



Valuation of GoTo Post-Merger: Analysis of the Key Drivers

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ABSTRACT: The pandemic has led to significant growth in Indonesia's digital economy, with e-commerce and on-demand services driving growth. However, many startups go public before achieving profitability, raising concerns about their long-term financial sustainability. PT GoTo Gojek Tokopedia Tbk., an Indonesian startup, went public in April 2022 but experienced a 75% decline in share price by December. This research aims to identify potential strategies to improve GoTo's profitability, determine implementation methods, assess intrinsic value, and analyze associated risks. The research design process includes a literature review, data collection, and financial projections using the Discounted Cash Flow method. Horizontal integration through mergers and acquisitions holds the greatest potential to enhance GoTo's profitability. Implementing this strategy requires sustainable revenue growth, strategic investments, and rigorous cost management practices. GoTo must prioritize sustainable revenue growth, strategic investments, and cost reduction strategies to achieve its strategic objectives.

KEYWORDS: Discounted Cash Flow, profitability, startup, strategy, valuation.

1. INTRODUCTION

The pandemic brought the acceleration of digital adaptation across the globe. The quarantine and mobility restrictions forced people to do things from the comfort of their own homes. People communicate, study, shop, exercise, and do other activities digitally. Businesses also reassessed their approach to delivering products and services. With people migrating into digital, tech-based businesses are thriving. The Indonesian government also supported the transition of digitalization intensively to keep the economic growth during the pandemic. Being a mobile-first country, the penetration of application-based startups in Indonesia is escalating. Some of the most used applications in Indonesia is e-commerce, on-demand mobility, and food delivery apps. Despite being relatively new industry, they emerged as the key engine that drives the growth of Indonesia's economy.

Preferences of digital becomes apparent with more investments in digital startups as they are perceived to be more promising. However, startups are known to have a high degree of cash burn to achieve rapid growth in a short time. According to e-Conomy SEA 2022 report by Google, there is a downtrend for late-stage investments for digital startups. More mature companies struggle to earn extensive funding due to the change in investors behavior, which prioritize profitability aggravated by declining global economy. In Indonesia's case, most startups are starting to pursue equity funding, planning to go public. In August 2021, Bukalapak became the first Indonesian tech unicorn that went public. In the next year, GoTo and BliBli followed. Currently there are several startup companies that are waiting to enter the capital market; J&T, Traveloka, OVO, Tiket.com, to name a few.

PT GoTo Gojek Tokopedia Tbk. is a merger of two Indonesian startups: the ride-hailing decacorn Gojek and the one of Indonesia's biggest e-commerce unicorns, Tokopedia. It went public in April 2022 by issuing 40,615,056,000 number of shares with the offer price of IDR 338. This made the target IPO funds IDR 13,727,888,928,000. The IPO proceeds were distributed to various business units, including on-demand, e-commerce, and financial technology services. In 2022, GoTo experienced significant revenue growth from the merger and acquisition and started to cut down its costs. But it still spends a significant cost for sales and marketing to stay competitive and keep its market position. In November, the company slimmed down the organization by laying off approximately 15% of its employees. In December, its share price was at its lowest at IDR 87, only 25% of its IPO price. In the beginning of 2023, GoTo announced management change to further improve its corporate governance and pursue its path to profitability. Despite the share price decline, GoTo is committed to reaching a positive contribution margin by Q1 of 2024. GoTo is confident in achieving the target, but investors emphasized more of its bottom line. Its Q4 2022 financial result shows that GoTo suffered almost IDR 40 trillion loss. In the beginning of 2023, GoTo also announced management change to further improve its corporate governance and pursue its path to profitability. As the company is going through challenges and unstable phase, it is important to assess the current company state to formulate strategies to achieve its profitability goal.



Firms are increasingly going public based on a prospect of profitability rather than actual profitability. In Indonesia, the Financial Services Authority does not make profitability a requirement for companies to go public. However, the rising number of startups going public is a major factor in this phenomenon. Unprofitable businesses face high risks of post-IPO failure due to shifts in investor sentiment and unfavorable financing environments. Achieving post-IPO profitability in a timely manner is an important goal for IPO startups.

The business environment is analyzed from two perspectives: external and internal. Externally, stable political conditions attract foreign investors, and Indonesia's upcoming presidential and legislative general election may increase competition for consumer attention and spending. However, political campaigns can also create uncertainty, leading to businesses delaying investment decisions and expansion goals until more clarity is provided. Economically, the post-pandemic world is facing uncertainties such as international conflict, high inflation, unstable interest rates, and climate crisis. The International Monetary Fund (IMF) projected global economic growth to slow down from 3.4% in 2022 to 2.9% in 2023, but ASEAN, including Indonesia, is a high-growth area driving global economic growth. Indonesia's economy is projected to moderate to 4.9% with normalization of domestic demand.

Socially, Indonesia's internet penetration rate has reached 77% in January 2023, a 4.5% increase compared to 2022. This shift in customer mindset is heavily influenced by social media and influencers, with Gen Z, the first digital native generation, being the majority of businesses targeting in the coming years (Kotler, Kertajaya, & Setiawan, 2021).

Technology, such as the construction of the Integrated Palapa Ring, supports the infrastructure of national communication and offers benefits such as cost efficiency, digital information, and measurable outcomes.

The environment is also a concern, with customers becoming more environmentally sensitive. As digital businesses and economies scale, emissions are projected to reach 20MT CO₂ by 2030, offset by increased transport, food delivery, and digital commerce shipment. GoTo has implemented the "Three Zeros" commitment to sustainability across its businesses, including Zero Emissions, Zero Waste, and Zero Barriers. The company aims to convert 100% of its driver fleets into electric vehicles by 2030 and partners with TBS Energi Utama and automotive brands to introduce EV bikes. Zero waste efforts include offering reusable delivery bags and opting out single-use utensils for on-demand food delivery, repurposing box containers for logistics services, and encouraging partners across the supply chain to eliminate single-use products. Zero barriers are concerned about the diversity, equality, and inclusivity efforts within and outside the company.

Sustainability can boost GoTo's image, as consumers increasingly appreciate businesses that exhibit environmental and social responsibility. Sustainable practices can attract environmentally conscious customers and lead to future contracts and funding opportunities associated with achieving sustainability standards.

Legal and regulatory changes are becoming more prevalent, and GoTo must adapt its business to support its goal of digital transformation acceleration. The government is currently reviewing the draft of the Personal Data Protection Bill, which aims to protect customers' personal data nationwide. The Ministry of Communication and Information has also stated regulations that take important part in the development of digital sectors, such as Regulations no. 11 year 2020 about Omnibus Law on Job Creation and Regulation of Ministry of Communication and Informatics no. 5 year 2020 about the implementation of private electronic systems.

GoTo's internal environment is analyzed through SWOT analysis, focusing on its strengths, weaknesses, opportunities and threats. The company has the advantages of being the first mover in the business, having the largest online ecosystem in Indonesia, and its ability to scale up. However, GoTo's cash burn rate, which is the rate at which a company utilizes its cash reserves to finance its operational costs and investments, can result in financial instability and liquidity concerns.

Opportunities for GoTo include Indonesia's potential to become the leading investment destination due to its strong GDP growth and the growing digital economy. The company can expand its financial technology services and benefit from M&A efforts in improving and expanding its product lines. However, GoTo's lack of profitability can be attributed to its high operating expenses, which affect its overall profitability. GoTo may need to adapt its strategies and operations due to social shifts, technological advances, and environmental concerns to meet evolving consumer demands and sustainability expectations.

2. LITERATURE REVIEW

A. *Startup Business Model and Strategy*

Startups are small businesses that enable individuals to develop and implement unconventional ideas and customer needs while discovering new ones (Slavik, 2019). They are often associated with technology and innovation-driven industries, operating in diverse



sectors. Startups are often incomplete and imperfect, so they need to build a business model to implement their idea. Digital business models have various methods and distinct characteristics, including e-commerce, the sharing economy, freemium, on-demand services, subscription services, digital advertising, and Platform as a Service (PaaS) (Remane, Hildebrandt, Hanelt, & Kolbe, 2016).

E-commerce involves online selling of products or services through a dedicated website or platform, while the sharing economy allows the sharing or renting of underutilized resources or assets using digital platforms. Freemium involves providing a free version of a product or service with the option to access more advanced features or additional content by paying a premium or subscribing. On-demand services facilitate the connection between customers and service providers through digital platforms, such as food delivery apps, ride-hailing services, and freelance platforms. Subscription services provide a product or service on a regular basis in exchange for a recurring fee, prevalent in industries like media streaming, software-as-a-service (SaaS), and subscription boxes. Digital advertising generates revenue by displaying targeted advertisements to users based on their online behavior and interests. Post-merger GoTo has become an integration of several digital business models, providing on-demand services, e-commerce, and financial technology (fintech). GoTo offers a digital marketplace for online transactions, digital payment services, mobile wallets, and expanded financial services to include insurance, lending, and investment products.

Strategy refers to the process of identifying the fundamental long-term objectives of a company (Kim B. , 2013). Strategy ensures alignment of resources, efforts, and investments towards a common purpose by establishing clear objectives and identifying the path to achieve them (Thompson, Gamble, Peteraf, & Strickland, 2016). Companies use various strategies to achieve their goals, tailored to their objectives, industry, and competitive environment. These strategies align with their unique circumstances and goals (David & David, 2015), as shown in Table 1.

Table I. Common Business Strategies.

| Group | Strategy | Definition |
|-----------------|---------------------------|---|
| Integration | Forward integration | Company expands its operations by acquiring or developing businesses that are closer to the end-consumer or downstream in the supply chain. |
| | Backward integration | Acquiring or developing businesses that are situated closer to the source of raw materials or upstream in the supply chain (supplier). |
| | Horizontal integration | Expansion of operations by acquiring or merging with competitors in the same industry or market. This strategy aims to achieve economies of scale, increase market share, and reduce competition. |
| Intensive | Market penetration | Enhance the market share of current products or services in established markets by employing assertive marketing, pricing, or distribution strategies. |
| | Market development | Entering new markets using existing products or services to broaden the customer base and achieve further sales growth. |
| | Product development | Creation and introduction of new products or services in existing markets, with the aim of meeting the changing needs and preferences of customers. |
| Diversification | Related diversification | Entering new industries or businesses that have a connection or synergy with their existing business. This expansion is facilitated by leveraging shared capabilities, resources, or market opportunities. |
| | Unrelated diversification | Entering new businesses or industries that are different to its existing business. This strategy is typically pursued to mitigate risk or take advantage of new growth prospects. |
| | Retrenchment | Reorganizing of operations, decrease expenses, or divest non-essential assets with the aim of enhancing financial performance or resolving operational issues. |
| Defensive | Divestiture | Selling or disposing of a business unit, subsidiary, or asset. This is done either to concentrate on its primary operations or to generate funds for other strategic objectives. |
| | Liquidation | Terminating a business entity and disposing of its assets in order to settle outstanding debts or distribute the remaining value to shareholders. Corporate failure often arises when a company is unable to sustain its operations or encounters financial insolvency. |



B. Performance of Tech Startups Post-IPO

Post-IPO performance is a crucial indicator of a company's ability to meet financial projections and commitments to investors. Positive performance can boost investor confidence and attract new investors, while poor performance can harm investor trust and negatively impact the company's share price. Studies suggest that earnings manipulation during the IPO process can lead to a decrease in post-IPO operating performance. They often overlook the fact that these earnings are artificially inflated and do not represent a sustainable increase in earnings (Jain & Kini, 1994; Ahmad-Zaluki, 2008; Arik & Mutlu, 2015). Firms should prioritize allocating funds towards core business operations to enhance operational performance and fulfill listing requirements. However, funds may be transferred to merger equities to accelerate market value growth. To optimize long-term market value, IPO firms should prioritize business-based investments and focus on operational efficiency and market value (Long, Lin, & Chen, 2021). Technology acquisition through technology alliances positively affects firms' IPOs, regardless of internal technologies (Kim & Heshmati, 2010). Startups should focus on core technology or product development to accelerate the maturity process and create a superior offering that meets their target market's needs. The initial strategy of a startup is crucial for its performance and positively impacts market confidence.

C. Role of Founders and Management in Startup Growth

Founders are visionaries who initiate a startup's establishment, identifying market opportunities, developing the business model, and determining the value proposition. Their entrepreneurial spirit shapes the startup's vision and mission. Entrepreneurs and startup founders acquire knowledge from previous failures and develop a comprehensive understanding of the industry and customer base, enabling them to create and execute following startups with greater efficiency (Zaheer, Breyer, Dumay, & Enjeti, 2022). They also gain benefits from establishing co-founding deals, supplier partnerships, and employment connections across various projects. Digital technologies serve as facilitators by offering founders the ability to customize, modify, assess, and authenticate their business models, as well as organize, initiate, and expand their products and services through the utilization of their skills, time, and financial resources.

Founders usually have extensive domain expertise and a profound understanding of their respective industry or market. They possess an in-depth understanding of customers' requirements, market patterns, and the competitive environment. To mitigate expenses associated with regular development, emerging startups can leverage established and proven methods that founders have acquired through prior entrepreneurial and professional experiences (Oe & Mitsuhashi, 2013). Gojek, presently identified as GoTo, was founded by Nadiem Makarim, Kevin Aluwi, and Michaelangelo Moran. Nadiem Makarim, an Indonesian entrepreneur, and former Chief Executive Officer of GoTo, underwent a significant transformation under his leadership, evolving from a ride-hailing platform into an extensive super-app that covers a diverse array of services. Kevin Aluwi co-founded and assumed the role of President at GoTo, directed his efforts towards achieving operational excellence and implementing strategic initiatives. Moran, who has left the company, made significant contributions during the initial stages of Gojek's technological platform in branding and marketing. He initiated the usage of referral code to spread the existence of Gojek, which allowed users to get credits in the form of credits.

However, not all the experience and knowledge possessed by founders can be effectively transformed into valuable assets for the organization. Startups should selectively process founders based on their relevance to the current context in which the firms are embedded (Zaheer, Breyer, Dumay, & Enjeti, 2022). It is important to include those with experience in the same industry. The management team plays an important role in adjusting to dynamic market conditions.

The board's strategy can be determined by two constructs: strategic control and financial control (Hendry & Kiel, 2004). Strategic control refers to the board's responsibility in shaping and directing the organization's overall strategic direction, while financial control refers to the board's supervision of the organization's financial performance and resources. Highly qualified board members can be more effective at overseeing management and represent a more valuable resource for businesses. Firms get advantages from board capital through the monitoring capabilities and advisory support offered by independent directors (Jermias & Gani, 2014). Ideally, a board of directors should maintain the founder's involvement, typically by appointing them as a board member, to leverage their established relationships and extensive knowledge to support the new CEO and management team in achieving success (Wasserman, 2008). Together, the founders and management should create a partnership that determines the company's direction, encourages innovation, and promotes its growth. In addition, tech startups must also closely monitor market demands and changes to remain competitive. Engaging customers in the innovation process further enhances the impact of dynamic capabilities on tech innovation (Shi, Xu, & Green, 2014). By combining a well-defined strategy, effective management of dynamic capabilities, and customer involvement, software startups can foster growth and succeed in the ever-changing market landscape.



3. METHODOLOGY

The research process begins with identifying the business issue or problem, focusing on the profitability problem faced by PT GoTo Gojek Tokopedia Tbk. after the merger. The research questions are developed to identify ways to improve profitability and implement strategies. The study also aims to determine the intrinsic value of the company and assess the risks associated with achieving this value. The choice of data collection methods will be limited to usage of available secondary data. The data source includes published annual financial reports of PT GoTo Gojek Tokopedia Tbk., market and economic data, and information from published research, news media, books, and websites. The top-down valuation approach is used, analyzing the business environment, and calculating the firm's value using the Discounted Cash Flow method. The method includes estimating free cash flow by forecasting revenue growth, cost of revenue, operational expenses, taxes, capital expenditures, interest, depreciation, amortization, and net working capital; as well as estimating the discount rate to calculate the value of the firm.

This study will use the top-down valuation approach, which involves analyzing the business environment and afterwards calculating the firm's value using the Discounted Cash Flow method. the Discounted Cash Flow (DCF) method, commonly referred to as absolute valuation, to determine the firm's value. The Net Present Value (NPV) is the fundamental equation used to assess the ability of an investment to generate value (De Luca, 2018; Kruschwitz & Löffler, 2006). This method considers the concept of the time value of money, recognizing that money has greater value in the present compared to the future (Zutter & Smart, 2022).

There are several steps of analysis to conduct a firm valuation based on Damodaran (2012):

1) *Estimating the Free Cash Flow*

The first input needed for Discounted Cash Flow analysis is the estimation of free cash flow. Free cash flow is the total source of cash minus the capital expenditures necessary to stay in the business and retention for growth (Pettit, 2007). A way to estimate it is to analyze the company's historical financial performance as the base for projection. It should address the estimation of net earnings, required capital expenditures, cash to finance working capital, and additional debt. It is calculated using the following formula:

$$FCFF = EBIT(1 - Tax) + Depreciation - CapEx - \Delta Working Capital$$

2) *Estimation of discount rate*

The cost of equity refers to the rate of return that investors demand to invest in a firm (Damodaran, 2012)The most widely recognized model in finance is the Capital Asset Pricing Model (CAPM). The CAPM theory relies on estimated expected returns (R_f and R_m) and expected betas (Larrabee & Voss, 2013)The risk premium indicates the additional return that investors typically require for investing solely in the market portfolio, in comparison to the risk-free asset. The investment beta measures the market risk of an asset by evaluating its relationship with the overall market. Damodaran (2012) provided a concise formula for calculating the cost of equity:

$$\text{Cost of Equity} = R_f + \beta_i (ER_m - R_f)$$

The cost of debt is the financial expense incurred by a company when it obtains debt financing through the issuance of bonds or bank loans (Clayman, Fridson, & Troughton, 2012). The interest rate on a corporate bond consists of the risk-free rate plus a premium for the company's default spread. The cost of debt can be determined using the following formula:

$$\text{Pre-tax Cost of Debt} = \text{Risk-free rate} + \text{Company Default Spread}$$

A company's default spread is based on the rating assigned by a rating agency. Certain companies opt not to submit to rating processes. This category includes numerous small firms and many private businesses. In circumstances when a rating is not available to determine the cost of debt, it is possible to assign a synthetic rating to a company by considering its financial ratios. The company's default spread can be calculated using the interest coverage ratio:

$$\text{Interest Coverage Ratio} = \frac{\text{Earnings before interest and taxes}}{\text{Interest expenses}}$$

The most used model to estimate the cost of capital is the Weighted Average Cost of Capital (WACC). WACC is a market-weighted average, at target leverage, of the cost of after-tax debt and equity (Pettit, 2007). It is used in assessments to discount the expected operating cash flows of the company, the discount rate in calculating value of the firm. The WACC can be calculated with the formula below:

$$WACC = (k_e \times W_e) + (k_p \times W_p) + (k_{d/(pt)} [1 - t] \times W_d)$$



3) Value of the Firm Calculation

The firm's value is determined by discounting projected cash flows to the firm, which are the remaining cash flows after including all operating expenses and taxes, but before making debt payments. This discounting is done at the Weighted Average Cost of Capital, which represents the cost of the various financing sources used by the firm, weighted according to their market value proportions. The formula to calculate firm value based on Damodaran (2012) is:

$$\text{Value of the firm} = \sum_{t=1}^n \frac{\text{FCFF}_t}{(1+r)^t} + \frac{\text{Terminal Value}_n}{(1+r)^t}$$

Terminal value is the value of the business based on a set growth rate beyond the forecast period. To determine the enterprise value, this research will use terminal value calculation using the Perpetuity Growth method, with the formula of:

$$\text{Terminal Value} = \frac{\text{FCFF} \times (1+g)}{(r-g)}$$

4. RESULTS & DISCUSSIONS

A. Potential Strategy for GoTo

The proposed solution is to adopt horizontal integration through a new merger and acquisition (M&A) plan, focusing on Digital Financial Service (DFS) startups. This strategy can enhance GoTo's product development, adapt to dynamic market needs, and enhance its market position as a fintech industry leader. The increasing investment in DFS indicates a positive market environment and heightened investor interest, making M&As a potential success. Factors influencing M&A success include relative size, managerial involvement, culture, and organizational structural issues (Calipha, Tarba, & Brock, 2010). Relative size can lead to a more balanced power dynamic and easier integration of operations, while significant disparities can lead to challenges in aligning cultures, systems, and transition management.

Cultural differences can impact employee morale, communication, decision-making, and overall organizational cohesion. Structural alignment between acquiring and target companies is crucial for M&A success, including reporting structures, decision-making processes, governance mechanisms, and operational synergies. Strategic planning, effective leadership, cultural integration, and structural alignment are essential for successful outcomes in M&A transactions.

B. Estimating Free Cash Flow

The basis for calculating the value of PT GoTo Gojek Tokopedia is the financial projections:

1) Revenue Growth

The revenue growth projection for GoTo uses an exponential smoothing algorithm that relies on historical data. A 95% confidence level is used for conducting the forecast. In addition, various factors are considered when evaluating the appropriateness of the rate of revenue growth.

The historical growth following the merger shown an average growth rate of 76.99% between 2021 and 2022. Specifically, the growth rate was 36.30% in 2021 and 150.22% in 2022. Due to the recent occurrence of the merger in 2021, the availability of data for analysis is limited. Assessing the potential impact of the merger on revenue growth is essential. The notable increase in 2022 can be attributed to the merger, leading to a substantial rise in revenue from the combined entities. To prevent overconfidence and consider the specific circumstances of the merger, the historical revenue growth of Gojek, GoTo's pre-merger business, also needs to be accounted for. This approach considers the growth trajectory of Gojek prior to the merger, offering a more comprehensive perspective.

Indonesia is predicted to experience a comparatively lower impact from the global economic downturn in contrast to Western nations, as indicated by The World Bank. Although there may be some effects, they are anticipated to be minimal. This indicates that there are opportunities for businesses in Indonesia to pursue growth, even with the normalization of domestic demand following the post-pandemic recovery.

GoTo's strong brand recognition and diverse services, including ride-hailing, food delivery, e-commerce, and fintech, drive revenue growth. Its advanced platform and data-driven insights enable seamless transactions and efficient service delivery, positioning it for success. GoTo's board structure has changed, with Andre Soelistyo becoming Deputy Chairman and Patrick Walujo as President Director. This highlights the company's commitment to enhancing board performance and profitability. Patrick Walujo's expertise in GoTo and related industries will strengthen the management team and support the company's growth.



Table II. Expected Revenue Growth. Source: Author’s processed data

| Year | Growth | Revenue (in millions IDR) |
|------|--------|---------------------------|
| 2023 | 5.41% | 11,963,296 |
| 2024 | 19.48% | 14,293,418 |
| 2025 | 16.30% | 16,623,541 |
| 2026 | 14.02% | 18,953,663 |
| 2027 | 12.29% | 21,283,785 |
| 2028 | 10.95% | 23,613,908 |
| 2029 | 9.87% | 25,944,030 |
| 2030 | 8.98% | 28,274,152 |
| 2031 | 8.24% | 30,604,275 |
| 2032 | 7.61% | 32,934,397 |

2) *Cost of Revenue*

The author sets a 35% cost of revenue target for GoTo's cost of revenue, improvement from a 51.71% gross profit margin in 2022. The merger of Gojek and Tokopedia led to synergies and operational efficiencies, resulting in a more efficient cost structure. The author targets a 66.03% gross profit margin for the first year, with annual growth of 0.5% to reach 70% by the end of the projection period. A rise in gross profit margin compared to the previous year is both attainable and consistent with Damodaran’s global gross margin rate for the software industry, which serves as a benchmark. The revenue growth projection for GoTo uses an exponential smoothing algorithm that relies on historical data. A 95% confidence level is used for conducting the forecast. In addition, various factors are considered when evaluating the appropriateness of the rate of revenue growth.

Table III. Sample Industry Gross Margin. Source: Damodaran (2023)

| Industry | Gross Margin |
|--|--------------|
| Advertising | 33.19% |
| Financial Svcs. (Non-bank & Insurance) | 56.07% |
| Food Processing | 25.12% |
| Information Services | 50.59% |
| Retail (Online) | 38.45% |
| Software (System & Application) | 66.03% |
| Transportation | 17.05% |

3) *Operating Expenses*

GoTo's operating expenses include Sales, General and Administration (SGA) and Research & Development (R&D) expenses. SGA is the highest expense in start-ups and digital companies, with an average SGA-to-revenue ratio of 327.24% in 2022. The company aims to reduce annual cash burn by 60-65% in 2023, leading to a rate of 88.34% of revenue. The goal is to achieve profitability by gradually decreasing the rate annually. The benchmark, based on Damodaran's 2023 global data sets, shows an average SGA rate of 30% for software companies. The projected SGA rates for 2023-2027 are expected to decrease gradually from 88.34% to 73.75%, 59.17%, 44.58%, and 30%, respectively. The company aims to lower its SGA rate to 25% by the end of the forecast period.

GoTo's R&D expenditures are heavily reliant on ongoing product innovation and feature updates. The company's R&D rate in the previous year was 41%, and with 65% reduction as per mentioned, brings down the rate to 14.32%. By integrating through mergers and acquisitions with fintech startups, GoTo can achieve cost savings in R&D. This strategy eliminates redundant activities, allocates resources towards mutually beneficial areas, and leads to a target R&D rate of 10%, lower than the benchmark. The rate of R&D will remain constant throughout the projection period.



Table IV. Expected Operating Expenses Rates. Source: Author’s processed data

| Year | SGA Rate | R&D rate |
|------|----------|----------|
| 2023 | 88.34% | 10.00% |
| 2024 | 73.75% | 10.00% |
| 2025 | 59.17% | 10.00% |
| 2026 | 44.58% | 10.00% |
| 2027 | 30.00% | 10.00% |
| 2028 | 29.00% | 10.00% |
| 2029 | 28.00% | 10.00% |
| 2030 | 27.00% | 10.00% |
| 2031 | 26.00% | 10.00% |
| 2032 | 25.00% | 10.00% |

4) *Tax rate*

The corporate tax rate for Indonesia is 22% and will be applied should the company reached positive profit after interests. Therefore, gradually the company will start to have expenses for corporate income tax.

5) *Capital Expenditures*

The historical analysis of data shows a decline in Capital Expenditure (CapEx) over the previous two years. The study will utilize the observed rate of capital expenditures in 2022 to forecast future expenditures. The analysis of the financial records reveals that the company's total capital expenditure represented 3.98% of its revenue. Out of this amount, 3.06% was allocated to fixed assets, while 0.92% was allocated to intangible assets. The decision to use the 2022 rate for forecasting is predicated on the assumption of operational efficiency. The company should enhance its operational efficiency and asset utilization through strategic control of its current assets to maximize their useful life.

Table V. Projected Capital Expenditures (in millions IDR). Source: Author's processed data

| Year | Fixed Assets | Intangibles | Total |
|------|--------------|-------------|-----------|
| 2023 | 366,555 | 110,047 | 476,139 |
| 2024 | 437,950 | 131,481 | 568,878 |
| 2025 | 509,345 | 152,916 | 661,617 |
| 2026 | 580,739 | 174,350 | 754,356 |
| 2027 | 652,134 | 195,784 | 847,095 |
| 2028 | 723,529 | 217,218 | 939,834 |
| 2029 | 794,924 | 238,652 | 1,032,572 |
| 2030 | 866,319 | 260,086 | 1,125,311 |
| 2031 | 937,714 | 281,521 | 1,218,050 |
| 2032 | 1,009,109 | 302,955 | 1,310,789 |

6) *Interest expense*

To calculate the interest expense, the capital expenditures is assumed to be funded with long-term debt with 10 years tenor. The Basic Loan Interest Rate (Suku Bunga Dasar Kredit or SBDK) data published on the OJK website for May 2023 is sourced from online reports submitted by banks through the OJK's Online Reporting Application (APOLO). The rate is 8.40%.

7) *Depreciation & amortization*

Based on the company’s financial statements, both fixed assets and intangibles are depreciated using the straight-line method with 0% salvage value. The average asset useful life used in the calculation is 5 years, in which the annual depreciation rate will be 20% of the asset value. A depreciation schedule was created to account for the depreciation of capital expenditures, including the previous capital expenditures from 2019 as 2023 makes the last year of the usage period of the asset.



Table VI. Projected Depreciation & Amortization (in millions IDR). Source: Author's processed data

| Year | Depreciation | Amortization | Total |
|------|--------------|--------------|-----------|
| 2023 | 612,280 | 633,962 | 1,246,242 |
| 2024 | 537,549 | 497,937 | 1,035,486 |
| 2025 | 385,259 | 274,362 | 659,621 |
| 2026 | 448,465 | 134,638 | 583,104 |
| 2027 | 509,345 | 152,916 | 662,260 |
| 2028 | 580,739 | 174,350 | 755,089 |
| 2029 | 652,134 | 195,784 | 847,918 |
| 2030 | 723,529 | 217,218 | 940,747 |
| 2031 | 794,924 | 238,652 | 1,033,576 |
| 2032 | 866,319 | 260,086 | 1,126,405 |

8) *Change in Net Working Capital*

The estimation of change in net working capital consists of four accounts: account receivables, inventories, and account payables and accruals. The average collection period in 2022 was 20.17 days, and the average age of inventories was 4.75 days. GoTo, a non-manufacturing company, has a minimum level of inventories and an average age of 4.75 days. The average payment period for account payables was 82.08 days in 2021, slightly decreasing from 2021. To capitalize on supplier discounts and reduce repayment time, GoTo should decrease the average payable days to 60 days. Accruals made up 12.21% of GoTo's SGA expenses last year, and for 2023, the rate will be assumed to be 10%, as it is considered low.

Table VII. Projected Net Working Capital (in millions IDR). Source: Author's processed data

| Year | Net Working Capital | Change in NWC |
|------|---------------------|---------------|
| 2023 | (1,016,467) | 3,016,002 |
| 2024 | (995,176) | 21,291 |
| 2025 | (902,393) | 92,783 |
| 2026 | (738,119) | 164,274 |
| 2027 | (502,353) | 235,766 |
| 2028 | (515,862) | (13,509) |
| 2029 | (521,184) | (5,322) |
| 2030 | (518,318) | 2,866 |
| 2031 | (507,264) | 11,054 |
| 2032 | (488,023) | 19,241 |

9) *Free Cash Flow Calculation*

Taking account of the projected elements in the previous sections, the calculation of Free Cash Flow can be seen in Table 10 below. The Free Cash Flow starts to show positive value starting in the year 2026.

Table VIII. Free Cash Flow Projections (in millions IDR). Source: Author's processed data.

| | 2023F | 2024F | 2025F | 2026F | 2027F | 2028F | 2029F | 2030F | 2031F | 2032F |
|-----------------------------------|--------------------|--------------------|--------------------|------------------|------------------|------------------|------------------|------------------|-------------------|-------------------|
| EBIT | (5,111,008) | (3,497,012) | (1,014,966) | 1,870,676 | 5,303,585 | 6,218,098 | 7,202,514 | 8,256,835 | 9,381,058 | 10,575,186 |
| (+) Depreciation & amortization | 1,246,242 | 1,035,486 | 659,621 | 583,104 | 662,260 | 755,089 | 847,918 | 940,747 | 1,033,576 | 1,126,405 |
| EBITDA | (3,864,766) | (2,461,526) | (355,344) | 2,453,779 | 5,965,845 | 6,973,187 | 8,050,433 | 9,197,582 | 10,414,635 | 11,701,591 |
| (-) Tax | - | - | - | (353,718) | (1,099,115) | (1,290,053) | (1,496,213) | (1,717,866) | (1,955,309) | (2,208,864) |
| (-) Capital Expenditures | 476,139 | 568,878 | 661,617 | 754,356 | 847,095 | 939,834 | 1,032,572 | 1,125,311 | 1,218,050 | 1,310,789 |
| (-) Change in Net Working Capital | 5,016,002 | 21,291 | 92,783 | 164,274 | 235,766 | (13,509) | (5,322) | 2,866 | 11,054 | 19,241 |
| Free Cash Flow | (7,356,907) | (3,051,695) | (1,109,744) | 1,181,432 | 3,783,870 | 4,756,809 | 5,526,969 | 6,351,539 | 7,230,222 | 8,162,697 |



C. Estimation of Discount Rate

The discount rate for GoTo is calculated using the rate of source of capital options. The cost of equity is calculated using the Indonesia 10-year government bond yield of 6.65% from Indonesian Securities Price Appraiser data, the equity risk premium of 9.23% based Damodaran rate, and the beta value of 2.68 from financial website. A higher beta indicates a higher level of risk and potential return. The cost of equity for GoTo is 31.39%. The pre-tax cost of debt is calculated by adding the risk-free rate and default spread for GoTo, which yields the rate of 7.34%. The weighted average cost of capital (WACC) is calculated using the debt-to-equity ratio of 0.13, leading to a 28.35% WACC for GoTo.

D. Value of the Firm Calculation

Past the projection period of the research, the future cash flow to infinity or terminal cash flow, uses terminal growth rate. Terminal growth rate estimates how much the cash flow will be until infinity. For this, the growth rate refers to Indonesia’s GDP growth for the last 10 years. It is important to note that within this time frame, the effect of the pandemic is reflected during the year 2020-2021. Despite the negative growth during those periods, currently Indonesia’s economy is getting stronger, even generating higher growth compared to the year before Covid-19. Overall, the estimated terminal growth rate is 4.27%. Based on the calculation, the terminal cash flow is IDR 35,351,170 million.

After that, the calculation for free cash flow to the firm is done. In the last year of the projection period, terminal cash flow is included.

Table IX. Value of the Firm Calculation (in millions IDR). Source: Author's processed data.

| Year | FCFF | Terminal Cash Flow | WACC | Present Value |
|-------|-------------|--------------------|--------|---------------|
| 2023 | (7,356,907) | | 28.35% | (5,732,077) |
| 2024 | (3,051,695) | | 28.35% | (1,852,570) |
| 2025 | (1,109,744) | | 28.35% | (524,896) |
| 2026 | 1,181,432 | | 28.35% | 435,387 |
| 2027 | 3,783,870 | | 28.35% | 1,086,475 |
| 2028 | 4,756,809 | | 28.35% | 1,064,183 |
| 2029 | 5,526,969 | | 28.35% | 963,395 |
| 2030 | 6,351,539 | | 28.35% | 862,607 |
| 2031 | 7,230,222 | | 28.35% | 765,072 |
| 2032 | 8,162,697 | 35,351,170 | 28.35% | 3,587,526 |
| Total | 655,101 | | | |

As can be seen from Table VII above, applying the discount rate to each year’s free cash flow including the terminal cash flow, we got the enterprise value of IDR 655,101 million.

E. Risk Analysis

Conducting a sensitivity analysis helps assess the degree in which different scenarios affect the result of the share intrinsic value. In conducting the analysis, each variable that affects the equity value are recalculated with ±25% swing. Assuming other variables remain constant, we can see the effect of change from each variable towards the value of the firm. The results are as follow:

Table X. Sensitivity Analysis. Source: Author's processed data.

| Variable | Current Assumption | +25% | -25% | Change +25% | Change -25% |
|---------------------------|--------------------|--------|--------|-------------|-------------|
| Terminal growth rate | 4.27% | 5.34% | 3.20% | 25.41% | -23.25% |
| Gross profit margin | 66.03% | 82.54% | 49.52% | 1488.77% | -1483.64% |
| Target SGA rate | 30.00% | 37.50% | 22.50% | -166.79% | 166.79% |
| R&D rate | 10.00% | 12.50% | 7.50% | -231.01% | 231.01% |
| Average Collection Period | 20.00 | 25.00 | 15.00 | -33.21% | 33.21% |
| Average Payment Period | 60.00 | 75.00 | 45.00 | 31.28% | -31.28% |



| | | | | | |
|------------------------------|--------|--------|--------|----------|---------|
| Accruals | 10.00% | 12.50% | 7.50% | 27.33% | -27.33% |
| Capital Expenditures | 3.98% | 4.98% | 2.99% | -102.16% | 102.16% |
| Long-term debt interest rate | 8.40% | 10.50% | 6.30% | 6.71% | -6.32% |
| Tax rate | 22.00% | 27.50% | 16.50% | -87.91% | 87.28% |
| Risk-free rate | 6.65% | 8.31% | 4.99% | -130.88% | 158.06% |
| Beta | 2.68 | 3.35 | 2.01 | -361.03% | 686.82% |
| Terminal growth rate | 4.27% | 5.34% | 3.20% | 25.41% | -23.25% |

These variables have different degrees of effect to the intrinsic value, which can be seen below:

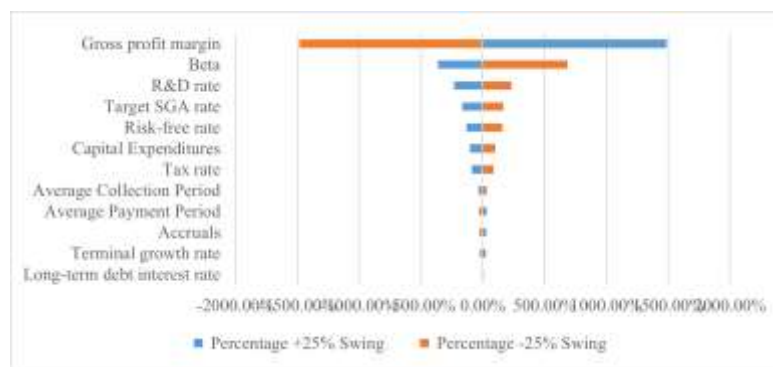


Figure 1. Tornado Diagram of the Variables Affecting the Enterprise Value.

From the tornado diagram above, the factors with the highest effect on the firm value are gross profit margin, beta, R&D rate, and target SGA rate. It is important to note that among those factors, gross profit margin, SGA, and R&D rate, are within the company’s control. They all have the effect on controlling the expenses associated with the business and the degree depends on how the policy applied by the company.

Next, scenario analysis is made assuming 3 different scenarios: worst, most likely, and best case. All factors that affect the firm value are considered, even though the effect is small. In this step, the ±25% swing is assigned to each case based on their effect (i.e., for cost lower rate is better, profit margin higher rate is better).

Table XI. Scenario Analysis. Source: Author's processed data.

| | Worst Case | Most Likely | Best Case |
|------------------------------|---------------------|----------------|-------------------|
| Terminal growth rate | 3.20% | 4.27% | 5.34% |
| Gross profit margin | 49.52% | 66.03% | 82.54% |
| Target SGA rate | 37.50% | 30.00% | 22.50% |
| R&D rate | 12.50% | 10.00% | 7.50% |
| Average Collection Period | 25.00 | 20.00 | 15.00 |
| Average Payment Period | 45.00 | 60.00 | 75.00 |
| Accruals | 12.50% | 10.00% | 7.50% |
| Capital Expenditures | 4.98% | 3.98% | 2.99% |
| Long-term debt interest rate | 10.50% | 8.40% | 6.30% |
| Tax rate | 27.50% | 22.00% | 16.50% |
| Risk-free rate | 4.99% | 6.65% | 8.31% |
| Beta | 3.35 | 2.68 | 2.01 |
| Enterprise Value | (12,790,279) | 655,101 | 21,285,058 |



The worst-case scenario assumes that the variables are adjusted to the most unfavorable conditions, negatively impact the intrinsic value and lead to the most adverse outcome. It might involve worse-than-predicted economic growth in Indonesia given the global economic downturn, decline in revenue, or failure to cut costs as targeted. Given that all factors simultaneously turn unfavorable, enterprise value decrease to -IDR 12,790,279 million. On the contrary, the best-case scenario is if all factors exceed expectations, being more favorable than the base case. Considering the most optimistic assumption, the enterprise value improves to IDR 21,285,058 million.

5. CONCLUSION & RECOMMENDATIONS

GoTo's analysis shows horizontal integration through mergers and acquisitions is the most potential strategy to boost profitability. By pursuing M&A, GoTo can benefit from economies of scale, streamlining the business process, eliminating redundant expenses, and optimizing resource allocation. Additionally, M&A strengthens GoTo's competitive advantage by transferring assets, technology, intellectual property, and knowledge, allowing the company to expand and improve its product portfolio, particularly in the financial technology market, gaining a competitive edge in Indonesia. To implement this strategy, GoTo must prioritize sustainable revenue growth, strategic investments, and cost management practices. The projected intrinsic value of GoTo is IDR 655,101 million, based on future cash flows and growth. To realize these benefits, GoTo must address inherent risks, prioritize expense management, and implement cost control measures to minimize financial inefficiencies. GoTo can enhance its market position and establish a foundation for future growth by enhancing its fundamental aspects.

To ensure the successful implementation of M&A activities, it is recommended that GoTo establish a specialized team specifically responsible for the planning and execution of these transactions. The team must possess the requisite expertise and experience in performing due diligence, negotiating, planning integration, and managing post-merger integration. A competent team is crucial for GoTo to effectively manage M&A transactions and optimize the value and outcomes of these strategic endeavors. Deloitte identifies five key participants in the execution of mergers and acquisitions, namely Investment Committee, Business Unit Leadership, Corporate Development, Transaction Lead, and External Advisors. It is important that to execute the M&A GoTo have the necessary team in place.

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