INSTITUTO
UNIVERSITÁRIO
DE LISBOA

The IPO of Mobileye Global Inc.: Boom or Bust?

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Master in Finance

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October, 2023

BUSINESS
SCHOOL

Department of Finance

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Acknowledgements

Completing this Master's Degree has been a demanding yet enriching journey, and it would not have been possible without the support of those around me. Your presence has been a constant inspiration, and I am deeply grateful for having each one of you by my side.

To my parents, Clarinda and Carlos, and my sister Bárbara, you've been my steady rock, my cheerleaders, and my home. Your unconditional support is the reason I've made it this far. I know I can always count on you to be there, front and center, cheering me on.

To my niece, Benedita, thank you for bringing such joy to my life and reminding me everyday how simple and beautiful the world can be.

To my dear grandparents, your wisdom and love have been a huge source of strength for me. I am grateful for all your support and for the example you've set for me.

To Filipe, my rock and partner of all adventures, there are not enough words to thank you for everything you do for me. In every step of this journey, your presence has been my greatest comfort.

To my friends, thank you for always being there to cheer me on and to pull a good laughter out of me, even on the hardest moments. To my hometown friends, who have known me through thick and thin, to the incredible group of friends from my bachelor's years, and to the group of friends from this master's program, with a special shoutout to the amazing group of girls, I extend my deepest gratitude.

Last, but not least, to my supervisor, Pedro Inácio, your guidance and mentorship have been truly invaluable throughout this journey. Thank you for your patience and dedication, pushing me to reach my goals.

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Resumo

A Mobileye Global Inc., uma subsidiária da Intel, é especializada em sistemas avançados de assistência ao condutor (SAAC) e entrou no mercado público no Nasdaq Global Select Market a 26 de outubro de 2022. A tecnologia inovadora da empresa coloca-a na vanguarda da indústria tecnológica automóvel em rápida evolução.

Este projeto analisa a oferta pública inicial (OPI) da Mobileye no dia 26 de outubro de 2022, comparando os preços de entrada das ações no mercado público com os valores obtidos de métodos de avaliação. O objetivo é oferecer uma recomendação de investimento com base no preço e noutros fatores críticos, determinando simultaneamente se as ações entraram no mercado com uma avaliação adequada. Utilizaram-se dois modelos de avaliação: o modelo de avaliação dos fluxos de caixa descontados, que considera dois cenários, e a avaliação relativa (múltiplos). Os pressupostos são baseados no desempenho histórico da empresa, no ambiente macroeconómico e nos dados do sector. Adicionalmente, efetuou-se uma análise de sensibilidade ao método de avaliação de fluxos de caixa descontados, para garantir a robustez dos resultados e avaliar o impacto de diferentes pressupostos e potenciais alterações de fatores, no preço das ações.

Em conclusão, o estudo indica que a Mobileye estava subvalorizada aquando da sua entrada no mercado público, o que indica um potencial de crescimento futuro e uma oportunidade de investimento. Esta perspetiva é fundamental para avaliar a OPI da empresa e a sua atratividade para potenciais investidores.

Classificação JEL: G11 - Decisões de Investimento; G30 - Finanças Empresariais; G32 - Política de Financiamento, Risco Financeiro e Gestão de Risco; Estrutura de Capital e de Propriedade, Valor das Empresas

Palavras-chave: Oferta Pública Inicial, Avaliação de Empresas, Fluxo de Caixa Descontado, Fluxos de Caixa Livres para a Empresa, Avaliação Relativa, Múltiplos, Mobileye Global Inc.

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Abstract

Mobileye Global Inc., a subsidiary of Intel, specializes in advanced driver assistance systems (ADAS) and was relisted on the Nasdaq Global Select Market on October 26, 2022. The company's innovative technology places it at the forefront of the rapidly evolving automobile technology industry.

This project analyzes Mobileye's Initial Public Offering (IPO) on October 26, 2022, comparing the stock's debut price with values derived from valuation methods. The aim is to offer an investment recommendation based on pricing and other critical factors, while determining if the stock entered the market at an appropriate valuation. Two valuation models are employed: the Discounted Cash Flow Valuation Model, considering two scenarios, and Relative Valuation (multiples). Assumptions are rooted in historical company performance, macroeconomic environment, and industry data. Additionally, a sensitivity analysis is conducted to the Discounted Cash Flow Valuation Model, to ensure result robustness and assess the impact of different assumptions and potential factor changes on the stock price.

In conclusion, the study indicates that Mobileye was undervalued upon market entry, signaling potential for future growth and a good investment opportunity. This insight is pivotal for assessing the company's IPO and its attractiveness to prospective investors.

JEL Classification: G11 – Investment Decisions; G30 – Corporate Finance; G32 – Financing Policy, Financial Risk and Risk Management; Capital and Ownership Structure, Value of Firms

Keywords: Initial Public Offering, Company Valuation, Discounted Cash Flow, Free Cash Flows to the Firm, Relative Valuation, Multiples, Mobileye Global Inc.

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Glossary

% - Percentage

$ - Dollars

$'000 000 – Million Dollars

- Number

ACEA - European Automobile Manufacturer

ACES - Autonomous driving, connected vehicles, electrification of the powertrain and shared mobility

AD - Autonomous Driving

ADAS - Advanced Driver Assistance Systems

CAGR - Compound Annual Growth

CAPEX - Capital Expenditures

CAPM - Capital Asset Pricing Model

CEO - Chief Executive Office

CPI - Consumer Price Index

D/E Ratio - Debt-to-Equity Ratio

D&A - Depreciation & Amortization

DCF - Discounted Cash-Flow

E - Equity

EBIT - Earnings before Interest, Taxes and Depreciation & Amortization

EV - Enterprise Value

EV/EBITDA - Enterprise Value to Earnings before Interest, Taxes and Depreciation & Amortization Ratio

FCF - Free Cash-Flow

FCFF - Free Cash-Flow to the Firm

IPO - Initial Public Offering

LCVs - Light Commercial vehicles

LiDAR - Light Detection and Ranging

MRP - Market Risk Premium

NCAP - New Car Assessment Programme

NHTSA - National Highway Traffic Safety Administration

NOPLAT - Net Operating Profit Less Adjusted Taxes

NWC - Net Working Capital

NYSE - New York Stock Exchange

OEMs - Original Equipment Manufacturers

P/E - Price-to-Earnings Ratio

R&D - Research & Development

ROA - Return on Assets

ROE - Return on Equity

ROIC - Return on Invested Capital

SAE - Society of Automotive Engineers

UNECE - United Nations Economic Comission for Europe

USA - United States of America

WACC - Weighted Average Cost of Capital

WC - Working Capital

1. Introduction

In today's dynamic market, investors are presented with countless investment opportunities across various sectors. This accessibility is further facilitated by the emergence of numerous dedicated trading platforms and the growing global financial literacy. A company's valuation stands as a primary source of information for investors, offering insights into its financial standing and growth prospects. Understanding a company's fair value is crucial for comprehending its overall business outlook and effectively projecting its future trajectory.

The core goal of the present master project is to determine the fair share price of Mobileye Global Inc, a company that made its public debut on NASDAQ through an Initial Public Offering (IPO) on October 26, 2022. This will be achieved by comparing the values derived from two distinct valuation models with the IPO issue price. The choice of Mobileye for this study is motivated by the significant attention garnered globally, driven not only by its affiliation with Intel, a prominent technology giant, but also due to its strategic position in the development of advanced driver assistance systems (ADAS), widely regarded as the future of the automotive industry.

To accomplish this, the project will adopt a structured narrative, rooted in a comprehensive analysis of Mobileye Global Inc. and its ecosystem. The journey will commence with an examination of existing literature, commencing with an in-depth exploration of Initial Public Offerings (IPOs) and a focused discussion on the phenomenon of IPO underpricing. This discussion is pivotal in drawing subsequent conclusions about the company's fair value and its comparison to the issue price. Subsequently, two valuation methods - the Discounted Cash Flow Model, and the Relative Valuation Model - will be introduced, along with their theoretical foundations, applicability, advantages, and limitations.

Following this, a thorough analysis of Mobileye's business operations and company history will be conducted, shedding light on the pivotal steps leading up to the IPO and illuminating its underlying business model. This will be complemented by a comprehensive financial analysis of the company. The project will then shift focus to Mobileye's broader environment, offering insights into the macroeconomic context and providing an industry overview, including the identification of key industry players.

In the subsequent section, the selected valuation methodologies will be applied, followed by a sensitivity analysis conducted for the FCFF model's outcomes, aimed at assessing the impact of variable changes on the final valuation. Finally, the results will be meticulously analyzed and compared to Mobileye's IPO issue price, culminating in the key conclusion drawn from the project: Mobileye was undervalued upon entering the public market.

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2. Literature Review

2.1. Initial Public Offering (IPO)

An initial public offering (IPO) refers to the process of making shares of a private firm available to the public for the first time as part of a new stock issuance. Through an IPO, a company can raise equity funding from the public.

An essential point of discourse concerning IPOs is the rationale behind corporations opting to become publicly traded. Brau & Fawcett (2006) propose that academic theory introduces four primary motivations that drive corporations to pursue an Initial Public Offering.

Firstly, there is literature based in the concept of the Cost of Capital, such as the work of Modigliani and Miller (1963), which supports the existence of a Trade-Off Theory. This hypothesis states that, in a situation where there is no asymmetry of information, if a corporation increases its Debt-to-Equity Ratio, the Cost of Capital will likewise increase. This is because the firm's capital will become riskier. One possible motive for conducting an IPO is to lower the Debt-to-Equity Ratio of a firm by introducing external equity. This, in turn, reduces the Cost of Capital and increases the value of the company's stock.

The second motivation is that, according to Zingales (1995), stockholders can utilize the Initial Public Offering (IPO) to streamline a forthcoming incorporation endeavor, such as an acquisition. Brau et al. (2003) further supported this notion by emphasizing that Initial Public Offerings (IPOs) allow a company to issue shares that can be publicly traded. These shares can be utilized in the future as a means of trading, either for acquiring other companies or being purchased by other companies.

Furthermore, and in connection with the second motivation, there exists literature that defends that an initial public offering (IPO) facilitates the process of inside shareholders liquidating their holdings with greater ease. According to Black and Gilson (1998) and Giot & Schwienbacher (2007), venture-capital funded firms have a higher probability of exiting through an IPO as time passes. This is because participating in this market activity can expedite the exit process for Venture Capitalists and grant additional leverage to the entrepreneur.

At last, there is literature that offers evidence for the hypothesis that initial public offerings (IPOs) might be utilized as a strategic move by the firm. How can this be accomplished? According to Bradley, Jordan, and Ritter (2003), organizations can improve their reputation and subsequently impact their market position through an initial public offering (IPO) (Chemmanur & He, 2011).

2.1.1. IPO Underpricing

As we can see, there are several reasons that motivate the decision to go public, however, there are also risks associated, that cannot be dismissed. There is one specific anomaly that is quite common: underpricing.

Literature reveals that a great percentage of firms suffer underpricing, when undergoing through an Initial Public Offering, potentially leading to a transfer of wealth from current shareholders to new ones, thereby posing a disadvantage to the company. Theories explaining underpricing in initial public offerings (IPOs) can be classified into four major categories, according to Berk, J. & DeMarzo, P. (2017): asymmetric information, institutional factors, control considerations, and behavioral approaches.

Regarding the asymmetric information, there is literature worth mentioning, though, the most known asymmetric information model is from Rock (1989): the winner's curse. Very briefly, this model assumes that some investors have access to more information about the shares' actual value than others, such as the issuing company or the underwriting bank. Therefore, while uneducated investors bid randomly, informed investors only bid for IPOs with appealing prices.

Regarding institutional factors, Logue (1973) and Ibbotson (1975) discussed the fundamental premise that firms intentionally sell their stock at a lower price to mitigate the risk of potential lawsuits from investors who are unhappy with the performance of their shares after the initial public offering (IPO). There may also be tax incentives to underpricing an IPO, which will lead to a trade-off between the tax gain and the loss resulting from the stock's being undervalued. Managers will favor underpricing greater or lesser based on their tax position.

Thirdly, when it comes to control considerations, or agency costs, two opposed trains of thought emerge in literature. Brennan and Franks (1997) state that underpricing can be seen as a way to ensure greater managerial control by avoiding oversight from a significant external stakeholder. In contrast, Stoughton and Zechner (1998) argue that underpricing can serve to mitigate the negative impact of agency costs by encouraging increased supervision.

Lastly, speaking of behavioral approaches, the main premise behind these theories assumes that investors are human, and, therefore, irrational, and unreliable beings. Welch (1992) presents the idea of "informational cascades" on the IPO world, that states that if investors make decisions sequentially, the earlier ones may condition in some way the decisions of the latter, discarding their own information. Early investors, who may exert greater influence in the market, might leverage this phenomenon to negotiate for higher levels of underpricing in return for their participation in the IPO at such an early stage. This can lead to a positive "cascade." In this regard, "cascades" might contribute to the explanation of IPO underpricing.

We know for a fact that almost all the IPOs demonstrate the anomaly of underpricing, all around the globe. In general, empirical data is consistent with the hypothesis that information disparities between agents represent the factor with the most significant impact on underpricing.

2.2. Valuation Methods

Valuation is an extremely relevant subject in the finance field, it "plays a key role in many areas of finance- in corporate finance, in mergers and acquisitions, and in portfolio finance" (Damodaran, 2012).

One of the main questions that occurs when one is performing a company's valuation is: what type of valuation method should be used? Benninga (1996) and Sarig (1996) stated that to conduct a precise corporate valuation analysis, it is advisable to use more than one valuation technique. Hence, the forthcoming sections in this chapter will predominantly explore two fundamental valuation methodologies: the Discounted Cash Flow method, with a specific emphasis on the Free Cash Flow to Firm (FCFF), and the Relative Valuation approach. The stock valuation in this report will be based on these two fundamental methodologies.

2.2.1. Discounted Cash Flow Valuation

The Discounted Cash Flow (DCF) methodology, a financial model created in the 1970s, is a significant approach for evaluating organizations. The core principle of this methodology is to establish the value of a company by forecasting its future cash flows and discounting them at a rate that corresponds to the level of risk associated with those cash flows (Férnandez, 2007).

Thorough evaluation of the future cash flows, terminal value, and discount rate is essential. The DCF model is a foundational methodology that serves as the basis for all other valuation methods. It is crucial to have a deep understanding of the underlying principles of the DCF model in order to comprehend and utilize other valuation techniques effectively (Damodaran, 2002).

During the analysis, it is essential to carefully forecast and synchronize the cash flows with the financial elements of the company for each period under consideration. The accuracy and usefulness of these forecasts heavily rely on the careful selection of the predicted growth rate, which is applied to the company's current earnings. This choice significantly impacts the result of the valuation.

After determining the free cash flows, the subsequent stage involves discounting them at a rate that accurately reflects their level of risk or uncertainty. Damodaran (2012) asserts that when the underlying risk of a firm increases, so does the discount rate. Fernández (2007) states that choosing the right discount rate is one of the most crucial aspects of valuing a company.

A general formula applied for cash flow discounting, when following this methodology is as follows:

$$V = \sum_{t=0}^{n} \frac{CF_t}{(1+r)^t} + \frac{CF_n + TV_n}{(1+r)^n} \quad (2\text{-}1)$$

With,

- CF_t= Cash Flow generated by the company in period t
- r = discount rate
- TV = Terminal Value, obtained by considering a constant growth rate after year n
- t = period of the cash flow being discounted
- n = period that corresponds to the latest forecasted cash flow

Regarding future cash flows, it is important to note that the Discounted Cash Flow Valuation Model in the DCF technique has many variations based on the characteristics of the cash flows. The two most significant methods are the Free Cash Flow to the Firm Method (FCFF) and the Free Cash Flow to Equity Method (FCFE). The process of valuing a corporation using the Free Cash Flow to the Firm (FCFF) approach begins with calculating the overall value of the enterprise, which includes both tangible assets and potential for growth. This value is referred to as Enterprise Value (EV). Afterwards, it makes corrections for variables such as net debt and the worth of non-operating assets to get the Equity Value (EQV).

Conversely, the Free Cash Flow to Equity (FCFE) approach focuses exclusively on assessing the equity stake in the company. In this case, cash flows naturally consider both debt payments and reinvestment requirements, making the calculation of EQV straightforward and efficient.

In addition, the FCFF approach incorporates a discount rate that considers the combination of equity and debt financing, which is represented by the Weighted Average Cost of Capital (WACC). On the other hand, the FCFE method just examines the cost of equity financing (R_e).

The shift from the Firm approach to the Equity method can be achieved by deducting the value of all non-equity claims from the total firm value, as mentioned by Damodaran (2006). In essence, when executed accurately, the equity value should remain consistent independent of the methodology employed.

2.2.1.1. Free Cash Flow to the Firm Method (FCFF)

The Free Cash Flow to the Firm (FCFF) approach, sometimes referred to as the DCF-WACC method, calculates the cash flow available to the company's capital providers (including stockholders and

debtholders) after covering all operational expenses and reinvestment needs. Based on this methodology, the company value is calculated by applying a discount to the Free Cash Flows to the Firm using the Weighted Average Cost of Capital (WACC). The FCFF is determined as follows, as evidenced in the literature by Modigliani & Miller (1958) and later by Damodaran (2012):

$$FCFF = EBIT(1-t) + Depreciation\ \&\ Amortization - CAPEX - \Delta\, Working\ Capital \quad (2\text{-}2)$$

With,

- $EBIT$ = Earnings before Interest and Taxes
- t = Corporate Tax Rate
- $CAPEX$ = Capital Expenditures

The first part of the equation [EBIT(1-t)] can also be referred to as NOPLAT, an acronym for Net Operating Profit Less Adjusted Taxes. In order to achieve a precise depiction, it is crucial to make the modification for depreciation and amortization (D&A), as it does not constitute a cash expense and, therefore, should be included again. Furthermore, it is imperative to acknowledge that alterations in working capital (WC) and capital expenditures (CAPEX) are fundamental components of a company's regular operations. Working Capital includes changes in inventories, accounts receivable accounts payable, and other short-term assets and liabilities (apart from debt). Conversely, CAPEX is derived from the enterprise's fundamental need to maintain the projected expansion of its operations. In this manner, an approximation for the Free Cash Flow to Firm (FCFF) is obtained.

It is crucial to emphasize that the FCFF calculation excludes the tax advantages derived from interest payments. Nevertheless, this intentional exclusion is justified as the computation of the cost of capital (WACC) already incorporates the intrinsic value obtained via tax shields, as indicated by Damodaran (2006).

Enterprise Value (EV)

The initial stage of the DCF-FCFF process involves calculating the Enterprise Value, which represents the overall worth of the organization. In this calculation, the formula is split into two components: the initial component consists of the Free Cash Flows to the Firm discounted at the discount rate (WACC), while the second component represents the Terminal Value in perpetuity, assuming a constant yearly growth rate (Damodaran, 2002). The calculation of Enterprise Value is as follows:

$$EV = \sum_{t=1}^{n} \frac{FCFF_t}{(1+WACC)^t} + \frac{TV_n}{(1+WACC)^n} \quad (2\text{-}3)$$

With,

- EV = Enterprise Value
- $FCFF_t$ = Free Cash Flows to the Firm in period t
- $WACC$ = Weighted Average Cost of Capital
- TV_n = Terminal Value at the end of the period
-

When it comes to the Terminal Value, the formula used for its computation is the following:

$$TV_n = \frac{FCFF_{n+1}}{(WACC - g)} \qquad (2-4)$$

With,

- TV_n = Terminal Value at the end of the period
- $FCFF_t$ = Free Cash Flows to the Firm in period t
- $WACC$ = Weighted Average Cost of Capital
- g = Perpetual growth rate

The definition of a Perpetual Growth rate that makes sense is crucial for the success of the valuation, therefore, there are some key aspects to be having in consideration. Being the DCF-FCFF a stable growth model, as stated by Damodaran (2012), it can only be used to value a company that can perpetually sustain a stable growth rate in the future. In addition, there is an additional requirement that must be adhered to when selecting a growth rate: a company's growth rate cannot exceed the growth rate observed in the economy, as per Damodaran (2012).

Weighted Average Cost of Capital (WACC)

The present value of a future cash flow represents the financial value required at the current time to achieve an equivalent future value, considering a specific discount rate. The discount rate, also known as the weighted average cost of capital (WACC), represents the expected rate of return that an investor anticipates from an investment with the same level of risk (Damodaran, 2012).

According to Luehrman (1997), the WACC is a “tax-adjusted discount rate, intended to pick up the value of interest tax shields that come from using an operation’s debt capacity”.

The WACC can be computed under the formula below:

$$WACC = \frac{E}{E+D} * R_e + \frac{D}{E+D} * R_d * (1-t) \qquad (2\text{ - }5)$$

With,

- E = Equity Market Value
- D = Debt Market Value
- R_e = Cost of Equity
- R_d = Cost of Debt before taxes
- t = Corporate tax rate

While the Weighted Average Cost of Capital (WACC) is a straightforward and easy-to-understand metric, it has both advantages and limitations. It serves as the minimum rate of return that investors require and is therefore a suitable choice for Discounted Cash Flow (DCF) methods. However, it is important to note that WACC also has notable limitations. An inherent limitation arises when employing WACC in the discounting procedure, since it entails an implicit assumption that the company's desired ratio of debt to equity would remain unchanging throughout the whole analysis period. The assumption mentioned is frequently impractical in real-world scenarios, which makes the static WACC approach best suitable for organizations that have very consistent capital structures (Luehrman, 1997).

Cost of Equity

The cost of equity corresponds to the anticipated rate of return that investors require for their equity investment (Damodaran, 2012), and it can be challenging to calculate.

The Capital Asset Pricing Model (CAPM), developed by William Sharpe (1964) and John Lintner (1965), provides a direct correlation between the expected return on an investment and its level of risk. It is widely regarded as the primary way for estimating the Cost of Equity and is preferred over alternative approaches (Damodaran, 2012). Another well-known method is the Fama-French three-factor model, but it is not as commonly utilized.

The CAPM equation, to determine Cost of Equity, is as follows:

$$K_e = r_f + \beta_L * \left[E(R_m) - r_f\right] \quad (2 - 6)$$

With:

- K_e = Cost of Equity
- r_f = Risk-free Rate
- β_L= Levered Beta
- $E(R_m)$= Expected Market Return

Risk-Free Rate

According to Damodaran (2008), the Risk-Free Rate is the fundamental factor used to calculate both the cost of equity and capital. The cost of equity is calculated by combining a risk premium with the risk-free rate. The magnitude of this premium is contingent upon the degree of risk associated with the investment and the comprehensive equity risk premium. The cost of debt is determined by adding a default spread to the risk-free rate, which is influenced by the credit risk of the organization. Using a higher risk-free rate, all else being equal, will result in increased discount rates and decreased present value in a discounted cash flow analysis (Damodaran, 2008).

However, the consensus among most experts is that in well-established markets, a 10-year government bond is the appropriate choice. This is because the government has a very minimal chance of default, making it one of the safest investment options available.

Market Risk Premium

The Market Risk Premium is the additional return anticipated from the uncertain and risky market in comparison to the risk-free interest rate. It is of utmost importance in the Capital Asset Pricing Model (CAPM) since it establishes the relationship between a risky asset's beta component and its anticipated return. Hence, the market risk premium plays a crucial role in both determining the value of a company and making decisions on asset allocation.

Estimating the risk premium involves evaluating the historical average additional return of the market compared to the risk-free interest rate, as stated by Berk & DeMarzo (2017). This computation considers the complex interaction of market dynamics, investor expectations, and economic conditions that together determine the premium that investors attribute to taking on market risk.

The equation for the determination of this relevant premium can be stated as follows:

$$MRP = E(R_m) - r_f \qquad (2-7)$$

Beta

The Beta (β) measure quantifies the increased risk of a stock by measuring its volatility relative to the broader stock market.

The use of Beta coefficients in the assessment of a company's value has been a central focus of financial analysis for a considerable period of time. Beta is a crucial metric for assessing an asset's susceptibility to market volatility, serving as an indicator of its systematic risk. Fama and French (1992) assert that Beta is a crucial measure for ascertaining the expense of equity capital, particularly within the framework of the Capital Asset Pricing Model (CAPM). Moreover, Damodaran (2002) highlights

that Beta plays a crucial role in determining discount rates, which in turn directly affects the valuation result.

In addition, Koller et al. (2020) propose a more comprehensive approach to evaluating market risk, employing a widely known technique known as the Bottom-Up Betas.

The Bottom-Up Betas process begins by carefully selecting a peer group that closely resembles the target company. The individual betas are combined and calculated to obtain a composite beta for the peer group, which acts as an indicator of the industry's overall systematic risk (Koller et al., 2020). The leveraged and unleveraged betas are subsequently computed to accommodate the target company's distinct financial framework. The levered beta incorporates the impact of existing debt on systematic risk, whereas the unlevered beta separates business risk from financial risk (Damodaran, 2012).

The equations for both the levered and unlevered Beta are as follows:

$$\beta_u = \frac{\beta_L + \beta_D * \frac{D}{E} * (1-t)}{1 + \frac{D}{E} * (1-t)} \qquad (2-8)$$

$$\beta_L = \beta_u + (\beta_u - \beta_D) * \frac{D}{E} * (1-t) \qquad (2-9)$$

Considering that,

$$\beta_D = \frac{K_d - (r_f + CRP)}{MRP} \qquad (2-10)$$

With,

- β_u= Unlevered Beta
- β_D= Beta of Debt
- β_L= Levered Beta
- t = Corporate tax rate
- $\frac{D}{E}$ = Debt-to-Equity ratio
- MRP= Market Risk Premium
- CRP= Country Risk Premium
- r_f= Risk-free rate
- K_d= Cost of Debt

Employing this approach provides us with a more accurate assessment of the company's risk, as it considers the prevailing industry circumstances by utilizing the selected peer group. Consequently, this results in a more precise assessment of beta.

Cost of Debt

The cost of debt refers to the interest rate that a firm incurs when it borrows capital. As stated by Damodaran (2008), it reflects the remuneration requested by investors for loaning their funds. As a result, it directly influences the calculation of the weighted average cost of capital, which significantly affects investment evaluations.

Koller et al. (2020) emphasize the crucial importance of risk assessment in determining the cost of debt. According to their argument, the perceived level of risk linked to a company's activities has a direct impact on the interest rate that lenders require. An increased level of risk results in higher interest rates, thereby raising the expense of borrowing. The significance of a precise risk assessment is emphasized, as it directly influences the cost of debt factor in WACC calculations.

The Credit Spread Approach, as described in the literature by Damodaran (2008) and further developed by Koller et al. (2020), is especially useful in cases where a company's debt is not traded on public markets. This approach involves the estimation of the cost of debt by the addition of a default spread to the risk-free rate. The default spread incorporates the extra return that investors want for keeping a more risky debt instrument in comparison to a risk-free asset. The company's creditworthiness, which is determined by elements such as its credit rating and financial stability, has a significant impact on it.

$$K_d = r_f + Default\ Spread \qquad (2-11)$$

This approach, by factoring in the default spread, offers a customized estimation of the debt cost that aligns with the company's unique risk profile. This method is extremely useful in situations where there is a lack of market data for the company's debt, providing a strong alternative for precisely determining the cost of debt in the context of valuation.

Equity Value

Equity Value (EQV) is a critical metric in company valuation, representing the residual interest of shareholders. It leverages the concept of Enterprise Value (EV) along with adjustments for non-operating assets and non-equity claims to arrive at an accurate estimation of a firm's true equity worth. This method provides a comprehensive framework for determining Equity Value (Damodaran,

2002; Koller et al., 2020). Damodaran (2002) argues that Equity Value reflects the market worth of a company's outstanding equity shares, accounting for liabilities.

The equation for this method is as follows:

$$EQV = EV + Non\ operating\ assets - Non\ equity\ claims \qquad (2-12)$$

Non-operating assets, although not directly contributing to cash flows, hold substantial value for shareholders. These include cash and near-cash investments, investments in other companies, holdings in private or public firms, and assets with intrinsic shareholder value (Damodaran, 2002).

The adjustment for non-equity claims, encompasses various forms of debt and hybrid securities (Koller et al., 2020).

In summary, this method, integrating non-operating assets and meticulously considering non-equity claims, offers a comprehensive perspective on Equity Value. It provides a robust framework for determining the true value of a company's equity, enabling well-informed i nvestment decisions.

Free Cash Flow to Equity Method (FCFE)

Since it includes all operating, financing, and investing flows, the Free Cash Flow to Equity (FCFE) technique is regarded as the most comprehensive valuation method in terms of cash flows. The FCFE, according to Pinto J. et al. (2010), is the amount of cash left over after all operating costs, debt repayments, and reinvestment costs are paid that can be distributed as dividends to equity holders. In this light, the way of computing it is:

$$FCFE = Net\ Income + D\&A - CAPEX - \Delta\ Working\ Capital + \Delta\ Debt \qquad (2\text{ - }13)$$

However, due to the model's complicated implementation and the fact that capital structure is incorporated into cash flows, the FCFE technique has some major drawbacks, which makes it not the preferred methodology to be using.

1.2.2. Relative Valuation: Multiples

As said by Damodaran (2012), “In relative valuation, the value of an asset is derived from the pricing of comparable assets, standardized using a common variable such as earnings, cash flows, book value, or revenues”. The multiples model is employed to assess the worth of companies by assuming that identical assets should be traded at comparable prices. This indicates that businesses with similar performances would have similar multiples. It is recommended to be used as a supplemental model,

as it can help summarize and analyze the value produced, providing valuable information about the company.

The main statement and idea behind the multiples' methodology is a two-step process: it starts by selecting a group of peers to the company and, the second part, choosing what multiples are most adequate for the analysis. A peer group is a set of firms that are somehow comparable to the company we plan on valuating.

According to Koller et al. (2020), an ideal peer group usually comprises 8 to 15 similar companies. Nevertheless, experts generally agree that it is more advantageous to have a more exact and limited group rather than diluting the sample with organizations that do not possess similar features to the one being evaluated.

Regarding the choice of multiples, when valuing technology companies, it is crucial to select multiples that align with the specific attributes of the industry. Among the array of metrics available, the Price-to-Earnings Ratio (P/E) and Enterprise Value-to-EBITDA (EV/EBITDA) emerge as particularly relevant for the technology sector.

As emphasized by Penman (2013), these multiples offer valuable insights into the valuation of technology companies. The P/E ratio, advocated by Penman, provides a measure of how the market values a company's earnings, which is especially pertinent in the context of technology firms where earnings growth is often a central focus.

Additionally, the EV/EBITDA ratio factors in a company's debt and cash holdings, providing a more comprehensive assessment of its value relative to EBITDA. In the technology sector, where capital expenditures and debt considerations can significantly impact valuation, the EV/EBITDA ratio becomes an invaluable metric.

By leveraging these multiples, analysts can arrive at a more precise and nuanced valuation for technology companies, aligning with their distinctive characteristics and industry dynamics as advocated by leading financial experts. Their formulas are as follows:

$$Price - to - Earnings\ Ratio\ (PER\ or\ P/E) = \frac{Market\ Capitalization}{Total\ Net\ Income} \quad (2\text{-}14)$$

$$Enterprise\ Value\ to\ EBITDA = \frac{Enterprise\ Value.}{EBITDA} \quad (2\text{-}15)$$

3. Mobileye Global Inc.: Overview

3.1. Company Profile & History

Mobileye Global Inc. is an Israeli technology company that specializes in developing advanced driver assistance systems (ADAS) and autonomous driving technologies. The company was founded in 1999 by Amnon Shashua and Ziv Aviram, both professors at the Hebrew University of Jerusalem.

Mobileye initially focused on developing algorithms and systems for enhancing vehicle safety. Their technology included vision-based systems that could detect and interpret visual information from the road, such as lane markings, traffic signs, and pedestrians. By processing this data in real-time, Mobileye aimed to provide drivers with warnings and alerts to prevent accidents.

Over the years, Mobileye's technology gained recognition and closed deals on valuable partnerships with various automotive manufacturers, including BMW, General Motors, and Nissan. These partnerships helped Mobileye expand its market reach and further develop its products.

In 2014, Mobileye announced a collaboration with Intel to develop a self-driving car platform. This partnership marked a significant milestone for Mobileye and demonstrated their ambition to advance autonomous driving technologies. The collaboration combined Mobileye's expertise in vision-based sensing with Intel's computing power, leading to the development of more advanced autonomous driving systems.

The growing demand for ADAS and autonomous driving technologies, combined with Mobileye's technological advancements and partnerships, created a favorable environment for the company to consider going public. On August 1, 2014, Mobileye had its initial public offering (IPO) on the New York Stock Exchange (NYSE) under the ticker symbol "MBLY."

The IPO was highly successful, raising $890 million and valuing the company at around $7.6 billion. The strong investor response reflected the market's recognition of Mobileye's potential and the increasing importance of ADAS and autonomous driving technologies in the automotive industry.

The funds raised through the IPO allowed Mobileye to further invest in research and development, expand its operations, and strengthen its position as a leading provider of ADAS technologies. The company continued to forge partnerships with additional automakers, making its technology a standard feature in an increasing number of vehicles.

In 2017, Intel acquired Mobileye for approximately $15.3 billion, marking one of the largest acquisitions in the autonomous driving technology industry. The acquisition aimed to combine Intel's computing power with Mobileye's expertise to accelerate the development of autonomous driving solutions. Following the acquisition, Mobileye continued to operate as a subsidiary of Intel, with Amnon Shashua leading the company as CEO and retaining a significant level of autonomy in its operations.

3.2. Going Public on NASDAQ

On October 26, 2022, Mobileye initiated a second Initial Public Offering (IPO) by issuing 41 million Class A Common Stock shares, priced at $21 per share. This move resulted in Mobileye's stock trading on Nasdaq under the ticker symbol "MBLY" and assigned the company a market valuation of $17 billion.

However, Intel, as the parent company of Mobileye, held a controlling interest by retaining ownership of more than 750 million shares of Class B Stock. In Mobileye's dual-class stock structure, Class B shares carried enhanced voting rights, with each share granting the holder 10 votes. Conversely, Class A shares, introduced during the IPO, only provided one vote per share. This structure endowed Intel with significant voting power, enabling it to exercise substantial influence over critical decisions within Mobileye. As a result, Intel retained authority over all matters brought before the company's stockholders, including pivotal determinations like director elections and the approval of substantial corporate transactions. This configuration solidifies Intel's dominant position in shaping Mobileye's strategic direction and underscores its pivotal role as the driving force behind Mobileye's advancements in autonomous driving technology.

Intel stated that listing Mobileye on the Nasdaq was a part of its strategy to revitalize its semiconductor business, which has faced strong competition from players like AMD and Nvidia, in recent years. The funds from the listing will be used to build more chip factories, supporting Intel’s transformation into a leading foundry for other chipmakers. This capital-intensive initiative aims to strengthen Intel's position in the semiconductor industry and meet the growing demand for advanced chip manufacturing capabilities.

3.3. Business Model

At the current juncture, a substantial portion of Mobileye's revenue stems from the marketing and sale of EyeQ SoCs (System-on-Chips). These cutting-edge and highly specialized integrated circuits have been meticulously designed to serve as the driving force behind vehicles' visual perception and intricate processing capabilities. Their primary application resides in propelling the evolution of advanced driver assistance systems (ADAS) and the realm of autonomous driving systems. This financial inflow is a direct outcome of the strategic distribution of EyeQ SoCs to original equipment manufacturers (OEMs) through the established channels of Tier 1 automotive suppliers, constituting a pivotal link in the automotive supply chain.

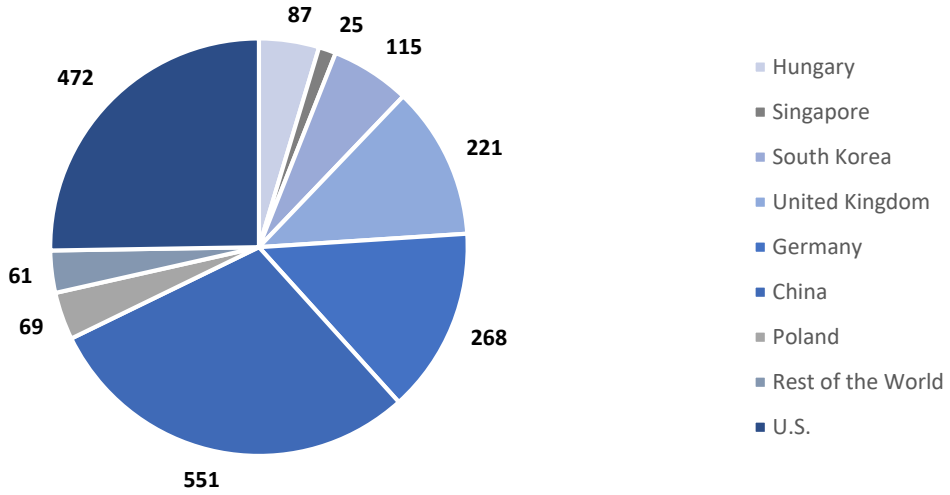

Figure 2: **Revenue Breakdown (in millions of $) by Geographical Region:** Adapted from Prospectus

When it comes to the geographical distribution of Mobileye's revenue, as shown in **Figure 1,** the three primary markets in which Mobileye operates are China, the United States of America, and Germany, collectively contributing significantly to its total revenue. These key markets account for a substantial portion, approximately 70%, of Mobileye's total revenue. This highlights the strategic importance of these countries for Mobileye's business and underscores the company's global presence and influence in the field of advanced driver assistance systems (ADAS) and automotive technology.

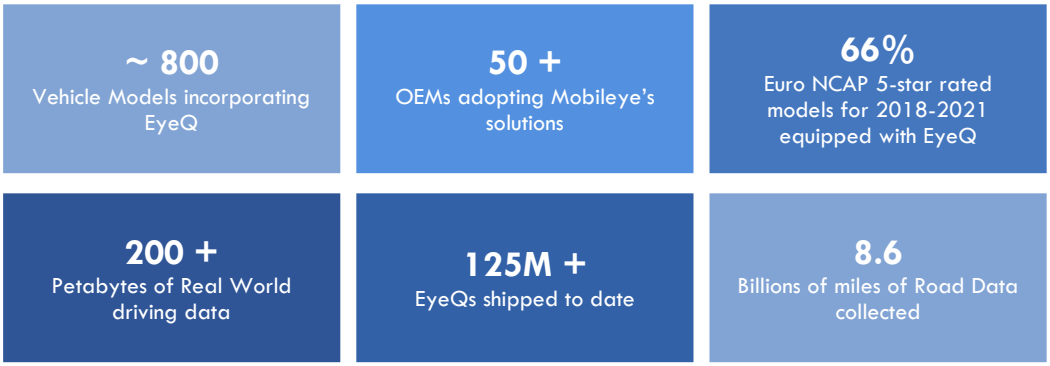

Figure 1: **Business Figures:** Adapted from Prospectus

In recent years, Mobileye has achieved notable growth and reached significant milestones, establishing a strong presence in the automotive technology sector, as evidenced by the business figures collected and presented in **Figure 2.**

3.4. Financial Analysis

The financial analysis of the company will be conducted based on the latest available information up to Mobileye's IPO date, which was October 26, 2022. The company's data utilized for this analysis can be found in the Prospectus, which is accessible on the U.S Securities and Exchange Commission website. The analysis will focus on examining financial data for the years spanning from 2019 to 2021, as well as the first semester of 2021 and 2022, for a more complete analysis.

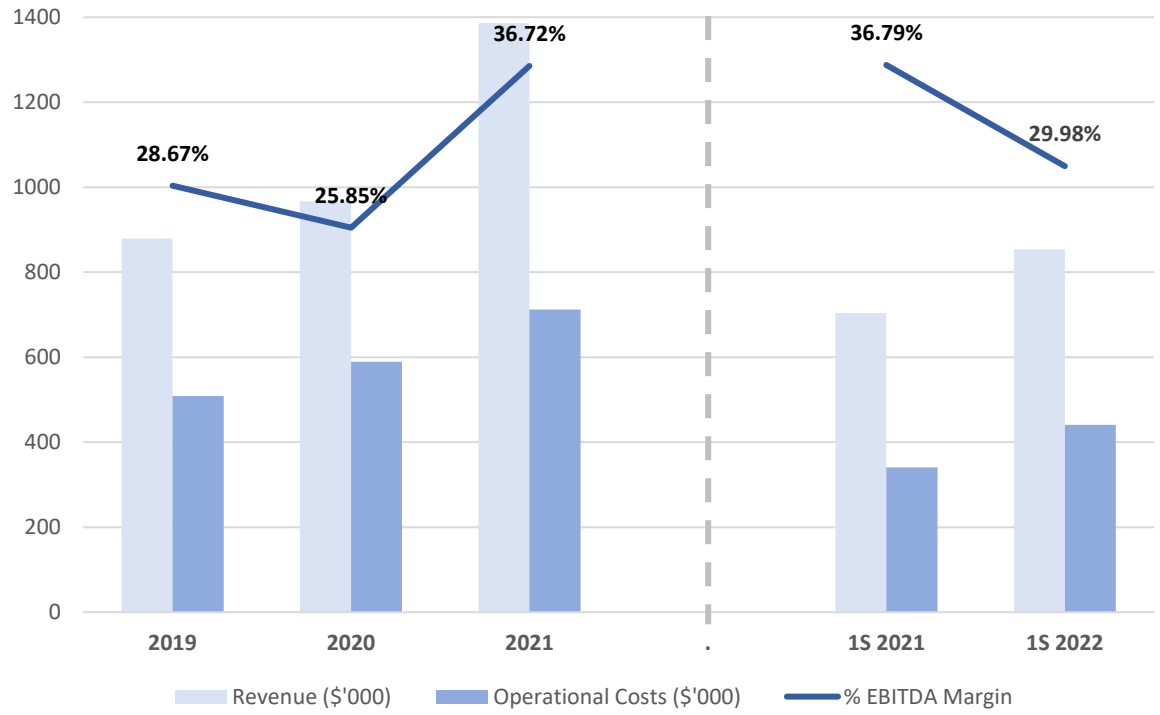

Figure 3: **Revenues, Operational Costs and EBITDA Margin**: Own estimates using data from Prospectus

As showcased in **Figure 3**, Mobileye's operational performance has demonstrated a positive trajectory throughout the analyzed period of 2019 to 2021. Furthermore, it continued to exhibit improvements from the first semester of 2021 to the corresponding period in 2022.

In 2021, the company experienced a substantial 43.3% growth rate in revenue compared to the preceding year, culminating in a year-end total of $1,386M. This growth rate significantly surpasses the increase observed from 2019 to 2020, which was approximately 10%. This substantial increase indicates that the company's technology has gained significant traction in the market during that year, likely due to factors such as increased demand for advanced driver assistance systems (ADAS) and autonomous driving technology. It is worth noting that this impressive growth might also be attributed to a robust recovery following the impact of COVID-19. In 2020, the global vehicle production declined by 16%, leading to revenue fluctuations for Mobileye, even though the year still ended with a revenue increase, compared to the year prior.

Furthermore, when comparing the revenue of the first semester of 2021 to the same period

in 2022, just prior to the IPO, there is a notable increase. Revenue grew at a commendable rate of approximately 21.3%, culminating in $854M in revenue by the end of the semester. This suggests that Mobileye continued to experience substantial growth and market demand as it approached its IPO.

Operational costs have been on a consistent upward trajectory during the period under analysis, amounting to $441M in the first semester of 2022, having risen about $100M since the same period in 2021. This is mainly due to substantial investments in Research and Development (R&D) with the company's dedication to technological advancement being a primary driver of this increase. Additionally, it is important to note that the global impact of inflationary pressures could also have contributed to the rise in operational costs. These external economic factors affect various cost components, including materials, labor, and other resources, leading to an overall increase in operational expenses.

In 2021, Mobileye's EBITDA Margin increased by more than 10 percentual points compared to 2020, indicating improved operational efficiency. However, in the first semester of 2022 there was a dip in this margin, which could be explained by increased investments in Research and Development (R&D) or other macroeconomic factors, as mentioned earlier. This decline should be viewed in the context of Mobileye's overall performance as all indicates that Mobileye is still on a strong growth path, that being evident from the concurrent increase in revenues.

Assessing a company's capacity to meet short-term financial obligations without depending on external funding is a critical aspect of evaluation. It offers investors valuable insights into how the company's generated revenue can cover its current liabilities and survive in times of increased distress. Liquidity, typically measured through a series of ratios, as illustrated in **Figure 4** serves as a fundamental metric for this assessment. Regarding the data available for constructing these ratios, Mobileye has provided information only up until 2020. Consequently, our analysis will focus on tracking the evolution of liquidity ratios from 2020 to 2021, the year prior to the IPO.

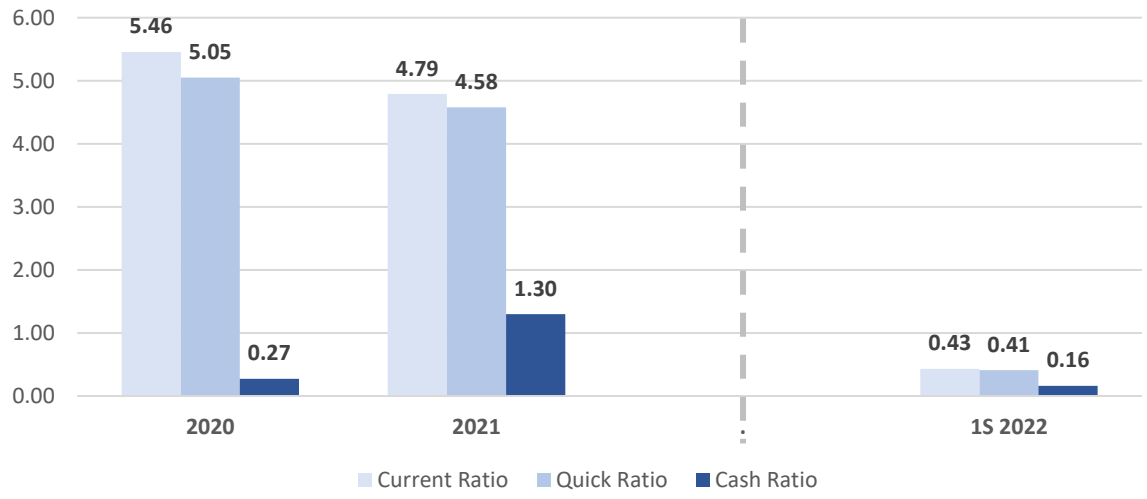

Figure 4: **Liquidity Ratios**: Own estimations using data from Prospectus

Starting off with the Current Ratio, a liquidity ratio that measures a company's ability to meet short-term obligations using its current assets. In 2020, Mobileye registered a current ratio of 5.46, an impressively high figure. This indicates that the company held an extensive pool of current assets in comparison to its current liabilities. In 2021, the current ratio remained high at 4.79, however slightly lower than the previous year. When it comes to the first semester of 2022, there was a significant decrease of this ratio, associated with the emission of a Dividend Note, which Mobileye distributed to Intel, allocating a great portion of the IPO proceeds to pay debt with Intel. This Dividend Note was categorized as a part of Current Liabilities on the balance sheet, leading to a decline in the Current Ratio, resulting in a value below zero. While this may appear as a less favorable financial indicator, it is important to recognize that this move was necessary for the company's continued growth and the full realization of its development potential.

The Quick Ratio is a stricter measure for liquidity since it only considers more liquid assets for the calculus, such as cash & cash equivalents, marketable securities, and accounts receivable. In 2020, Mobileye's quick ratio was 5.05, indicating that the company had slightly fewer highly liquid assets to cover its short-term liabilities. However, on the first semester of 2022, this ratio suffered a major decrease, to the lowest value seen yet, 0.41, mainly due to the emission of the Dividend Note to Intel, as previously explained.

Lastly, focusing on the Cash Ratio, an even more conservative measure, considering only cash and cash equivalents. In 2020, Mobileye's cash ratio stood at 0.27, revealing that the company held relatively limited cash and cash equivalents to meet short-term obligations directly. While this ratio signifies a cautious approach to liquidity, it might indicate a preference for investments over maintaining excess cash reserves. As seen above, in 2021, this ratio increased notably up to 1.30. This suggests that Mobileye had a more substantial amount of cash and cash equivalents relative to its short-term liabilities. This shift implies a heightened focus on liquidity management and might indicate a deliberate strategy to maintain a more robust cash position. Following the same trend seen on the above ratios, in the first semester of 2022, the Cash Ratio suffered a decreased.

Mobileye's liquidity ratios for 2020 and 2021 reflect a company with a solid liquidity position. The high current ratios for both years signal a strong ability to cover short-term obligations, while the significant improvements in the quick and cash ratios from 2020 to 2021 suggest a more prudent approach to liquidity management, with Mobileye enhancing its capacity to meet immediate financial needs. When it comes to the first semester of 2022, the liquidity ratios took a dip, however, t's important to recognize that this reduction could be a deliberate move associated with the IPO.

To finalize the financial analysis, a profitability analysis is relevant since these ratios, illustrated on **Figure 5**, offer a clear snapshot of the company's financial performance, shedding light on its ability to generate profits and manage resources effectively.

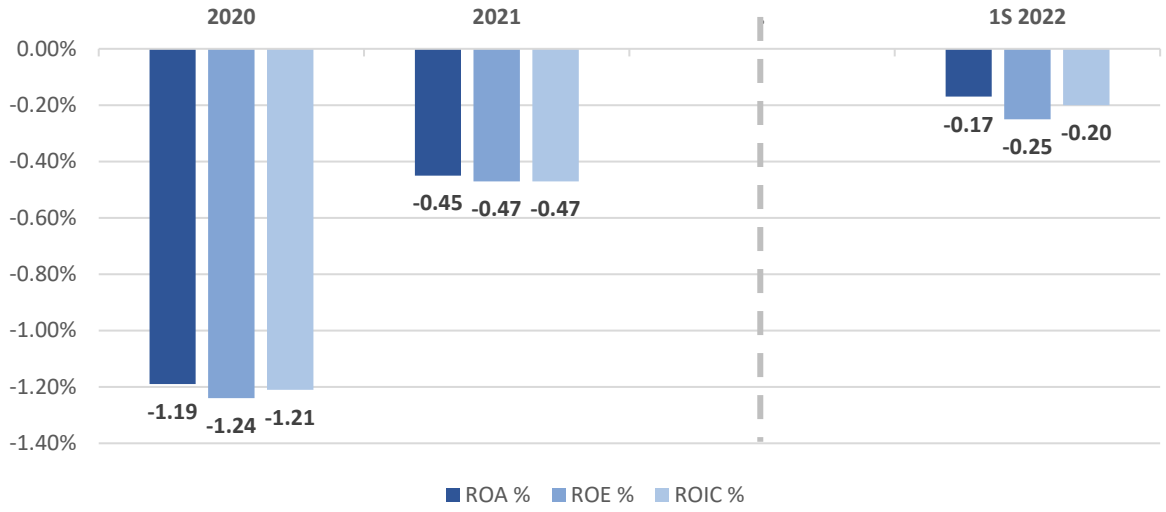

Figure 5: **Profitability Ratios:** Own estimations using data from Prospectus

Looking at the provided values for Mobileye's Return on Invested Capital (ROIC), Return on Equity (ROE), and Return on Assets (ROA) over the specified periods, we observe a consistent improvement in the company's profitability metrics.

In 2020, Mobileye reported negative values for all three ratios (ROIC: -1.21%, ROE: -1.24%, ROA: -1.19%). However, the subsequent years show a positive trend, indicating a progressive shift towards profitability. In 2021, the ROIC improved to -0.47%, ROE to -0.47%, and ROA to -0.45%. By the 1st semester of 2022, we see further progress with the ROIC at -0.20%, ROE at -0.25%, and ROA at -0.17%.

These improvements suggest that Mobileye is actively taking measures to enhance its financial performance. While negative values may raise some concerns, it is important to note that these metrics can be influenced by various factors, including investments in research and development or strategic expansion initiatives. It is also relevant to note that negative values in these ratios are not uncommon in industries that require substantial capital investments, such as advanced driver-assistance systems and autonomous vehicle technologies.

3.5. Stock Performance, Shareholder Structure and Dividend Policy

3.5.1. Stock Performance

On October 26, 2022, Mobileye made its debut in the public stock market with the trading for 41M Class A shares on NASDAQ. Each of these shares had a nominal value of $21, as previously mentioned. In **Figure 6** below, it is possible to examine the stock price performance over the six months that followed the IPO, from October 2022 to March 2023.

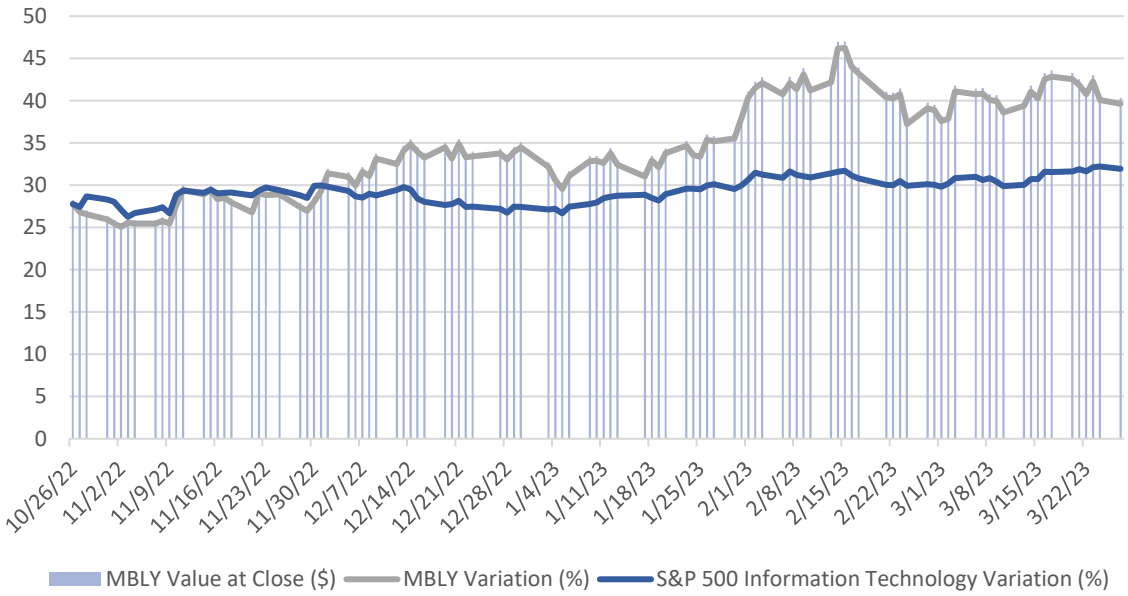

Figure 6: **Stock performance comparison between Mobileye and S&P 500 Technology Hardware & Electronics (Oct.2022-Mar.2023)**: Yahoo Finance

On the first day trading in the regulated market, Mobileye closed at a price of $28.25, which is 34% higher that the IPO price of $21, showing major evidence of underpricing. Additionally, during the first six months trading in NASDAQ, Mobileye's share price experienced a growth of 55.7%, closing at $40.31 on March 27th of 2023. This growth compares to a 9.35% growth for the S&P 500 Technology Hardware & Electronics, for the same period, which shows that the company has been outperforming the industry index. Moreover, throughout the analyzed time, the stock price experienced oscillations ranging from a minimum of $25.49 to a maximum of $47.02.

3.5.2. Shareholder structure

Before the Initial Public Offering, Mobileye was entirely owned by Intel, as previously mentioned. An important aspect to investigate is how the ownership structure changed after the IPO was completed, having in mind that Mobileye still has full control over Mobileye, as explained above on the "Going Public on NASDAQ" chapter.

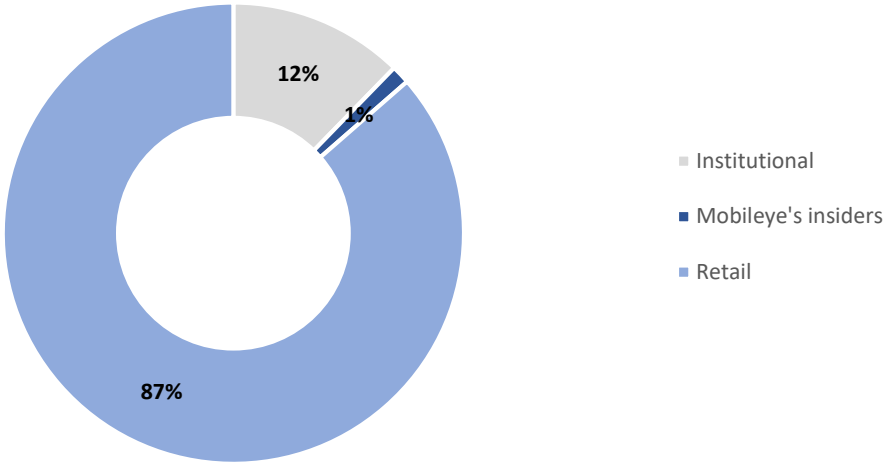

Figure 7: **Ownership Structure:** Adapted from Refinitiv

Utilizing the latest publicly available data, as of June 30, 2023, Mobileye had a total of approximately 802 million shares in circulation (750 Million class B and the remaining in class A). In **Figure 7** above, we can observe the distribution of ownership among these shares.

Institutional shareholders hold 12.28% of the company's shares, while Mobileye Global Inc. insiders possess 1.30%. The majority, 86.42%, is in the hands of retail investors. The largest single shareholder of Mobileye Global is General Atlantic Me LP, with ownership of 4.76 million shares, equivalent to 0.59% of the company.

3.5.3. Dividend Policy

Mobileye's dividend policy, as it is described on the Prospectus, revolves around its commitment to repay a value of $3.5 billion to Intel, an obligation established in connection with the IPO. To meet this commitment, Mobileye distributed a Dividend Note to Intel, allocating a significant portion of the IPO proceeds to service this debt. Additionally, on May 12, 2022, Mobileye executed the payment of a Dividend, totaling $336 million to Intel, after accounting for $14 million remitted to tax authorities to address tax obligations related with the Reorganization associated with the IPO.

Looking forward, Mobileye intends to retain its forthcoming earnings, primarily for the purpose of funding its operational expansion. There are currently no immediate plans for cash dividends. The discretion to declare and pay future dividends to common stockholder’s rests with Mobileye's board of directors. These decisions will be influenced by various factors, including economic conditions, financial stability, cash availability, capital needs, legal, tax, and regulatory constraints. Certain subsidiary credit facilities contain restrictive covenants that could impact dividend decisions.

In conclusion, Mobileye's dividend policy underscores its commitment to fulfilling obligations

arising from the IPO and directing earnings toward the growth of its business. Future dividend declarations will continue to be subject to the discretion of Mobileye's board of directors and influenced by a spectrum of factors.

Under Delaware law, which serves as the legal framework for Mobileye, dividends may be payable only out of surplus, which is calculated as net assets less liabilities and capital, or, if we there is no surplus, out of net profits for the fiscal year in which the dividend is declared and/or the preceding fiscal year. Therefore, Mobileye's decision to keep dividend distribution as a Board of Directors option rather than an obligation is entirely legal.

4. Market Overview

4.1. Macroeconomic Outlook

The global economy rebounded strongly in 2022, after the COVID-19 pandemic, which caused an historic contraction in 2020 and 2021. The availability of vaccines, the fiscal and monetary support, the reopening of businesses and borders, and the adaptation to the new normal boosted economic activity and consumer confidence, all around the globe.

However, the recovery was not smooth or uniform, as the global economy faced several challenges and uncertainties in 2022. These included new variants of the COVID-19 virus, uneven vaccination rates, inflationary pressures, supply chain disruptions, social and environmental issues, and geopolitical tensions. One of the most serious geopolitical conflicts in 2022 is the war in Ukraine, which escalated in February and threatened the stability and security of Europe and beyond. The war has had, and continues to have, negative impacts on trade, investment, energy, and humanitarian conditions worldwide.

The global economic performance in 2022 was, therefore, diverse, and complex, depending on the region and sector. By analyzing the Real GDP growth, in **Figure 8**, it becomes clear that global economy has suffered a big hit with the pandemic, in 2020, and is still recovering from its effects. This analysis places its emphasis on China, the United States, and Europe, as they presently stand as the three most pivotal regions for Mobileye Global Inc, in terms of revenue, as of 2022

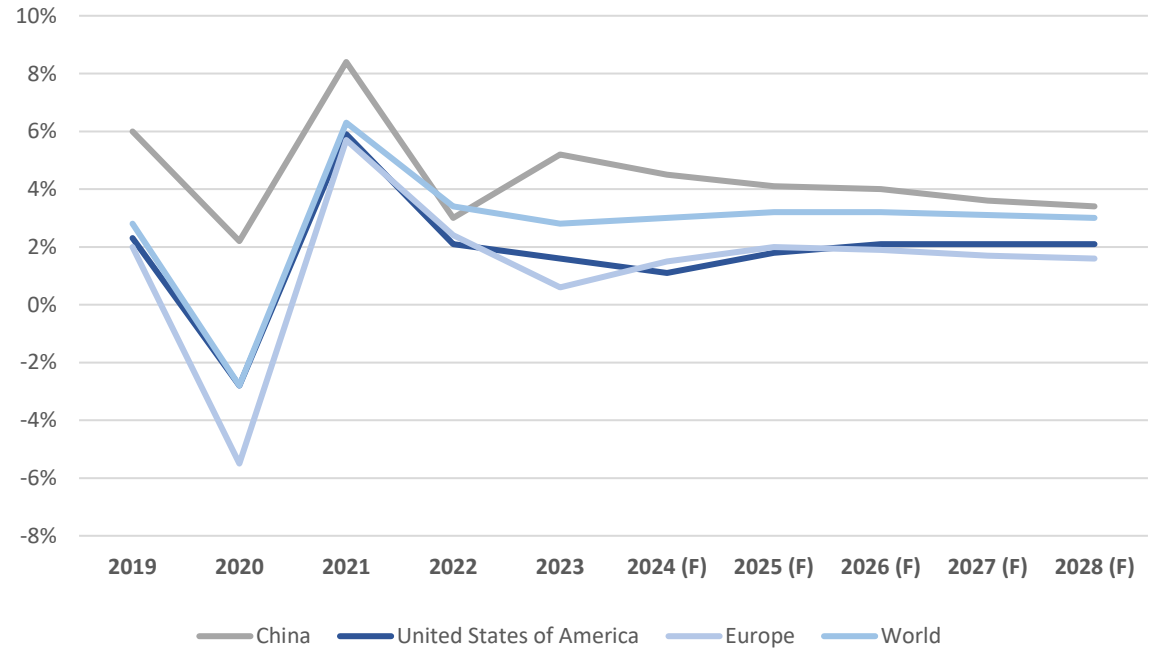

Figure 8. **Real GDP Growth:** Adapted from International Monetary Fund (IMF)

In addition, using IMF data going back to 1980, it is clear that the GDP growth rates in China, the U.S., and Europe all reached record lows in 2020, hovering around 2.2%, -5.5%, and -2.8%, respectively, demonstrating the pandemic's profound impact on the global economy. Despite this

slump, there is cause for optimism because predictions show that real GDP growth will resume to pre-pandemic levels by 2025.

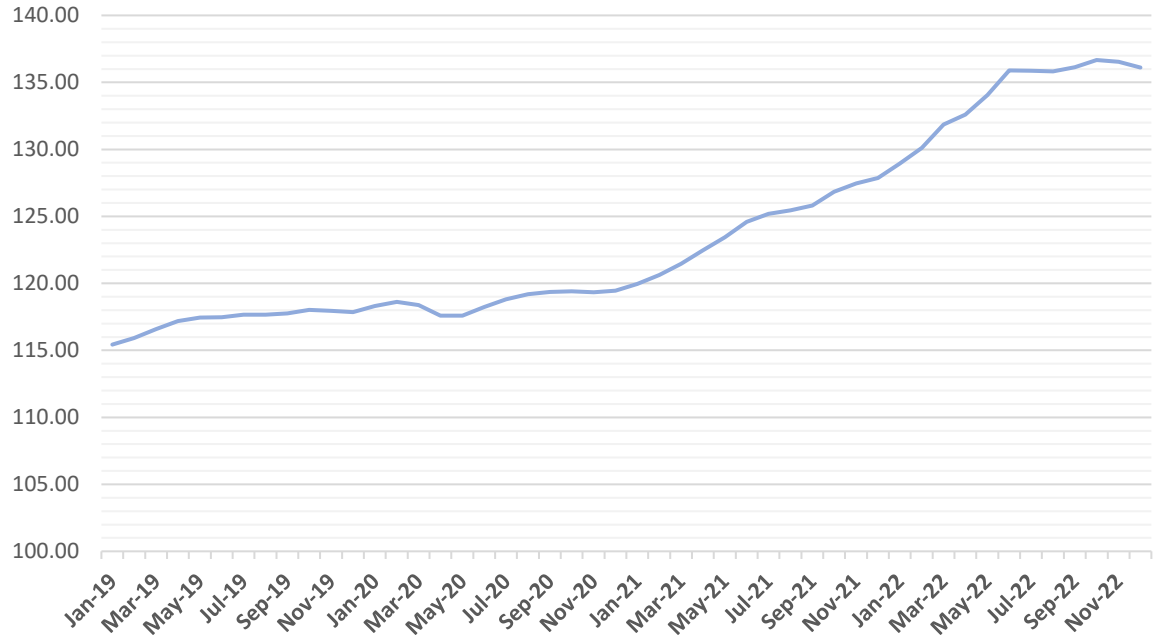

Figure 9. **Consumer Price Index (CPI) evolution, in United States of America (Year of 2010 = 100):** Adapted from International Monetary Fund (IMF)

Examining **Figure 9**, which portrays the consistent increase in the Consumer Price Index (CPI) in the United States from 2019 to 2022, provides valuable insights into a pivotal market for Mobileye Global Inc. During this period, the U.S. experienced a steady uptrend in CPI and inflation rates. In 2019, CPI remained relatively stable, with an annual increase of around 2.3%. However, the COVID-19 pandemic in 2020 triggered a shift, with CPI recording a lower annual increase, due to increased variations, of approximately 1.2%, reflecting the initial economic challenges posed by the pandemic.

Despite this initial dip, CPI has steadily risen thereafter. In 2021, it surged to around 5.4%, indicating a substantial increase in the cost of living. This ongoing upward trend in CPI had significant implications for businesses, particularly in the automotive sector. Rising input costs, stemming from factors such as labor, raw materials, and transportation, exerted pressure on profit margins. Moreover, supply chain disruptions, magnified by the semiconductor shortage, led to production delays and escalated expenses for automakers. These mounting costs were eventually passed on to consumers, resulting in notable price increases for both new and used vehicles.

To navigate this challenging landscape, automotive companies adopted strategies like diversifying their supplier base, reevaluating manufacturing practices, and optimizing designs to reduce their dependence on specific components. The persistence of rising CPI highlighted the necessity for adaptability and strategic planning for businesses in this sector, as they fight to remain competitive despite the consistent inflationary pressures.

4.2. Industry Overview

4.2.1. Automotive technology industry

The technology sector, a large and quickly expanding industry, includes a diverse spectrum of businesses, from software developers to hardware makers. One of the most important subsectors of the technology sector is the automotive technology industry, which focuses specifically on the development of technology for automobiles.

In recent years, a significant trend within the automotive technology subsector, commonly known as ACES (autonomous driving, connected vehicles, electrification of the powertrain, and shared mobility), has been massively disrupting the automotive sector. This trend has become a hot topic of discussion in the mobility space. The emergence of the COVID-19 pandemic and its subsequent impact on the world has accelerated the development of mobility solutions, leading to notable shifts in consumer preferences, the adoption of new technologies, and changes in regulatory frameworks. This leads the automotive manufacturers to channel their significant investments into software and electrification, recognizing them as pivotal areas for future growth and innovation.

Regarding market growth, a recent 2023 report by McKinsey & Company projects that the global automotive software and electronics market will reach an impressive valuation of $462 billion by 2030, experiencing a robust Compound Annual Growth Rate (CAGR) of 5.5% between 2019 and 2030. By contrast, the overall global automotive market, including passenger cars and light commercial vehicles (LCVs), was projected to expand at a considerably more modest CAGR of approximately 1% over the same period. These projections, estimating a shift from 89 million units in 2019 to a mere 102 million units in 2030, underscore the substantial transformation shaping the future of mobility. This transformation is a testament to the profound impact that ACES is having over the automotive industry.

When it comes to ADAS (Advanced Driver Assistance Systems), the technology in which Mobileye is currently specialized in, its market size was valued at approximately $18.2 billion in 2022, is expected to reach $24.5 billion in 2023 and forecasts performed by Mckinsey & Company indicate that it could reach a value of around $46 billion by 2030, increasing at a compound annual growth rate (CAGR) of about 6.3% during the forecast period 2023 to 2030.

To comprehend the dynamic changes unfolding in the automotive technology sector, it is interesting to mention and understand the levels of automation established by the Society of Automotive Engineers (SAE). These levels delineate the extent of automation in vehicles, ranging from Level 0, where human control is absolute and sensors are absent, to Level 5, signifying full autonomy in all conditions, underpinned by advanced sensor and radars, cameras, LiDAR (Light Detection and Ranging), ultrasonics, and more. Each level introduces progressively sophisticated sensor

technologies, enhancing vehicles' capabilities for autonomous operation.

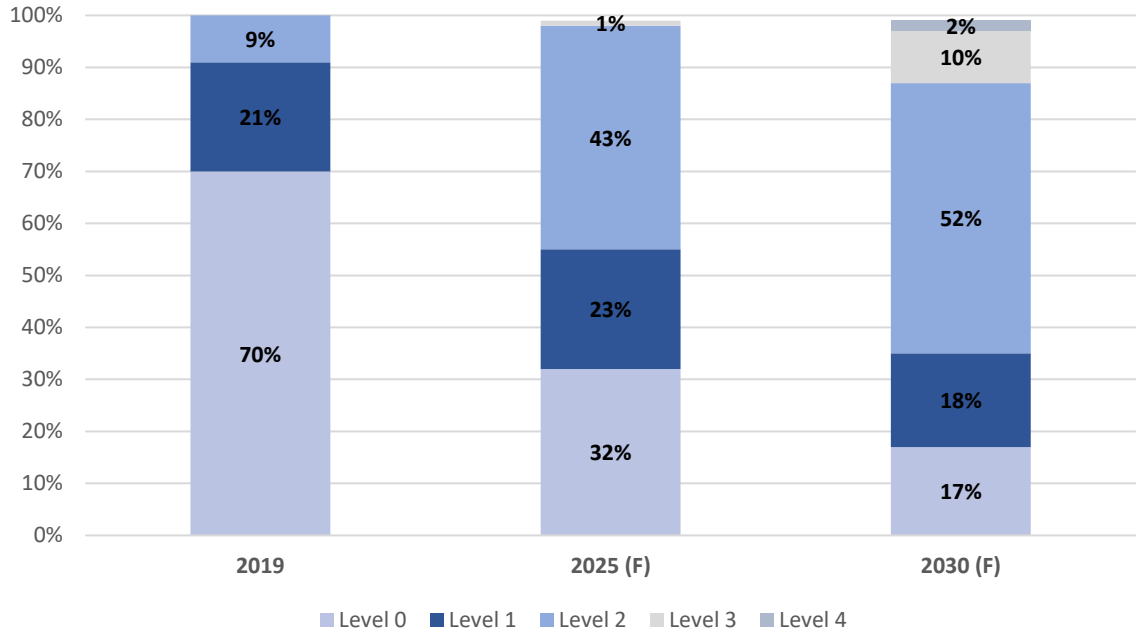

Figure 10: **Vehicle sales by SAE level, % of vehicles:** Adapted from Mckinsey & Company report "Automotive software and electronics 2030"

Through the analysis of Mckinsey & Company's forecasts for vehicle sales shown in **Figure 10**, it becomes evident that the consumer demand is propelling the fast growth of autonomous driving and advanced driver assistance systems (AD and ADAS) sales. The significant increase on the adoption of higher level, therefore, more technologically evolved vehicles, can be explained not only by the consumer preferences, but also by a regulatory landscape that is putting the emphasis on safety and enabling increased levels of autonomous driving and by major technological advances. It is noteworthy to highlight that the most substantial surge in sales is projected to occur in the Level 2 category, primarily distinguished by the integration of Advanced Driver Assistance Systems (ADAS). Forecasts suggest that by 2030, a notable 12% of vehicle sales will encompass vehicles falling under the Level 3 and Level 4 categories in terms of autonomous driving capabilities, which is a major increase compared to the mere 1% expected in 2025.

4.2.2. Main Players

Analyzing the main players in the autonomous technology industry is important in the process of understanding the dynamics and evolution of this transformative sector. Autonomous technology, encompassing self-driving vehicles and related systems, has the potential to revolutionize transportation, logistics, and beyond. To gain meaningful insights into this industry, one effective approach is to examine the largest autonomous driving companies, sorted by market capitalization.

Market capitalization, as a metric, provides an immediate snapshot of a company's size and

value in the stock market. It is calculated by multiplying a company's stock price by the total number of outstanding shares. This figure represents the collective assessment of a company's worth by investors. In the context of autonomous technology, market cap sorting helps identify the dominant forces shaping the industry.

Table 1: **Main players in the autonomous driving industry, sorted by increasing Market Capitalization (in $):** Adapted from Yahoo Finance (August 28th 2023)

Rank	Company	Market Cap
1	Alphabet (Google)	$1.643 T
2	NVIDIA	$1.136 T
3	Tesla	$757.28 B
4	Mercedes-Benz	$77.75 B
5	**Mobileye**	**$27.85 B**
6	Aptiv	$27.60 B
7	XPeng	$15.17 B
8	Aurora Innovation	$4.55 B
9	NWTN Inc.	$2.56 B
10	Luminar Technologies	$2.17 B

As seen in **Table 1** above, Mobileye holds the fifth position, right below Mercedes-Benz, in terms of market capitalization within the autonomous driving industry, with a market capitalization of $25.85 billion as of August 28th, 2023. At the forefront of the industry is Alphabet, a subsidiary of Google, commanding the top position with a substantial market capitalization of $1.643 trillion.

4.2.3. Regulatory Landscape

Understanding the regulatory environment of the automotive industry, and particularly within the subsector of automotive technology, is crucial since regulations wield major influence over the trajectory of this industry, having a significant impact on its evolution. The regulatory landscape for the automotive technology industry is on constant evolution as governments all around the globe seek to find a balance between safety and innovation, this poses as a challenge for companies that operate in this business as they must stay compliant and up to date with the latest applicable regulations,

while keeping innovative.

By analyzing the "The Automotive Regulatory Guide," an annual publication from the European Automobile Manufacturers' Association (ACEA) that offers an exhaustive insight into the global and national regulations governing the automotive sector, it becomes evident that this industry operates within a highly intricate regulatory framework.

One of the most important regulatory forces to have in mind is the United Nations Economic Commission for Europe (UNECE), an intergovernmental organization which develops international standards for vehicles and road traffic. It has issued several regulations over the past years related to automotive technology and the automotive industry in general, including regulations on autonomous and connected vehicles.

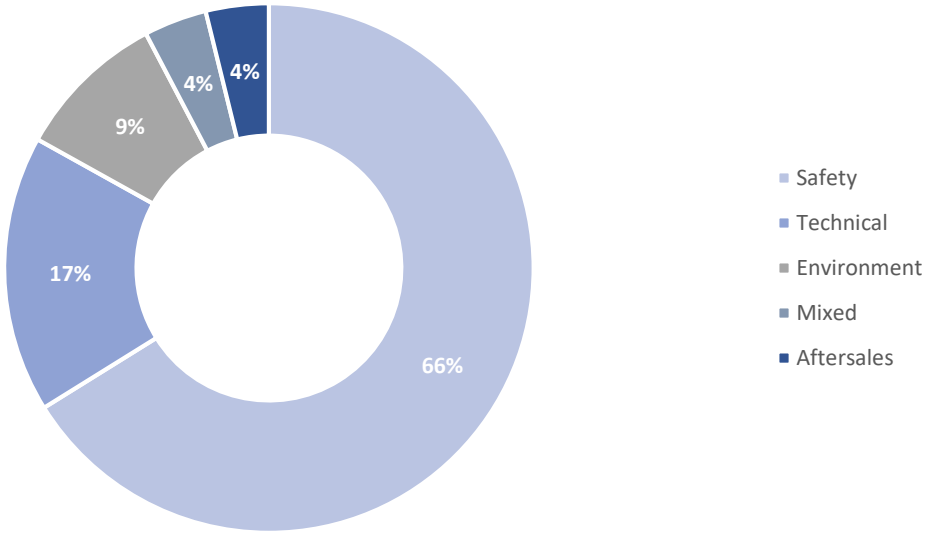

Figure 11: **UNECE's Regulation Distribution per item:** Adapted from European Automobile Manufacturers' Association (ACEA)

On **Figure 11**, that shows the UNECE's Regulation Distribution per item of focus, we can see that the main regulatory focus has been on safety, directly followed by technical regulations. In addition to UNECE, there are several important regulatory entities, such as EU Institutions (European Parliament, Council of European Union, European Commission, etc.), the National Highway Traffic Safety Administration (NHTSA) in the United States, among others distributed all around the globe.

The regulatory landscape for automotive industry is expected to become even stricter in the future, as safety concerns associated with autonomous and connected vehicles increase, however and despite the challenges, the automotive technology industry is a rapidly growing and innovative industry. Companies that can navigate the regulatory landscape successfully will be well-positioned to succeed and grow in this industry.

5. Mobileye Global Inc. Valuation

As determined in **Chapter 1**, Mobileye's share value at the moment of its initial public offering (IPO) will be determined using two specific valuation methods: the Discounted Cash Flow approach, specifically the Free Cash Flow to the Firm method, and the Relative Valuation method, which relies on multiples.

5.1. Valuation Assumptions

In the upcoming sections of this chapter, we will delve into the key assumptions that underly the valuation process and the correspondent financial model execution. All the assumptions made take into consideration all the information available at the time of the Initial Public Offering (October 26th, 2022) and consider financial data up until the 30th of June 2022.

Given the time horizon and the data available on Mobileye Global Inc. and its industry, a projected span of five years (2022E – 2026F) was adopted in this analysis, for future estimations.

Concerning the data utilized for the valuation of Mobileye Global Inc., all the company's data was taken from the Prospectus, emitted by the company regarding the IPO, and from the platform Reuters. This data contains information from the firm's Financial Statements, specifically the Income Statement and Balance Sheet.

5.2. Discounted Cash Flow Model

5.2.1. Revenue

Forecasting future revenue growth can be a challenging task. To better estimate expected revenue growth, it would be valuable to gain insights into how the overall market for autonomous vehicles is projected to evolve or expand over time.

Statista provides valuable historical data on global automotive sales revenue. However, it is crucial to recognize that assuming a direct correlation between this overall industry growth and Mobileye's specific growth would be inaccurate. This is due to the fact that Mobileye specializes in manufacturing and developing Advanced Driver Assistance Systems (ADAS) and autonomous driving technology, and its growth is primarily driven by sales of vehicles with a SAE level of 2 or higher. These vehicles are distinguished by their integration of advanced ADAS and autonomous driving systems, as outlined in **Chapter 4 - Market Overview**, specifically in section **4.2.1** focusing on the **Automotive Technology Industry.**

Subsequently, our approach to estimating revenue growth relied on a forecast from Statista. This forecast projected the percentage of the global automotive revenue attributable to vehicles with

a SAE Level 2 or higher. Using this percentage in conjunction with historical data on global automotive sales revenue, we calculated Mobileye's market share. This was done by dividing Mobileye's revenue by the revenue generated from SAE Level 2 and above vehicles. Additionally, we assumed that Mobileye's market share during the forecasted period would align with the historical average market shares. Through this process, we derived the forecasted revenue figures up until 2026, values that can be consulted on **Table 2** below.

Table 2: **Mobileye Revenue Forecast**: Own estimates, Statista (2023) and Prospectus

Revenue Forecast								
($'000 000)	2019	2020	2021	2022E	2023F	2024F	2025F	2026F
Revenue	**879**	**967**	**1,389**	**2,141**	**2,667**	**3,236**	**3,773**	**4,319**
Automotive Sales Revenue	2,701,000	2,755,000	2,809,000	2,863,000	2,917,000	2,995,000	3,027,000	3,182,000
SAE Level 2 and above (%Revenue)	9%	15%	21%	27%	33%	39%	45%	49%
SAE Level 2 and above Revenue	243,090	413,250	589,890	773,010	962,610	1,168,050	1,362,150	1,559,180
Market Share	0.36%	0.23%	0.24%	0.28%	0.28%	0.28%	0.28%	0.28%

5.2.2. Cost of Revenue

Estimating Cost of Revenue evolution is vital in valuation. It shows how efficiently a company turns revenue into profits, impacting overall worth. Understanding these changes provides insights into efficiency gains and competitiveness.

Given Mobileye's specialization in autonomous driving systems, we assumed a decreasing percentage of cost of revenue relative to revenues over time, anticipating efficiency gains from technological advancements, economies of scale, and process optimization in this rapidly evolving industry. In 2022, we have set the cost of revenue at 55% of total revenue, derived from the average of cost of revenue as a percentage of revenue for the years 2019 to 2021. Looking ahead to the forecasted years of 2023 to 2026, we project a gradual annual decrease of one percentage point. This assumption guides our estimates for cost of revenue in the forecasted years, aligning with our expectations of improved operational efficiency and cost management.

Table 3: **Cost of Revenue Forecast:** Own estimates, Prospectus

Cost of Revenue Forecast								
($'000 000)	2019	2020	2021	2022E	2023F	2024F	2025F	2026F
Revenue	879	967	1,389	2,141	2,667	3,236	3,773	4,319
Cost of Revenue	**456**	**591**	**731**	**1,182**	**1,446**	**1,722**	**1,970**	**2,212**
% Revenue	52%	61%	53%	55%	54%	53%	52%	51%
Gross Profit	423	376	658	959	1,221	1,514	1,803	2,107

The estimation of Cost of Revenue allows us to obtain Gross Profit estimations by subtracting it to the Revenue forecasts we obtained before this, as it is visible in **Table 3.**

5.2.3. Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA)

Estimating EBITDA forecasts is vital for assessing a company's core operational profitability, understanding its ability to generate cash flow, and evaluating its capacity to manage debt. This metric provides a focused view of a company's performance, making it a key factor in valuations and investment decisions. EBITDA is derived from a combination of factors, including gross profits, other comprehensive income, selling/general/administrative expense, advertising expense, labor & related expense, and research and development expense. To accurately project EBITDA, it is imperative to estimate the individual evolution of each of these factors.

In accordance with the guidance provided in the prospectus, we anticipated that both selling/general/administrative and advertising expenses would develop with fixed percentages of revenue over the forecasted years, as seen on **Table 4** below. This method ensures a steady allocation of expenses while also factoring in an anticipated level of operational stability and efficiency as the company experiences growth and expansion. This approach is grounded in the expectation that as Mobileye evolves, certain aspects of its cost structure will align more closely with revenue generation.

When estimating Labor & Related Expenses, we proceeded under the assumption that the cost per employee would remain consistent, and that the number of personnel would evolve in proportion to historical trends. This approach allowed us to project expenses for the years 2022E to 2026F based on this established pattern.

For Research and Development (R&D) expense estimation, we relied on guidance from the Prospectus, which indicated Mobileye's expectation for continued growth in R&D expenses, at a decreasing percentage of revenues. To account for this, we assumed an annual decrease of 3 percentage points to this percentage. This approach reflects Mobileye's proactive investment in innovation while also recognizing a trend towards greater efficiency in R&D spending relative to revenue.

The comprehensive set of assumptions and estimations outlined above culminated in the forecasts for EBITDA, demonstrated below on **Table 4**. These projections indicate a highly favorable trend expected to persist throughout the forecasted period from 2022E to 2026F. This positive trajectory serves as a strong indicator of Mobileye's anticipated robust financial performance and underscores its potential for sustained growth in the coming years.

Table 4: **EBITDA Forecast:** Own estimates, Prospectus

EBITDA Forecast								
($'000 000)	2019	2020	2021	2022E	2023F	2024F	2025F	2026F
Gross Profit	423	376	658	959	1,221	1,514	1,803	2,107
Other comprehensive income, net	0	0	5	0	0	0	0	0
Selling/General/Administrative Expense	(41)	(46)	(57)	(107)	(133)	(162)	(189)	(216)
% Revenue	-5%	-5%	-4%	-5%	-5%	-5%	-5%	-5%
Labor & Related Expense	(16)	(18)	(19)	(23)	(27)	(32)	(38)	(46)
Number of Personnel	2,000	2,500	2,900	3,390	3,963	4,632	5,415	6,330
Cost per employee	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
Advertising Expense	(2)	(3)	(2)	(5)	(6)	(7)	(9)	(10)
% Revenue	-0.23%	-0.31%	-0.14%	-0.23%	-0.23%	-0.23%	-0.23%	-0.23%
Research and Development, net	(384)	(440)	(544)	(839)	(967)	(1,080)	(1,150)	(1,191)
% Revenue	-44%	-46%	-39%	-39%	-36%	-33%	-30%	-27%
EBITDA	**-20**	**-131**	**41**	**-14**	**88**	**233**	**418**	**645**

5.2.4. Effective Tax Rate

In the valuation of Mobileye Global Inc., determining the applicable corporate effective tax rate is crucial. Given Intel's continued majority ownership post the Initial Public Offering (IPO) and the limited available tax information, a conservative approach is imperative.

Despite Mobileye being primarily taxed in the United States and Israel, the specific tax liabilities remain undisclosed. To mitigate potential overestimations, the worst-case scenario is assumed, employing the United States corporate tax rate of **21%**. This choice aligns with Mobileye's operational presence and Intel's majority stake, ensuring a prudent and robust valuation.

5.2.5. Net Capital Expenditures (Net CapEx)

Estimating Net CapEx (Net Capital Expenditures) is crucial for valuation as it directly impacts a company's future growth potential, operational efficiency, and ultimately, its overall worth.

The methodology employed for projecting Net CapEx in this analysis follows a structured approach. Initially, fixed assets were calculated by aggregating Property & Equipment, Intangible Assets, and Other Long-term Assets. Historical data was then utilized to discern the evolving relationship between fixed assets and revenue. Recognizing that companies tend to become more efficient in utilizing assets as they grow, a decreasing trend in the fixed assets to revenue ratio was assumed for the forecasted years. This assumption was substantiated by calculating the variation in fixed assets as a percentage of revenues for the historical years and subtracting it to the Fixed Assets to Revenues (%) rate. To maintain a balanced projection, a minimum threshold of 91% was established based on the observed historical variation in fixed assets relative to revenue for the years 2020 and

2021. This threshold prevents the ratio from decreasing too rapidly, maintaining a reasonable balance between fixed assets and revenue. This comprehensive approach, which is demonstrated in **Table 5**, ensures that the projection aligns with historical trends and anticipates shifts in Mobileye's resource allocation as it continues to grow and adapt in the dynamic autonomous driving technology industry.

Table 5: **Net CapEx Forecast:** Own estimates, Prospectus

Net CapEx Forecast							
($'000 000)	2020	2021	2022E	2023F	2024F	2025F	2026F
Fixed Assets	3,490	3,875	4,220	3,070	2,952	3,443	3,941
%Revenue	361%	279%	197%	115%	91%	91%	91%
Net CapEx		**385**	**345**	**(1,150)**	**(118)**	**491**	**498**

5.2.6. Depreciation & Amortization (D&A)

Accurately estimating Depreciation and Amortization is vital for valuation, as it influences Mobileye's reported earnings, cash flow, and book value of assets, providing a clearer picture of its true financial health and value.

For the purpose of this analysis, an approach where Depreciation and Amortization (D&A) expenses are projected to decrease as a percentage of revenues was employed, assuming that this percentage would decline by 1.9% annually until it levels off at 1.9% of total revenues. This approach is particularly relevant for Mobileye, given its involvement in autonomous driving technology. In the initial phases of rapid technological advancement and infrastructure development, D&A expenses may be relatively higher compared to revenue. However, as Mobileye's technology integrates into commercial products and contributes significantly to revenue generation, a decrease in the relative cost of D&A is expected. This is due to the initial high costs becoming distributed over a larger revenue base.

Notably, it is worth mentioning that this 1.9% figure is derived from the historical analysis of the Variation of D&A to the Variation of Revenues, specifically from 2020 to 2021, providing a grounded basis for our forward-looking projections.

Table 6: **Depreciation & Amortization Forecast**: Own estimates, Prospectus

D&A Forecast							
($'000 000)	2020	2021	2022E	2023F	2024F	2025F	2026F
Depreciation & Amortization	**82**	**90**	**98**	**72**	**61**	**72**	**82**
%Revenue	8.5%	6.5%	4.5%	2.7%	1.9%	1.9%	1.9%

5.2.7. Net Working Capital

The forecast of Net Working Capital holds significant relevance as it serves as a crucial determinant of a company's short-term financial health and operational efficiency. By accurately projecting changes in current assets and liabilities, businesses can ensure they have the necessary resources to meet their day-to-day operational requirements and capitalize on growth opportunities.

For the assessment of net working capital (NWC), our methodology involved the calculation for the historical years of 2020 and 2021, which was determined as the difference between Current Assets Needs (including Trade Receivables, Inventories, and Other current assets) and Current Liabilities Sources (comprising Accounts Payables & Accrued Expenses, Employee related accrued expenses, and Other current liabilities). Starting from 2022E and extending until 2026F, a growth assumption for NWC was applied, set at a fixed percentage of revenue, specifically at approximately 4.2%, the percentage registered for the historical year of 2021. This approach was implemented to account for the anticipated changes in working capital requirements as the company progresses, offering a structured and realistic foundation for our valuation analysis.

Together, these assumptions lay the groundwork for estimating Net Working Capital and its variation (ΔNWC) or the forecasted period of 2022E to 2026F, as seen on **Table 7** below, providing a critical foundation for Mobileye's financial outlook.

Table 7: **Net Working Capital Forecast:** Own estimates, Prospectus

Net Working Capital Forecast							
($'000 000)	2020	2021	2022E	2023F	2024F	2025F	2026F
Net Working Capital	**17**	**58**	**89**	**111**	**135**	**158**	**180**
%Revenue	1.8%	4.2%	4.2%	4.2%	4.2%	4.2%	4.2%
ΔNWC	n.a	41	31	22	24	23	22
Trades Receivables	155	93	243	303	368	429	491
%Revenue	16%	7%	11%	11%	11%	11%	11%
Inventories	97	128	206	257	311	363	416
%Revenue	10%	9%	10%	10%	10%	10%	10%
Other Current Assets	76	54	126	157	190	222	254
%Revenue	8%	4%	6%	6%	6%	6%	6%
Current Asset Needs	328	275	575	716	869	1,014	1,160
Accounts Payable & Accrued Expenses	160	109	261	325	395	460	527
%Revenue	17%	8%	12%	12%	12%	12%	12%
Employee related accrued expenses	102	81	112	134	160	191	227
%Labor & Related Expenses	527%	426%	496%	496%	496%	496%	496%
Other Current Liabilities	49	27	75	93	113	132	151
%Revenue	5%	2%	4%	4%	4%	4%	4%
Current Liabilities Sources	311	217	449	553	668	783	906

5.2.8. Free Cash Flow to the Firm (FCFF)

Once the growth-sensitive items have been projected, it becomes feasible to construct the DCF-FCFF model in accordance with these forecasts.

Table 8: **Free Cash Flow to the Firm:** Own estimates, Prospectus

Free Cash Flow to the Firm (FCFF)							
($'000 000)	**2020**	**2021**	**2022E**	**2023F**	**2024F**	**2025F**	**2026F**
EBITDA	(131)	41	(14)	88	233	418	645
Depreciation & Amortisation	(82)	(90)	(98)	(72)	(61)	(72)	(82)
EBIT Net of Taxes	n.a	n.a	(89)	13	136	274	445
NWC	17	58	89	111	135	158	180
Fixed Assets	3,490	3,875	4,220	3,070	2,952	3,443	3,941
Invested Capital	3,507	3,933	4,309	3,181	3,087	3,600	4,121
Δ Invested Capital	n.a	426	376	(1,128)	(94)	513	521
FCFF	**n.a**	**n.a**	**(465)**	**1,141**	**230**	**(239)**	**(76)**

The process began with the calculation of Earnings Before Interest and Taxes (EBIT) net of taxes. Subsequently, the Invested Capital was determined, which comprises the aggregate of Net Working Capital and Fixed Assets. This groundwork facilitated the computation of the Free Cash Flow to the Firm (FCFF) for the projected years, as showcased on **Table 8** above. This was achieved by deducting the variation in Invested Capital from the EBIT net of taxes. This approach offers a robust evaluation of Mobileye's financial performance, allowing us to gauge the cash flows available to all providers of capital as the company progresses through the forecasted period.

The projected Free Cash Flow to the Firm (FCFF) for Mobileye shows a fluctuating pattern over the forecasted period. In 2022E, the year of the IPO, the FCFF is -465, indicating a negative cash flow, likely due to substantial investments or exceptional expenses associated with the IPO. The following year, in 2023F, sees a significant improvement, with the FCFF surging to 1,141, suggesting improved financial performance possibly driven by revenue growth and operational efficiencies. Moving to 2024F, the FCFF experiences a moderate decline at 230. However, by 2025F, the FCFF turns negative again at -239, suggesting potential financial pressures or significant investments. In 2026F, the FCFF remains in negative territory at -76, indicating ongoing efforts to address financial challenges. These trends reflect a dynamic financial landscape, highlighting the need for vigilant financial management.

5.2.9. Growth Rate

In the assessment of Mobileye's valuation using the Free Cash Flow to the Firm (FCFF) model, it is crucial to make assumptions about the persistence and growth of cash flows. Given the dynamic

nature of the autonomous driving technology industry and Mobileye's rapid advancements, assuming a consistent and perpetual growth rate beyond the initial 5-year forecast may not align with the industry's realities.

To address this, the valuation model has been segmented into three distinct time periods: 2022E-2026F, 2027F-2036F, and 2037F-Perpetuity.

The initial phase, spanning from 2022 to 2026, corresponds to the present and is based on projected SAE level 2 and above revenue values, as further discussed in Section **5.2.1. Revenue**. These values range from 35% in 2022E to 13% in 2026F, reflecting a decreasing growth trend in line with industry expectations.

Moving into the second phase, from 2027F to 2036F, the assumption is to maintain the decreasing growth rate pattern. This period begins with a growth rate of 12% in 2027F and gradually approaches the annual U.S. GDP Growth Rate, of 5.9% registered for 2021 by 2036F, signifying a transitional phase where Mobileye is anticipated to achieve a level of stability.

Finally, in the third phase, extending into perpetuity, the growth rate is set to mirror the annual U.S. GDP Growth Rate recorded in 2021, of 5.9%. This assumption reflects a prudent estimate, considering the broader economic landscape.

These segmented growth rate assumptions are tailored to Mobileye's unique position in the autonomous driving technology sector, accounting for both its current trajectory and projected industry shifts. This approach allows for a more nuanced and realistic valuation, aligning with the company's specific growth dynamics.

5.2.10. Discount Rate

5.2.10.1. Cost of Debt

For the discount rate, we will consider two distinct scenarios. In the first scenario, we'll assume that Mobileye maintains its current debt level, or lack thereof, into perpetuity. In the second scenario, we'll introduce the sector-average debt to observe how the capital structure influences the enterprise value and overall company valuation. It is important to note that, at the end of this analysis, a equity value and share price will be calculated only for the first scenario. This approach is taken due to the information provided in Mobileye's Prospectus, which does not indicate plans for incurring debt in the foreseeable future, prompting us to adopt a cautious stance and assume the actual lack of debt.

Risk-Free Rate

In **Chapter 2** of this study, the convention of use a 10-year government bond in well-established

markets as the benchmark for the risk-free rate in financial analysis is mentioned. Given Mobileye's global operations and its integration into an industry influenced by international economic conditions, as well as its unique ownership structure and relation with Intel, the 10-year U.S. Treasury bond rate is a stable and widely accepted choice for our risk-free rate in both scenarios.

During the period from June 2021 to June 2022, we observed notable economic fluctuations. The risk-free rate at the end of June 2022 appeared unusually high due to inflationary pressures. To ensure our valuation accurately reflects prevailing market conditions, we calculated an average rate of 1.93% over the year. For a detailed breakdown, please refer to **Annex C: 10-year U.S Treasury Bond Evolution.**

Cost of Debt

Scenario 1:
Given Mobileye's current capital structure, which notably lacks any debt obligations, estimating a traditional cost of debt becomes inapplicable. In this scenario, where no debt is assumed to be present in perpetuity, the company does not incur any interest expenses. Therefore, the cost of debt is effectively zero, reflecting the absence of debt financing.

Scenario 2:
In this comparative scenario, assuming a capital structure akin to sector peers, Mobileye's current absence of debt necessitates a specialized approach to estimating the cost of debt. A selected peer group is analysed to assess the creditworthiness of companies with similar attributes.

Table 9: **Peer Group Credit Spreads:** NYU Stern website, Aswath Damodaran

Peer Group	Credit Rating	Spread
Aptiv PLC	BBB	2%
Visteon Corp	BB-	3.13%
Borgwarner Inc	BBB+	2%
NVIDIA Corp	A-	1.62%
Alphabet Inc	AA+	0.85%
Aisan Industry Co Ltd	A-	1.62%
ANSYS Inc	-	-
Magna International Inc	A-	1.62%
Autoliv Inc	BBB	2%
Lear Corp	BBB	2%
Average		**1.87%**

This evaluation includes appraising their credit ratings, a critical factor in determining the credit spread. The credit spreads, available in **Table 9** and calculated by finance scholar Aswath

Damodaran, offer insights into the added risk premium investors seek for firms with varying creditworthiness.

The derived average spread of 1.87% reflects the compensation investors demand for taking on additional credit risk beyond the risk-free rate. Incorporating this spread into the risk-free rate allows us to obtain the Pre-Tax Cost of Debt, as follows:

$$Pre-tax\ Cost\ of\ Debt = 1.93\% + 1.87\% \approx 3.8\% \quad (5\text{-}1)$$

This figure encapsulates the combined effect of prevailing market conditions, investor sentiment, and the specific characteristics of the companies within the peer group.

Recognizing the impact of taxes on the Cost of Debt is crucial for an accurate assessment of a company's financial obligations. The statutory tax rate of 21%, assumed for this valuation model, serves as a critical component in this calculation. By factoring in this tax shield, the Cost of Debt can be computed, as follows:

$$Cost\ of\ Debt = 3.8\% * (1 - 21\%) \approx 3\% \quad (5\text{-}2)$$

The adjusted Cost of Debt of 3% accurately mirrors the actual financial commitment Mobileye would encounter in meeting its debt obligations, should the company decide to take on debt. This figure serves as a reliable estimate of the cost associated with servicing potential debt in this scenario.

5.2.10.2. Capital Structure

Scenario 1:
Mobileye's capital structure stands without any debt, reflecting the current state of affairs for the company. This absence of debt is a notable characteristic, suggesting a conservative approach to financing. While this scenario aligns with Mobileye's present financial standing, it is important to note that this may not be a sustainable strategy in the long term.

Scenario 2:
The initial step involved identifying a peer group of companies comparable to Mobileye. By examining this group, their Debt-to-Equity (D/E) ratios were calculated. This provided a valuable benchmark for understanding the typical debt levels within the industry.

Upon this analysis, we proceeded to calculate the median D/E ratio of the identified peer group. This median of 0.51, showcased on **Table 10**, serves as a robust assumption for Mobileye's capital structure if it were to incur in debt. Choosing the median D/E ratio over the average helps

mitigate the influence of outliers—extremely high or low values that could distort the representation of the industry standard.

Table 10: **Peer Group Capital Structure**: Reuters

Peers	Ticker	D/E
Aptiv PLC	APTV.N	0.74
Visteon Corp	VC.OQ	0.52
Borgwarner Inc	BWA.N	0.59
NVIDIA Corp	NVDA.O	0.50
Alphabet Inc	GOOGL.O	0.06
Aisan Industry Co Ltd	7283.T	0.47
ANSYS Inc	ANSS.O	0.15
Magna International Inc	MG.TO	0.32
Autoliv Inc	ALV	0.68
Lear Corp	LEA	0.56
Median		**0.51**

5.2.10.3. Cost of Equity

Country Risk Premium

The assessment of Mobileye's financial outlook necessitates a thorough consideration of the country risk premium. This metric accounts for potential economic and political risks associated with a company's home country. However, Mobileye's unique corporate structure, marked by its ownership by Intel—a U.S.-based multinational—and the majority of its operations being conducted in the United States, shifts the focal point of risk assessment.

While Mobileye's headquarters are in Israel, the dominance of U.S.-based operations and Intel's ownership lead us to apply U.S.-based risk metrics. The United States maintains an AAA credit rating, according to Moody’s, indicating an extremely low risk of default. This rating signifies a robust and stable economic environment. Consequently, the country risk premium associated with Israel is considered negligible in this context.

Market Risk Premium

The Market Risk Premium (MRP) denotes the additional return expected by investors when choosing to invest in an asset from the market portfolio rather than in a risk-free asset.

Estimating the MRP involves a two-step methodology. Initially, we evaluate the credit rating of the United States, which, as previously mentioned, is rated AAA by Moody's. Subsequently, we incorporate the default spread associated with this rating into the market premium of a mature market.

As per Aswath Damodaran's analysis on the NYU Stern Business School website, a Market Risk Premium of 5.94% was determined. This estimation was arrived at using the same methodology outlined above. This rate will be considered for both scenarios.

Betas

An integral component of the Capital Asset Pricing Model (CAPM) is the Levered Beta of Mobileye. As outlined in **Chapter 2**, the most reliable method for its computation is through the Bottom-up approach.

To commence this process, we initiate with the derivation of an Unlevered Beta (β_u). This was accomplished through a meticulous calculation involving the weighted average of the unlevered betas belonging to the identified peer group for Mobileye. Referencing **Table 11**, this comprehensive procedure yields an Unlevered Beta (β_u) of 1.56. The Beta Unlevered, which reflects the company's risk without accounting for the impact of debt, will be the only beta considered for **Scenario 1**.

Table 11: **Unlevered Beta**: Own estimates, Reuters

Peers	Ticker	Unlevered Beta
Aptiv PLC	APTV.N	2.05
Visteon Corp	VC.OQ	1.83
Borgwarner Inc	BWA.N	1.44
NVIDIA Corp	NVDA.O	1.75
Alphabet Inc	GOOGL.O	1.06
Aisan Industry Co Ltd	7283.T	1.24
ANSYS Inc	ANSS.O	1.24
Magna International Inc	MG.TO	1.64
Autoliv Inc	ALV	1.74
Lear Corp	LEA	1.60
Mean		**1.56**

Scenario 2:

In Scenario 2, we delve into an assessment of Mobileye's potential Levered Beta, a crucial parameter in determining the company's cost of equity. Unlike Scenario 1, where we focused exclusively on the unlevered beta, Scenario 2 introduces the Levered Beta, which takes into account the potential influence of debt on the company's risk profile.

The Beta of debt (β_d) of Mobileye can be computed as follows:

$$\beta_d = \frac{K_d - (r_f + CRP)}{MRP} = \frac{3\% - 1.9\%}{5.94\%} \approx 0.18 \qquad (5-3)$$

Having computed both the Unlevered Beta (β_u) and the Beta of Debt (β_d), we can now proceed to estimate the Levered Beta (β_L) using specific data from Mobileye and the earlier established assumptions for this Scenario. This estimation is derived from the following expression:

$$\beta_L = \beta_u + (\beta_u - \beta_d) * \frac{D}{E} * (1 - t)$$
$$= 1.56 + (1.56 - 0.18) * 0.51 * (1 - 21\%) \approx 2.11 \quad (5-4)$$

Cost of Equity

Scenario 1:
With the Unlevered Beta determined, we can now proceed to compute the Unlevered Cost of Equity for Mobileye. This measure represents the return expected by investors for holding the company's equity, taking into account the inherent risk associated with its business operations. The equation, utilizing the Capital Asset Pricing Model (CAPM), is as follows:

$$K_U = r_f + \beta_u * MRP = 1.9\% + 1.56 * 5.94\% = 11.2\% \quad (5-5)$$

The Unlevered Cost of Equity, derived from the Capital Asset Pricing Model (CAPM), serves as the discount rate because it encapsulates the expected return that investors would require for holding equity in Mobileye. By factoring in the risk-free rate, market risk premium, and the company's systematic risk (represented by the unlevered beta), the Unlevered Cost of Equity provides a comprehensive assessment of the required return on equity investment. This discount rate is pivotal in evaluating the present value of Mobileye's future cash flows, forming the basis of our valuation analysis, for this Scenario.

Scenario 2:
Following the computation of the aforementioned variables, we proceed to estimate the cost of equity utilizing the Capital Asset Pricing Model (CAPM), as follows:

$$K_e = \left(r_f + CRP\right) + \beta_L * MRP = 1.9\% + 2.11 * 5.94\% \approx 14\% \quad (5-6)$$

5.2.10.4. Weighted Average Cost of Capital (WACC)

Scenario 2:
In Scenario 2, where we consider the possibility of Mobileye incurring debt in the future, the Weighted Average Cost of Capital (WACC) becomes a critical metric. This is because the introduction of debt

alters the firm's capital structure, impacting its overall cost of financing. The Weighted Average Cost of Capital (WACC) considers the expense of utilizing both debt and equity, proportionate to their respective allocation. Given the previously determined and assumed inputs for this Scenario, and as outlined in **Table 12**, we are now poised to calculate the WACC using **Equation 5-7**, showcased below.

Table 12: **Weighted Average Cost of Capital (WACC)**: Own estimates

Inputs	
Corporate Tax Rate	*21.0%*
Risk Free Rate	*1.9%*
MRP	*5.94%*
Levered Beta	2.11
Peer Group D/E	0.51
Spread	*1.9%*
Pre Tax Cost of Debt	*3.8%*
Cost of Debt	*3.0%*
Cost of Equity	*14%*
Net Debt/Book Value	*33.6%*
Equity/Book Value	*66.4%*
WACC	***10.6%***

$$WACC = K_d * \frac{\frac{D}{E}}{\frac{D}{E}+1} + K_e * \left(1 - \frac{\frac{D}{E}}{\frac{D}{E}+1}\right)$$

$$= 3\% * 33.6\% + 14\% * 66.4\% \approx 10.6\% \qquad (5-7)$$

5.2.11. Enterprise Value

Enterprise Value (EV) stands as a cornerstone in financial analysis, offering a comprehensive measure of a company's total worth.

As described on Section **5.2.9. Growth Rate**, a 3-period segmentation was used for this growth rate, with the Annual U.S. GDP growth rate, of 2021, 5.9%, being used for perpetuity. This allowed for an estimation of the Enterprise Value, as showcased on **Table 13** and **Table 14,** for both Scenarios considered.

Table 13: **Enterprise Value for Scenario 1:** Own estimates, Prospectus

Enterprise Value - Scenario 1						
($'000 000)	**2021**	**2022E**	**2023E**	**2024F**	**2025F**	**2026F**
FCFF	n.a	(465)	1,141	230	(236)	(76)
Enterprise Value	**10,467**	**12,104**	**12,319**	**13,468**	**15,216**	**16,995**
Enterprise Value + $FCFF_t$	n.a	11,639	13,459	13,698	14,977	16,920

Table 14: **Enterprise Value for Scenario 2:** Own estimates, Prospectus

Enterprise Value - Scenario 2						
($'000 000)	**2021**	**2022E**	**2023E**	**2024F**	**2025F**	**2026F**
FCFF	n.a	(465)	1,141	230	(236)	(76)
Enterprise Value	**12,341**	**14,114**	**14,470**	**15,774**	**17,685**	**19,635**
Enterprise Value + $FCFF_t$	n.a	13,650	15,610	16,004	17,446	19,560

For this analysis, a backward-looking approach was employed, initiating from the projected year of 2036. Here, we determined the Enterprise Value by dividing the projected Free Cash Flow to the Firm (FCFF) for the subsequent and last projected year, 2037, by the relevant discount rate. This rate, which varies based on the scenario (Unlevered Cost of Equity, K_U, for Scenario 1; Weighted Average Cost of Capital, WACC, for Scenario 2), was adjusted by subtracting the perpetuity growth rate of 5.9%. This calculation provided a comprehensive assessment of the company's total worth, accounting for both the time value of money and the expected growth rate.

This process was then extrapolated backward through the preceding years, maintaining a consistent methodology. Each year's Enterprise Value was derived by adding the FCFF of the subsequent year to the Enterprise Value of that same year, appropriately discounted to the relevant rate (K_U or WACC). This meticulous calculation ensured a thorough evaluation, encompassing both projected cash flows and the associated cost of capital, from the culmination of our projections back to 2021.

The comparison of enterprise values between Scenario 1 and Scenario 2 reveals a significant difference, with Scenario 2 yielding a notably higher value of $12,341M compared to Scenario 1's $10,467M, for Enterprise Value in 2021. This disparity arises primarily from the introduction of debt in Scenario 2, which brings about a change in the capital structure. The inclusion of debt financing allows Mobileye to leverage its operations, potentially leading to higher expected cash flows in the future.

For a detailed breakdown of the cash flow and enterprise value projections until 2037F, please refer to **Annex D-1: Projected Cash Flows & (2027F-2037F) for Scenario 1** and **Annex D-2: Projected Cash Flows (2027F-2037F) for Scenario 2.**

5.2.12. Equity Value

As previously outlined, our analysis of Mobileye's equity value will be conducted within the framework of only the first scenario, which assumes the perpetuation of the current debt level or lack thereof.

The Equity Value of a company represents its total worth attributable to the shareholders. In our analysis, and to obtain this value, the Enterprise Value will be subjected to specific adjustments related to the company's financial structure and assets. These adjustments, referred to as net asset adjustments, account for various components that can significantly impact the overall value. By adding these net asset adjustments to the enterprise value, we ensure that the valuation accurately reflects the complete financial picture, considering factors like cash & cash equivalents, loans, goodwill, and other assets/liabilities. This approach provides a more comprehensive estimate of Mobileye's equity, taking into account these significant financial elements of Mobileye's Balance Sheet, enabling the calculation of the Equity Value for the year of 2021, as showcased on **Table 15** below.

Table 15: **Equity Value Estimation:** Own Estimates, Prospectus

Equity Value Estimation ($'000 000)	
Enterprise Value	10,467
Goodwill	10,895
Related Party Loan	1,332
Cash & Cash Equivalents	85
Asset Adjustments	12,312
Related party payable	3
Deferred acquisitions consideration	90
Long-term employee benefits	79
Deferred tax liabilities	208
Other long-term liabilities	23
Liabilities Ajustments	403
Net Asset Adjustments	11,909
Equity Value	**22,376**

5.2.13. Share Price

Once the Equity Value has been determined through the DCF-FCFF approach, the valuation process is nearly complete. The next step involves converting this value into a per-share figure, providing a clear indication of the estimated value of each Mobileye share.

In order to calculate the share price, it is imperative to take into account the total number of existing shares, which stands at 791 million. This comprises 750 million Class B Stocks, each carrying the right to 10 votes, and 41 million Class A shares that were issued during the Initial Public Offering

(IPO), a process previously explained in **Chapter 3.2. Going Public on NASDAQ**. This comprehensive consideration of all outstanding shares is essential as we are valuing the company in its entirety. Therefore, to get the share price at 31/12/2021, the following calculation is made:

$$Share\ Price_{2021} = \frac{Equity\ Value}{\#\ Shares\ outstanding} = \frac{22{,}376}{791} \approx \$28.29 \quad (5\text{-}10)$$

As the Initial Public Offering (IPO) took place towards the end of October 2022, it becomes necessary to adjust the share price from December 31, 2021, to accurately reflect its value at the time of the IPO. This entails capitalizing the share price for the preceding ten months. This adjustment ensures a precise evaluation of the share price in alignment with the specific timing of Mobileye's IPO, as follows:

$$IPO\ Share\ Price = Share\ Price_{2021} * (1 + K_U)^{\frac{10}{12}} =$$

$$\$28.29 * (1 + 11.2\%)^{\frac{10}{12}} \approx \$30.90 \quad (5\text{-}11)$$

The calculated target share price of $30.90 at October 2022, compared to Mobileye's public market entry price of $21 per share, reveals a compelling insight. It suggests that Mobileye's stock was undervalued at the time of the Initial Public Offering (IPO). This undervaluation could be attributed to various factors, such as market sentiments, limited information accessibility, or a conservative pricing strategy

5.2.13.1. Sensitivity Analysis

To enhance the DCF approach, a sensitivity analysis was conducted on two critical variables in the valuation process: the perpetuity growth rate and the discount rate (K_U).

Table 16: **Sensitivity Analysis on 2021 Share Price (in $):** Own estimates

Equity value	22,376	**Growth**				
$Share\ price_{2021}$	28.29	*5.5%*	*5.7%*	*5.9%*	*6.1%*	*6.3%*
Unlevered Cost of Equity (K_U)	*10.8%*	35.07	38.87	42.98	47.44	52.30
	11.0%	29.20	32.63	36.33	40.34	44.69
	11.2%	23.80	26.91	28.29	33.87	37.77
	11.4%	18.83	21.66	24.69	27.96	31.48
	11.6%	14.25	16.83	19.58	22.54	25.72

By adjusting these two variables, investors can assess the share price of 2021 under various scenarios, and make a correlation to the IPO share price, considering the inherent uncertainty linked to the growth rate and the Unlevered Cost of Capital (K_U).

Consequently, both inputs underwent four variations of +/-0.2%, as depicted in **Table 16** above. Based on the presented scenarios, Mobileye's share price ranged from a minimum of $14.25, which would be equivalent to $15.56 in October 2022, to a maximum of $52.30, equivalent to $57.13 at the IPO date. This represents a 50% decrease and an approximate 84% increase compared to the IPO share price obtained.

Furthermore, considering that the stock initially entered the market at a price of $21, it is evident that, in most scenarios, the results consistently suggest that the stock suffered undervaluation at the time of the Initial Public Offering. At the end of 2022, Mobileye closed the year with a share price of $36.12, further affirming the potential for undervaluation during its IPO.

5.3. Relative Valuation

In the pursuit of a comprehensive assessment of Mobileye Global Inc.'s valuation, we turn our focus to relative valuation methods. While the DCF-FCFF model provides a robust foundation, relative valuation offers an additional perspective by comparing Mobileye to its industry peers, and can offer valuable insights.

Identifying an appropriate peer group is crucial for conducting a meaningful relative valuation. We carefully selected companies with similar characteristics, market presence, and operational focus, with a particular emphasis on those engaged in advanced driver assistance systems (ADAS) and related technologies, resulting in the peer group identified on **Table 17,** and previously on **Table 11.**

Table 17: **EV/EBITDA & P/E:** Own estimates, Reuters

Identifier (RIC)	Company Name	EV/EBITDA (2021)	P/E (2021)
APTV.N	Aptiv PLC	13.87	47.56
VC.OQ	Visteon Corp	11.74	30.07
BWA.N	Borgwarner Inc	5.19	8.88
NVDA.O	NVIDIA Corp	63.50	116.88
GOOGL.O	Alphabet Inc	11.40	19.36
7283.T	Aisan Industry Co Ltd	2.41	6.66
ANSS.O	ANSYS Inc	29.47	40.36
MG.TO	Magna International Inc	6.26	27.61
ALV	Autoliv Inc	8.94	15.79
LEA	Lear Corp	6.32	22.68
Muliple (Median)		**15.91**	**33.59**

With both multiples now calculated, we can proceed to execute the Relative Valuation (**Table 18**).

Table 18: **Relative Valuation:** Own estimates, Reuters

Relative Valuation	EV/EBITDA	P/E
Enterprise value for 2021 ($'000 000)	652	18,718
Share price	**0.8**	**24**

Upon review, it is evident that the EV/EBITDA multiple has yielded values that seem impractical for our valuation. The Price-to-Earnings (P/E) ratio, however, offers a more reasonable value and significantly more trustworthy for Mobileye's valuation.

The resulting share price from the P/E analysis is $24, while the DCF model estimates it at $30.90. These disparities are noteworthy, especially when considering the IPO share price of $21. However, they all point to a common conclusion: **Mobileye's stock was undervalued upon its entry into the public market.**

The widely used EV/EBITDA metric faces challenges in valuing Mobileye accurately, primarily due to the company's unique characteristics. Industry-specific influences and rapid technological evolution introduce uncertainty, affecting the stability of EBITDA as a measure. Mobileye's debt-free capital structure further complicates EBITDA interpretation, potentially leading to misinterpretations of its true value. Additionally, reliance on intellectual property and advanced technology, rather than tangible assets, also adds complexity to EBITDA calculation.

Given these complexities, the EV/EBITDA multiple is considered unreliable for determining Mobileye's intrinsic value. Instead, the Price-to-Earnings (P/E) ratio, better aligned with market sentiment and earnings potential, offers a more suitable approach to valuation in this specific context.

5.4. Results Overview

In the present valuation analysis of Mobileye Global Inc. at the time of its Initial Public Offering, a comprehensive set of methodologies was employed to determine its fair market value. The valuation derived from the EV/EBITDA multiple was excluded due to its inconsistency in this context.

With this adjustment, the analysis yielded an average share price of $27.45. This figure was derived by taking the mean of the share price obtained through the DCF-FCFF model, which stood at $30.90, and the value derived from the PER multiple analysis, which yielded $24. It is crucial to highlight that shortly after the IPO, specifically on November 10th, 2022, the stock exceeded this calculated price, closing at $28.09. This development, occurring in less than a month post-IPO, underscores the potential undervaluation of Mobileye at the time it entered the public market on October 26th, 2022.

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6. Conclusion

The valuation of Mobileye leading up to its Initial Public Offering (IPO) on October 26th, 2022, was a meticulous endeavor, navigating the constraints of limited historical financial data. The primary reliance on the information provided in the Prospectus necessitated a cautious approach, recognizing the inherent margin of error associated with such a dataset.

This valuation was underpinned by a rigorous exploration of industry dynamics to derive a set of key assumptions, using the DCF-FCFF model. The unique context of Mobileye, operating in the rapidly evolving sphere of autonomous driving technology, required careful consideration of innovation, disruptive potential, and dynamic competitive forces. To ensure a comprehensive assessment, we introduced two distinct scenarios, each reflecting a different capital structure. This approach allowed us to account for potential variations in Mobileye's financial landscape and provided a more robust basis for our valuation.

In parallel, a relative valuation analysis was conducted, analyzing a peer group of companies identified based on industry, growth prospects, and technological advancements. This comparative approach allowed for insights into the relative positioning of Mobileye within its sector. The EV/EBITDA approach, while offering a distinctive perspective, also highlighted the need to temper quantitative assessments with a qualitative understanding of broader market dynamics. This methodology yielded a share price lower than anticipated, underscoring the importance of considering industry-specific nuances in valuation techniques.

Furthermore, a comprehensive sensitivity analysis was performed on the DCF-FCFF model, probing the implications of variations in the Unlevered Cost of Equity (K_U) and perpetuity growth rate. This extensive approach offered a nuanced perspective on potential valuation outcomes under diverse scenarios.

Our assessment strongly leans towards the belief that Mobileye may have been **undervalued** at the juncture of its IPO, especially considering the share price at which the stock entered the market—an unassuming $21. This supposition is reinforced by the rapid increase in the company's stock price shortly after its public offering, closing the year of 2022 with a share price of $36.12.The DCF-FCFF model yielded a valuation of $30.90 per share, while the P/E analysis suggested a value of $24 per share, resulting in an average share price of $27.45.

In sum, this analysis provides a comprehensive insight into Mobileye's valuation within the context of its IPO on October 26th, 2022. The conclusions drawn are contingent upon the available data up to the point of our analysis, encapsulating a snapshot within a constantly evolving narrative. As markets continue to evolve, so too do the opportunities and challenges for investors. Thus, maintaining an adaptable approach to valuation remains paramount for making sound investment decisions.

While this study provided valuable insights, the main challenge encountered was the limited availability of financial data beyond 2019, which may have introduced a margin of error into the findings. Our results have illuminated the undervaluation Mobileye experienced upon entering the public market in October 2022, suggesting that the IPO **was characterized by undervaluation rather than being a market boom**. For future research in this domain, a more comprehensive dataset encompassing recent financial information would greatly enhance the accuracy of valuations. Additionally, an in-depth exploration of the IPO's performance post-October 2022 could offer valuable insights into the market's reception of Mobileye's entry onto the public stage. Such investigations hold the potential to further refine our understanding of valuation dynamics in the context of rapidly evolving and technology-driven industries.

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Annexes

Annex A: Balance Sheet Projections until 2026

Balance Sheet							
($'000 000)	**2020**	**2021**	**2022E**	**2023F**	**2024F**	**2025F**	**2026F**
ASSETS							
Current Assets							
Cash and cash equivalents	616	85	43	53	65	75	86
Trade accounts receivable, net	155	93	243	303	368	429	491
Inventories	97	128	206	257	311	363	416
Related party loan	1,326	1,332	852	546	349	223	143
Other current assets	76	54	126	157	190	222	254
Total Current Assets	2,270	1,692	1,471	1,315	1,283	1,313	1,390
Property and equipment, net	304	187	230	280	336	397	460
Intangible assets, net	3,071	3,580	4,148	4,811	5,561	6,366	7,208
Goodwill	10,895	10,895	10,895	10,895	10,895	10,895	10,895
Other long-term assets	115	108	110	112	115	117	119
Total Assets	**16,655**	**16,462**	**16,853**	**17,413**	**18,190**	**19,088**	**20,072**
LIABILITIES & EQUITY							
Current Liabilities							
Accounts payable and accrued expenses	160	109	261	325	395	460	527
Employee related accrued expenses	102	81	112	134	160	191	227
Related party payable	163	3	0	0	0	0	0
Deferred acquisitions consideration	-	90	0	0	0	0	0
Other current liabilities	49	27	75	93	113	132	151
Total Current Liabilities	468	306					
Long-term employee benefits	94	79	106	127	151	180	215
Deferred tax liabilities	181	208	212	216	221	225	230
Other long-term liabilities	17	23	23	24	24	25	25
Total Liabilities	**755**	**612**	**337**	**362**	**392**	**425**	**465**
EQUITY							
Parent net investment	15,884	15,842	15,800	15,758	15,716	15,675	15,633
Total Equity	**15,889**	**15,842**	**15,800**	**15,758**	**15,716**	**15,675**	**15,633**
Total Liabilities and Equity	**16,644**	**16,454**	**16,137**	**16,120**	**16,108**	**16,100**	**16,098**

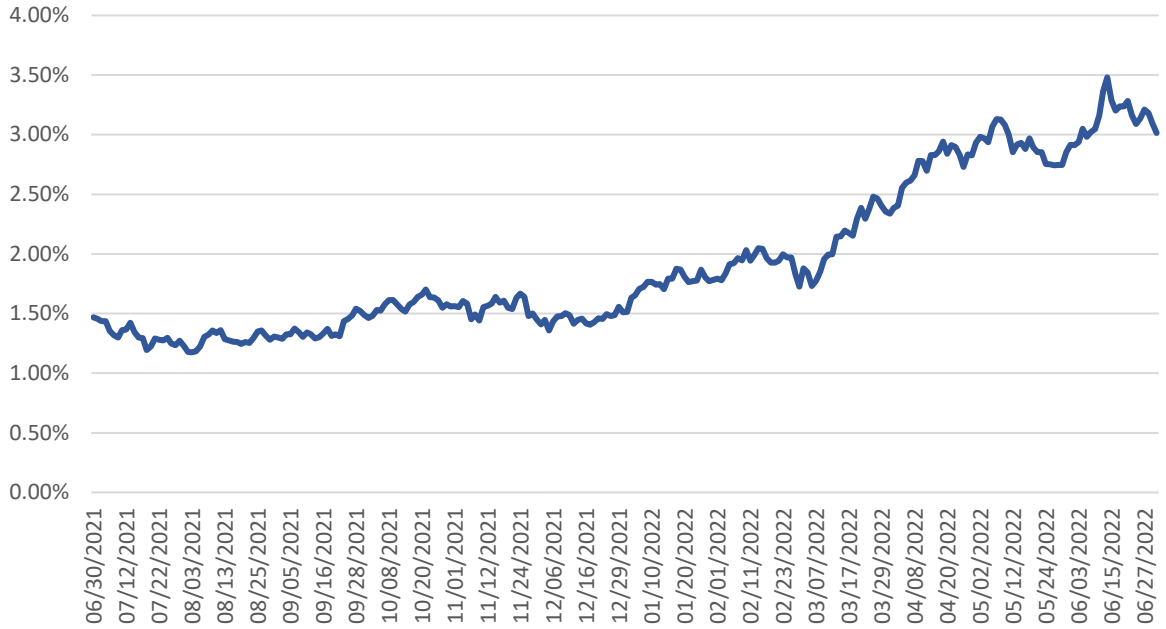
Source: Prospectus, Own estimates

Annex B: Income Statement Projections until 2026

Income Statement								
($'000 000)	2019	2020	2021	2022E	2023E	2024E	2025E	2026E
Revenue	**879**	**967**	**1,389**	**2,141**	**2,667**	**3,236**	**3,773**	**4,319**
Cost of Revenue	456	591	731	1,182	1,446	1,722	1,970	2,212
Gross Profit	**423**	**376**	**658**	**959**	**1,221**	**1,514**	**1,803**	**2,107**
Other comprehensive income, net	0	0	5	0	0	0	0	0
Selling/General/Administrative Expenses								
Selling/General/Administrative Expense	(41)	(46)	(57)	(107)	(133)	(162)	(189)	(216)
Labor & Related Expense	(16)	(18)	(19)	(23)	(27)	(32)	(38)	(46)
Advertising Expense	(2)	(3)	(2)	(5)	(6)	(7)	(9)	(10)
Research and Development, net	(384)	(440)	(544)	(839)	(967)	(1,080)	(1,150)	(1,191)
EBITDA	**(20)**	**(131)**	**41**	**(14)**	**88**	**233**	**418**	**645**
Depreciation/Amortization	(66)	(82)	(90)	(98)	(72)	(61)	(72)	(82)
EBIT	**(86)**	**(213)**	**(49)**	**(112)**	**16**	**172**	**347**	**563**
Interest income (expense) with a related party, net	(235)	6	3	-	-	-	-	-
Other expenses, net	(4)	(5)	(3)	-	-	-	-	-
EBT	**(325)**	**(212)**	**(49)**	**(112)**	**16**	**172**	**347**	**563**
Benefit (provision) for income taxes	(3)	16	(18)	(24)	3	36	73	118
Net income	**(328)**	**(196)**	**(67)**	**(136)**	**19**	**208**	**419**	**682**

Source: Prospectus, Own estimates

Annex C: 10 year U.S treasury yield evolution



Source: **MarketWatch:** https://www.marketwatch.com/investing/bond/tmubmusd10y?countrycode=bx

Annex D-1: Projected CashFlows & Enterprise Value (2027F-2037F) for Scenario 1

Discounted Cash Flow & Enterprise Value Calculation: Scenario 1											
($'000 000)	**2027F**	**2028F**	**2029F**	**2030F**	**2031F**	**2032F**	**2033F**	**2034F**	**2035F**	**2036F**	**2037F**
FCFF	77	193	332	496	656	838	1,040	1,260	1,498	1,751	2,015
Enterprise Value	18,814	20,728	22,718	24,767	26,884	29,057	31,272	33,514	35,796	38,024	n.a
Enterprise Value + $FCFF_t$	18,891	20,921	23,050	25,262	27,540	29,895	32,311	34,774	37,268	39,775	n.a

Source: **Prospectus**, Own estimates

Annex D-2: Projected CashFlows & Enterprise Value (2027F-2037F) for Scenario 2

Discounted Cash Flow & Enterprise Value Calculation: Scenario 2											
($'000 000)	**2027F**	**2028F**	**2029F**	**2030F**	**2031F**	**2032F**	**2033F**	**2034F**	**2035F**	**2036F**	**2037F**
FCFF	77	193	332	496	656	838	1,040	1,260	1,498	1,751	2,015
Enterprise Value	21,640	20,728	22,718	24,767	26,884	29,057	31,272	33,514	35,796	38,024	n.a
Enterprise Value + $FCFF_t$	21,717	23,934	26,257	28,673	31,165	33,742	36,392	39,100	41,851	44,630	n.a

Source: **Prospectus**, Own estimates