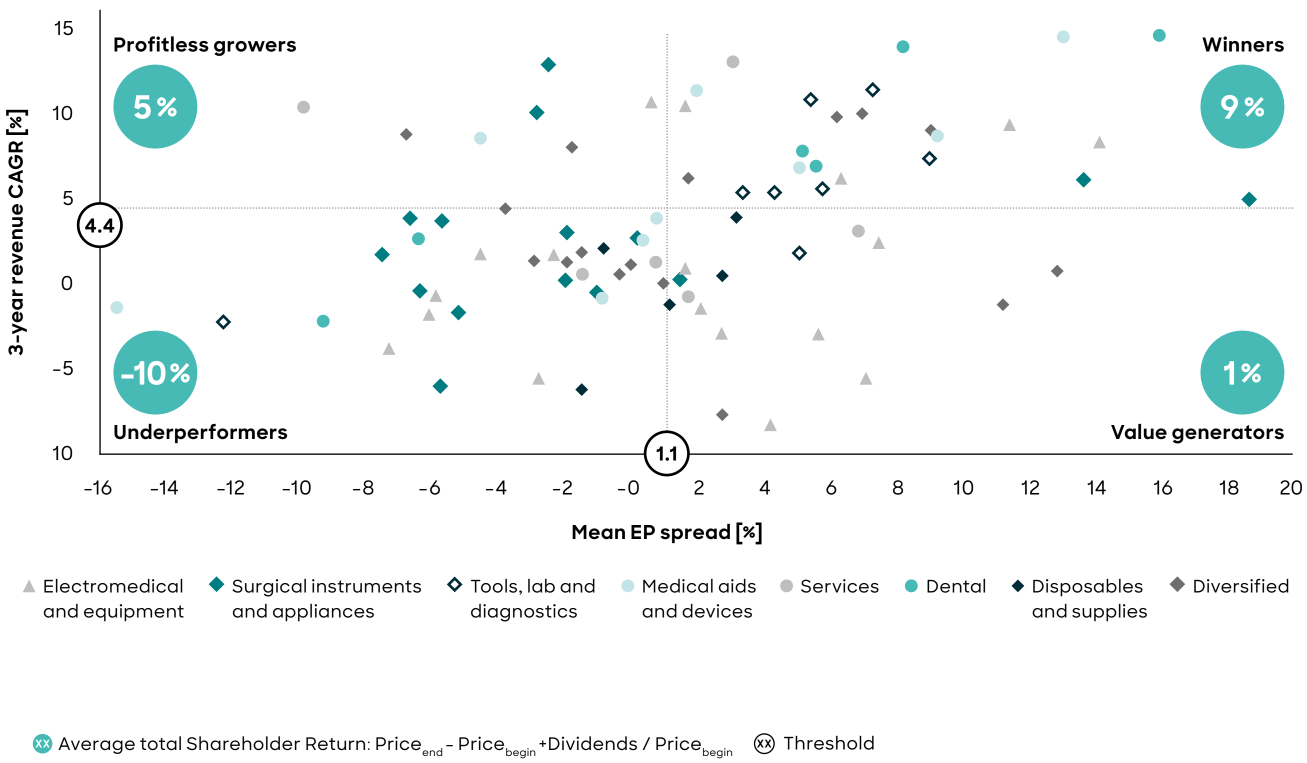
Roland Berger assessed the financial performance of each company by compiling three key performance indicators – TSR, the compound annual growth rate (CAGR) of revenues, and mean economic profit. This allowed us to identify the attributes that make some companies more successful than others. This, in turn, allowed us to identify the common strategic characteristics all MedTech companies should adopt to achieve – or maintain – MedTech industry leadership.

Top-ranking MedTech companies – "winners" with both high profit and revenue growth – achieved an average TSR of 9% per year between 2019 and 2022, while the lowest-ranking quartile – the low-growth, low-profitability "underperformers" – saw TSR shrink by 10%. This disparity allowed us to identify 1) the companies that consistently outperform peers, 2) the factors that drive their industry-leading TSRs, and 3) the strategic attributes these winners have in common. ▶F

Our Winners Analysis took a company's past performance as a blueprint for future strategy. It rated a company's value-creation potential by taking past CAGRs of revenue as the best proxy for future growth, and rated its economic profitability (EP) by calculating the difference between its return on invested capital (ROIC) and the weighted average cost of this capital (WACC). MedTech's average EP of 1.1% from 2019 to 2022 shows that the industry as a whole was able to refinance its capital, even if a large number of companies had higher capital costs than returns.

So-called "profitless growers" – companies with higher revenue growth but lower profitability – achieved an average TSR of 5% per year, notably better than so-called "value generators" – MedTechs with lower growth but higher profitability – which averaged TSRs of just 1%. Aside from rewarding winners, investors appear to like MedTech companies that sacrifice profitability for higher revenue growth – a key difference to our recent study of the pharmaceuticals industry, which found investors preferred companies that sacrifice revenue growth for higher profits.

F **About one third of winners make tools, lab and diagnostics solutions**
Financial performance matrix (clustered by product segment), 2019–2022



Source: CapIQ, Roland Berger

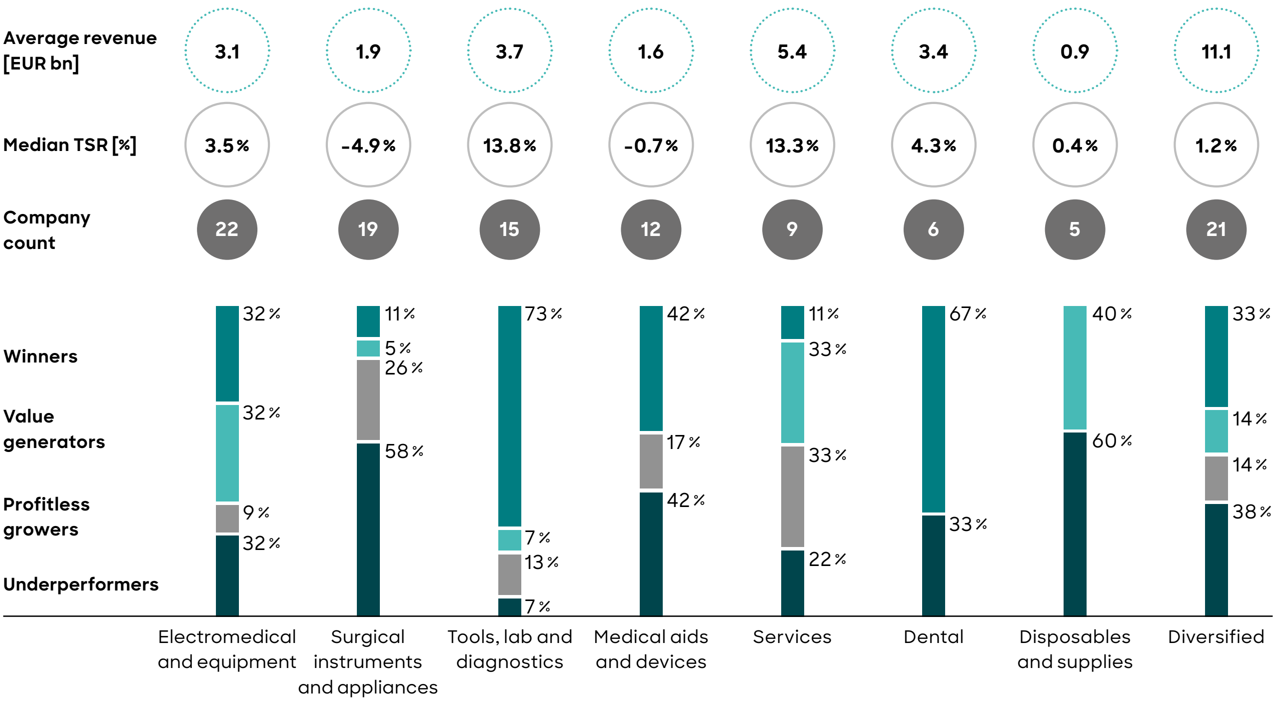
While our Winners Analysis uses past performance to assess a company's future potential, it is crucial to note that past returns are no guarantee of future ones. Our analysis quantitatively and qualitatively assesses companies' past performance to identify shared winning characteristics at that moment in time – it provides no investment advice as it cannot predict future risks and volatility. But by comparing industry segments and regions it can render new insights into past relative performance – for example, the fact that tools, lab and diagnostics players and companies based in Asia had the highest share of high-profit and high-revenue-growth winners between 2019 and 2022.

Electromedical and medical equipment companies found their way into all four categories by performing very differently from 2019 to 2022. Winning companies in the field include United Imaging, a fast growing China-based company that is using attractive pricing to tap into new segments and compete with European imaging incumbents Siemens Healthineers and Philips. Another example of a winner is US-based ResMed, a leading manufacturer of equipment for sleep apnea and chronic obstructive pulmonory disease (COPD) treatments. A shared characteristic of winning players in the segment was that they used their platform technology to outgrow peers.

The surgical instruments and appliances segment had the second highest share of underperformers. The companies were hit in the COVID-19 years 2020 and 2021 as hospitals

G Most underperformers make surgical instruments and disposables

Financial performance by product segment, 2019–2022



Source: CapIQ, Roland Berger

used fewer surgical instruments after postponing elective procedures. One notable exception was the winner Edwards Lifesciences, a US company that uses cutting-edge technology to make instruments for treating structural heart disease as well as providing critical care and surgical monitoring. ▶ G

The tools, lab and diagnostics products segment maintained a very positive performance fueled by COVID-19. The positive effects of sales and margin increases were visible well into 2022. Examples of companies that performed very strongly are Sartorius, Thermo Fisher and Tecan.

In the medical aids and devices segment, hearing aid manufacturers Sonova, Demant and GN Group were among the winners. All three companies profited from aging populations driving demand for help with hearing problems – and there were direct competitors that did not benefit in the same way. Another winner was Dexcom, a company offering next-generation diabetes care through a continuous glucose-monitoring platform. Platforms can be very lucrative, but they demand strategic coherence and stamina, given that development can take almost a decade.

Services companies saw only US-based Ensign Group, a provider of post-acute healthcare services, make it into the winners quartile. This people-intensive segment faces challenges in finding skilled talent, particularly nurses, given relatively low salaries. In 2022, a number of companies had to contend with inflation-driven salary increases that put pressure on margins.

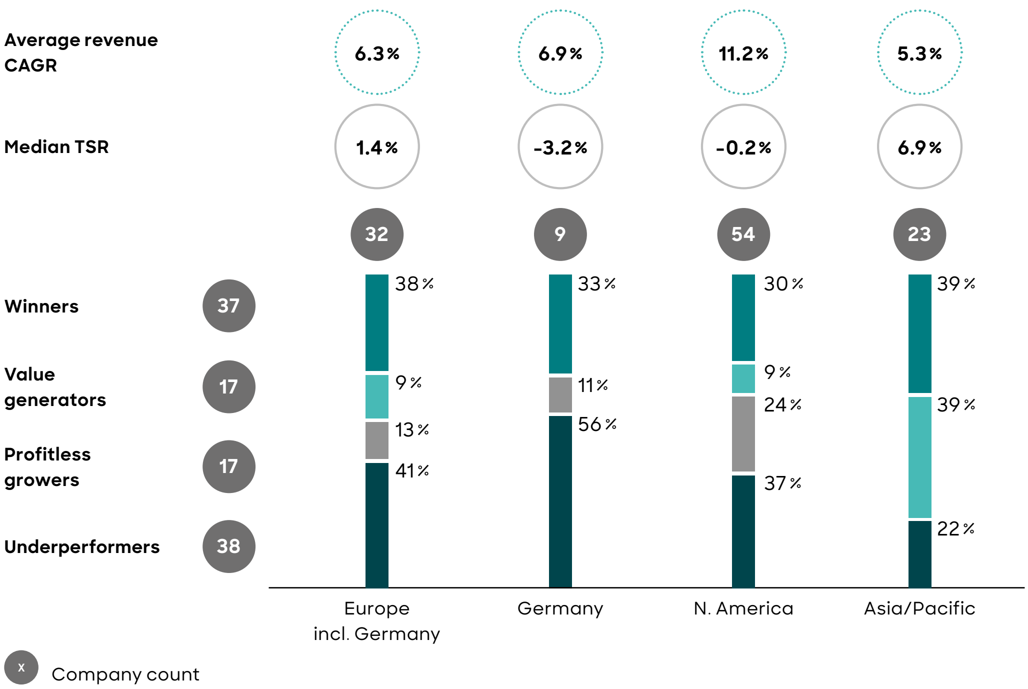
Disposables and supplies companies were either value generators or underperformers. Companies in this price-sensitive segment remain under pressure to reassess their business models. Digital and service-based offerings would allow them to differentiate product offerings – and increase the efficiency of their operations by introducing automation where possible.

Diversified players were either very successful winners or unsuccesful underperformers. One winning company was Danaher, which performed extremely well despite serving customers in very different business areas. Part of its success is stringent and coherent management, centered around people, culture and processes. Another winner was Stryker, which leads by innovation in fields as diverse as medical and surgical equipment, orthopedics, neurotechnology and services.

The dental solutions segment had almost the same share of winners as tools, lab and diagnostics. Given favorable demographics and successful digitalization of the business, companies participating in this segment stand to grow significantly. Winners include Straumann, focused on innovative implants, and Align, which has developed a platform system for orthodontic treatments.

A regional analysis, meanwhile, shows an alarming trend. While Asian and particularly Chinese MedTechs have the highest share of winning companies, companies headquartered in Germany have the highest share of underperformers. While a large share of German MedTechs is struggling, companies like Carl Zeiss and Sartorius fall squarely into the top quartile of winners. ▶ H

H Almost 80% of Asian companies are winners or value generators
Financial performance per region, 2019–2022



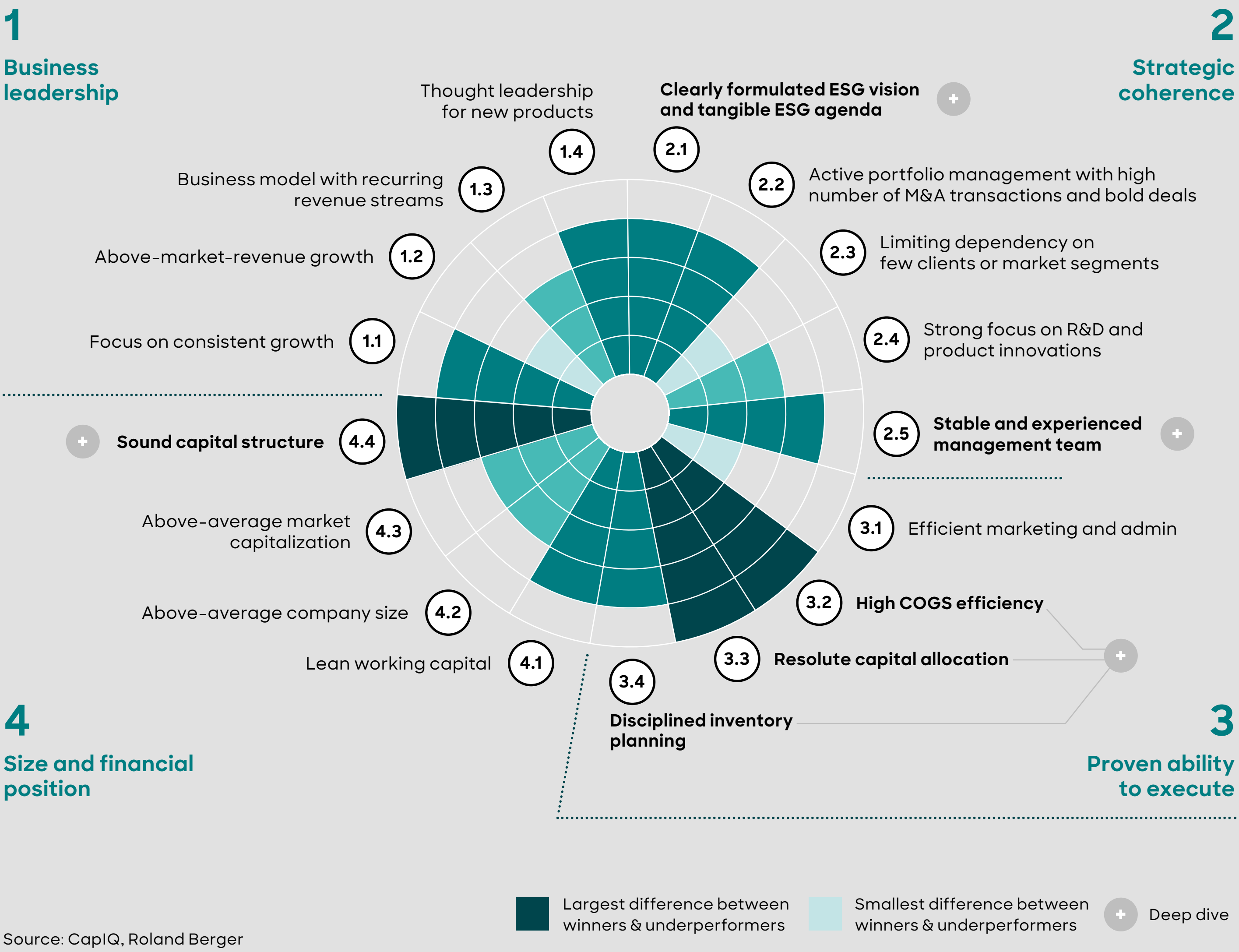
Source: CapIQ, Roland Berger

3 Corporate winners – Efficient ops, compelling ESG vision

Our analysis of the selected financial data and operating figures highlights strategic imperatives common to winners. There follows some general findings from the key indicators described above. More detailed deep dives about winning operations and environmental, social and governance (ESG) performance follow in the next chapters. All indicators are analyzed quantitatively to give an objective understanding of the differences between winning and underperforming companies.

Winners succeed because they identify and pursue strategic goals

Strategic imperatives for MedTech companies – Summary

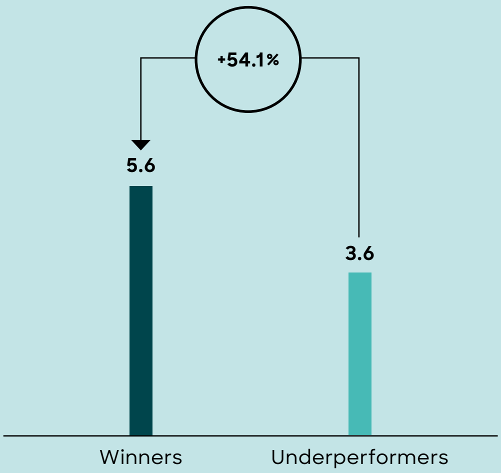


Source: CapIQ, Roland Berger

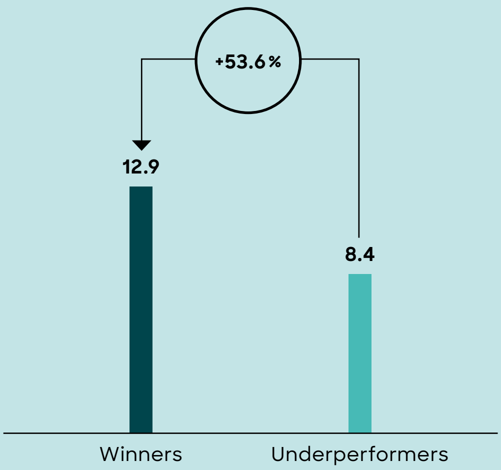
J Leadership tenure and overall time at company are key success factors

Management board characteristics characteristics, 2019–2022

Management tenure [years]



Management's time with the company [years]



Source: CapIQ, Roland Berger

In short, winners are companies that strengthen their competitiveness by striving for continuous and above-market-revenue growth through innovation, strategically coherent investments and best-in-class cost structures. To catch up, value generators should consider investing more in expanding their product portfolios and markets, profitless growers need to generally enhance performance and productivity to stimulate more profitable growth, while underperformers should go as far as considering strategic overhauls to improve both revenue growth and profitability.

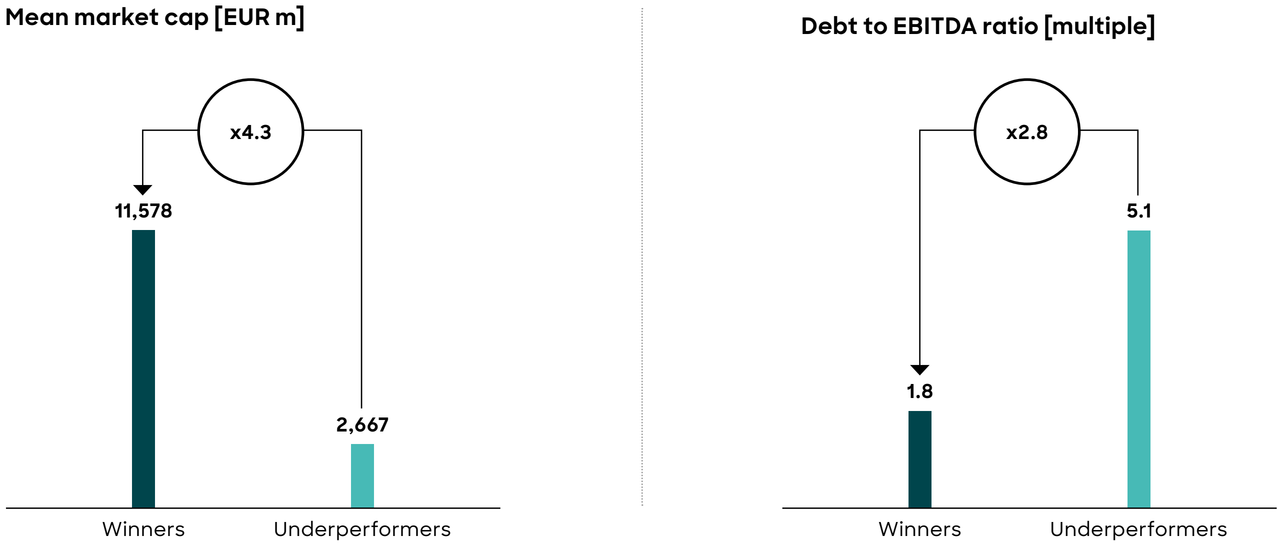
An important building block of strategic coherence is a stable and experienced management team. Long management tenure leads to a deep understanding of the company's strengths and weaknesses. Board members have on average served their company two years longer at the time of being promoted to its leadership – and on average serve two years longer at this level. ▶ J

Size and financial position is also a shared charactistic of winning companies. Our analysis of market capitalization and the ratio of debt to EBITDA highlights the importance of access to comparatively cheap capital on stock markets as well as solid profitability and balance-sheet management. ▶ K

Winners also continue to display a proven ability to execute. Winning and underperforming companies saw the average cost of goods sold (COGS) increase from the period 2018-2021 to 2019-2022. But winners were able to contain these rises more than underperformers, which meant that the difference in COGS burden widened between the two groups. At the same time, underperforming companies cut sales, marketing and general expenses (SG&A) by more than seven percentage points (pp.), indicating performance improvement initiatives, including headcount reductions. But the next chaper shows that SG&A reductions have not kept pace with the increase in COGS over the last decade. Operational efficiency is a crucial area MedTechs have to look at. ▶ L

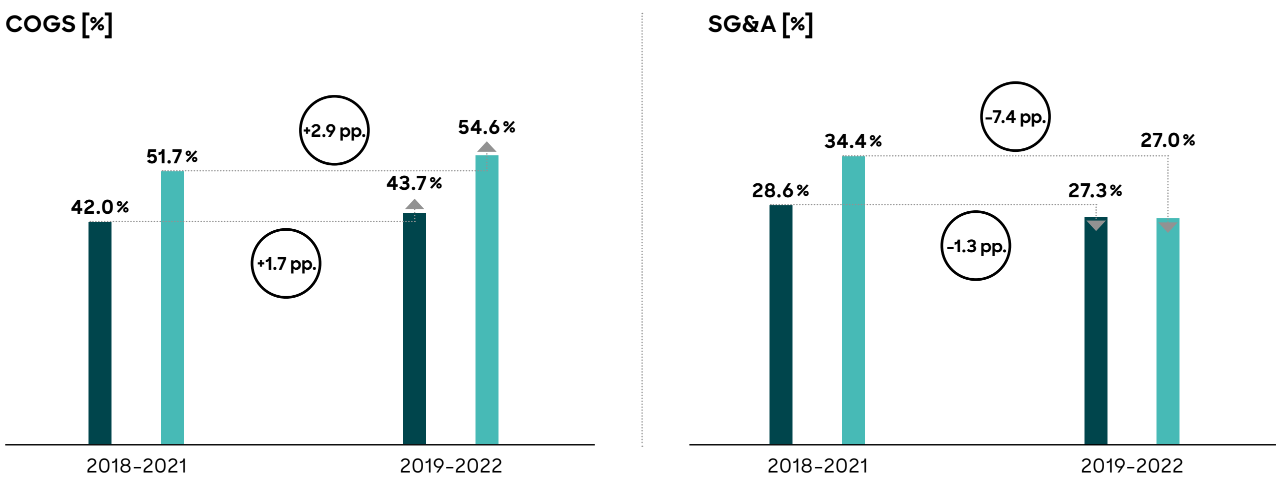
K Winning companies have higher market cap and lower debt levels

Financial position, 2019–2022



L Underperformers have to deal with faster increases in cost of goods sold

Average COGS and SG&A in percentage of revenues,
2018–2021 vs. 2019–2022



Winners Underperformers

Source: CapIQ, Roland Berger

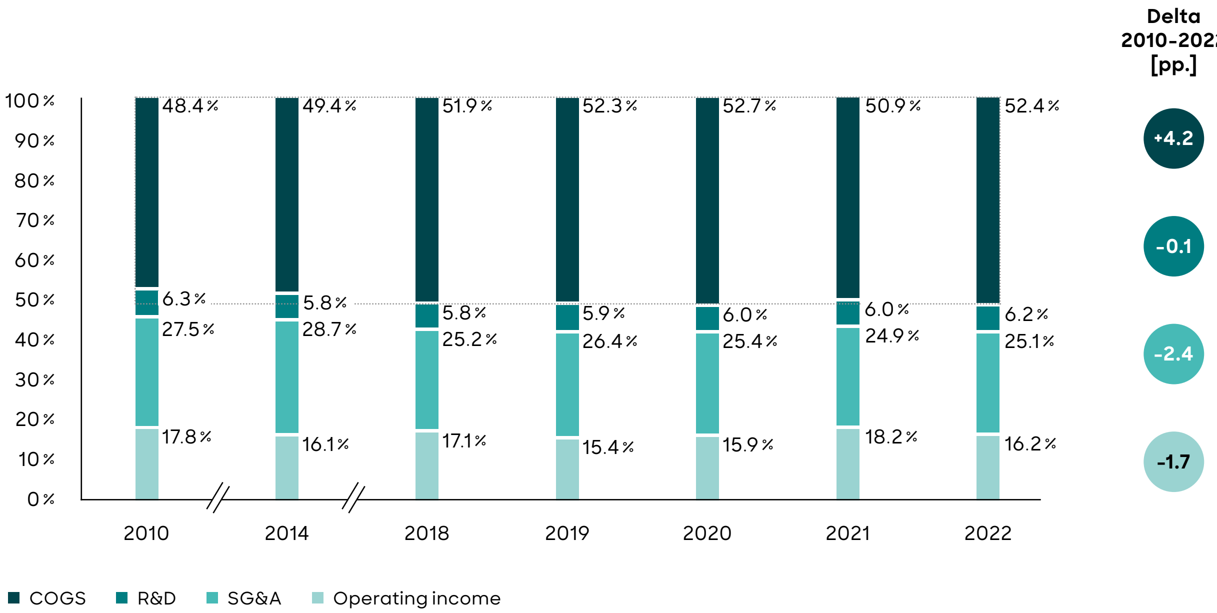
4 Winning remedies – Short-term operational excellence

Winning MedTech companies stand out from their peers in terms of key operational and financial metrics. Although they operate in the same challenging market environment – which includes long-unthinkable risks like war and disrupted supplies – MedTech winners substantially outperform their peers when it comes to the cost of making their products, the investments they allocate to buying, maintaining and improving fixed assets, and their inventories. Winners are not immune to broader trends affecting the industry, as described below. But they are noticeably better at reducing their impact, as the conclusions to this chapter highlight.

The MedTech industry's recent decline in profitability has to be seen in light of a decade-long increase in COGS. From 2010 to 2022, COGS on average increased by more than four percentage points to 52.4% of revenues. Beyond recent inflationary trends, most notably increasing raw-material and energy costs and rising salaries, MedTech companies have over a longer term been contending with increasing product complexity. Unable to pass all resulting cost increases on to customers, companies have fought to maintain margins by cutting SG&A spend by 2.4 points to 25.1% from 2010 to 2022. ▶ M

Interestingly, underperforming MedTechs in recent years have placed a greater emphasis on SG&A cost reduction than winners. This suggests leading companies were more successful at containing COGS and slimming down overhead functions. Their focus on this kind of strong cost control also seems to have paid off in allowing them to successfully pass input-price increases on to their end customers.

M **Rising COGS have put pressure on MedTech profits for over a decade**
Development of MedTech P&Ls, 2010–2022

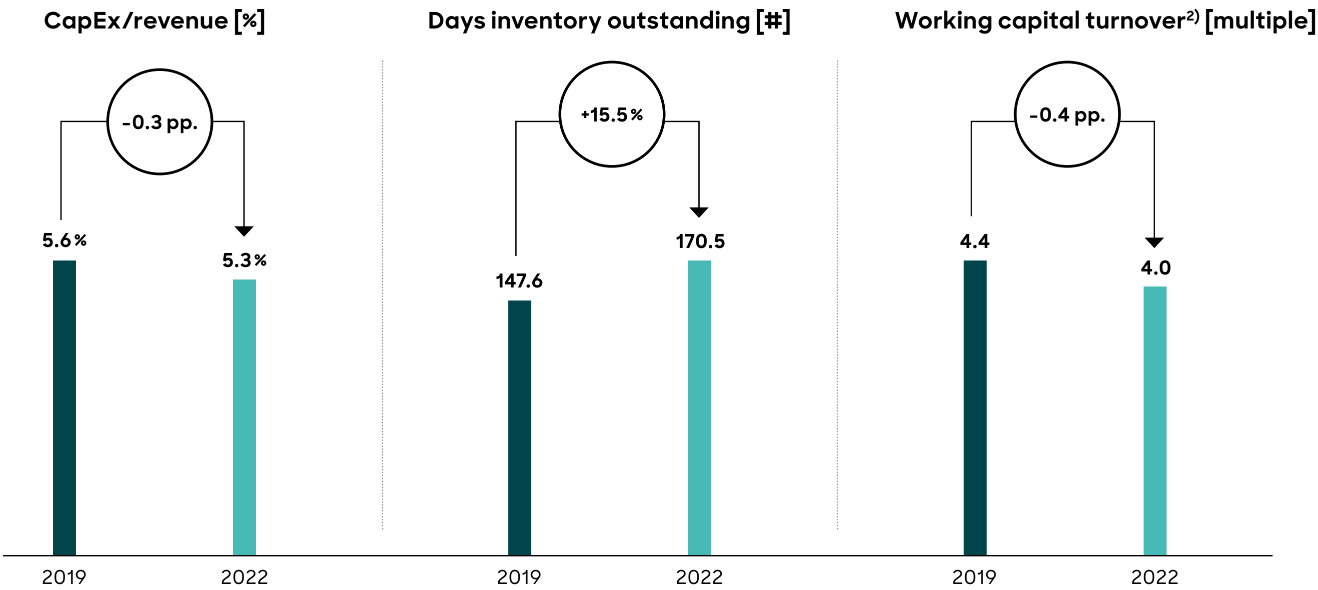


Source: CapIQ, Roland Berger

Cost pressures have recently gone hand in hand with an increasingly volatile market environment. Supply chain disruptions that started with the COVID-19 pandemic and were extended by Russia's attack on Ukraine have led to unprecedented worries about supply – and uncertain outlooks have made companies more cautious about investments. From 2019 to 2022, MedTechs cut average capital expenditure (CapEx) from 5.6% to 5.3% of revenues. ▶ N

Supply chain uncertainties also drove days of inventory outstanding (DIO) up by almost 16% over the same period – from an average 148 days in 2019 to 171 in 2022. This lowered the industry's ability to generate sales from capital employed day to day, as its average working capital turnover – net revenues as a proportion of average working capital employed – declined from 4.4 times to 4.0.

N **MedTechs used working capital less efficiently as they increased inventories**
Average CapEx, DIO[1] and working capital figures, 2019 vs. 2022



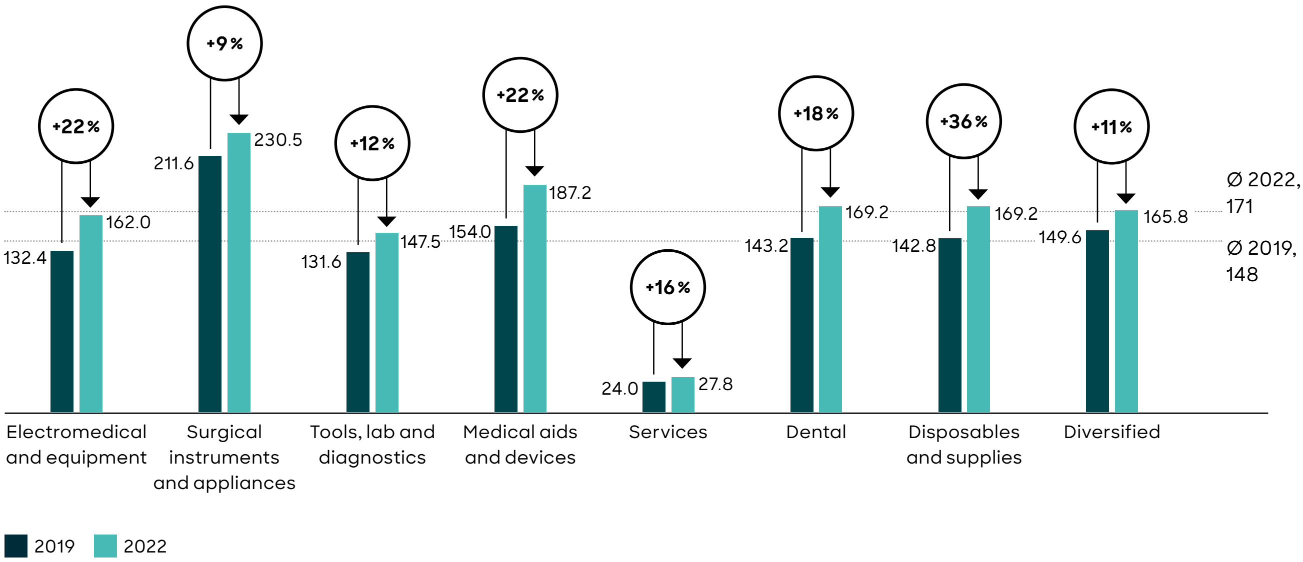
[1] DIO = Days inventory outstanding defined as (average inventory / cost of goods sold) x 365
[2] Working capital turnover defined as revenue / working capital

Source: CapIQ, Roland Berger

While this trend hit all segments, disposables and supplies manufacturers as well as medical aids and devices companies saw the highest inventory increase – although surgical instrument makers still retain the highest inventory levels of all MedTech companies. Looking ahead, MedTech companies need to readjust and level down inventories to stay competitive, especially in light of higher interest rates. ▶ O

Companies in all segments raised stockpiles as risks to supply chains rose

Days inventory outstanding by segment, 2019 vs. 2022 [# days]



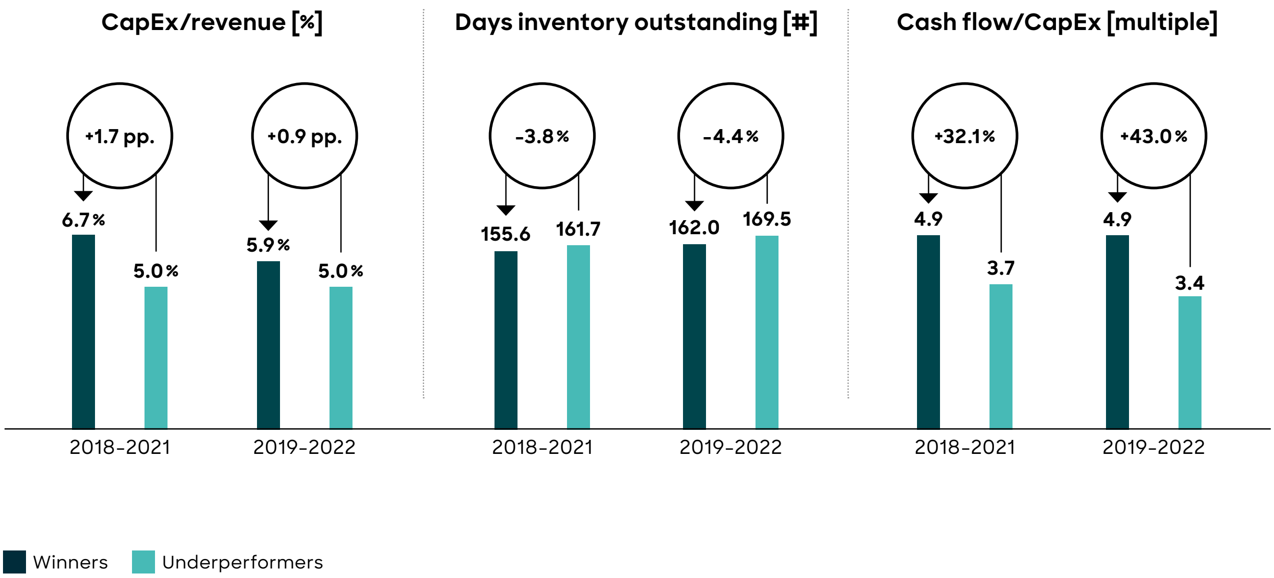
Source: CapIQ, Roland Berger

Winners also allocate more CapEx and need to continue investing to stay ahead. These companies continue to invest more in CapEx than underperformers. On average between 2109 and 2022, winners invested nearly one percentage point more CapEx as a proportion of revenues than underperformers. But the gap between both groups narrowed recently as the decline in CapEx by underperformers appeared to bottom out at around 5% of revenues. To stay ahead, winners should carefully reconsider their investment plans and risk appetite and raise CapEx again. ▶ P

Furthermore, the entire industry has seen a substantial increase of inventory levels over the past five years to mitigate potential supply chain disruptions. Winners still tend to perform better and manage their inventory levels more efficiently, keeping on average 5% less than underperformers (162 DIO vs. 170 DIO). Days inventory outstanding (DIO) represents the number of days a company requires to sell off all of it inventories. While winners also increased their stocks recently, the gap between both segments actually increased again. Considering high inflation rates, a high DIO ratio signals that a company's cash is tied up in inventory for a longer period of time. Looking ahead, MedTech companies will increasingly have to pay attention to more efficiently managing inventories.

Finally, the superior performance of winners in terms of working capital management, inventory and investment strategies leads to them outperforming peers when it comes to cash generation. While generally having higher CapEx investments, the cash flow they generate as a proportion of CapEx is about 30% higher (4.9 vs. 3.4) than underperformers. This is also a strong signal to capital markets, as it provides a strong foundation for ongoing profitable growth.

P **Winners have increased their lead over laggards in generating cash flow**
Average CapEx, DIO and cash flow figures, 2018–2021 vs. 2019–2022



Source: CapIQ, Roland Berger

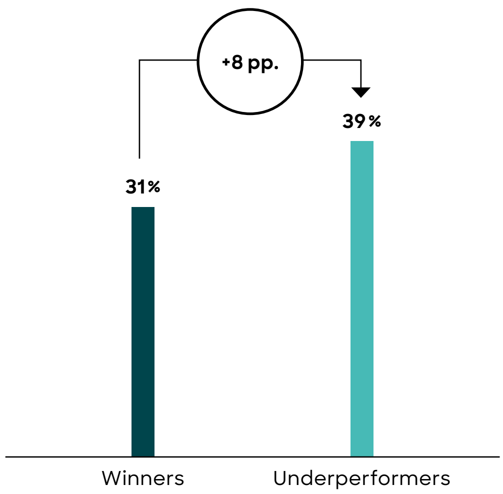
5 Winning remedies – ESG performance as a license to operate

Apart from short-term operational excellence, MedTech companies need to set the points for successful environmental, social governance (ESG) measures in the longer term. Sustainability in the environmental dimension is driven by product and platform specifics and has to be integrated in product development and operations. That means MedTechs have to define their strategy and ensuing implementation today in order to have a chance of improving their ESG performance tomorrow. Rising customer sustainability expectations and the increasing prevalence of industry standards – such as the ESG assessment platform EcoVadis, the ISO 14001 environmental management system, or the ISO 45001 occupational health and safety management system – will make it mandatory for MedTech companies to significantly increase their efforts in all ESG areas.

In many healthcare markets, hospital policies or national regulations require suppliers to document their ESG efforts as a precondition for tendering for contracts. Sustainability has quite literally become a license to operate in ever more markets. Leading MedTech companies have the opportunity to use their prowess in ESG as a competitive advantage. They can, for example, help shape regulations and tender requirements to lock out peers with lower ESG ambitions. Robust ESG performance will in the future be a determining feature of businss leadership.

Morningstar Sustainalytics corporate sustainability ratings show that MedTech winners already face significantly lower risk from ESG-related issues – their risk rating of 31% is eight points below that of underperformers. This indicates that winners have managed to reduce exposure to ESG-related risks, for example by implementing measures to reduce emissions over the coming years. ▶ Q

Q **Winners have better ESG performance and are less exposed to sustainability risks**
ESG score [top n % of MedTech firms in ESG score, as of October 2023]



Source: Morningstar Sustainalytics

To consider ESG from a strategic viewpoint, we tailored the most important indicators in all three ESG fields to the MedTech industry. Our Roland Berger benchmarking database shows that companies still have significant room to grow. Rising environmental standards will make emissions reduction, waste and pollution avoidance, and the use of sustainable materials important trends in MedTech. ▶ R

MedTech companies' social responsibility will be graded on their efforts to ensure equal access to healthcare. This will challenge them to find innovative business models that, for example, aim to make their products available in developing countries. Companies' governance efforts will be measured in terms of patient safety and data privacy and become critical components for success. With increasing regulation through measures like the EU's Medical Device Regulation and its proposed ban of per- and polyfluoroalkyl substances (PFAS), MedTechs will have to place an ever greater emphasis on their regulatory, quality and production-related processes.

The average performance ratings across the 18 ESG indicators are based on a proprietary Roland Berger benchmarking of the 25 largest MedTech companies. While leading US-based MedTechs have been scoring decently in social categories such as diversity and inclusion or access to care, the MedTech industry as a whole is still in the early stages of working out the environmental dimension of ESG.

While companies have set some goals in areas like waste and pollution, their efforts to use sustainable materials and sourcing as well as the use of renewable energies are relatively modest compared to standard-setting industries. In all fairness, MedTech companies have to contend with long registration cycles, which means any major impact regarding waste and pollution reduction will typically come with product-related changes that can require the redesign of whole platforms. But in order to hold a "license to operate" in five to ten years, MedTech companies need to focus on embedding environmental measures in their product development processes today.

Looking towards 2024, market conditions are expected to remain challenging for MedTech companies. While reaching for operational excellence in the short term, MedTech companies need to set the agenda for ESG success, developing critical ambition levels for each of the three dimensions and conceiving concrete measures.

R ESG benchmarking reveals huge optimization potential for MedTechs

Average ESG performance in the MedTech industry

Source: Roland Berger MedTech ESG benchmarking

Essential questions MedTech executives now need to answer

Our analysis shows that MedTech company executives now need to consider the following key questions – and to find solutions to any gaps they might identify:

1. **Winning characteristics:** Where does my company stand today along the winners dimensions – for the good of its patients, customers, shareholders and employees?

2. **Operational excellence:** Does my company display excellence in operations, ranging from product development and manufacturing to commercialization of products?

3. **ESG performance:** Does my company have a clear ESG agenda, including a well-defined ambition level and strategic activities supporting it to reach this ambition?

At Roland Berger, we help our clients address strategic questions so that they can assume or sustain leading positions in their industry. MedTech companies have to address current issues, strategic questions and structural problems in order to continue fulfilling their pivotal role. Only if they address all these issues successfully can they continue to shape the future – and grow more quickly than many other industries.

We would be delighted to discuss how your company's KPIs look and how they map onto our winners framework. We know how to support your ambition to remain or become a winner in the MedTech industry.

6 Appendix

Segment characteristics

Electromedical and equipment: Companies focusing on the manufacturing and supply of durable, high-tech medical equipment and capital goods, e.g., pacemakers, neurostimulation, robotics, MRI scanners, X-ray, ultrasound, and OR tables/lighting

Tools, lab and diagnostics: Companies focusing on manufacturing and supply of system tools and products (disposables and machines) related to laboratories, e.g., in vitro diagnostics

Surgical instruments and appliances: Companies focusing on the manufacturing and supply of surgical instruments, procedural solutions and medical tools, e.g., optical tools, guiding catheters, drainage, and minimally invasive therapy instruments

Services: Companies focusing on providing healthcare services in hospital operations and ambulatory care, e.g., infusion services, parenteral nutrition, dialysis services, acute care services, and clinical laboratories

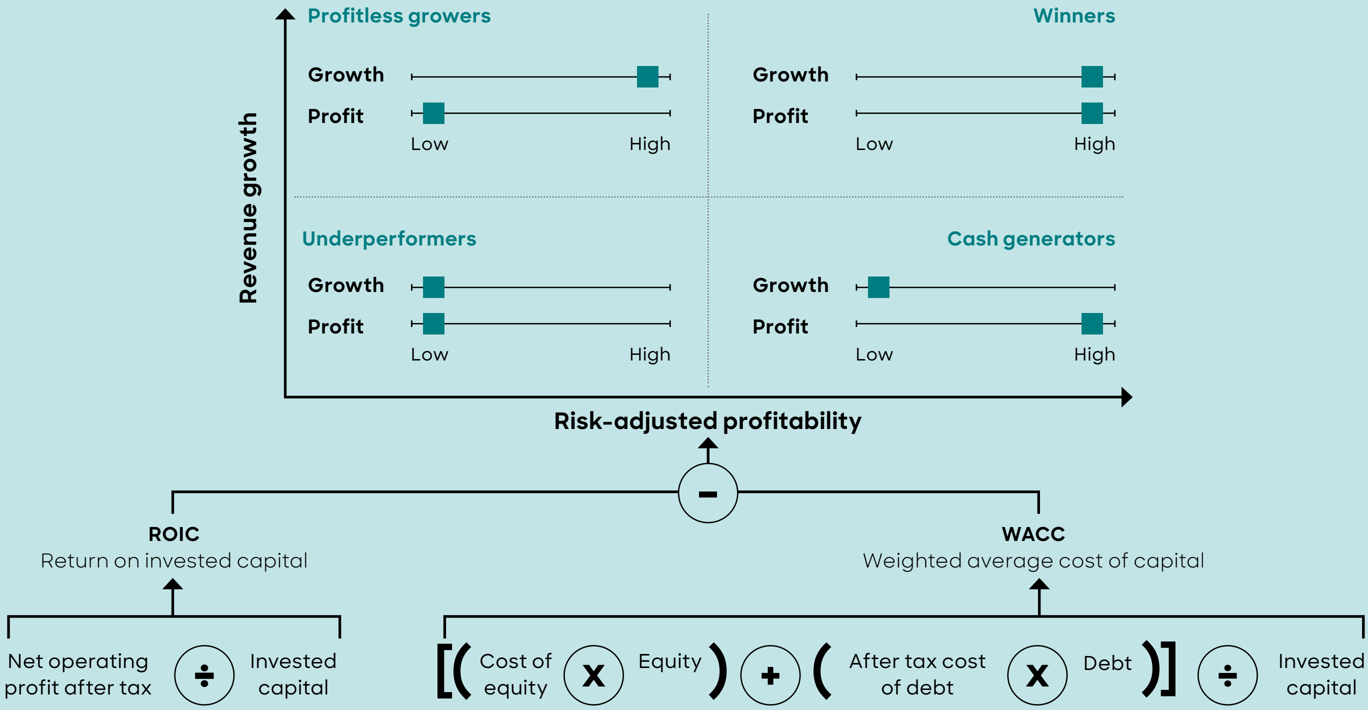
Medical aids and devices: Companies focusing on the manufacturing and supply of implants and selfcare solutions, e.g., joint replacements, and hearing implants and wearables

Disposables & supplies: Companies focusing on the manufacturing and supply of disposable products, e.g., bandages, drainages, plasters, needles, syringes, drapes, and tubes

Diversified: Companies that do not specialize in one of the above but offer two or more of the above-mentioned segments with a significant share of total revenues

Dental: Companies focusing on the manufacturing and supply of dental products, e.g., instruments for dental practitioners, dental diagnostic systems, implants, dental ceramics, and dentures

Assessment logic of Winners Analysis



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