

Louvain School of Management

Fundamental Valuation of Melexis: Strategic Analysis and Investment Recommendation

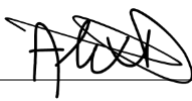
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1. Introduction

The automobile industry around the world is moving towards SDVs¹ and electric cars, which necessitate the involvement of semiconductors. Being one of the leading companies in terms of automotive sensor manufacturing and a Belgium-based fabless semiconductor company, Melexis is well placed to make use of this opportunity.

However, evaluating Melexis as a long term investment means dealing with a volatile environment. The company recently went through a severe cyclical inventory correction across its global supply chain. Furthermore, Melexis's exposure to the Chinese market brings challenges, as domestic overcapacity has started a price war that threatens profit margins across the whole industry. In addition to all these factors, Melexis faces strict ESG obligations such as the management of Scope 3 emissions and future bans of certain manufacturing chemicals in Europe.

The aim of the thesis is to determine the intrinsic value of Melexis under the given circumstances. In other words, it is necessary to understand whether the stock is undervalued or if there is an overall neglect of potential threats by the stock market. To address this, I will conduct a fundamental analysis, the initial part of which will be devoted to the business model and strategy of Melexis. A quantitative analysis of past financial statements will be conducted to check profitability, solvency, and cash flow. Finally, a Discounted Cash Flow model and a relative comparables analysis will be applied to build a clear long term investment recommendation. A major difficulty encountered during this research was the selection of a relevant peer group for the relative valuation, as the semiconductor sector contains vastly different business models, making it challenging to isolate true competitors with the exact same automotive focus as Melexis. To ensure consistency across all the valuation metrics, all financial data and market multiples used throughout this research have been strictly fixed to a cutoff date of May 12, 2026.

2. Literature Review

2.1. Foundations of Fundamental Analysis

When considering an investment opportunity, it is important to have a good theoretical background. According to Brealey, assessing a company's true value requires more than observing its current stock price; it demands a comprehensive analysis of its financial health,

¹ SDV: a vehicle in which core functions are controlled through software rather than a hardware system.

strategic positioning, and capacity to generate cash flows. This type of analysis is called fundamental analysis and its purpose is to discover the true value of the business. The approach helps in finding the discrepancy between what a company is worth and how it is priced by the market (Brealey et al., 2022).

2.2. Valuation Methodologies

In order to provide a recommendation on the basis of these concepts, appropriate valuation methods need to be used. According to Damodaran, proper valuation serves as the link between the story of the company and its forecasts. The most precise method is the Discounted Cash Flow approach. According to the principles of corporate finance by Brealey, intrinsic value can be derived through forecasting future cash flows and discounting them at the appropriate cost of capital (Brealey et al., 2022).

Moreover, it should be noted that according to Damodaran, another way to improve the accuracy of this method is the use of relative valuations. This approach compares the target firm to industry peers using financial multiples, providing a market based perspective to verify if the stock is fairly priced within its specific sector (Damodaran, 2012). By combining these established corporate finance principles, this thesis will determine if Melexis represents a truly attractive long term investment opportunity.

3. Qualitative Analysis

3.1. General presentation of Melexis

3.1.1. Profile of the Company

Melexis NV is a global fabless semiconductor company based in Leper, Belgium. The company was created in 1988 by Roland Duchâtelet, Françoise Chombar and Rudi De Winter. As of May 12, 2026, the company employs over 2000 people and is present on 20 different sites in 3 continents (North America, Europe and Asia). With a valuation of approximately 3 billion EUR, the firm is traded on Euronext Brussels, is part of the BEL 20 index and ranks as the world's fourth largest supplier of automotive sensors. Their vision is to become the leading provider of sensors and drivers in an electrified and robotized world (Melexis, 2026).

3.1.2. Core Business

Melexis adopted a fabless business model in order to remain flexible and maintain focus on value creation. This implies that Melexis concentrates its efforts on design, development and testing, while outsourcing the physical manufacturing of the chips to external foundries. The adoption of this approach has a profound effect on their finances, as it protects the company

from significant CAPEX costs which are otherwise necessary for keeping production facilities up and running. It also allows the allocation of a larger portion of their resources into research and development (R&D) instead of manufacturing infrastructure. This financial structure translates into a remarkably high volume of new product launches, as seen throughout 2025 (Melexis, 2026).

Their product portfolio is specific and is divided into three main product families:

- **Sensors integrated circuits:** This includes their magnetic position sensors (Triaxis), pressure sensors (Triphibian), temperature sensors, current sensors and optical sensors. All these sensors capture physical phenomena and convert them into precise electrical signals that a computer can understand.
- **Actuator integrated circuits:** Such as motor drivers and LED drivers. They receive data from the vehicle's computer and provide the exact electrical power and logic needed to drive physical movements or lighting. They essentially translate digital commands into physical actions.
- **Communication integrated circuits:** Such as LIN²/CAN³ transceivers. They act as the communication bridge by connecting remote sensors to the central computer of the car, ensuring everything communicates smoothly.

The microchips engineered by the firm are integrated into vehicle powertrains, thermal management systems and safety mechanisms. The production of these microchips is a complicated process that requires stacking hundreds of microscopic material layers.

However, the fabless approach combined with their market position exposes Melexis to various potential risks. By relying entirely on external foundries, the company lacks direct control over the production and delivery time. In case of global semiconductor shortage, the company runs the risk of being overshadowed by big technology players. Furthermore, 28,9% of Melexis revenue comes from China, which exposes them to Intellectual Property risks. There is a threat of reverse engineering, where local competitors replicate the technologies of Melexis (TechInsights, n.d.). With China actively pursuing technological independence, Melexis faces the serious risk of being swapped for local substitutes, potentially causing a noticeable drop in market share and overall revenues.

² LIN: Local Interconnect network: a low speed, single-wire network used for non-critical comfort functions.

³ CAN: Controller Area Network: a high speed, robust two-wire network used for critical automotive safety and engine systems.

3.1.3. Revenue Breakdown: Automotive and Beyond Automotive

Historically, the automotive industry has been the core of the company's revenue. According to the full 2025 financial data, total sales reached 839,6 million EUR and sales to automotive customers made up 88% of that amount. This indicates a significant concentration of revenue within a single sector. The remaining 12% comes from “beyond automotive”, composed of alternative mobility markets, sustainable world, robotics and digital health (Melexis, 2026).

To reduce its dependence on the automotive sector, Melexis expanded into “beyond automotive” markets. The objective is to diversify revenue sources and create a more stable

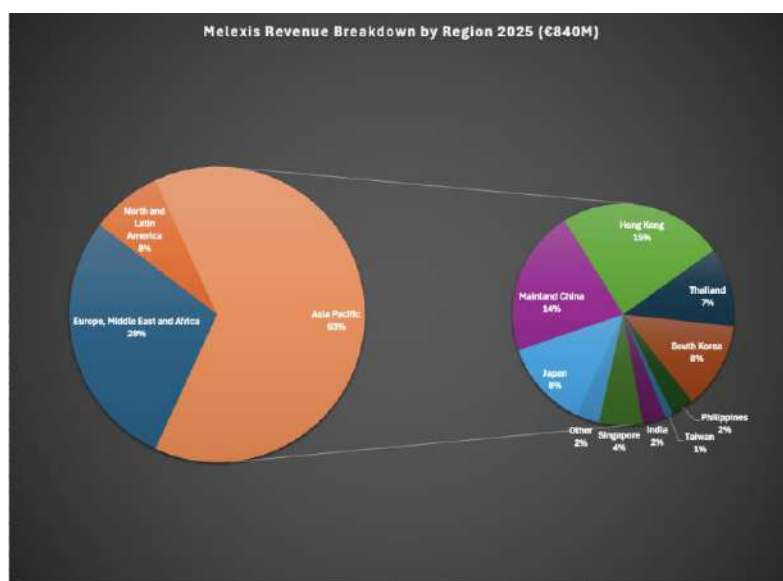


Figure 1 – Melexis Revenue Breakdown by Region 2025

Sources: Annual Report 2025 & Author's own calculation

growth profile. The idea is to take their existing automotive-grade sensing technology and adapt it for rapidly growing industrial applications. As shown in **Figure 1**, Melexis group's activities are conducted in EMEA (Europe, Middle East and Africa), APAC (Asia Pacific) and NALA (North and Latin America). Most notably, China contributes

47,5% of the APAC region's sales. This is mainly driven by China's position as the world's biggest market for electric vehicles (EVs). Nevertheless, this reliance on a single market makes the company vulnerable to macroeconomic fluctuations and domestic market dynamics in China.

3.2. Market Analysis

3.2.1. The Automotive Semiconductor Market

The global automotive semiconductor market is experiencing a period of structural transformation. The market was valued at \$79,7 billion in 2025 and is expected to reach \$177,6 billion by 2035 with an estimated compound annual growth rate (CAGR) of 8,4% (Global Market Insights, n.d.). This trajectory is driven by three independent vectors: the electrification of vehicles, the integration of autonomous capabilities and the transition toward software defined vehicles (SDVs).

Replacing internal combustion engines (ICEs) with battery electric vehicles (BEVs) changes vehicle architecture. Electric vehicles use two to three times as many microchips as traditional gas cars, and the specialized chips that manage their power are six times more expensive (Deloitte, n.d. ; PwC, n.d.-b). Furthermore, the rapid adoption of advanced driver assistance systems⁴ (ADAS) requires a large amount of sensors to perceive the environment. This directly expands the total addressable market for automotive sensor specialists.

3.2.2. The Shift to Software-Defined Vehicles

The SDV requires a complete transformation of vehicle electrical and electronics architectures. Historically, cars were fragmented across dozens of distributed electronics control units (ECUs)⁵ and the architecture is evolving toward domain centralization and zonal architecture. In this new architecture, central computers handle the algorithm processing, while the zonal controllers collect signals from the sensors. For sensor specialists, this presents a major shift as sensors must become “smart” by being capable of analyzing information, adjusting quickly and exchanging data with the new system (S&P Global, 2026).

Furthermore, this rapid pace of innovation drastically shortens technology lifecycles, creating a financial risk of product obsolescence that forces companies to maintain high research and development expenditures just to defend their market position.

3.2.3. Financial Performance and Market Cyclicity

Despite strong growth indicators, the automotive semiconductor industry remains cyclical. External macroeconomic shocks can directly affect cash flows and valuation. Recent financial years have exposed the volatility of automotive demand, characterized by significant declines in revenues in the automobile industry. This is mainly due to a large destocking by Tier 1 suppliers (Lazard, 2025), causing short term declines on sales volumes and profit margins. Moreover, the expansion of China’s domestic semiconductor and EV industries has created a market overcapacity. This oversupply has led to price wars, putting downward pressure on profit margins for other suppliers. Furthermore, the sector frequently faces flat short term growth projections primarily due to weak and unpredictable automotive demand in the Chinese market. This demonstrates the sensitivity of the entire sector to regional economic policies, changes in electric vehicle subsidies and geopolitical tensions.

⁴ ADAS: electronic systems inside vehicles that assist the driver and automate safety features like the warning sounds or automatic braking.

⁵ ECU: is an computer within an automobile that controls specific electrical systems.

3.2.4. Supply Chain Resilience and Transition Risks

The reliance on a fabless operational model exposes the sector to geopolitical and regulatory risks. Because global silicon wafer⁶ production is concentrated in East Asia, geopolitical tensions and policies like the American and European Chips Acts are pushing the industry to build regionalized supply chains (Semiconductor Industry Association, n.d.). Beyond geopolitics, transition risks represent a significant threat to the sector. European regulations are becoming strict regarding toxic chemicals. An example is the proposed ban on perfluoroalkyl and polyfluoroalkyl substances (SEMI, n.d.). As these chemicals are essential for cleaning wafers, their restriction creates a conflict between sustainability goals and industrial production capabilities. Additionally, the electrification trend faces structural challenges due to its reliance on rare earth elements required for electric motor magnets.

3.2.5. Environmental Materiality and Ecosystem Dependencies

An important element of the fabless model is that environmental risks are concentrated within the outsourced manufacturing supply chain. The financial stability of chip designers depends on the natural environment where their manufacturing partners are based. Semiconductor fabrication relies heavily on electrical and water energy, leaving the whole industry exposed to the effects of climate change in terms of physical risks (McKinsey & Company, n.d.). The partner foundries based in Southeast Asia face challenges relating to water scarcity and other climate events (PwC, 2025). This implies that the climate events such as droughts or flooding in the region may affect their operations. Water shortages will also increase operational costs and cause tensions with local communities. This could lead to regulatory restrictions on water output, directly impacting the production volume. Approximately one third of the global semiconductor supply is at risk over the next decade due to these physical climate changes (PwC, 2025). Beyond carbon and water, the long term resilience of the industry is challenged by resource scarcity resulting from the intensive mining of raw materials. The extraction of silicon and rare earth elements often occurs in sensitive areas, leading to significant biodiversity loss. This situation creates a dual operational and regulatory challenge as companies must manage the shift away from toxic processing chemicals while ensuring their

⁶ Wafer: a pure and thin slice of silicon that serves as the base substrate for manufacturing chips.

supply chains align with the guidelines like the Taskforce on Nature related Financial Disclosures (Taskforce on Nature-related Financial Disclosures, n.d.). Failure to meet these conditions could result in a higher risk premium from institutional investors and structural disruptions at the foundry level.

3.3. Competitive Positioning and Risk Management

Melexis' competitive advantage in the automotive semiconductor sector is due to its technological differentiation, flexible costs, and smart risk management. Even though the company ranks as the fourth largest supplier of automotive sensors globally, it still has to deal with intense competition.

The sector comprises pure play fabless sensor specialists like Allegro MicroSystems, Novosense Microelectronics and Elmos Semiconductor, alongside Integrated Device Manufacturers who own and operate internal foundries like Infineon Technologies, NXP Semiconductors, ON Semiconductor, Texas Instruments and STMicroelectronics.

Large competitors like Infineon and NXP benefit from economies of scale and internal fabrication facilities. However, these factories involve substantial fixed costs that empty cash during market downturns. Melexis avoids this by outsourcing its production to X-FAB, which keeps its costs flexible and protects its cash when demand drops. Additionally, the diversified product lines of these bigger companies tend to offer complete but closed systems, sometimes compromising their specific research focus.

By deciding to specialize exclusively in edge sensing⁷ and edge driving⁸ technology, Melexis adopts an accurate niche strategy that functions as an effective technological moat. This positioning allows the company to remain flexible and maintain close relationships with its customers. It also enables automakers to avoid dependence on a single proprietary ecosystem. With the rise of software defined vehicles (SDV), carmakers need components that let them build their own electronic systems without becoming dependent on a single giant supplier. To mitigate the risk of losing its competitive advantage, Melexis prioritizes sustained capital allocation in research and development. Despite the revenue contraction experienced in 2024 and 2025, the company maintained its research spending at roughly 15% of sales. This investment is important to support its technological positioning against key rivals.

⁷ Edge sensing: detects physical information (like movement or temperature) at the extremities of the vehicle.

⁸ Edge driving: controls physical parts (like small motors) at those same extremities.

This competition centers on the choice of physical magnetic and inductive sensing⁹ principles. Rivals like Infineon and Allegro have strategically adopted Tunnel Magnetoresistance (TMR) technology (Infineon Technologies, n.d.). Initially developed for data storage, it provides a high signal-to-noise ratio (SNR)¹⁰ and low power consumption, becoming the new standard for current measurement in advanced inverters¹¹.

Melexis, on the other hand, concentrates on the Triaxis technology and the inductive sensors that give more flexibility and functional safety. It provides strong protection from stray fields, which is valuable for electric vehicles. Standard Hall effect sensors are restricted to measuring magnetic flux in one direction. The Triaxis technology improves magnetic field measurement by using an Integrated Magnetic Concentrator, enabling a single microchip to measure magnetic fields across three dimensions simultaneously (Melexis, n.d.-d).

3.4. Management Vision and Strategy

The strategic direction of the company is defined by an ambitious plan designed to capitalize on global industrial transformation. At its 2025 Capital Markets Day, Melexis stated its goal to lead the sensor and driver markets for electric cars and robotics. The management is aware that regardless of the car production state, the demand for high tech chips will keep rising (Melexis, 2026). This vision acknowledges that while traditional automotive production is expected to be flat, the evolution of mobility and industrial technology favors their specialized expertise.

To quantify this vision, the management team has established long term financial objectives looking towards 2030. Assuming a baseline of 0% growth in global vehicle production they are targeting a compound annual growth rate of at least 10% for their automotive sales. This growth is expected to be driven entirely by the increasing amount of chips required for electric vehicle powertrains as well as thermal management and electronic braking systems.

Even more aggressively the strategic plan calls for a compound annual growth rate of at least 15% in their beyond automotive business segments. The diversification strategy focuses on four growth segments: Sustainable World, Alternative Mobility, Robotics, and Digital Health.

⁹ Magnetic and Inductive sensing: magnetic sensing detects changes in a magnetic field and requires a separate magnet. Inductive sensing is a contactless technology using electromagnetic fields to detect the position or motion of metallic objects.

¹⁰ High SNR: a measure indicating that the desired information (the signal) is strong and clear.

¹¹ Inverters: converts direct current into alternating current. The battery stores DC power, but its motor requires AC.

From a profitability standpoint the company aims for a gross profit margin of at least 45% and an operating margin of at least 25% in the long term. These targets indicate a clear strategic choice to develop premium innovations rather than price competition. To achieve these goals they rely on an innovation engine which focuses on accelerating product development cycles and secure long term customer partnerships.

An important component of their company's strategy is its geographic expansion toward Asia through their "In China For China" initiative (Melexis, 2026). Recognizing that China is the global engine for electric vehicles with fast development cycles, the company is localizing its production to navigate customs barriers and boost reactivity. They recently announced the establishment of a locally embedded logistics center in China to reduce delivery times. While recent financial guidance noted soft and uneven short term automotive demand in the region, the company actively views it as a fast growing market where they continue to capture market share. To grow, Melexis signed a local supply deal in China that will be fully operational during the first half of 2026.

This flexibility is crucial in the modern economy. Even though 2025 sales dropped by 10% to 839,6 million EUR, the company still managed to maintain a robust pace of innovation. For example, they adapted automotive sensors like the Tactaxis technology that gives robots a sense of touch, which further demonstrates the resilience of their business model.

3.5. Corporate Governance and Shareholder Relations

When looking at how Melexis handles corporate governance, the main focus is to align the long term interests of shareholders with strict ethical standards. The company follows the 2020 Belgian Code on Corporate Governance and operates under the supervision of the Financial Services and Markets Authority. Everything is organized around a single tier Board of Directors that stands out for its early achievement of gender parity.

The board also includes key figures who built the company from the ground up. Françoise Chombar leads the board and uses her position to push for STEM education, working right next to cofounder Roland Duchatelet. They are joined by independent directors who bring a neutral eye to global operations and sustainability (Melexis, n.d.-a). This structure guarantees that the board knows the semiconductor industry inside out while remaining flexible to the changing economy. Another element of the Melexis model is its concentrated group of shareholders. For a long time, a central holding company called Xtrion NV essentially directed the company. Since October 2023, Sensinnovat has held exactly 25% plus one share, and Elex

has held another 25%. The rest of the shares, about 48%, are traded on the Euronext Brussels stock market. This particular split control system ensures that the founding families remain engaged in the success of the business, thereby ensuring stability while also ensuring that no single entity exercises disproportionate control. It also gives the management team a buffer against investors who only care about quick short term profits. However, from a strict governance and risk perspective, this concentrated shareholder group also controls X-FAB, which is the main manufacturing partner for Melexis.

Across the whole organization, the governance bodies place a heavy emphasis on transparency and ethical behavior. Melexis strictly enforces a Code of Conduct for all employees, board members and external contractors, making sure everyone is on the same page regarding business ethics. The board also takes time to evaluate its own performance and checks how well it communicates with the executive team through formal assessments conducted every three years. More importantly, this dual ownership creates a structural conflict of interest regarding value distribution. While the founding families have a financial incentive to maximize the combined profitability of both Melexis and X-FAB, the independent, minority shareholders of Melexis are only focused on the specific margins of Melexis. Because X-FAB acts as a key supplier, there is an inherent risk that pricing agreements between the two entities could be balanced in a way that favors X-FAB's financial results at the direct expense of Melexis.

Finally, the company consistently demonstrates a strong commitment to shareholder returns, as evidenced by its dividend policy. Despite a recent contraction in total revenue, the board maintained a gross dividend of 3,70 EUR per share for the 2025 financial year (Morningstar, n.d.). The dividend policy may reflect management's confidence in the company's cash-flow generation capacity.

3.6. Non-Financial Reporting (CSRD) and ESG Policy

Non-financial reporting has become an important topic of modern corporate strategy, especially for European companies dealing with the strict requirements of the Corporate Sustainability Reporting Directive (European Commission, n.d.). Melexis treats environmental and social governance not just as an administrative chore, but as a real foundation for its long term business resilience.

In order to demonstrate its commitment to combat climate change, the company has established some measurable environmental objectives. The core of their policy is to cut their

Scope 1¹² and Scope 2¹³ greenhouse gas emissions per sold integrated circuit by 55% by 2030. Tracking emissions on a per unit basis is a demanding approach because it forces the company to reach absolute operational efficiency even as they scale up production volumes. To evaluate this accurately, they rely on two strict metrics: Operational Carbon Intensity and overall Energy Intensity. Looking at the evolution of these metrics reveals a more nuanced strategic reality. While the firm successfully reduced its operational carbon intensity to 4.7 tonnes through green energy contracts, an analysis of its absolute energy consumption reveals a different reality regarding its physical constraints. As detailed in the historical data provided in **Appendices 1 and 2**, their energy consumption relative to their revenue did not steadily decline. While it improved initially down to 36,36 megawatt hours per million EUR, the energy intensity recently climbed back up to 53,42 in 2025. Even without a physical factory, Melexis still consumes a large amount of electricity to power its R&D labs, servers for chip design and wafer testing equipment. This indicates that their testing facilities require a large amount of energy regardless of temporary drops in financial revenue, showing that complete economic separation remains a complex ongoing challenge.

To hit these numbers, they are investing heavily in transitioning their testing facilities away from fossil fuels. But since they operate entirely as a fabless company, focusing only on direct operations reveals a structural paradox. Their actual Scope 1 and Scope 2 emissions are incredibly low. Scope 3 emissions account for 96,17% of the company's total emissions¹⁴. To put this into perspective, the carbon footprint of their outsourced production and external supply chain is around 25 times larger than the impact of their own internal operations. As a result, the management is concerned about addressing this carbon footprint, which represents the carbon footprint of its external logistics operations and end use of its products. The company ensures its foundries and suppliers adopt the same environment-related policies as it does through the ESG Procurement Policy.

Apart from dealing with greenhouse emissions, their broader strategy is concerned with the issue of resource management and corporate social responsibility. Melexis puts a lot of focus and effort on cutting down their water consumption, industrial waste, and pushing for circular packaging. Most of their consumed water is used more for cooling down their testing facilities

¹² Scope 1: covers direct greenhouse gas emissions from sources that are owned or controlled by the company.

¹³ Scope 2: accounts for indirect greenhouse gas emissions resulting from the generation of purchased energy.

¹⁴ Scope 3: encompasses all indirect greenhouse gas emissions that occur throughout a company's upstream and downstream value chain, excluding purchased energy (Scope 2).

than for the chemical cleaning processes required in the semiconductor fabs. They are committed to a safe and diverse workplace, which is reflected by all their commitments with certifications like ISO 14001 as well as following the regulations REACH and RoHS. Through such transparency, Melexis manages to avoid accusations of greenwashing. This is best illustrated through their Handprint strategy, which demonstrates how the chips that they manufacture allow users to save significantly more CO2 compared to the production. (see **Appendix 3 for SWOT summary**)

3.7. Melexis SWOT Analysis

In order to synthesize all the strategic, financial, and operational points I covered in this chapter, conducting a comprehensive SWOT analysis is crucial. This section breaks down the internal strengths and weaknesses of the company and weighs them against the external forces shaping the global semiconductor industry. This analysis is important to understand the long term sustainability and the real risk profile of the company.

3.7.1. Strengths

Regarding its core competencies, the primary internal advantage Melexis holds is their technological dominance in specific sensor markets. Their proprietary Triaxis magnetic sensing technology effectively acts as a competitive moat. By using an Integrated Magnetic Concentrator, they allow one single microchip to measure magnetic fields in three dimensions all at once. Given the extensive patent protection for this technology, their competitors have been forced to rely on old style single axis Hall effect sensors that need complicated workarounds just to get decent results. This gives Melexis substantial pricing power and helps them lock in long term contracts with major automotive companies for whom functional safety and reliability remain key priorities.

Another competitive advantage is their fabless business model. By outsourcing the process of manufacturing the wafers to external foundries, the company stays financially flexible. It saves on significant depreciation charges from operating physical manufacturing factories. This system results in direct high profitability and strong financial statements. Such margins create substantial amounts of free cash flow that the management can use for R&D activities. These constant investments guarantee a continuous stream of breakthrough innovations, keeping its product portfolio aligned with market demand (Melexis, 2026).

Finally, the way the company is governed is a hidden strength. The balance of power between the founders of the company via Elex NV and Sensinnovat BV makes a stable organizational

structure. Unlike standard corporations, which face constant pressure to generate quick profits from short term stockholders, Melexis's board of directors can afford to adopt a long term horizon. This stability lets the executive team invest patiently in complex, multi year technological development cycles without facing immediate pressure from activist investors.

3.7.2. Weaknesses

One of the company's main vulnerabilities is its strong dependence on the automotive sector. While this focus is what helped them capture their market share, it ignores the basic financial rule of diversification. The business is fundamentally dependent on the volatile cycles of global automobile manufacturing. When car production slows down, the revenue of Melexis drops immediately and proportionally and they have almost no security from other industries to mitigate the impact.

Another concern is the vulnerability built directly into their fabless model. While outsourcing their manufacturing gives them financial flexibility, it also means they give up control over the physical production of their chips. Melexis is dependent on only a few foundry partners, which are mostly based in Asia and Europe, for producing their microchips. Within this small group, Melexis is vulnerable to a single dominant supplier, especially X-FAB. During times of global semiconductor shortages, a fabless company has to fight for limited foundry space against giant electronics brands. This brings up another weakness: their relatively smaller corporate size puts them at a disadvantage when negotiating pricing or capacity compared to diversified giants like Infineon and Texas Instruments. Since they cannot increase their production capacity independently, this puts them at risk since it becomes difficult for them to react immediately to any changes in the market environment, which could also lead to an increase in the costs of production. Moreover, being an international corporation operating out of Europe, where the majority of its sales come from Asia and America, they always face the risk of foreign exchange. While such risks can be managed by hedging through financial management measures, the structural exposure remains a constant obstacle to financial predictability, making long term forecasting harder.

Finally, the concentrated family ownership that provides long term stability also acts as a structural governance weakness. Because the founders and family shareholders hold so much voting power, there is a serious risk of a lack of adaptability. If the management misjudges a market trend and makes an unwise decision, it may be difficult to change course because there is no pressure coming from the activist shareholders or the independent board.

3.7.3. Opportunities

The growth potential for Melexis is driven by a few technological trends that offer lucrative commercial opportunities. The biggest and most immediate one is the shift toward the electrification of vehicles. The transition from internal combustion engines to battery systems requires a significant redesign of vehicle electronic architectures. Electric vehicles require a larger number of semiconductor components to manage power conversion, battery monitoring, and thermal regulation. As a result, Melexis has an excellent opportunity to benefit from it due to its specialisation in current sensors and thermal integrated circuits. The firm is actively capitalizing on the rising semiconductor integration per vehicle, allowing for sustained upside for sales even if global automotive production volumes remain flat.

The rise in the popularity of software defined vehicles (SDVs) as well as driver assistance systems generates new opportunities for the company. Steer by wire and brake by wire setups demand multiple redundant and precise position sensors to guarantee functional safety (Fortune Business Insights, n.d.). The strict automotive compliant sensors developed by Melexis fit these critical safety requirements perfectly. As car companies compete to deliver higher levels of autonomous capability, the number of sensors required per vehicle will exponentially increase. Also, the Chinese market, while extremely competitive, presents a major opportunity with localization. By establishing themselves locally to supply domestic companies directly, the firm can integrate itself into the most dynamic automotive ecosystem globally.

Their strategy to step outside the automotive sector represents a significant opportunity for them to diversify their portfolio and revenue stream. Robots working in an assembly line, automated logistic vehicles and even humanoid robots need the exact type of spatial awareness and precision that the sensors used by Melexis have achieved. By adapting their tech portfolio to serve robotics, digital health and sustainable world, the company can sell at premium prices in specialized niches and fix its historical overexposure to the cyclical car market (Melexis, n.d.-b).

3.7.4. Threats

Right at the top of the list, geopolitical instability and trade barriers represent major threats in the global market environment. The ongoing strategic rivalry between the United States and China has led to strict export control measures, increased tariffs, and a general attempt to create distinct tech ecosystems (Sourceability, 2026). Melexis remains exposed to

geopolitical risks due to its dependence on Asian foundries and the importance of China as an end market. An escalation in trade tensions or regulatory restrictions could disrupt supply chains or reduce market access.

Closely tied to these geopolitical issues is the rising threat of state funded local competition. The Chinese government is aggressively funding the development of a domestic semiconductor ecosystem to achieve technological independence and cut out Western suppliers. As a result, the company will have a lot of competition when it comes to its prices, and even face risks of being excluded by leading original equipment manufacturers. This extremely competitive business environment presents an even more serious risk of commoditization, as a price war could easily erode the premium margins that Melexis has. Another risk factor that cannot be overlooked is technological disruption. Technologies such as low cost Tunnel Magnetoresistance technology by their rivals could make the solutions obsolete within no time if the company does not innovate at a rapid pace. This risk factor jeopardizes their growth plans and has been highlighted by financial analysts as the primary reason for their poor guidance for the first half of 2026.

In conclusion, the growing physical reality of global warming represents a serious financial threat to their entire fabless business model, as the regions where the essential fabrication facilities are located, especially in Southeast Asia, are vulnerable to climatic anomalies. Drought conditions can force local governments to implement strict restrictions on water usage, shutting down the operations at foundries. Furthermore, extreme weather conditions such as typhoons and floods may damage production facilities and interrupt supply chains. As these climate disruptions become more frequent and severe, the outsourced supply chain system on which Melexis depends appears vulnerable. Addressing these risks and diversifying their supply chain represents a strategic and financial difficulty for the decade ahead.

4. Quantitative Analysis

4.1. Income Statement Analysis

The income statements of Melexis during the years 2021 to 2025 indicate that the global semiconductor industry is quite cyclic. In order to understand the profit-making capacity and operational sustainability of the fabless company Melexis, it becomes imperative to divide this period of five years into two significant economic periods. The period from 2021 to 2023 constitutes a supercycle defined by a supply shortage. Following this, the period from 2024 to 2025 represents a phase dominated by intense inventory management and correction.

4.1.1. Revenue Dynamics and Addressable Market Evolution

In the early phase of growth, the data reveals explosive growth in Melexis' revenue performance, which has altered its earnings structure entirely. Revenue has jumped from 643,8 million EUR in 2021 to 836,2 million EUR in 2022 and finally to 964,3 million EUR in fiscal year 2023 as shown in **figure 2**. This growth was driven by the convergence of two primary economic factors. First, the global chip shortage gave fabless designers pricing power, meaning the firm could easily pass increased foundry costs directly into automotive manufacturers. Second, the global automotive market has progressively shifted toward electric vehicles. As electric vehicles require a higher semiconductor content than traditional combustion vehicles, this trend supported demand for the company's sensing technologies.



Figure 2 - Total Revenue (2021-2025)

Sources: Melexis Annual Report 2025

However, the dynamic violently reversed during the 2024 and 2025 fiscal years, marking a shift. The company's revenue contracted first to 932,8 million EUR in 2024 and then to 839,6 million EUR in 2025, representing a year-over-year decline of 10% (Melexis, 2026). The decline in revenues experienced in 2025 was compounded by unfavorable developments on foreign currency exchange markets, resulting in an additional 2% fall in revenues. On top of that, lower and uneven demand in the Chinese car market, the main engine for global electric vehicle growth, created an adverse chock at the end of the cycle. For a closer look at these regional shifts, **Appendix 4** compares Melexis's revenue across different geographical markets to the previous year. Despite the general contraction, sales to automotive customers accounted for a significant portion, totaling 88% of all sales for the entire year of 2025. This highlights the concentration risk the company faces by relying heavily on a single sector.

Moving forward, the overproduction within the electric vehicle and semiconductor sectors in China poses a serious problem for the future income of Melexis. Production capacity exceeds market demand, leading several manufacturers to reduce prices in order to clear excess inventory. This price competition will naturally squeeze profit margins for everyone in the supply chain. Since Melexis depends so much on China, betting on the traditional growth of

car sales is not a viable long term strategy. To protect their earnings, the management team needs to speed up their expansion into other markets like robotics and digital health. Otherwise, they will likely face a lasting drop in their pricing power and profitability (The Edge Singapore, n.d.).

4.1.2. Margin and Income Analysis



Figure 3 – Gross Profit (2021-2025)

Sources: Melexis Annual Report 2025

The gross profit margin is an essential metric for understanding how well a fabless semiconductor company operates its pricing power and capacity. Indeed, during the period of constrained supply, Melexis achieved high-gross margins. The gross margin increased from 42,5% in 2021 to 44,8% in 2022, eventually hitting a peak of 45,6% in 2023. This was mainly due to favorable product mix toward premium sensor architecture, price increases for their customers globally and making sure their own testing facilities ran at full capacity to absorb fixed costs.

However, as the semiconductor industry entered a new phase, the gross margin contracted to 43,0% in 2024. The contraction intensified further in 2025 where the gross margin fell to 38,6%. This represents 324 million EUR in absolute gross profit, which is a 19% drop from the previous year. It is a contraction of 700 basis points from its 2023 peak and shows how operational leverage works in reverse as the decrease in sales means under-utilization of their capital-intensive test centers located in Bulgaria and Malaysia. Further contraction of gross margins in 2025 was due to unfavorable inventory revaluation in relation to EUR to USD exchange rate and increased structural costs within the entire supply chain. (see Appendix 5)

Operating income (EBIT) mirrored this challenging trajectory perfectly. While operating margins expanded to reach a peak of 27,1% in 2022 and 2023, in 2024 they fell to 23,6%, while further decreasing to 16% in 2025. In absolute terms, the operating result dropped to 134,0 million EUR in 2025, a 39% decrease compared to the 219,9 million EUR generated in 2024. However, the



Figure 4 – EBIT (2021- 2025)

Sources: Melexis Annual Report 2025

operating margin being less resilient than the gross margin is clear proof that this decision was strategically planned. (see **Appendix 5 for details**)

Indeed, Melexis decided not to cut costs by reducing its investments in R&D and therefore jeopardizing future performance, but rather decided to stick to the growth strategy. The R&D expenses spiked up to 13,8% of overall sales in 2025, illustrating the constant commitment of the management to its own internal innovation machine. As a result, the company managed to successfully introduce 19 new products in 2025 alone, including a new product line for protective devices. (see **Appendix 6 for details**)



Figure 5 – Net income (2021-2025)

Sources: Melexis Annual Report 2025

As far as the net profit is concerned, it follows the pattern of the operating profit but is even more influenced by net financial result and taxation. The peak of consolidated net profit was attained in 2023, amounting to 209,5 million EUR which reflects the effectiveness of a business operating at its optimum capacity. However, due to the negative cyclical effect, the decline was extremely steep. It decreased from 209,5 million EUR in 2023 down to 171,4 million EUR in 2024, representing an 18,1% reduction. This figure further declined to 112,5 million EUR in

2025, marking a 34,3% drop. Consequently, the Earnings Per Share (EPS) ($\frac{\text{net profit/loss}}{\text{outstandings shares}}$) of 2,78 EUR in 2025 reached its lowest level in recent business cycles, proving once again the severity of the correction undergone by the automotive parts supply industry. The financial markets naturally reacted to this drop in profitability. To illustrate the severity of the situation, the stock price of the company fell to 50 EUR in 2026. This represents the company's lowest valuation level in five years and remains well below its historical peak of EUR 107. The market reaction here suggests that the investors are extremely cautious about the shrinking profit margin and over-capacity problems in the automotive industry. However, the stock recently recovered from 50 EUR to nearly 80 EUR by May 2026. This increase happened across the

entire semiconductor sector because investors became more confident about the long term demand for chips, especially for AI applications. This quick price recovery shows that market sentiment is driven by long term optimism rather than immediate financial fundamentals.

4.2. Balance Sheet Analysis

An examination of the balance sheet of a fabless semiconductor company indicates that returns on invested capital (ROIC) are typically elevated, primarily because these firms avoid the substantial capital expenditures required to construct manufacturing facilities. However, a close examination of the assets and liabilities of Melexis from 2021 through 2025 reveals a significant shift taking place. This particular transition is characterized by an increase in working capital requirements, the signing of major long term supply contracts and a

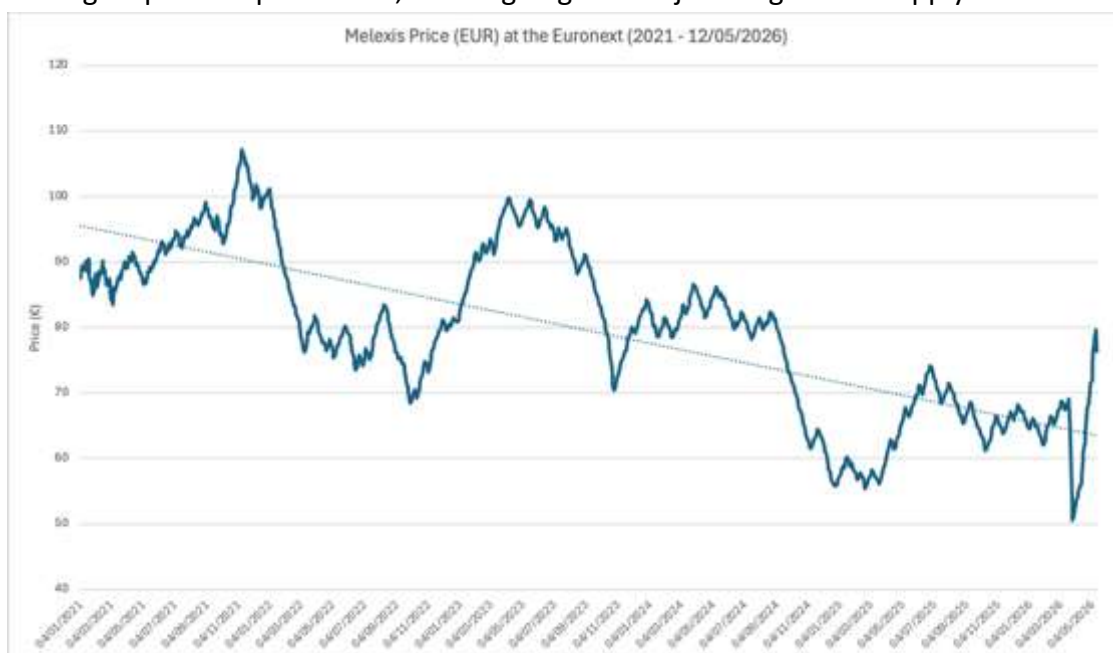


Figure 6 –Melexis stock Price (2021- 2026)

Sources: Author's own calculation, company data extracted from Investing

fundamental change in how the business structures its capital. (see **Appendix 7**)

4.2.1. Assets and Operational Efficiency Ratios

Total assets increased from 461,1 million EUR in 2021 to 903,3 million EUR in 2025, mainly because of a few select strategic decisions. While their physical infrastructure did grow due to sustainability focused investments like their advanced testing facility in Kuching Malaysia, the most financially material changes happened within their current and specialized non-current assets. (see **Appendix 8**)

To ensure that Melexis would have long term access to this kind of capacity, the company entered into binding agreements with its leading foundry manufacturer, X-FAB. The agreements required large up-front cash payments that were needed to provide funding for the capacity expansion of X-FAB. Because Melexis paid this money before receiving the goods, these payments turned into a substantial supplier receivable. This direct financial claim against X-FAB is exactly why the other non current assets on their balance sheet increased significantly. Specifically, the amount of this type of asset increased to 163,6 million EUR in 2024 and then began to decrease in 2025 as the actual silicon wafers started to arrive. As such, the company effectively became its own bank in this regard, creating an artificial increase in assets and a reduction of asset turnover ratios. Fixed asset turnover ($\frac{Revenue}{(Fixed\ assets\ 2024\ \&2025/2)}$), previously at 6,26 for 2022, decreased to 4,15 by 2025, indicating that every euro spent on assets generated significantly lower returns (**Figure 7**).

	2021	2022	2023	2024	2025
Days of Sales of Inventory	142,47	142,09	177,14	180,50	212,60
fixed assets turnover		6,26	5,83	4,58	4,12

Figure 7 – Operational Efficiency Ratios
Sources: Melexis Annual Report 2025

The biggest stress on their balance sheet during this time was the accumulation of physical inventory. The total amount of inventory has risen dramatically from a relatively modest amount of 144,5 million EUR in 2021 to 300,3 million EUR in 2025. This growth of inventories was an unavoidable consequence of the destocking process that was taking place in the entire automotive industry. Due to destocking by the larger companies which were their major Tier 1 customers, Melexis was forced to take their business and become the 'shock absorber' of the supply chain, leading to high and growing inventories. The average days of sales of inventories ($\frac{Inventory}{Cost\ Of\ Good\ Sold} * 365$) grew heavily from 142 days in 2021 to 212 days in 2025. This implies that the firm was holding nearly seven months worth of sales within its inventories (**Figure 7**).

4.2.2. Liabilities and Profitability Ratios

The liability side of the balance sheet went through a permanent and radical restructuring. However, in 2021 and 2022, the company operated with a perfect capital structure, being essentially free of debt, while the net cash position was estimated at 85 million EUR in 2022. Nevertheless, the combination of paying off these enormous costs for X-FAB and dealing with

the serious cash flow problem created by the accumulation of inventories forced the management to alter their strategy. Management decided to cover this significant cash gap using external debt instead of diluting their existing shareholders or cutting their attractive dividend payouts. Long term debt was recorded on the balance sheet in 2023 at 184,7 million EUR and just kept climbing. By the end of 2025, the company reported a heavy net debt position of 287,4 million EUR. (see **Appendix 9**)

The Return on Equity, which reached an amazing peak of 40,9% in 2022, decreased along with the rise of their total equity and decline of total net income. However, their structural solvency is strong enough to withstand the surviving automotive downturn without breaking any of their debt agreements (**Figure 8**).

	2021	2022	2023	2024	2025
ROE	33,70%	40,90%	38,01%	30,21%	23,22%
ROA	28,43%	33,98%	24,18%	19,17%	12,46%
ROIC	47,83%	65,27%	43,59%	33,82%	20,59%

Figure 8 – Profitability Ratios
Sources: Melexis Annual Report 2025

ROA hit a strong 33,98% during the 2022 peak but then dropped to 12,46% by 2025. This decline perfectly reflects the inventory problem mentioned earlier. ROIC¹⁵ reached its peak at 65,27% when the inventory turnover was high in 2022. However, due to the growing number of issues with inventory, this indicator declined to 20,59% in 2025. Even with this decline, a ROIC of 20,59% is still higher than their WACC of 9,51%, meaning the business is still creating value. For the future, the company needs to reduce these inventory levels and show that their new products can bring these margins back to their previous levels.

4.2.3. Solvency and Liquidity

Over the period between 2021 and 2025, the capital structure of the enterprise experienced a noticeable change. Solvency¹⁶ ($\frac{Equity}{Total Assets}$) declined sharply from the extremely high level of 84,36% in 2021 to only 53,64% in 2025. As expected, the dynamics of the debt-to-equity ratio followed the same pattern. It was exceptionally low at around 18% to 20% in 2021 and 2022 but began to rise significantly, reaching a maximum value of 86,42% in 2025. This indicates an increasing tendency towards external borrowing as well as the formation of considerable

¹⁵ ROIC = NOPAT / Invested Capital where NOPAT = EBIT * (1 - Tax Rate)

¹⁶Solvency ratio: metric that indicates what part of the firm's assets is financed through own resources.

inventory discussed above. Still, since the debt to equity ratio is under 100%, the risk of the structure is under control.

	2021	2022	2023	2024	2025
debt to equity	18,54%	20,36%	57,16%	57,58%	86,42%
net debt/ebitda	-0,21	-0,34	0,48	0,71	1,53
current ratio/liquidity ratio	4,22	4,63	3,63	4,54	5,46
Solvability	84,36%	83,08%	63,63%	63,46%	53,64%
cash ratio	0,50	0,97	0,32	0,31	0,33

Figure 9 – Solvency & Liquidity Ratio

Sources: Melexis Annual Report 2025

The net debt to EBITDA ratio evaluates how effectively a firm can repay its debt with cash flows from operations. At the end of 2025, the ratio stood at 1,53. Even though this represents a considerable jump from earlier years, it shows that Melexis continues to earn sufficient cash from operations to meet its commitments (**figure 9**).

While ensuring that Melexis is solvent and able to manage its long term debts, it is also necessary to ensure that the business is capable of paying its short term liabilities. Liquidity ratios are used for this purpose. The two liquidity ratios used here include current ratio and cash ratio. The trend of current ratio for Melexis has been quite impressive for the last five years. The current ratio ($\frac{\text{Current Assets}}{\text{Current Liabilities}}$) has always remained above 1, with a peak figure of 5,46 in 2025. Nonetheless, a substantial proportion of these current assets is locked in unsold inventories. While the highest cash ratio ($\frac{\text{Cash and Cash Equivalents}}{\text{Current Liabilities}}$) was 0,97 in 2022, the ratio fell drastically to 0,33 in 2025. This means Melexis can cover exactly 33% of its immediate obligations using just liquid cash. The extremely high current ratio is heavily inflated by excess inventory the company has.

4.3. Cash Flow Analysis

The cash flow profile of Melexis from 2021 to 2025 exhibits a structural anomaly in 2023, following which the firm returned to consistent operational cash generation. Furthermore, the company also maintains capital expenditure initiatives linked to environmental issues as well as a capital allocation strategy for the benefit of shareholders.

Regarding net profit, the company saw strong growth from 131,11 million EUR in 2021 to 197,15 million EUR in 2022. **Figure 10** indicates that during 2021 and 2022, Melexis recorded 142,2 million EUR and 187,8 million EUR of cash flows from operating activities, respectively.

Furthermore, the firm's free cash flow ratio ($\frac{FCF}{\text{Net Profit}}$) from the two years mentioned above was 0,79 and 0,75. This translated to a Free Cash Flow (FCF) of 103,14 million EUR in 2021 and

147,95 million EUR in 2022, alongside impressive FCF margins ($\frac{FCF}{Revenue}$) of 16,02% and 17,69% respectively.

mEUR	2021	2022	2023	2024	2025
net profit	131,11	197,15	209,46	171,45	112,51
net cash from operating activities	142,23	187,84	3,01	173,23	126,31
net cash of investing activities	-38,84	-27,29	-91,68	-52,75	-29,19
net cash of financing activities	-127,36	-110,40	43,35	-127,29	-94,56
FCF	103,14	147,95	-91,78	120,12	96,94
FCF ratio	0,79	0,75	-0,44	0,70	0,86
FCF margin	16,02%	17,69%	-9,52%	12,88%	11,55%

Figure 10 – Cash Flow Statement Summary (2021-2025)

Sources: Melexis Annual Report 2025

However, for the year 2023, an inconsistency occurred concerning the profitability and cash generation abilities of the enterprise. Despite a record high in the company's bottom line of 209,5 million EUR in net income, cash flows from operations decreased to 3 million EUR. This substantial cash outflow is an illustration of the financial costs incurred when securing supply chain supremacy in the modern semiconductor market. The cash flow from investments was 38,8 million EUR in 2021 and 27,3 million EUR in 2022. By contrast, in 2023, it grew to 91,78 million EUR, primarily due to the construction of their new testing facility in Malaysia. As a result of the combination of the reduced operating cash flows and increased capital expenditures (Capex), the FCF for 2023 fell to -91,78 million EUR, resulting in an FCF ratio of -0,44 and an FCF margin of -9,52%.

In 2024, the operating cash flows returned to 173,2 million EUR while the investing cash flows also returned to a more normal 52,8 million EUR. This operational recovery restored the FCF to 120,12 million EUR, with an FCF ratio of 0,70 and an FCF margin of 12,88%. Throughout 2025, despite the sharp reduction in sales volumes, operating cash flows remained strong at 126,3 million EUR. This shows a 27% drop compared to the prior year. Additionally, investing cash outflows decreased further to 29,19 million EUR. Despite the broader downturn, the firm maintained a resilient FCF of 96,94 million EUR, achieving its highest FCF ratio of the period at 0,86 and an FCF margin of 11,55%.

Their financing cash flow profile across these five years is dominated by two factors. The first is taking on systematic long term debt to bridge those working capital deficits caused by inventory and prepayments. Secondly, a consistent policy of dividend distribution is applied. Even with the cyclical downturn, falling revenues, and bloated inventory levels, Melexis's Board of Directors showed immense confidence in the long term liquidity generation of the

business by keeping up its generous gross dividend. Total dividend payouts grew from 88,9 million EUR in 2021 all the way to 147,8 million EUR in 2025. Moreover, realizing that the market oversold their stock during the absolute peak of the 2025 inventory correction, management launched a large-scale new share buyback program. This program targeted up to 850.000 shares for a total value of 50 million EUR starting in December 2025. The company carried out significant stock repurchases right through early March 2026, buying back shares at an average price of around 54,63 EUR. To sustain these substantial cash payouts while their operating cash flow was temporarily trapped inside physical inventory, the company had to rely heavily on external financing. This incredibly aggressive capital allocation strategy inherently depends on one fundamental assumption. Management is betting that the automotive inventory correction will fully resolve by late 2026, which will finally release all that trapped working capital straight back into liquid cash reserves.

4.4. Scenarios

While the baseline financial projection gives a convincing and logical growth story, Melexis operates inside a remarkably complex and interconnected global ecosystem that is full of geopolitical, environmental and technological variables. Strict financial prudence means we have to build and evaluate alternative scenarios to properly stress test the intrinsic valuation, strategic resilience and risk mitigation frameworks of the company. Based on a deep dive into the double materiality assessment of the firm and broader global semiconductor market trends, three distinct scenarios emerge. **(see Appendix 10 for summary)**

4.4.1. The Normal Scenario

The first scenario is the Central Case, defined by the Hybrid Trap¹⁷ and margin compression. In this plausible normal situation, the world does not make any rapid progress towards the full electrification of cars. Consumers, still worried about inadequate charging infrastructure and persistent range anxiety, start buying hybrid vehicles instead of pure electrics or efficient internal combustion engine vehicles. Since Melexis sensors work just as well on all kinds of engines, the delay in the electric vehicle transition caps the expected multiplication of semiconductor components per car. Meanwhile, increasingly strict European environmental and sustainability regulations act as a burden on operating margins.

¹⁷ The “Hybrid Trap”: refers to a prolonged market phase where consumers prefer hybrid vehicles over fully electric ones.

For example, any future prohibition on the usage of chemicals which are essential for the chemical etching and cleaning of raw silicon wafers forces foundry partners to adopt expensive and less efficient alternative manufacturing processes. As a consequence, the costs required to meet regulatory requirements and switch to new manufacturing processes will eventually find their way straight to Melexis through its supply chain. Since it is difficult for the company to transfer these costs to the automotive industry, the resulting margin pressure limits profitability.

4.4.2. The Pessimistic Scenario

Alternatively, the second scenario describes a Bear Case, caused by the geopolitical divergence of the West from China and a catastrophic supply chain disruption. The primary risk associated with Melexis relates to its heavy dependency on Chinese revenues, which represent a large portion of its Asia Pacific revenue stream.

In this pessimistic scenario, rising global geopolitical tensions trigger severe trade tariffs, technology sanctions or export controls. To prevent the identified risk from materializing, Melexis has opened a Wholly Foreign Owned Enterprise in Shanghai in order to establish localized foundry agreements. In this particular case, however, such a risk management strategy fails to be effective. Local Chinese manufacturers, which are significantly subsidized by the state government, reverse engineer or find substitutes to Melexis crucial magnetic sensors, causing an intense price war among the suppliers, leading to commoditization, and thereby losing their previous monopoly on pricing power.

The bear scenario also considers the potential impact of climate-related disruptions. Semiconductor manufacturing remains highly dependent on water and energy availability, meaning that extreme weather events affecting key X-FAB facilities could disrupt production operations. Since Melexis is dependent on the partnership with X-FAB, almost using them as a sole foundry capacity, foundry production is severely affected across the globe.

4.4.3. The Optimistic Scenario

The last alternative scenario would be the bull case, which involves a rapid robotics supercycle, alongside increased adoption of software defined vehicles. In this optimistic setup, the global macro-economic environment bounces back quickly in late 2026. Global central bank interest rate cuts successfully stimulate broad consumer demand for premium electric vehicles, speeding up the transition to software defined vehicles (SDV) across all major markets. A global labor shortage accelerates the commercial deployment of humanoid robots and

industrial collaborative robots. The force sensors from Tactaxis and joint encoders from Arcminaxis from Melexis will soon become the absolute market standards in terms of robotic dexterity and spatial awareness. In addition, the growth in volume of artificial intelligence data centers leads to increased demand for Melexis smart ICs, which are important for cooling of servers (Silicon Semiconductor, n.d.). Since these non-automotive products have substantial margins, the operating profit margin will grow significantly, creating massive amounts of free cash flow. This may support debt reduction while also increasing the company's capacity to return capital to shareholders through dividends and share buybacks.

4.5. Projections and Business Plan

With the strategic landscape clear, it is imperative for all these understandings to be translated into concrete financial projections to estimate future cash flows. Making a prediction about the financial future of Melexis involves finding the balance between cyclical challenges that are anticipated to arise in 2026 and the profitable trends that are highlighted in their vision for 2030. The overall financial future depends heavily on the firm using its technological moat to capture value in an increasingly electrified and robotized global economy. The projections will allow us to calculate the Free Cash Flow (FCF), which is essential for Valuation. The calculation of FCF is based on the following formula:

$$FCF = EBIT \times (1 - \text{Tax Rate}) + D\&A - CAPEX - \Delta NWC$$

4.5.1. Forecasting Revenue

In projecting the company's income over the forecast period, the evaluation was divided into two segments: the "Beyond Automotive" division and the "Automotive Sector" division, using three different growth assumptions (base, pessimistic, and optimistic) from 2026 to 2030. For the Automotive Sector, I modeled an 8% compound annual growth rate (CAGR) through 2030 under the central scenario, 4% for the pessimistic scenario and 11% for the optimistic scenario. I calculated the 8% central rate using the actual historical compound annual growth rate recorded for the automotive segment between 2016 and 2025. Relying on this ten year average gives a realistic baseline because it naturally smooths out past market cycles. On the other hand, the 11% optimistic rate assumes that their China strategy works perfectly, while the 3,5% rate shows what happens if the hybrid trap and price wars continue. (see **Appendices 11 & 12**)

Concurrently, the Beyond Automotive segment is projected to grow at a 10% CAGR in the central scenario with 6% and 18% in the pessimistic and optimistic scenarios, respectively. In the exact same way, I derived the 10% central rate from the historical compound annual growth rate (CAGR) of this division between 2016 and 2025 to ensure the forecast relies on real past results. Starting from this historical foundation, the 18% optimistic scenario implies a broad commercial rollout of humanoid robots boosting the trend, while the 6% pessimistic rate accounts for potential delays in new industrial investments. Considering that the company will be able to implement their localized manufacturing concept in China along with product diversification, this division will increase its revenue from 100,75 million EUR in 2025 to 162,27 million EUR in 2030. Driven by these combined central forecasts, total projected revenues will cross the 1,0 billion EUR in 2028 (reaching 1.064,86 million EUR) and achieve 1,25 billion EUR by 2030 in the central scenario.

4.5.2. Forecasting EBIT Margin and EBIT

Future operating profits (EBIT) are forecasted by applying various margin assumptions based on the revenue. The baseline for this analysis is taken from the 2025 financial results, where the company generated an EBIT of 133,96 million EUR, translating to a margin of roughly 16%. From this starting point, future trends in profitability are adjusted annually considering changing macroeconomic environments and company performance under three different scenarios.

The underlying logic dictates that profitability will evolve in line with revenue growth and would depend strongly on the evolution of the product portfolio. Under the central base case, operating margins are anticipated to continue rising, moving from 17,5% in 2026 to 21% by 2030. This upward trend is primarily supported by the strategic integration of higher-value technological components, even if early gains are slightly muted by less demand and ongoing pricing negotiations with automotive clients.

With regard to a more adverse environment, the pessimistic approach illustrates a case whereby price competition and a slow movement towards premium products result in poor financial performance. In such a case, profits decline, resulting in an EBIT margin of 15,5% at the end of the period. On the other hand, the optimistic approach assumes favorable business conditions, which facilitate the quick adoption of high-end technology products. Consequently, the firm will achieve a strong operating margin of 25% in 2030. (see **Appendix 13**)

4.5.3. Forecasting Effective Tax Rate

The effective tax rate in Melexis between 2021 and 2025 was kept under control, even though it was impacted by the corporate taxation system of Belgium. In this particular case, the effective tax rate faced only marginal changes, ranging from its minimum of 15,41% in 2024 up to its maximum of 18,20% in 2022, with an average of 16,68% throughout this period of time. This historically low rate was mainly possible due to specific Belgian tax incentives, like the innovation income deduction, which acts as a tax niche for companies investing heavily in research and development like Melexis.

Instead of projecting the historical average of the rate, a rate of 17,5% was used throughout the forecast years. This adjustment is necessary because Melexis is strictly bound by the OECD Pillar Two model rules, which enforce a global minimum tax rate of 15,0%. Since this new legislation requires paying top up taxes for jurisdictions with lower rates like Bulgaria and Switzerland, using 17,5% provides a margin of safety. The use of this rate makes it conservative to estimate the future free cash flow. Moreover, it allows the maintenance of consistency in calculating the Weighted Average Cost of Capital (WACC) because it requires the use of a Corporate Tax Rate of 25%. Because international tax laws and research incentives can easily change, I will include a sensitivity analysis later in the valuation to show exactly how variations in this tax rate impact the final share price. (see **Appendix 14**)

4.5.4. Forecasting CAPEX

Future CAPEX from 2026 to 2030 is estimated based on the direct percentage of the future revenue streams. While Melexis operates under a fabless manufacturing model, they still need to invest heavily in specialized testing equipment and research facilities. The historical ratio of capital expenditures to revenue from 2021 to 2025 was 5,94%. This exact figure gives us a solid baseline for the financial model.

In order to reflect differences between the future business environments, I adjusted this baseline in all three models. The optimistic scenario requires a 6% investment ratio due to the high amounts of capital needed to fully equip their new facilities in Shanghai. For the central model, I maintained a stable investment ratio of 5%. Finally, the bearish scenario assumes a more conservative capital allocation approach, reducing the investment ratio to 4%. As a result, future annual investments in the model are simply calculated by multiplying the projected revenues by these specific percentages. (see **Appendix 15 for details**)

4.5.5. Forecasting D&A

To accurately project depreciation and amortization within the model, I decided to split the estimation between the already existing asset base and the newly forecasted capital expenditures.

For the new investments across the three scenarios, I applied a standard straight line depreciation method based on an average asset lifetime of 11,31 years.

In parallel, I used the depreciation schedule for the already existing asset base as the starting point, which naturally decreases from 48,62 million EUR in 2026 down to 29,76 million EUR in 2030 as these older assets become fully depreciated. This method gave me accurate results when determining the total amount of D&A to be added back in the free cash flow calculation. By combining these two elements, the total depreciation and amortization reaches a sum of 53,44 million EUR by 2030 for the central base case scenario. **(See Appendix 16)**

4.5.6. Forecasting NWC

In order to predict the changes in NWC, this calculation will only include the operational factors according to the formula: Trade Receivables + Inventories – Accounts Payable. The prediction for Inventories and Accounts payable will be made through the application of ratios on the Cost of Goods Sold (COGS). For Trade Receivables, it will be made through the application of ratios on Revenue. According to historical data collected during 2021 to 2025, COGS will be equal to 57% of sales. **(see Appendix 17 & 18)**

In the most likely case, these ratios should slowly drop as the company finally clears out its old inventory in a normal operating environment. The assumptions about the ratio changes rely on a calmer supply chain where Accounts Payable will move from 9,8% in 2026 to 9,6% in 2030, Trade Receivables will go from 12,4% to 12%, and Inventories will decrease from 53,% to 41,% of COGS. **(see Appendix 19)**

The effects of the pessimistic scenario on supply chain efficiency include reduced flexibility due to the cyclical decline and fewer electric cars being sold. The accumulation of unsold goods leads to an increase in the inventory to COGS percentage to 58,5% in 2026 and further to 60,5% in 2030. Moreover, delayed payments from late paying customers cause trade receivables to rise from 12,7% to 13,9%. Because suppliers ask for money earlier, accounts payable drops from 9,5% to 5,5%. This scenario causes more money to be locked in the day to day activities which hurts the overall cash position. **(see Appendix 20)**

On the contrary, the optimistic scenario features an extremely effective operating cycle due to exploding demand for the company's products. An increased speed of inventory turnover ensures the gradual reduction of inventory to COGS percentage from 50% in 2026 to 35% in 2030. Better cash collection helps bring down trade receivables to 11,2% of COGS, and improved negotiating powers allow increasing accounts payable to 12,5% by the end of the forecast period. All these factors lead to minimum cash lock up and maximum cash flow at the end of the process. (see Appendix 21)

4.5.7. Forecasting Free Cash Flow

Finally, for the purposes of financial projections, I combine all previously defined operational variables to calculate the Free Cash Flow. This can be considered as the key component of the discounted cash flow model calculated using the formula: $FCF = NOPAT + D\&A - CAPEX - \text{change in Net Working Capital}$.

Prior to the forecast period, **figure 11** shows that the company finished 2025 with an FCF of 80,12 million EUR. From 2026 onward, all three scenarios project a temporary increase in free

Central Scenario	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
mEUR										
Revenue	643,79	836,16	964,30	932,81	839,82	908,80	983,72	1064,86	1152,73	1247,90
EBIT	148,45	226,53	261,25	219,89	133,96	149,95	172,15	197,00	224,78	255,82
EBIT Margin	23,06%	27,09%	27,09%	23,57%	15,96%	16,50%	17,50%	18,30%	19,59%	20,50%
Taxes	23,19	41,23	43,70	33,87	23,39	26,24	30,33	34,47	39,34	44,77
Taxes (%)	15,6%	18,2%	16,7%	15,4%	17,6%	17,6%	17,5%	17,5%	17,5%	17,5%
NOPAT	125,26	185,30	217,55	186,01	110,57	123,71	142,02	162,52	185,45	211,05
Depreciation & Amortization	44,79	45,17	45,16	47,74	53,34	52,64	52,27	52,26	52,64	53,45
Capital Expenditures	-39,09	-39,88	-94,23	-52,99	-28,52	-45,44	-49,19	-53,24	-57,64	-62,39
Changes in NWC	-32,60	-46,11	-60,97	-7,33	-55,27	20,32	-10,22	-9,62	-8,87	-7,91
FCF	98,36	144,47	107,51	173,43	80,12	151,23	134,90	151,92	171,59	194,19
Discount factor						0,9107	0,8294	0,7654	0,6980	0,6265
Discounted FCF						137,73	111,89	114,76	118,04	121,67

Figure 11 – Forecasting Free Cash flow – Central Scenario

Sources: Author's own calculation and assumptions, company data extracted from Melexis Annual Report

cash flow. In the central model, the free cash flow increases to 151,23 million EUR. This happens because the company finally clears out the inventory and receivables built up over previous years, which brings a large amount of trapped cash back into the business. After this first peak, the total naturally drops back to 134,89 million EUR in the year 2027. This decrease is mainly due to the return of positive capital expenditure and working capital adjustments. The cash flow is projected to increase continually, despite its dip in 2027, due to growing income and profits. In the base case, free cash flow will recover after 2027, scaling consistently to reach 194,19 million EUR by 2030. (see Appendix 22)

The other scenarios show how sensitive the cash flow is to the company execution and the overall market conditions. In the pessimistic scenario, the company's poor performance and low inventory turnover result in limited growth in free cash flow, which reaches only 106,86 million EUR by the end of the decade. However, in an optimistic scenario, characterized by strong operations and technology adoption, the company aggressively generates free cash flow and ends up at 260,47 million EUR by 2030. (see **Appendices 23 & 24**)

5. Intrinsic Valuation: Discounted Cash Flow (DCF)

5.1. Configuration of the Weighted Average Cost of Capital (WACC)

For this, I configured a specific Weighted Average Cost of Capital for Melexis. The WACC represents the minimum return expected from investors for their investments associated with the risk. I calculate this using three main inputs: the cost of equity, the after tax cost of debt and the capital structure, weighted according to the market value of each source of financing.

$$WACC = \frac{E}{D+E} \cdot R_e + \frac{D}{D+E} \cdot R_d \cdot (1 - T)$$

Where E is the market value of equity, D is the market value of debt, R_e is the cost of equity, R_d is the cost of debt, and T is the effective corporate tax rate.

For finding the cost of equity, I used the Capital Asset Pricing Model (CAPM). To get a realistic risk-free rate, I assumed 3,08%, representing the interest on a 10 year German government bond. Next, I introduced the Equity Risk Premium of 5,24%, reflecting the premium required by investors for the Western European market (Damodaran, n.d.).

For calculating the beta coefficient of the volatility of Melexis compared to the market, I calculated it myself using linear regression. For the index, I used the STOXX Europe 600 Tech rather than the BEL 20. Since Melexis is a global company, its risk is driven by international tech and automotive markets. The BEL 20 mostly reflects the domestic Belgian economy and financial institutions, making it an inaccurate comparison.

Using this relevant benchmark, I opted for a weekly regression over a monthly one because it captures significantly more data points (278 vs. 63), obtaining a statistically more precise estimate. This is evidenced by a lower standard error (0,13 vs. 0,31) and a tighter 95% confidence interval [1,17 to 1,68] compared to [1,02 to 2,26] for the monthly regression. (see **Appendix 25 & 26**)

The weekly regression yielded a levered beta of 1,4272. To validate this result, I cross-referenced it with financial platforms, finding betas of 1,51 (Yahoo Finance, n.d.); 1,67

(Gurufocus, n.d.) and 1,42 (Investing.com, n.d.). These market figures fall perfectly within the 95% confidence interval, confirming the robustness of the weekly model. This high beta strategically confirms that Melexis is sensitive to the cyclical swings of global automobile production and inventory corrections.

To calculate the cost of debt, I added the risk-free rate to the default spread based on Damodaran's synthetic rating tables. Given their strong interest coverage ratio ($\frac{EBIT}{Interest\ charges}$) of 13,89; Melexis achieves a synthetic AAA credit rating, which corresponds to a spread of 0,4% (Damodaran, n.d.). To confirm that the cost of debt is not making the valuation figure appear inflated, I conducted a test of the effects of a possible decline in their credit rating. It turns out that even with the most substantial decline in creditworthiness to BBB, the WACC would go up to 9,85% only. **(see Appendix 27)**

Interest coverage ratio has stayed considerably higher than the minimum level of 8,5 required for an AAA rating over the last five years. In particular, this trend indicates robust financial strength, especially considering the recent decline in 2025, with the company's EBIT dropping to €133,9 million. When analyzing the past EBIT and interest expenses, we can see that the coverage ratio always stays well above the minimum AAA limit. **(see Appendix 28)**

Melexis relies heavily on the automotive sector, which is facing a clear slowdown in demand. While their solid track record fully justifies the AAA rating, keeping this low cost of debt will depend on their ability to protect margins in a tough automotive market. This results in a pre-tax cost of debt of 3,48%. Finally, applying a corporate tax rate of 25% yields an after-tax cost of debt of 2,61%. **(see Appendix 29)**

Regarding the capital structure, I looked at the accounting value of their debt¹⁸, which is 322 million EUR, compared to an equity market value of over 2,88 billion EUR. This means their capital structure is heavily weighted toward equity, which gives us weights of about 90,55% for equity and 9,45% for debt. **(see Appendix 30)**

By combining these weights with the cost of equity (10,55%) and the after-tax cost of debt (2,61%), I arrived at a final WACC of 9,80%. This rate will serve as the discount factor for the rest of the DCF model. As a final check on this 9,80% figure, I conducted a sensitivity test for the two key determinants, Equity Risk Premium and the Beta. It shows that the WACC moves

¹⁸ Total debt = long term debt + lease liabilities

quite a bit, from 8,30% to 11,49%, depending on market assumptions. This tells us that Melexis is sensitive to general market sentiment. Due to the fact that the company is operating in a cyclical market like the automotive technology industry, its valuation will decrease rapidly with any shift in investors attitudes toward investments. (see Appendices 31 & 32)

5.2. Terminal Value Calculation

In high-growth technology and semiconductor valuations, this terminal value usually makes up the vast majority of the total Enterprise Value, making the underlying assumptions sensitive to the final share price. For the academic methodology, I evaluated two different approaches to see how they impact the final valuation.

5.2.1. Perpetual Growth Method

The primary method I used for the models is the Gordon Growth formula.

$$TV = \frac{FCF_n * (1 + g)}{(r - g)}$$

Where FCF_n is the Free Cash Flow in the final forecast year, g is the perpetual growth rate, r is the WACC. This approach assumes that after 2030, the free cash flows of the company will grow at a steady and constant rate forever. I decided to apply a perpetual growth rate of 2%. I chose this specific rate because it perfectly aligns with the long term inflation targets set by central banks and reflects a mature, stabilized growth outlook for the traditional automotive sector.

5.2.2. EV/EBITDA Multiple Method

$$\text{Terminal Value (TV)} = EBITDA_n \times \text{Exit Multiple}$$

As a robust alternative for the research, I also examined the exit multiple method.

While the comparables analysis shows a median multiple of 14,12, applying this exact figure directly to the 2030 projections implies an unrealistic level of precision. To adjust for this, I normalized the exit multiple to 14x for the Central Scenario, which reflects a high quality technology firm that has reached a mature, stabilized growth phase. To capture the full picture of potential market conditions, I also modeled a 12x multiple for the Pessimistic Scenario and a 16x multiple for the Optimistic Scenario.

5.2.3. Calculation and Evaluation of Melexis

In the central scenario, by applying this 2% growth rate to the terminal free cash flow projection of 194,18 million EUR, I calculated an absolute Terminal Value of 2.538,62 million

EUR. When discounting this figure back to the valuation day using the 9,80% WACC, the present value of the terminal phase is 1.590,54 million EUR.

Figure 12 brings all these calculations together and gives us the final intrinsic value of the business. In the central scenario, the sum of the present value of the explicit cash flows from

mEUR	Central scenario	Pessimistic scenario	Optimistic scenario
FCFn	194,19	106,86	260,47
Perpetual Growth Rate	2%	2%	2%
WACC (Discount Rate)	9,80%	9,80%	9,80%
Terminal Value	2538,66	1397,09	3405,23
Discount Factor	0,63	0,63	0,63
Terminal Value Discounted	1590,57	875,33	2133,50
Enterprise Value	2194,64	1293,34	2893,55
Net Debt	287,40	287,40	287,40
Equity Value	1907,24	1005,94	2606,14
Fair Price in €	€ 47,21	€ 24,90	€ 64,51
Margin of Safety (%)	-38,17%	-67,39%	-15,51%

Figure 12 – DCF Results –Scenarios (Perpetual Growth Method)

Sources: Author's own calculation and assumptions, company data extracted from Melexis Annual Report

2026 to 2030, combined with the discounted terminal value, results in a total Enterprise Value of 2.120,64 million EUR. (see **Appendices 33 & 34 for the other scenarios**)

Subtracting this debt from the enterprise value leaves an Equity Value of 1.907,20 million EUR. Finally, by dividing this equity value by the total number of outstanding shares, the DCF model produces an intrinsic fair price of 47,21 EUR per share. Following the exact same methodology, but this time using the EV/EBITDA multiple and the terminal EBITDA. **Figure 13** shows the results of this change, which covers the pessimistic, central, and optimistic scenarios. For the Central Scenario, we obtain an intrinsic fair price of 49,91 EUR per share.

	Central Scenario	Pessimistic Scenario	Optimistic Scenario
Terminal EBITDA	309,26	206,84	430,24
EBITDA Multiple	14,00	12,00	16,00
Terminal Value	2712,67	1555,10	4313,01
Discount Factor	0,63	0,63	0,63
Terminal Value Discounted	1699,59	974,33	2702,26
Enterprise Value	2303,66	1392,33	3462,30
Net Debt	287,40	287,40	287,40
Equity Value	2016,25	1104,92	3174,89
Fair Price in €	€ 49,91	€ 27,35	€ 78,59
Margin of Safety (%)	-34,63%	-64,18%	2,93%

Figure 13 – DCF Results –Scenarios (EV/EBITDA Multiple)

Sources: Author's own calculation and assumptions, company data extracted from Melexis

If we compare our price estimate with the market price of 76,35 EUR, it shows that for both central scenarios Melexis is overvalued. Even the most optimistic scenario with the FCF fails to mathematically justify the stock price. The calculated Margin of Safety is a negative - 34,63%, indicating that an investor buying the stock at these market rates is taking on severe downside risk if future cash flows don't meet industry's growth rates.

5.3. Sensitivity Test on Price

As shown in **Figure 14**, the sensitivity analysis adjusts the WACC between 8,80% and 10,80% and the perpetual growth rate between 1% and 3%. If central banks cut rates and the WACC

Central Scenario					
WACC/g	1,00%	1,50%	2,00%	2,50%	3,00%
8,80%	€ 46,82	€ 49,70	€ 53,00	€ 56,82	€ 61,30
9,30%	€ 44,47	€ 47,01	€ 49,90	€ 53,22	€ 57,06
9,80%	€ 42,39	€ 44,66	€ 47,21	€ 50,11	€ 53,44
10,30%	€ 40,54	€ 42,56	€ 44,84	€ 47,40	€ 50,32
10,80%	€ 38,87	€ 40,70	€ 42,74	€ 45,02	€ 47,59

Figure 14 – Sensitivity Analysis – Central Scenario (Perpetual growth Method)

Sources: Author's own calculation and assumptions

drops to 8,80% while growth stays at 2%, the fair value expands to 53 EUR. Conversely, if inflation remains the same and the WACC increases by 100 basis points to 10,80%, the value goes to 42,74 EUR. This sensitivity highlights the financial risk introduced by their 287,40 million EUR debt position. It shows that Melexis is vulnerable to any shifts in global interest rates. (see **Appendices 35 & 36 for the other scenarios**)

Central scenario									
WACC/EBITDA Multiple	12	12,5	13	13,5	14	14,5	15	15,5	16
8,80%	47,35	49,06	50,64	52,29	53,94	55,58	57,23	58,88	60,52
9,30%	45,58	47,15	48,73	50,30	51,87	53,44	55,02	56,59	58,16
9,80%	43,90	45,40	46,90	48,40	49,91	51,41	52,91	54,41	55,92
10,30%	42,30	43,73	45,17	46,60	48,04	49,47	50,91	52,35	53,78
10,80%	40,77	42,14	43,52	44,89	46,26	47,63	49,01	50,38	51,75

Figure 15 – Sensitivity Analysis – Central Scenario (EV/EBITDA Multiple)

Sources: Author's own calculation and assumptions

The same pattern shows up in the EBITDA Multiple sensitivity analysis in **figure 15**. If we take the central WACC of 9,80% and apply a 14x multiple, the implied share price sits at 49,91 EUR. Even under a more optimistic scenario combining a 16x multiple with an 8,80% WACC, the estimated value reaches 60,52 EUR. Conversely, a 12x multiple combined with a 10,80% WACC results in an estimated value of 40,77 EUR. (see **Appendices 37 & 38 for the other scenarios**)

I noticed a significant difference between the 16,68% average tax rate Melexis recorded from 2021 to 2025 and the standard 25% Belgian corporate rate. I decided to investigate how much this tax spread changes the final share price and the sensitivity is quite limited. Even if the company were taxed at the full 25% rate, the value only drops to €45,83. On the other hand,

a lower 15% rate only moves the price up to €47,67. This proves that the tax rate is not the main factor behind the market mispricing. (see **Appendix 39**)

5.4. Comparables Analysis

5.4.1. Comparables Selection

Selecting the right peers was a challenging part of the research because the semiconductor industry contains different business models and end markets. I initially extracted a list of twenty-five potential competitors from the Bloomberg terminal. To isolate the most relevant benchmarks, I narrowed this list down to four core peers by applying two strict criteria. First, I excluded companies that do not share the heavy automotive exposure of Melexis. Secondly, I filtered out purely regional players.

This rigorous filtering process left me with a group consisting of ON Semiconductor, NXP Semiconductors, Infineon Technologies, and Elmos Semiconductor. While the three larger companies own physical manufacturing facilities, they target the exact same automotive and industrial markets as Melexis and represent the global standard for this sector. To balance this out, Elmos Semiconductor was retained as it provides a specialized and direct competitor benchmark. This final selection provides a robust and accurate basis for the market valuation. (See **Appendix 40**)

5.4.2. Multiple Selection

For the valuation metrics, I extracted data for four specific multiples consisting of Enterprise Value to EBITDA, Enterprise Value to Revenue, Price to Earnings ratio, and Enterprise Value to EBIT. Given the disparities between peers in terms of size and business models, I chose to focus on the median values as benchmarks to limit the impact of outliers. The data shows that the peer group median for the Enterprise Value to EBITDA multiple is 14,12. Melexis trades closely in line with this peer group at an individual multiple of 15,08. (see **Appendices 41 & 42**)

5.4.3. Calculation and Evaluation of Melexis

When I apply these peer benchmarks directly to the financial metrics of Melexis, the results provide a clear valuation range. Looking at **Figure 16**, adjusting the Enterprise Value to EBITDA Multiple by its standard deviation creates an implied share price for Melexis landing in a range between 57 EUR and 85,11 EUR. Applying the standard deviation to the Enterprise Value to Revenue multiple yields a wider range from 89,38 EUR to 127,05 EUR. The Price to Earnings ratio sensitivity analysis produces a range from 66,46 EUR all the way up to 97,60 EUR. Finally,

applying the specific peer group standard deviation to the Enterprise Value to EBIT multiple results in a price range from 53,43 EUR to 92,24 EUR.

		median	Estimated EV	Net debt	equity value	estimated share price	price range
STDV	Mutiple used						
2,60	EV/EBITDA (+2,5)	16,72	3.652.731.437,28	214.250.000,00	3.438.481.437,28	85,11	57-85,11
	EV/EBITDA (-2,5)	11,52	2.517.024.739,88	214.250.000,00	2.302.774.739,88	57,00	
0,86	EV/Revenue(+0,5)	6,04	5.346.868.279,69	214.250.000,00	5.132.618.279,69	127,05	89,38-127,05
	EV/Revenue(-0,5)	4,32	3.825.251.222,53	214.250.000,00	3.611.001.222,53	89,38	
4,72	P/E (+7)	29,56			3.942.973.970,72	97,60	66,46-97,6
	P/E (-7)	20,13			2.684.904.473,29	66,46	
4,67	EV/EBIT (+3)	23,48	3.940.917.118,45	214.250.000,00	3.726.667.118,45	92,24	53,43-92,24
	EV/EBIT (-3)	14,13	2.372.743.414,52	214.250.000,00	2.158.493.414,52	53,43	

Figure 16 – Comparables results – different multiples

Sources: Author's own calculation and assumptions, company data from Bloomberg

Upon comparison of these theoretical figures to the realities of the market up until the valuation date, which is May 12, 2026, the share price of Melexis was selling at 76,35 EUR per share. This particular price level falls within the standard deviation levels of the main multiples, especially EV/EBITDA, Price/Earnings multiple, and EV/EBIT. If Melexis simply got the exact same EV/EBITDA market respect as its competitor median of 14,12; its stock would mathematically trade near 71,06 EUR. The fact that the price of 76,35 EUR was slightly above this strict operational median suggests a small market premium. Ultimately, this demonstrates that benchmarked against its global peers, Melexis was priced accurately and realistically by the market.

However, it is necessary to address why this relative market valuation yields a higher implied share price than the Discounted Cash Flow model. Throughout the results, I observed that this divergence is driven by a few core structural differences between the two methods. First, comparables analysis relies on market multiples, which inherently capture broader macroeconomic optimism and the investor enthusiasm for the entire semiconductor sector. The DCF model remains isolated from short term market fluctuation. Secondly, applying the multiples of diversified industry giants like NXP or Infineon mathematically imports a degree of their size and safety premium into the theoretical value of Melexis. Finally, the intrinsic valuation relies heavily on a strict weighted average cost of capital. By applying conservative risk estimates in the DCF model, I naturally compressed the present value of future cash flows, whereas the broader stock market is willing to pay a high multiple expansion for future growth.

5.5. Financial impact of ESG risks

The most pressing regulatory risk is the proposed European ban on PFAS chemicals. These toxic substances are absolutely essential for cleaning and processing silicon wafers. These increased costs will inevitably be passed down the supply chain to Melexis. I accounted for this exact risk in the central DCF scenario by permanently capping their operating margins below 21%, reflecting the increased cost of sustainable goods.

Furthermore, there is a geopolitical and social risk regarding their exposure to China, which generates nearly 29% of their global revenue. The Chinese government is heavily subsidizing domestic companies to achieve technological self-sufficiency. This creates a severe risk of intellectual property theft through reverse engineering, leading directly to price wars. I modeled this exact supply chain decoupling in the pessimistic scenario, which destroys immense enterprise value and drops the fair share price down to just 23,35 EUR.

Finally, physical climate change poses a threat to the foundry network.

5.6. Football Field Valuation

From a fundamental perspective, the central Discounted Cash Flow range indicates that the stock is overvalued. The company does not generate the necessary cash flows to fully support its market capitalization. Conversely, the relative valuation metrics, specifically the Enterprise Value to EBITDA range, suggest the stock is priced conservatively when compared to the high multiples of its direct competitors.

However, the most important takeaway from this chart is the convergence zone highlighted by the vertical box. The most robust implied share price lies in the tight range between 57 EUR and 60,52 EUR.

The gap between this fundamental price range and the actual trading price suggests that investors are largely overlooking the short term cash flow constraints caused by recent automotive inventory destocking. Instead, the market is fully pricing in an optimistic future where the proliferation of software defined vehicles and industrial robotics drives volume growth. **(see Appendices 43 & 44)**

6. Stock Reputation

To comprehend the market premium despite these fundamentals, I analyzed Melexis's corporate reputation using LPE Research criteria, yielding a score of 69/100 across five areas. The area with the lowest score is the stock performance, which received 8 out of 20 points. This low score reflects historical volatility and deviations from its moving average.

However, this volatility is offset by the Quality of shareholder structure, which scored 8 out of 10. Major institutional investors hold nearly 24% of the free float.

Governance also scored well, with 10 out of 15 points. While the company is controlled by the founding families, they maintain strong transparency. The CEO and Chairman roles are strictly separated, and the board benefits from a strong independent representation (57%).

Most importantly, their Social and environmental focus achieved 18 out of 20 points. The company treats social impact as a top priority with detailed reporting, and their products are universally recognized for having a positive impact on global carbon reduction by enabling electric vehicles.

Lastly they scored 15/20 for their communication and consistency. While Melexis maintains consistent financial reporting and transparent strategy, this score is heavily dragged down by recent failures to meet financial targets. Because they missed their revenue guidance for both 2024 and 2025, they received a zero out of five for guidance achievement. This specific metric shows that while the management team is transparent and detailed about what they want to do, they have struggled to deliver on their short term financial promises during the recent automotive industry downturn (Belga News Agency, n.d.). **(see Appendix 45)**

7. Conclusion

Fundamental analysis reveals a significant gap between the actual cash generation of Melexis and its stock market valuation. The central Discounted Cash Flow model indicates a fair price range between 38,81 EUR and 61,3 EUR. While the comparative analysis produced a higher implied price, this is mostly driven by the market enthusiasm for the entire semiconductor sector rather than immediate financial performance.

Beyond the mathematical models, the company has to navigate serious strategic challenges in the coming years. The upcoming European restrictions on PFAS chemicals and the intense price competition from Chinese domestic suppliers pose direct threats to their operating margins. Melexis does have a solid corporate reputation to rely on, backed by loyal shareholders and a genuine commitment to sustainability. However, the fact that they recently missed their own revenue guidance proves they are still exposed to the ongoing inventory correction in the automotive market.

Consequently, the final assessment indicates that the Melexis stock is as of 12 May 2026 overvalued. The underlying business model is definitely strong and well positioned for the long

term electrification of cars over a five to ten year horizon. Trading near 76,35 EUR, the stock offers a negative margin of safety. Investors should sell their positions to protect capital and wait for a broader market correction to align the share price with its fundamental value. The market price appears to reflect an optimistic scenario that overlooks immediate operational risks. Therefore, the stock only represents an attractive positioning once a market realignment brings the share price back within its fundamental valuation range, situated between 57,00 EUR and 60,52 EUR.

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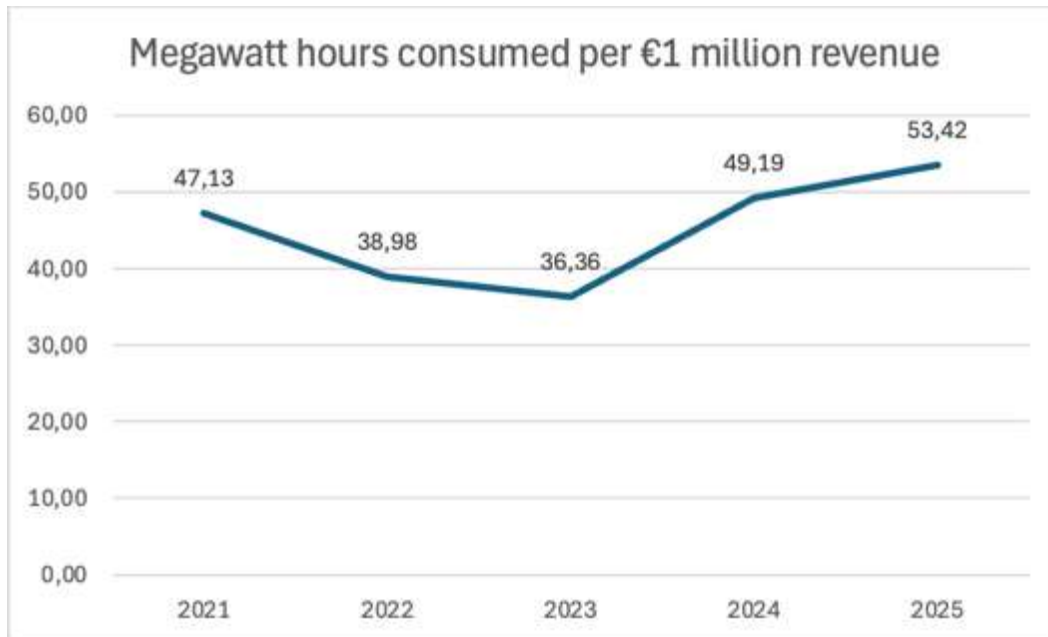
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9. Appendices

Appendix 1:

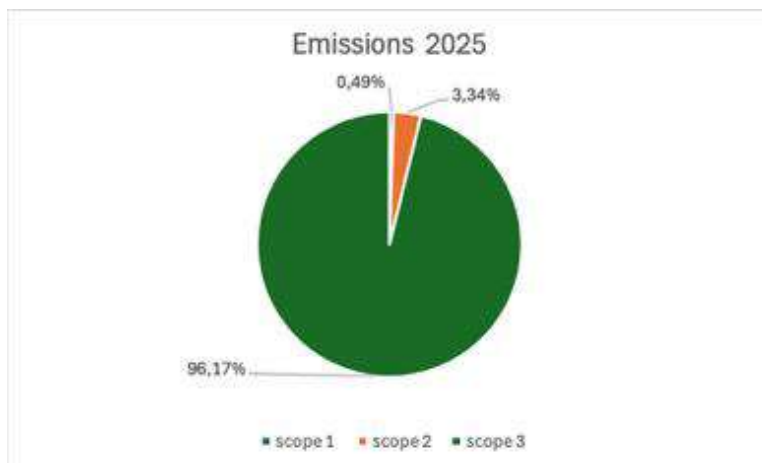


Title: Evolution of Energy Intensity (2021-2025)

Sources: Company data extracted from Melexis Annual Report

Unit: Megawatt hours consumed per € 1 million revenue

Appendix 2:



Title: Greenhouse Gas Emissions Breakdown by Scope (2025)

Sources: Author's own calculation, company data extracted from Melexis Annual Report

Unit: Percentages (%)

Appendix 3:



Title: SWOT Summary

Sources: Author's own assumptions

Appendix 4:

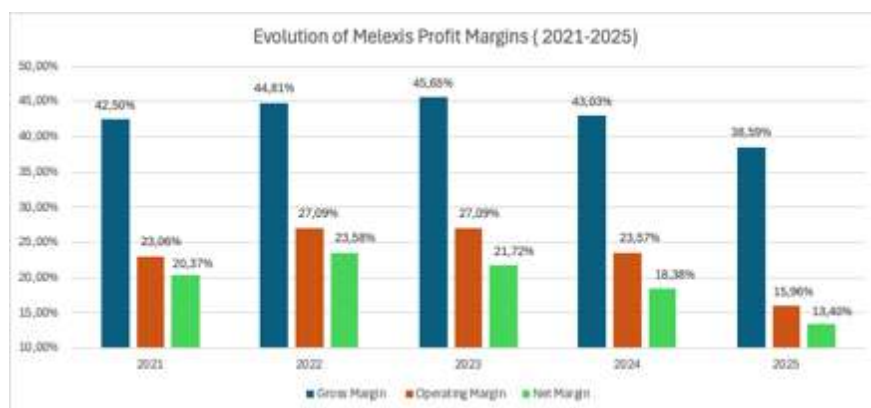
in EUR	2025	2024
Europe, Middle East and Africa	239,362,070	285,074,745
Germany	84,033,222	117,562,234
France	25,133,441	24,658,521
United Kingdom	5,243,812	2,051,414
Poland	5,930,268	9,234,396
Switzerland	19,935,726	23,575,913
Ireland	587,680	515,767
Czech Republic	8,345,759	9,584,432
Austria	9,695,708	12,383,404
Netherlands	45,768	17,178
Romania	15,961,214	22,828,191
Bulgaria	4,807,147	4,315,288
Spain	2,902,914	2,640,321
Lithuania	13,672,865	12,999,456
Hungary	8,446,551	7,089,382
Italy	9,269,146	12,935,699
Other	25,350,849	22,683,149
North and Latin America	65,233,770	84,490,836
United States	32,389,569	44,194,467
Canada	11,794,265	22,872,344
Mexico	21,043,732	17,422,802
Other	6,204	1,223
Asia Pacific	535,021,120	563,242,486
Japan	69,174,099	83,790,918
Mainland China	114,081,952	117,137,557
Hong Kong	128,577,782	137,293,848
Thailand	61,750,485	75,582,019
South Korea	67,600,827	67,344,567
Philippines	17,653,015	21,869,704
Taiwan	6,233,519	5,007,296
India	17,995,670	18,070,201
Singapore	34,219,457	23,431,375
Other	17,734,314	13,715,001
Total	839,616,959	932,808,067

Title: Sales by Country

Sources: Melexis Annual Report 2025

Unit: Euros (EUR)

Appendix 5:



Title: Evolution of Melexis Profit Margins (2021-2025)

Source: Author's own calculation, company data extracted from Melexis Annual Report

Unit: Percentages (%)

Appendix 6:

mEUR	2021	2022	2023	2024	2025
Revenue	643,79	836,16	964,30	932,81	839,62
Cost Of Goods Sold (COGS)	-370,19	-461,48	-524,08	-531,46	-515,61
Gross Profit	273,60	374,68	440,22	401,35	324,01
Gross Margin (%)	42,50%	44,81%	45,65%	43,03%	38,59%
Research and Development (R&D)	-78,39	-90,21	-106,73	-110,25	-115,90
General and Administrative (G&A)	-32,05	-40,89	-50,60	-51,37	-54,33
Selling (S)	-14,71	-17,05	-21,64	-19,84	-19,82
EBIT	148,45	226,53	261,25	219,89	133,96
Operating Margin	23,06%	27,09%	27,09%	23,57%	15,96%
Financial Income	13,20	23,53	9,11	6,38	18,93
Financial Charges	-7,35	-11,68	-17,19	-20,93	-17,00
Profit Or Loss Before Tax	154,30	238,38	253,16	205,34	135,90
Taxes	23,19	41,23	43,70	33,87	23,39
Net Profit Or Loss For The Period	131,11	197,15	209,46	171,47	112,51
Net Margin	20,37%	23,58%	21,72%	18,38%	13,40%

Title: Income Statement Breakdown (2021-2025)

Source: Author's own calculation, company data extracted from Melexis Annual Report

Unit: Millions of euros (mEUR)

Appendix 7:

mEUR	2021	2022	2023	2024	2025
Total Current Asset	291,86	407,74	450,07	472,59	579,35
Total Non-Current Assets	169,32	172,50	416,02	421,66	323,92
Total Assets	461,18	580,23	866,09	894,26	903,27
Total Current Liabilities	69,21	88,08	124,03	104,21	106,05
Total Non Current Liabilities	2,91	10,07	190,99	222,54	312,69
Total Liabilities	72,12	98,15	315,01	326,75	418,74
Total Equity	389,06	482,08	551,07	567,50	484,53
Total Equity And Liabilities	461,18	580,23	866,08	894,26	903,27
Working Capital	175,63	220,37	285,42	339,58	449,85
Net Working Capital	187,45	233,56	294,52	301,86	357,13
Total Debt	4,63	4,25	188,18	222,18	322,04
Cash & Cash Equivalent	34,95	85,08	39,35	32,68	34,63
Net Indebtedness/ Net Debt	-40,68	-93,33	148,83	189,50	287,40

Title: Balance Sheet Breakdown (2021-2025)

Source: Author's own calculation, company data extracted from Melexis Annual Report

Unit: Millions of euros (mEUR)

Appendix 8:

	2021	2022	2023	2024	2025
cash & cash equivalent	€ 34.950.394,00	€ 85.080.008,00	€ 39.348.841,00	€ 32.681.024,00	€ 34.633.433,00
current investments, derivation	€ 10.356.160,00	€ 12.500.754,00	€ 0,00	€ 0,00	€ 0,00
accounts receivable- trade	€ 80.229.168,00	€ 107.547.507,00	€ 120.206.343,00	€ 102.246.479,00	€ 107.852.150,00
accounts receivable- related companies	€ 5.179.602,00	€ 1.285.880,00	€ 0,00	€ 0,00	€ 0,00
assets for current tax	€ 5.976.258,00	€ 1.593.576,00	€ 3.727.334,00	€ 18.889.415,00	€ 27.726.651,00
inventories	€ 144.490.281,00	€ 179.648.792,00	€ 254.348.153,00	€ 262.815.232,00	€ 300.329.420,00
other current assets	€ 10.680.012,00	€ 20.078.633,00	€ 32.439.173,00	€ 55.960.757,00	€ 108.805.150,00
total current asset	€ 291.861.875,00	€ 407.735.150,00	€ 450.069.844,00	€ 472.592.907,00	€ 579.346.804,00
deferred tax assets	€ 25.230.552,00	€ 27.832.233,00	€ 33.331.820,00	€ 36.985.308,00	€ 35.367.266,00
other non-current assets	€ 3.140.921,00	€ 2.369.107,00	€ 181.233.403,00	€ 163.581.332,00	€ 82.818.890,00
net property, plant and equipment	€ 132.020.093,00	€ 135.078.650,00	€ 195.883.944,00	€ 211.119.499,00	€ 196.955.806,00
intangible assets	€ 4.334.611,00	€ 3.049.458,00	€ 2.075.226,00	€ 1.175.079,00	€ 1.197.246,00
leased assets	€ 4.592.443,00	€ 4.168.369,00	€ 3.496.902,00	€ 8.801.161,00	€ 7.582.699,00
total non-current assets	€ 169.318.620,00	€ 172.497.817,00	€ 416.021.295,00	€ 421.662.379,00	€ 323.921.907,00
total assets	€ 461.180.495,00	€ 580.232.967,00	€ 866.091.139,00	€ 894.255.286,00	€ 903.268.711,00

Title: Total Assets Breakdown (2021-2025)

Source: Author's own calculation, company data extracted from Melexis Annual Report

Unit: Millions of euros (EUR)

Appendix 9:

	2021	2022	2023	2024	2025
derivation financial instruments	€ 0,00	€ 0,00	€ 259.214,00	€ 228.348,00	€ 283.773,00
current portion of long-term debt	€ 0,00	€ 0,00	€ 0,00	€ 5.796.846,00	€ 13.021.807,00
lease liabilities	€ 1.718.141,00	€ 1.709.951,00	€ 1.526.743,00	€ 2.143.011,00	€ 2.116.037,00
accounts payable - trade	€ 22.667.627,00	€ 28.728.082,00	€ 80.030.373,00	€ 63.202.611,00	€ 51.054.111,00
accounts payable - related companies	€ 19.785.548,00	€ 26.195.316,00	€ 0,00	€ 0,00	
short-term employee benefits accruals	€ 17.810.905,00	€ 21.103.825,00	€ 23.680.221,00	€ 18.222.489,00	€ 22.522.563,00
accrued taxes	€ 789.822,00	€ 1.283.753,00	€ 2.642.293,00	€ 3.219.819,00	€ 6.706.260,00
other current liabilities	€ 4.002.058,00	€ 5.105.614,00	€ 12.964.363,00	€ 9.320.419,00	€ 5.902.022,00
deferred income	€ 2.437.459,00	€ 3.952.550,00	€ 2.925.624,00	€ 2.076.383,00	€ 4.444.997,00
total current liabilities	€ 69.211.560,00	€ 88.079.091,00	€ 124.028.831,00	€ 104.209.926,00	€ 106.051.570,00
long-term debt less current portion	€ 0,00	€ 0,00	€ 184.659.096,00	€ 207.525.218,00	€ 301.277.602,00
lease liabilities	€ 2.908.663,00	€ 2.538.904,00	€ 1.989.751,00	€ 6.714.403,00	€ 5.622.758,00
other non-current liabilities	€ 0,00	€ 4.272.000,00	€ 3.625.947,00	€ 4.567.028,00	€ 3.114.505,00
deferred tax liabilities	€ 3.824,00	€ 3.259.743,00	€ 710.268,00	€ 3.737.367,00	€ 2.673.210,00
total non current liabilities	€ 2.912.487,00	€ 10.070.647,00	€ 190.985.062,00	€ 222.544.016,00	€ 312.688.075,00
total liabilities	€ 72.124.047,00	€ 98.149.738,00	€ 315.013.893,00	€ 326.753.942,00	€ 418.739.645,00

Title: Total Liabilities Breakdown (2021-2025)

Source: Author's own calculation, company data extracted from Melexis Annual Report

Unit: Millions of euros (EUR)

Appendix 10:

Strategic Dimension	Pessimistic Scenario (Bear Case)	Central Scenario (Normal Case)	Optimistic Scenario (Bull Case)
Macro and Geopolitics	Growing political tension and high taxes on imports between the West and China.	Stable market conditions with a steady global shift towards electrification.	The economy recovers quickly by late 2026 with lower interest rates encouraging spending.
Automotive Sector	The transition to electric vehicles slows down significantly in favor of traditional engines.	Electric vehicle adoption continues at a sustained but rational pace.	Accelerated adoption of software defined vehicles and much higher demand for backup sensors.
Beyond Automotive	Segment growth is hidden by big price fights and ongoing supply chain problems.	The segment grows at a 10.0% rate while gaining market share in new industries.	A robotics supercycle drives massive demand for Tactaxis and Arcminaxis sensors.
China Market	The plan to build in China fails as local competitors start a price war that hurts profits.	Successful execution of the local manufacturing concept to serve Chinese customers.	Melexis products become the industry standard allowing for significant pricing premiums.
Supply Chain	Supplier issues stop the company from delivering enough chips to the global market.	Gradual normalization of the inventory cycle among Tier 1 suppliers.	Massive operational leverage allows production to easily meet high volume demand.
Financial Outlook	EBIT margins drop to 15.0% and the final free cash flow only reaches 96,22 million euros.	Revenues reach 1.25 billion euros with a final free cash flow of 193,01 million euros.	EBIT margins reach 25.0% with a final free cash flow climbing to 250,70 million euros.

Title: Scenarios Analysis and comparison

Source: Author's own analysis

Appendix 11:

Segment Automotive															
mEUR	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Revenue	58.19	56.28	61.34	58.86	65.01	70.82	83.42	94.43	81.28	100.76					
CAGR (Central Scenario)(2026-2030)											11%	11%	11%	11%	11%
CAGR (Pessimistic Scenario)(2026-2030)											8%	8%	8%	8%	8%
CAGR (Optimistic Scenario)(2026-2030)											14%	14%	14%	14%	14%
CAGR of 2016 to 2025															
								16.89%							
											118.89	140.29	160.54	180.39	200.68
Automotive Sector															
mEUR	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Revenue	406.09	401.28	418.12	447.81	446.81	472.87	512.14	567.87	638.52	728.88					
CAGR (Central Scenario)(2026-2030)											8%	8%	8%	8%	8%
CAGR (Pessimistic Scenario)(2026-2030)											4%	4%	4%	4%	4%
CAGR (Optimistic Scenario)(2026-2030)											11%	11%	11%	11%	11%
CAGR of 2016 to 2025															
											7.89%				
											787.67	981.81	1205.75	1466.23	1765.63
											788.42	788.51	821.12	864.17	908.84
											810.14	910.16	1019.49	1127.85	1245.63

Title: Historical Revenue per Sector & Revenue Forecast (2026-2030)

Source: Author's own calculation, company data extracted from Melexis Annual Report

Unit: Millions of euros (mEUR) and percentages (%)

Appendix 12:

Total Revenue (mEUR)	2025	2026	2027	2028	2029	2030	CAGR global (2025-2030)
CAGR (Central Scenario)(2026-2030)	839.62	908.80	983.72	1064.86	1152.73	1247.90	8.25%
CAGR (Pessimistic Scenario)(2026-2030)	839.62	875.22	912.36	951.12	991.56	1033.77	4.25%
CAGR (Optimistic Scenario)(2026-2030)	839.62	939.03	1050.64	1176.03	1316.99	1475.53	11.94%

Title: Total Revenue Forecast (2026-2030)

Source: Author's own calculation, company data extracted from Melexis Annual Report

Unit: Millions of euros (mEUR)

Appendix 13:

Percentage (%)	2026	2027	2028	2029	2030	
EBIT Margin (Central Scenario)	16,50%	17,50%	18,50%	19,50%	20,50%	
EBIT Margin (Pessimistic Scenario)	15,00%	15,00%	15,50%	15,50%	15,50%	
EBIT Margin (Optimistic Scenario)	18,00%	20,00%	22,00%	24,00%	25,00%	
mEUR	2025	2026	2027	2028	2029	2030
EBIT (Central Scenario)	133,96	149,95	172,15	197,00	224,78	255,82
EBIT (Pessimistic Scenario)	133,96	131,28	136,85	147,42	153,69	160,23
EBIT (Optimistic Scenario)	133,96	169,02	210,13	258,73	316,08	368,88

Title: Calculation for EBIT Forecast (2026-2030)

Source: Author's own calculation, company data extracted from Melexis Annual Report

Unit: Percentages (%)

Appendix 14:

Percentage (%)	2021	2022	2023	2024	2025
Effective tax rate	15,62%	18,20%	16,73%	15,41%	17,46%
Average Effective Tax Rate	16,68%				
Effective Tax Rate Chosen	17,5%				

Title: Calculation of Effective Tax Rate (2021-2025)

Source: Author's own calculation, company data extracted from Melexis Annual Report

Unit: Percentages (%)

Appendix 15:

mEUR	2021	2022	2023	2024	2025	
Capital Expenditures (CAPEX)	39,09	39,88	94,23	52,99	28,52	
Revenue	643,79	836,16	964,30	932,81	839,62	
CAPEX/ Revenue Ratio	6,07%	4,77%	9,77%	5,68%	3,40%	
Average CAPEX/ Revenue Ratio	5,94%					
mEUR	2025	2026	2027	2028	2029	2030
1. Central Scenario :						
Capital Expenditures (CAPEX)	28,52	45,44	49,19	53,24	57,64	62,39
CAPEX/ Revenue Ratio	5,0%	5,0%	5,0%	5,0%	5,0%	5,0%
2. Pessimistic Scenario :						
Capital Expenditures (CAPEX)	-28,52	35,01	36,49	38,04	39,66	41,35
CAPEX/ Revenue Ratio	4,0%	4%	4%	4%	4%	4%
3. Optimistic Scenario :						
Capital Expenditures (CAPEX)	-28,52	56,34	63,04	70,56	79,02	88,53
CAPEX/ Revenue Ratio	6,0%	6%	6%	6%	6%	6%

Title: Calculation of Capital Expenditures (CAPEX) on different Scenarios (2026-2030)

Source: Author's own calculation, company data extracted from Melexis Annual Report

Unit: Millions of euros (mEUR) and percentages (%)

Appendix 16:

mEUR	2025	2026	2027	2028	2029	2030
CAPEX (Central Scenario)		45,44	49,19	53,24	57,64	62,39
CAPEX (Pessimistic Scenario)		35,01	36,49	38,04	39,66	41,35
CAPEX (Optimistic Scenario)		56,34	63,04	70,56	79,02	88,53
Asset Lifetime	11,31	10,31	9,31	8,31	7,31	6,31
Depreciation (New Capex)(Central)		4,02	8,37	13,07	18,17	23,69
Depreciation (New Capex)(Pessimistic)		3,10	6,32	9,69	13,19	16,85
Depreciation (New Capex)(Optimistic)		4,98	10,55	16,79	23,78	31,61
Depreciation & Amortization (existing)	53,34	48,62	43,91	39,19	34,48	29,76
Total D&A (Central)		52,64	52,27	52,26	52,64	53,45
Total D&A (Pessimistic)		51,72	50,23	48,88	47,67	46,61
Total D&A (Optimistic)		53,60	54,46	55,98	58,26	61,37

Title: Calculation of Depreciation & Amortization (D&A) on different Scenarios (2026-2030)

Source: Author's own calculation, company data extracted from Melexis Annual Report

Unit: Millions of euros (mEUR)

Appendix 17:

mEUR	2021	2022	2023	2024	2025
Revenue	643,79	836,16	964,30	932,81	839,62
Cost Of Goods Sold (COGS)	370,19	461,48	524,08	531,46	515,61
AS % of Revenue	57,50%	55,19%	54,35%	56,97%	61,41%
Ratio COGS/Revenue (2021-2025)	57,08%				

Title: Calculation Ratios COGS/Revenue (2021-2025)

Source: Author's own calculation, company data extracted from Melexis Annual Report

Unit: Millions of euros (mEUR) and percentages (%)

Appendix 18:

mEUR	2020	2021	2022	2023	2024	2025
Revenue		643,79	836,16	964,30	932,81	839,62
Cost Of Goods Sold (COGS)		370,19	461,48	524,08	531,46	515,61
Accounts Payable		42,45	54,92	80,03	63,20	51,05
AS % of COGS		11,47%	11,90%	15,27%	11,89%	9,90%
Accounts Receivables		85,41	108,83	120,21	102,25	107,85
AS % of Revenue		13,27%	13,02%	12,47%	10,96%	12,85%
Inventories		144,49	179,65	254,35	262,82	300,33
AS % of COGS		39,03%	38,93%	48,53%	49,45%	58,25%
Net working capital (NWC)	154,84	187,45	233,56	294,52	301,86	357,13
Change in NWC		-32,60	46,11	60,97	7,33	55,27

Title: Calculation of Average Ratios used for Net Working Capital (2021-2025)

Source: Author's own calculation, company data extracted from Melexis Annual Report

Unit: Millions of euros (mEUR) and percentages (%)

Appendix 19:

Central Scenario	Average Ratio (2021-2025)	2026	2027	2028	2029	2030
Accounts Payable Average Ratio (2026-2030)	12,1%	9,8%	9,75%	9,7%	9,65%	9,6%
Accounts Receivable Average Ratio (2026-2030)	12,5%	12,40%	12,30%	12,20%	12,10%	12,00%
Inventories Average Ratio (2026-2030)	46,8%	53,0%	50,0%	47,0%	44,0%	41,0%
Central Scenario	2025	2026	2027	2028	2029	2030
Revenue	839,62	908,80	983,72	1064,86	1152,73	1247,90
Cost of Goods Sold	515,61	518,79	561,56	607,87	658,03	712,36
Ratio COGS/ Revenue (2021-2025)	57,08%					
Accounts Payable	51,05	50,84	54,75	58,96	63,50	68,39
AS % of COGS	9,90%	9,80%	9,75%	9,70%	9,65%	9,60%
Trade Receivables	107,85	112,69	121,00	129,91	139,48	149,75
AS % of Revenue	12,85%	12,40%	12,30%	12,20%	12,10%	12,00%
Inventories	300,33	274,96	280,78	285,70	289,53	292,07
AS % of COGS	58,25%	53,00%	50,00%	47,00%	44,00%	41,00%
Net Working Capital (NWC)	357,13	336,81	347,02	356,65	365,51	373,43
Change in NWC	-32,60	20,32	-10,22	-9,62	-8,87	-7,91

Title: Calculation of Net Working Capital – Central Scenario (2026-2030)

Source: Author's own calculation, company data extracted from Melexis Annual Report

Unit: Millions of euros (mEUR) and percentages (%)

Appendix 20:

Pessimistic Scenario	Average Ratio (2021-2025)	2026	2027	2028	2029	2030
Accounts Payable Average Ratio (2026-2030)	12,1%	9,5%	8,5%	7,5%	6,5%	5,5%
Accounts Receivable Average Ratio (2026-2030)	12,5%	12,70%	13,00%	13,30%	13,60%	13,90%
Inventories Average Ratio (2026-2030)	46,8%	58,5%	59,0%	59,5%	60,0%	60,5%
Pessimistic Scenario	2025	2026	2027	2028	2029	2030
Revenue	839,62	875,22	912,36	951,12	991,56	1033,77
Cost of Goods Sold	515,61	499,62	520,82	542,94	566,03	590,13
Ratio COGS/ Revenue (2021-2025)	57,08%					
Accounts Payable	51,05	47,46	44,27	40,72	36,79	32,46
AS % of COGS	9,90%	9,5%	8,5%	7,5%	6,5%	5,5%
Trade Receivables	107,85	111,15	118,61	126,50	134,85	143,69
AS % of Revenue	12,85%	12,7%	13,0%	13,3%	13,6%	13,9%
Inventories	300,33	292,27	307,28	323,05	339,62	357,03
AS % of COGS	58,25%	58,5%	59,0%	59,5%	60,0%	60,5%
Net Working Capital (NWC)	357,13	355,96	381,62	408,83	437,68	468,26
Change in NWC	-32,60	1,16	-25,66	-27,21	-28,85	-30,58

Title: Calculation of Net Working Capital – Pessimistic Scenario (2026-2030)

Source: Author's own calculation, company data extracted from Melexis Annual Report

Unit: Millions of euros (mEUR) and percentages (%)

Appendix 21:

Optimistic Scenario	Average Ratio (2021-2025)	2026	2027	2028	2029	2030
Accounts Payable Average Ratio (2026-2030)	12,1%	10,5%	11,0%	11,5%	12,0%	12,5%
Accounts Receivable Average Ratio (2026-2030)	12,5%	12,0%	11,8%	11,6%	11,4%	11,2%
Inventories Average Ratio (2026-2030)	46,8%	50,0%	44,0%	40,0%	37,0%	35,0%
Optimistic Scenario	2025	2026	2027	2028	2029	2030
Revenue	839,62	939,03	1050,64	1176,03	1316,99	1475,53
Cost of Goods Sold	515,61	536,04	599,76	671,34	751,80	842,30
Ratio COGS/ Revenue (2021-2025)	57,08%					
Accounts Payable	51,05	56,28	65,97	77,20	90,22	105,29
AS % of COGS	9,90%	10,5%	11,0%	11,5%	12,0%	12,5%
Trade Receivables	107,85	112,68	123,98	136,42	150,14	165,26
AS % of Revenue	12,85%	12,0%	11,8%	11,6%	11,4%	11,2%
Inventories	300,33	268,02	263,89	268,53	278,17	294,81
AS % of COGS	58,25%	50,0%	44,0%	40,0%	37,0%	35,0%
Net working capital (NWC)	357,13	324,42	321,90	327,75	338,09	354,78
Change in NWC	-32,60	32,71	2,52	-5,86	-10,34	-16,69

Title: Calculation of Net Working Capital – Optimistic Scenario (2026-2030)

Source: Author's own calculation, company data extracted from Melexis Annual Report

Unit: Millions of euros (mEUR) and percentages (%)

Appendix 22:

Central Scenario	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
mEUR										
Revenue	643,79	836,16	964,30	932,81	839,62	908,80	983,72	1064,86	1152,73	1247,90
EBIT	148,45	226,53	261,25	219,89	133,96	149,95	172,15	197,00	224,78	255,82
EBIT Margin	23,06%	27,09%	27,09%	23,57%	15,96%	16,50%	17,50%	18,50%	19,50%	20,50%
Taxes	23,19	41,23	43,70	33,87	23,39	26,24	30,13	34,47	39,34	44,77
Taxes (%)	15,6%	18,2%	16,7%	15,4%	17,5%	17,5%	17,5%	17,5%	17,5%	17,5%
NOPAT	125,26	185,30	217,55	186,01	110,57	123,71	142,02	162,52	185,45	211,05
Depreciation & Amortization	44,79	45,17	45,16	47,74	53,34	52,64	52,27	52,26	52,64	53,44
Capital Expenditures	-39,09	-39,88	-94,23	-52,99	-28,52	-45,44	-49,19	-53,24	-57,64	-62,39
Changes in NWC	-32,60	-46,11	-60,97	-7,33	-55,27	20,32	-10,22	-9,62	-8,87	-7,91

Title: Forecasting Free Cash Flows – Central Scenario (2026-2030)

Source: Author's own calculation, company data extracted from Melexis Annual Report

Unit: Millions of euros (mEUR) and percentages (%)

Appendix 23:

Pessimistic Scenario	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
mEUR										
Revenue	643,79	836,16	964,30	932,81	839,62	875,22	912,36	951,12	991,56	1033,77
EBIT	148,45	226,53	261,25	219,89	133,96	131,28	136,85	147,42	153,69	160,23
EBIT Margin	23,06%	27,09%	27,09%	23,57%	15,96%	15,00%	15,00%	15,50%	15,50%	15,50%
Taxes	23,19	41,23	43,70	33,87	23,39	22,97	23,95	25,80	26,90	28,04
Taxes (%)	15,6%	18,2%	16,7%	15,4%	17,5%	17,5%	17,5%	17,5%	17,5%	17,5%
NOPAT	125,26	185,30	217,55	186,01	110,57	108,31	112,90	121,82	126,80	132,19
Depreciation & Amortization	44,79	45,17	45,16	47,74	53,34	51,71	50,22	48,87	47,66	46,60
Capital Expenditures	-39,09	-39,88	-94,23	-52,99	-28,52	-35,01	-36,49	-38,04	-39,66	-41,35
Changes in NWC	-32,60	-46,11	-60,97	-7,33	-55,27	1,16	-25,66	-27,21	-28,85	-30,58

Title: Forecasting Free Cash Flows – Pessimistic Scenario (2026-2030)

Source: Author's own calculation, company data extracted from Melexis Annual Report

Unit: Millions of euros (mEUR) and percentages (%)

Appendix 24:

Optimistic Scenario	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
mEUR										
Revenue	643,79	836,16	964,30	932,81	839,62	939,03	1050,64	1176,03	1316,99	1475,53
EBIT	148,45	226,53	261,25	219,89	133,96	169,02	210,13	258,73	316,08	368,88
EBIT Margin	23,06%	27,09%	27,09%	23,57%	15,96%	18,00%	20,00%	22,00%	24,00%	25,00%
Taxes	23,19	41,23	43,70	33,87	23,39	29,58	36,77	45,28	55,31	64,55
Taxes (%)	15,6%	18,2%	16,7%	15,4%	17,5%	17,5%	17,5%	17,5%	17,5%	17,5%
NOPAT	125,26	185,30	217,55	186,01	110,57	139,45	173,36	213,45	260,76	304,33
Depreciation & Amortization	44,79	45,17	45,16	47,74	53,34	53,60	54,46	55,98	58,25	61,36
Capital Expenditures	-39,09	-39,88	-94,23	-52,99	-28,52	-56,34	-63,04	-70,56	-79,02	-88,53
Changes in NWC	-32,60	-46,11	-60,97	-7,33	-55,27	32,71	2,52	-5,86	-10,34	-16,69

Title: Forecasting Free Cash Flows – Optimistic Scenario (2026-2030)

Source: Author's own calculation, company data extracted from Melexis Annual Report

Unit: Millions of euros (mEUR) and percentages (%)

Appendix 25:

Regression Statistics	
Multiple R	0,5464713
R Square	0,2986309
Adjusted R Square	0,2960897
Standard Error	0,0412884
Observations	278

ANOVA					
	df	SS	MS	F	Significance F
Regression	1	0,20033327	0,2003333	117,51603	4,79257E-23
Residual	276	0,47050589	0,0017047		
Total	277	0,67083916			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95,0%	Upper 95,0%
Intercept	-0,001838	0,002485445	-0,739344	0,4603263	-0,006730437	0,0030552	-0,0067304	0,003055238
-0,008074519	1,4272732	0,131661432	10,840481	4,793E-23	1,168085026	1,6864615	1,168085	1,686461454

Title: Regression output for Beta Estimation - weekly

Source:

- Author's own calculation, data Yahoo Finance and Investing
- Risk-free rate based on Germany 10-Year Bond Yield, retrieved from [Trading economics](#)
- Market risk premium derived from Damodaran's country equity risk premium estimates ([NYU Stern](#))

Appendix 26:

Regression Statistics									
Multiple R	0,559822								
R Square	0,3134								
Adjusted R Square	0,302145								
Standard Error	0,090109								
Observations	63								
ANOVA									
	df	SS	MS	F	Significance F				
Regression	1	0,22608	0,22608	27,84361	1,84036E-06				
Residual	61	0,495298	0,00812						
Total	62	0,721378							
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95,0%	Upper 95,0%	
Intercept	-0,009847	0,011568	-0,851192	0,397992	-0,03297825	0,013285	-0,032978	0,013285	
0.023089554	1.641659	0,311114	5.276704	1.84E-06	1.019547042	2.26377	1.019547	2.26377	

Title: Regression output for Beta Estimation - Monthly

Source:

- Author's own calculation, data Yahoo Finance and Investing
- Risk-free rate based on Germany 10-Year Bond Yield, retrieved from [Trading economics](#)
- Market risk premium derived from Damodaran's country equity risk premium estimates ([NYU Stern](#))

Appendix 27:

Percentage (%)		
Synthetic Rating	Spread	WACC
AAA	0,40%	9,80%
AA	0,55%	9,81%
A+	0,70%	9,82%
A	0,78%	9,83%
A-	0,89%	9,84%
BBB	1,11%	9,85%

Title: Ratings & Default Spread

Source: Author's own calculation, data extracted from Damodaran Table Ratings, Interest Coverage Ratios and Default Spread from Damodaran's Ratings, Interest Coverage Ratios and Default Spread ([nyu.edu](#))

Unit: Percentages (%)

Appendix 28:

EUR	2021	2022	2023	2024	2025
EBIT	€ 148.448.410,00	€ 226.528.067,00	€ 261.250.176,00	€ 219.889.104,00	€ 133.963.000,00
Interest Charges	€ 530.277,00	€ 506.382,00	€ 5.985.432,00	€ 11.200.024,00	€ 9.645.211,00
Interest Coverage Ratio	279,95	447,35	43,65	19,63	13,89

Title: interest coverage ratio

Source: Author's own calculation, data extracted from Damodaran Table

Unit: Millions of euros (mEUR)

Appendix 29:

	2025
EBIT	€ 133.963.000,00
Interest Charges	€ 9.645.211,00
Interest Coverage Ratio	13,89
Synthetic Rating	AAA
Spread (table Damodaran)	0,40%
Risk Free Rate	3,08%
Cost of Debt	3,48%
Tax Rate	25%
After-Tax Cost of Debt	2,61%

Title: cost of debt Calculation

Source: Author's own calculation, company data extracted from Melexis Annual Report & Damodaran Table

Unit: Euros (EUR) and percentages (%)

Appendix 30:

Date	12/05/2026
Number of Shares	40.400.000
Share Price	76,35
Market Value Of Equity	3084,54
Total Debt	322,04
Enterprise Value	3406,58
Equity Proportion (%)	90,55%
Debt Proportion (%)	9,45%

Title: Equity and debt proportion

Source: Author's own calculation, company data extracted from Melexis Annual Report

Unit: Euros (EUR) and percentages (%)

Appendix 31:

WACC Calculation	
Target Capital Structure	
Debt To Total Capitalization	9,45%
Equity To Total Capitalization	90,55%
Cost of Debt	
Cost of Debt	3,48%
Tax Rate	25,0%
After -Tax Cost of Debt	2,61%
Cost of Equity	
Risk-Free Rate	3,08%
Market Risk Premium	5,24%
Levered Beta	1,43
Cost of Equity	10,55%
WACC	9,80%

Title: WACC calculation

Source: Author's own calculation, company data extracted from Melexis Annual Report

Unit: Percentages (%)

Appendix 32:

WACC					
ERP/Beta	1,23	1,33	1,43	1,53	1,63
4,74%	8,30%	8,73%	9,16%	9,58%	10,01%
4,99%	8,58%	9,03%	9,48%	9,93%	10,38%
5,24%	8,85%	9,33%	9,80%	10,28%	10,75%
5,49%	9,13%	9,63%	10,13%	10,62%	11,12%
5,74%	9,41%	9,93%	10,45%	10,97%	11,49%

Title: sensibility of WACC due to ERP & BETA

Source: Author's own calculation

Unit: Percentages (%)

Appendix 33:

Pessimistic Scenario mEUR	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Revenue	643,79	836,16	964,30	932,81	839,62	875,22	912,36	951,12	991,56	1033,77
EBIT	148,45	226,53	261,25	219,89	133,96	131,28	136,85	147,42	153,89	160,23
EBIT Margin	23,06%	27,09%	27,09%	23,57%	15,96%	15,00%	15,00%	15,50%	15,50%	15,50%
Taxes	23,19	41,23	43,70	33,87	23,39	22,97	23,95	25,80	26,90	28,04
Taxes (%)	15,6%	18,2%	16,7%	15,4%	17,5%	17,5%	17,5%	17,5%	17,5%	17,5%
NOPAT	125,26	185,30	217,55	186,01	110,57	108,31	112,90	121,62	126,80	132,19
Depreciation & Amortization	44,79	45,17	45,16	47,74	53,34	51,71	50,22	48,87	47,86	46,60
Capital Expenditures	-39,09	-39,88	-94,23	-52,99	-28,52	-35,01	-36,49	-38,04	-39,66	-41,35
Changes in NWC	-32,60	-46,11	-60,97	-7,33	-55,27	1,16	-25,66	-27,21	-28,85	-30,58
FCF	98,36	144,47	107,51	173,43	80,12	126,18	100,98	105,24	105,95	108,86
Discount factor						0,9107	0,8294	0,7554	0,6880	0,6265
Discounted FCF						114,91	83,75	79,50	72,89	66,95

Title: Forecasting discounted Free Cash Flows – Pessimistic Scenario (2026-2030)

Source: Author's own calculation, company data extracted from Melexis Annual Report

Unit: Millions of euros (mEUR) and percentages (%)

Appendix 34:

Optimistic Scenario mEUR	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Revenue	643,79	836,16	964,30	932,81	839,62	939,03	1050,64	1176,03	1316,99	1475,53
EBIT	148,45	226,53	261,25	219,89	133,96	169,02	210,13	258,73	316,08	368,88
EBIT Margin	23,06%	27,09%	27,09%	23,57%	15,96%	18,00%	20,00%	22,00%	24,00%	25,00%
Taxes	23,19	41,23	43,70	33,87	23,39	29,58	36,77	45,28	55,31	64,55
Taxes (%)	15,6%	18,2%	16,7%	15,4%	17,5%	17,5%	17,5%	17,5%	17,5%	17,5%
NOPAT	125,26	185,30	217,55	186,01	110,57	139,45	173,36	213,45	260,76	304,33
Depreciation & Amortization	44,79	45,17	45,16	47,74	53,34	53,80	54,46	55,98	58,25	61,36
Capital Expenditures	-39,09	-39,88	-94,23	-52,99	-28,52	-56,34	-63,04	-70,56	-79,02	-88,53
Changes in NWC	-32,60	-46,11	-60,97	-7,33	-55,27	32,71	2,52	-5,86	-10,34	-16,69
FCF	98,36	144,47	107,51	173,43	80,12	169,41	167,30	193,01	229,66	260,47
Discount factor						0,9107	0,8294	0,7554	0,6880	0,6265
Discounted FCF						154,29	138,76	145,80	157,99	163,19

Title: Forecasting discounted Free Cash Flows – Optimistic Scenario (2026-2030)

Source: Author's own calculation, company data extracted from Melexis Annual Report

Unit: Millions of euros (mEUR) and percentages (%)

Appendix 35:

Pessimistic Scenario					
WACC/g	1,00%	1,50%	2,00%	2,50%	3,00%
8,80%	€ 24,69	€ 26,27	€ 28,08	€ 30,19	€ 32,65
9,30%	€ 23,39	€ 24,79	€ 26,38	€ 28,21	€ 30,32
9,80%	€ 22,25	€ 23,49	€ 24,90	€ 26,50	€ 28,33
10,30%	€ 21,23	€ 22,34	€ 23,59	€ 25,00	€ 26,61
10,80%	€ 20,31	€ 21,32	€ 22,44	€ 23,69	€ 25,11

Title: Sensitivity Analysis – Pessimistic Scenario (Perpetual growth Method)

Source: Author's own calculation and assumptions

Unit: Euros (EUR) and percentages (%)

Appendix 36:

Optimistic Scenario					
WACC/g	1,00%	1,50%	2,00%	2,50%	3,00%
8,80%	€ 63,99	€ 67,85	€ 72,27	€ 77,40	€ 83,41
9,30%	€ 60,84	€ 64,25	€ 68,12	€ 72,57	€ 77,72
9,80%	€ 58,05	€ 61,08	€ 64,51	€ 68,40	€ 72,86
10,30%	€ 55,56	€ 58,28	€ 61,33	€ 64,77	€ 68,68
10,80%	€ 53,32	€ 55,77	€ 58,51	€ 61,57	€ 65,03

Title: Sensitivity Analysis – Optimistic Scenario (Perpetual growth Method)

Source: Author's own calculation and assumptions

Unit: Euros (EUR) and percentages (%)

Appendix 37:

Pessimistic scenario									
WACC/EBITDA Multiple	10	10,5	11	11,5	12	12,5	13	13,5	14
8,80%	25,26	26,36	27,46	28,56	29,66	30,76	31,86	32,96	34,07
9,30%	24,27	25,32	26,37	27,42	28,48	29,53	30,58	31,63	32,68
9,80%	23,33	24,34	25,34	26,35	27,35	28,36	29,36	30,36	31,37
10,30%	22,44	23,40	24,36	25,32	26,28	27,24	28,20	29,16	30,12
10,80%	21,59	22,51	23,42	24,34	25,26	26,18	27,10	28,01	28,93

Title: Sensitivity Analysis – Pessimistic Scenario (EBITDA Multiple)

Source: Author's own calculation and assumptions

Unit: Euros (EUR) and percentages (%)

Appendix 38:

Optimistic scenario									
WACC/EBITDA Multiple	14	14,5	15	15,5	16	16,5	17	17,5	18
8,80%	73,73	76,58	80,99	84,67	91,43	89,52	87,67	85,19	81,79
9,30%	54,17	56,38	58,58	60,79	62,99	65,16	67,32	69,49	71,66
9,80%	55,23	60,76	66,46	72,46	78,59	76,86	75,51	73,99	72,17
10,30%	48,81	50,81	52,81	54,81	56,80	58,80	60,80	62,79	64,79
10,80%	46,34	48,25	50,16	52,07	53,98	55,89	57,79	59,70	61,61

Title: Sensitivity Analysis – Optimistic Scenario (EBITDA Multiple)

Source: Author's own calculation and assumptions

Unit: Euros (EUR) and percentages (%)

Appendix 39:

Taxes	Price
15,00%	€ 47,67
15,50%	€ 47,58
16,00%	€ 47,48
16,50%	€ 47,39
17,00%	€ 47,30
17,50%	€ 47,21
18,00%	€ 47,12
18,50%	€ 47,02
19,00%	€ 46,93
19,50%	€ 46,84
20,00%	€ 46,75
20,50%	€ 46,66
21,00%	€ 46,57
21,50%	€ 46,47
22,00%	€ 46,38
22,50%	€ 46,29
23,00%	€ 46,20
23,50%	€ 46,11
24,00%	€ 46,01
24,50%	€ 45,92
25,00%	€ 45,83

Title: Sensitivity Analysis – Tax Rate

Sources: Author's own calculation and assumptions, company data extracted from Melexis Annual Report

Unit: Euros (EUR) and percentages (%)

Appendix 40:

Company	Description
ON SEMICONDUCTOR CORPORATION (XNAS:ON)	ON Semiconductor Corporation is engaged in providing intelligent power and intelligent sensing solutions. The Company's intelligent power technologies enable the electrification of drivetrain in the automotive industry to allow for lighter and longer-range electric vehicles. Its segments include Power Solutions Group (PSG), the Analog and Mixed-Signal Group (AMG) and the Intelligent Sensing Group (ISG). PSG segment provides a portfolio of discrete, module, and integrated semiconductor devices designed to enable conversion across artificial intelligence (AI) data centers, energy infrastructure, automotive and industrial. AMG segment designs and develops a range of analog and mixed-signal solutions including power-management, sensor-interface, connectivity, and products that serve automotive, industrial automation, AI data center, computing, and mobile end markets.
NXP Semiconductors NV (XNAS:NXP)	NXP Semiconductors N.V. is a Netherlands-based holding company primarily engaged in the semiconductor industry. The Company through its subsidiaries focuses on the design, development, and manufacturing of semiconductor products used in a wide range of applications across automotive, industrial, mobile, and communication infrastructure markets. NXP Semiconductors discloses its revenue by end-markets. Automotive includes products for vehicle control, safety, infotainment, and electrification; Industrial & Internet of Things (IoT) covers applications in smart home, smart city, and industrial automation. The Company has one reportable segment representing the entity as a whole, it reflects the operating decisions and allocation of resources of the Company.
Infineon Technologies AG (XFRA:IFX)	Infineon Technologies AG is a Germany based Company. The Company is a developer and manufacturer of semiconductors and related system solutions. The Company operates through four divisions: Automotive, Green Industrial Power, Power & Sensor Systems and Connected Secure Systems. Automotive division designs, develops, manufactures and markets semiconductors to support automotive applications like electromobility, automated driving, connectivity, and advanced security. Industrial Power Control division provides products, solutions and services for energy generation, transmission, storage, and use. Power & Sensor Systems provides semiconductors and power and connectivity devices like chargers, servers, mainboards, power tools, and lighting systems. Connected Secure Systems provides Internet of Things (IoT) technologies like computing, wireless connectivity, and technologies that provide secure connections.
Elmos Semiconductor SE (XFRA:ELG)	Company is engaged in the development, production and distribution of microelectronic components and system components as well as functionally related technological units. The Company operates through two segments: Semiconductor, which focuses on automotive customers and Micromechanics segment, which belongs to the industrial, consumer goods, medical and automotive industry. Its product portfolio encompasses interface components; voltage supply components, which are switching regulators enabling the energy efficient adjustment of different voltage levels; optical sensors, which facilitate touchless interaction with displays and mobile phones; motor drive systems and micromechanical sensors used for reading out electric resistance sensors and recording physical quantities. It also produces application-specific integrated circuits (ASICs) and semiconductor chips in mixed-signal technologies.

Title: Comparables Description

Source: Yahoo Finance, Bloomberg

Appendix 41:

Name	Net Cap. (EUR)	Net Debt LP	EV:20240512	Best Sales BP12M	Best EBITDA:12F	Best EBIT:12M	Best N:12F
MELEXIS NV	3,080,000,000.00	214,250,000.00	3,294,250,000.00	885,020,000.00	218,500,000.00	167,870,000.00	133,410,000.00
ON SEMICONDUCTOR	34,790,000,000.00	751,600,000.00	35,541,600,000.00	5,775,000,000.00	1,860,000,000.00	1,360,000,000.00	1,180,000,000.00
NXP SEMICONDUCTORS NV	83,340,000,000.00	8,960,000,000.00	92,300,000,000.00	12,520,000,000.00	5,060,000,000.00	4,490,000,000.00	3,390,000,000.00
INFINEON TECHNOLOGIES AG	77,770,000,000.00	8,140,000,000.00	85,910,000,000.00	17,870,000,000.00	5,850,000,000.00	4,080,000,000.00	2,900,000,000.00
ELMOS SEMICONDUCTOR SE	2,980,000,000.00	-59,640,000.00	2,920,360,000.00	688,660,000.00	214,690,000.00	171,340,000.00	130,340,000.00
Name	Best Curr EV/Best EBITDA:12F	Best Curr EV / Best EBIT:12F	Best Curr EV / Best N:12F	Best P/E:12F	Shares Out LP		
MELEXIS NV	15.08	19.62	3.72	23.09	40,400,000.00		
ON SEMICONDUCTOR	18.11	26.13	6.16	29.48	391,871,488.00		
NXP SEMICONDUCTORS NV	13.89	15.66	5.52	18.68	252,624,982.00		
INFINEON TECHNOLOGIES AG	14.34	20.57	4.75	26.82	1,295,578,496.00		
ELMOS SEMICONDUCTOR SE	13.60	17.04	4.24	22.86	17,158,000.00		

Title: Peer Group Financial Metrics and Valuation Multiples

Source: Author's calculations based on Bloomberg data

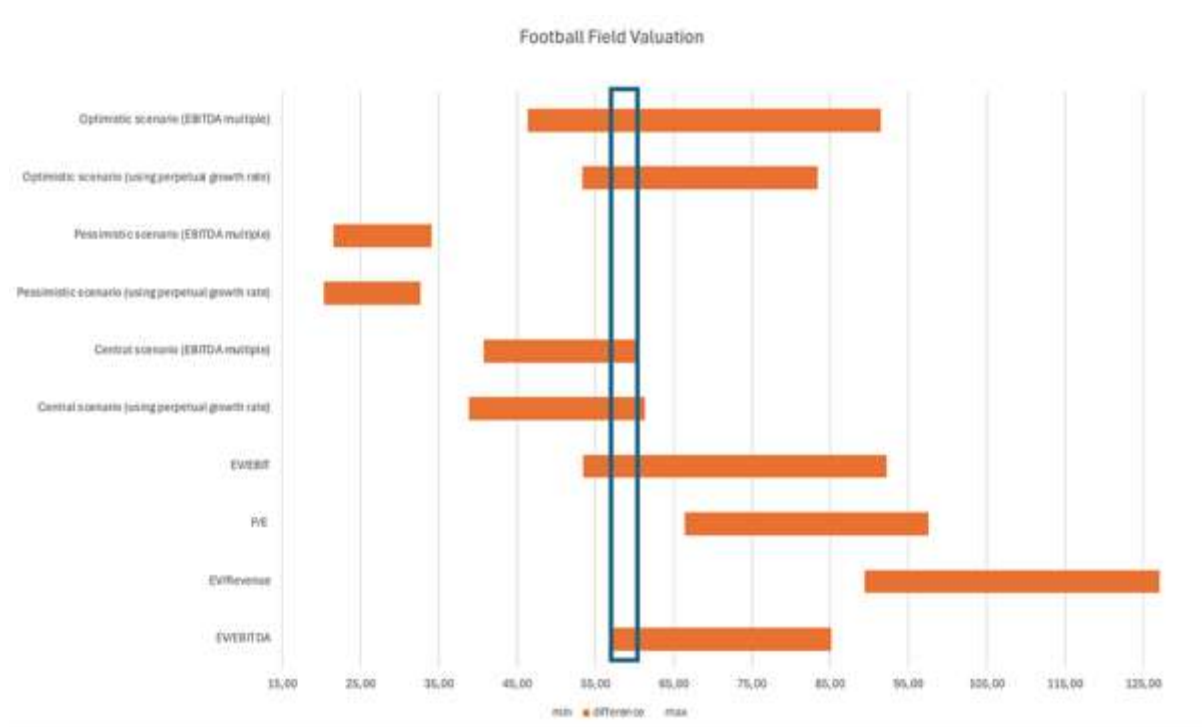
Unit: Euros (EUR)

Appendix 42:

	EV/EBITDA	EV/Revenue	P/E	EV/EBIT
Comparable Average	15,24	5,19	24,46	19,85
Comparable Median	14,12	5,18	24,84	18,81
Melexis	15,08	3,72	23,09	19,62

Title: Summary of Peer Group Valuation Multiples

Source: Author's calculations based on Bloomberg data

Appendix 43:

Title: Football Valuation

Source: Author's own calculation and assumption

Unit: Euros (EUR)

Appendix 44:

EUR (€)	price range
EV/EBITDA	57-85,11
EV/Revenue	89,38-127,05
P/E	66,46-97,6
EV/EBIT	53,43-92,24
DCF Central Scenario (Using perpetual Growth Rate)	38,87-61,3
DCF Central Scenario (EBITDA Multiple)	40,77-60,52
Pessimistic Scenario (Using Perpetual Growth Rate)	20,31-32,65
Pessimistic Scenario (EBITDA Multiple)	21,59-34,07
Optimistic Scenario (Using Perpetual Growth Rate)	53,32-83,41
Optimistic Scenario (EBITDA Multiple)	46,34-91,43

Title: Summary – scenarios and comparables

Source: Author's own calculation and assumption

Unit: Euros (EUR) and percentages (%)

Appendix 45:

Criteria	Data	Nb of points	score
1. Share price behavior		8/20	
1.1 Erratic share price movements			
Erratic movements probability	5.31%	4	/10
1.2 Share price deviation from its trend			
Standard deviation compared to 200-day moving average	11.03%	4	/10
2. Quality of shareholder structure		8/10	
2.1 Ownership by 'major' institutional investors			
Proportion of 'major' institutional investors (% of float)	23.43%	8	/10
2.2 Shareholder loyalty			
Proportion of funds selling out their shares each quarter	N/A		
3. Governance and focus on shareholder value		10/15	
3.1 Reference shareholder			
Typology of the reference shareholder	Family	2	/5
3.2 Board structure			
Board members being major shareholders	Yes (Chombar Duchâtelet)	2	/2
Roles of CEO and Chairman of the board separated	Yes (since 2021)	2	/2
Percentage of independent board members	57% (4/7)	1	/1
3.3 Focus of the CEO			
Stock ownership in numbers of years of salary		2	/5
3.4 Investor Relations intensity			
Nb of days per year dedicated by the CEO to investors	N/A		
Nb of days per year dedicated by the CFO to investors	N/A		bonus
Nb of analysts covering the company	19	1	bonus
4. Social and environmental focus		18/20	
4.1 Social Impact reporting and priority			
Formal prioritization of social impact	First priority	3	/3
Social performance indicators reporting	Detailed and regular reporting	2	/2
4.2 Impact of operations and products on people			
Impact of operation on people	Positive impact (ISO 45001,formation)	2	/2
Impact of products/services on customers	Positive impact (Security, Health)	3	/3
4.3 Environmental impact reporting and priority			
Formal prioritization of environmental impact	First priority	3	/3
Environmental performance indicators reporting	Detailed and regular reporting	2	/2
4.4 Impact of operations and products on the environment			
Impact of operation on the environment	Neutral/positive (30% renewable)	1	/2
Impact of products/services on the environment	Positive (Clean drive, EV sensors)	2	/3
5. Communication and consistency		15/20	
5.1 Communication quality			
Business model communication	Detailed	2	/2
Strategy communication	Detailed	2	/2
Capital allocation communication	Detailed	2	/2
Results and performance communication	Detailed	2	/2
Communication coherence	Strong	2	/2
5.2 Consistency			
Strategy consistency	High	2	/2
Reporting consistency	High	2	/2
Accounting consistency	no big Chances	1	/1
5.3 Guidance			
Guidance achievement	2024 and 2025 miss	0	/5
6. Conclusion	Decile	Total	
Adequate reputation on the stock market (/85)		59/85	
Adequate reputation on the stock market (/100)		69/100	

Title: Reputation analysis dashboard

Source: Author's own calculation and assumptions, company data extracted from Melexis Annual Report