INDIVIDUAL Assignment

AQ045-3-2-FSA

FINANCIAL STATEMENT ANALYSIS

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HANG OUT DATE : 20TH DECEMBER 2023

HAND IN DATE : 8TH FEBRUARY 2024

WEIGHTAGE : 50%

INSTRUCTIONS TO CANDIDATES:

1. **Answer ALL questions.**

2. **Students are advised to underpin their answers with the use of references (cited using the APA Referencing).**

3. **Submit your assignment online via Moodle.**

4. **Late submission will be awarded zero (0) unless Extenuating Circumstances (EC) are upheld.**

5. **Cases of plagiarism will be penalized.**

6. **You must obtain 50% overall to pass this module.**

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QUESTION 1

1. Introduction

The selected company for this report, subject to conduct PESTLE and SWOT analysis to determine both external and internal forces and competitive advantage, is **Frontken Corporation Berhad** (hereinafter referred to as “FRONTKEN”), which is distinguished the world leading service provider of advanced precision cleaning and surface treatment for semiconductor process chamber parts, and repair and maintenance services for oil and gas industry. FRONTKEN is a publicly listed company on the Bursa Malaysia Stock Exchange, operates within the Technology Sector, and concludes its fiscal year on December 31st (Frontken Corporation Berhad, 2023).

2. PESTLE Analysis

2.1 Political Factor

Geopolitical Tension

As FRONTKEN’S operational footprint encompasses Malaysia, Singapore, Taiwan, the Philippines and Indonesia, each governed by distinct political systems and regulations, it faces a myriad of political risks that may impact its operation as well as financial performance (Frontken Corporation Berhad, 2023). Among all, the Group’s heavy reliance on Taiwan, a major global supplier of semiconductors that produce about half the world’s annual supply, exposes it to heightened political sensitivity (Hashmi, 2021). With a 3-year average of approximately 65% of FRONTKEN’s revenue generated from Taiwan, the geopolitical tensions and military threats from China, which claims sovereignty over the island, pose significant challenges (Frontken Corporation Berhad, 2023; Hashmi, 2021). The complex relationships between the USA, China, and Taiwan, compounded by the ambiguity of the US policy towards Taiwan's independence and the aftermath of the US-China Trade War, amplify political uncertainties for FRONTKEN (Hashmi, 2021). Besides, as reported by CTech (2023), the recent escalation of the US-China trade war, coupled with China's restrictions on metal exports for the chip industry, has sent shockwaves through the global semiconductor supply chain. Such repercussions could further add to the political risks faced by FRONTKEN and potentially affect its financial performance.

2.2 Economic Factor

Exchange Rate Fluctuations

Operating in multiple countries introduces complexities in managing cash flows, as transactions are conducted in various currencies (Woodruff, 2019). Thus, FRONTKEN with an operational footprint encompasses four countries, exposure to foreign currency risks arise from transactions denominated in currencies other than its functional currencies. As outlined in the Annual Report (2023), the primary currencies contributing to this risk include the United States Dollar (USD), Singapore Dollar (SGD), Euro (EUR), and Great Britain Pound (GBP). These currency risks stem from fluctuations in exchange rates, which can affect the company's cash inflows and outflows. For instance, in 2023, the USD appreciated against the Malaysian Ringgit (MYR) by 4.20%, showcasing the volatility inherent in currency markets. Such fluctuations can impact Frontken's financial performance as USD is the denominated currency for international trade (Bertaut, 2023).

Source: TradingView (USD against MYR, from 2-Jan-2023 to 29-Dec-2023)

Interest rate

Furthermore, in the semiconductor sector, which heavily relies on capital investments for research, development, and production, interest rates wield significant influence. As interest rates climb, the cost of borrowings increases, posing challenges for semiconductor firms in funding their operations as well as eroding their profit margins. This scenario can prompt to a reduction in capital expenditure, and thereby, slowing down innovation within the industry (Lucintel, 2023). Although FRONTKEN’s business is not directly engaged in semiconductor manufacturing, the services they provide are essential for semiconductor maintenance. Consequently, any deceleration in the semiconductor industry, triggered by heightened borrowing costs and diminished demand, indirectly impacts FRONTKEN's sales as their customer’s sales potentially decreased. Consequently, both FRONTKEN and other semiconductor firms may face hurdles in sustaining growth and competitiveness amidst the surge in interest rates.

2.3 Social Factor

In term of social factor, labour conditions and corporate social responsibility play significant roles in shaping semiconductor firms’ business operations. According to Semiconductor Industry Association (2023), the semiconductor industry is projected to face a significant shortage of tech workers, with an estimated 67,000 unfilled labour gaps in the US by 2030, presenting a notable social risk. However, FRONTKEN demonstrates a commitment to employee well-being and fair treatment, as evidenced by its exemplary health and safety track record, zero-tolerance policy against forced labour, and promotion of equal opportunities. The company prioritizes creating a safe work environment and maintaining employee morale, as seen in its impressive 98% retention rate in 2022, surpassing the target goal by 105% (Frontken Corporation Berhad, 2023).

Besides, as there’s a growing awareness on corporate social responsibility, the importance of prioritizing sustainability serves as another key social factor (Heyward, 2020). Notably, FRONTKEN has actually actively engaging in corporate social responsibility initiatives, including providing internships for local students, offering employment opportunities for individuals with health conditions, and supporting various causes (Frontken Corporation Berhad, 2023). By addressing labour conditions and embracing social responsibility, FRONTKEN aligns itself with evolving societal expectations, ensuring sustainable business practices and fostering a positive impact on the community. Thus, it can be concluded that there's no adverse social factor impacting FRONTKEN's business operation.

2.4 Technological Factor

Operating in an industry characterized by constant technological advancements and innovation, FRONTKEN is inherently susceptible to the risks associated with lagging behind in technological adaptation (Frontken Corporation Berhad, 2023). Particularly relevant to FRONTKEN's sphere of precision cleaning services for semiconductor manufacturing, the ongoing shrinkage in semiconductor chip size poses significant challenges. As semiconductor features continue to shrink and evolve into the third dimension, traditional cleaning methodologies have encountered limitations. This necessitates the development of novel single-wafer cleaning processes to effectively address the critical requirements of contemporary semiconductor nodes. Moreover, the evolving landscape of semiconductor manufacturing demands an increased focus on advanced engineering services and coatings to tackle the escalating complexities in precision cleaning processes. Notably, within semiconductor fabrication facilities, where cutting-edge lithography, etching, and deposition equipment prevail, the significance of wafer-cleaning technology has ascended to a paramount position. With over 200 cleaning steps incorporated into the manufacturing process of leading-edge factories, the evolution of cleaning systems from manual operations to sophisticated, chemically precise equipment underscores the indispensable role of technological advancement in sustaining FRONTKEN's competitive edge and relevance in the dynamic semiconductor industry (Silicon Semiconductor, 2023). Consequently, FRONTKEN's strategic alignment with emerging technological trends and investments in research and development are imperative to mitigate the risk of obsolescence and maintain its position as an industry leader in precision cleaning services for semiconductor manufacturing (Frontken Corporation Berhad, 2023).

2.5 Legal Factor

Rather than the above-mentioned factors, FRONTKEN's business operations is also subjected to a multitude of legal factors within the realm of tax policies and international competition that shape its strategic decisions and regulatory compliance efforts. First of all, as reported by The Star (2022), Malaysia's agreement in principle to implement the Global Minimum Tax (GMT) regime on certain multinational corporations could potentially impact FRONKEN's tax liabilities and overall competitiveness. The GMT reform aims to ensure that MNCs pay an equitable share of taxes regardless of their operating jurisdictions. This shift in tax policy may necessitate FRONTKEN to reevaluate its tax strategies and adapt to the evolving regulatory landscape to maintain its financial performance and competitive edge. Additionally, the US CHIPS and Science Act, allocating substantial federal funding for semiconductor production and research in the United States, may influence demand for assembly and testing services, potentially benefiting companies like FRONTKEN. However, this could also intensify competition within the industry and spur technological innovation, requiring FRONTKEN to continually enhance its capabilities to meet evolving market demands and maintain its position as a key player in the global market. Therefore, FRONTKEN must remain vigilant and proactive in navigating these legal factors to mitigate potential risks and capitalize on emerging opportunities for sustained growth and profitability.

2.6 Environmental Factor

On the environmental front, as a player in the semiconductor industry, FRONTKEN is significantly influenced by environmental factors, particularly climate change policies and greenhouse gas emissions regulations. The semiconductor sector, which accounts for nearly 75% of the total CO_2 emissions related to electronic products, is subject to various international agreements and initiatives such as the Kyoto protocol, the CoP-27 conference, and the UN Sustainable Development Goals (Beckmann, 2023; Mehta & Prakash 2023). These policies are geared towards emissions reduction, climate adaptation, and overall decarbonization efforts. Considering that semiconductor manufacturing alone contributes to 31% of global greenhouse gas emissions, FRONTKEN may face intensified regulations and increased operational costs to mitigate its carbon footprint and align with global decarbonization objectives. Moreover, the escalating demand for electronic chips exacerbates the industry's carbon emissions, as the production process necessitates significant electricity and fossil fuel consumption. Thus, adherence to stringent climate change policies is imperative for FRONTKEN to sustain its operations and remain competitive in a rapidly evolving regulatory landscape (Mehta & Prakash 2023).

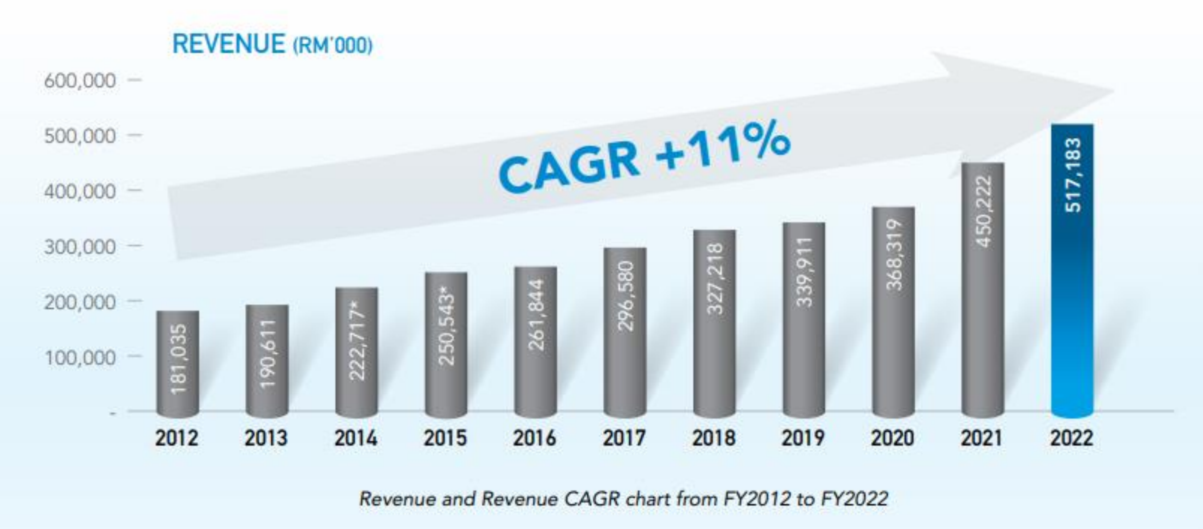
However, as reported in the Annual Report (2023), the company is dedicated to minimizing its negative impact by focusing on reducing carbon footprints. Through extensive research and development efforts, FRONKEN has made significant strides, exemplified by its adoption of solar energy since 2018, resulting in an equivalent of 2,277,595 KW of electricity. Moreover, the company has achieved substantial savings in recycled water (307,623 tons) and recycled waste (381,196 kg) in its operations. A forward-looking approach is evident in Frontken's long-term targets, including a 50% reduction in Emissions Intensity by 2050, aiming to peak emissions around 2050, and achieving Net Zero Emissions by 2060 (Frontken Corporation Berhad, 2023).

3. SWOT Analysis

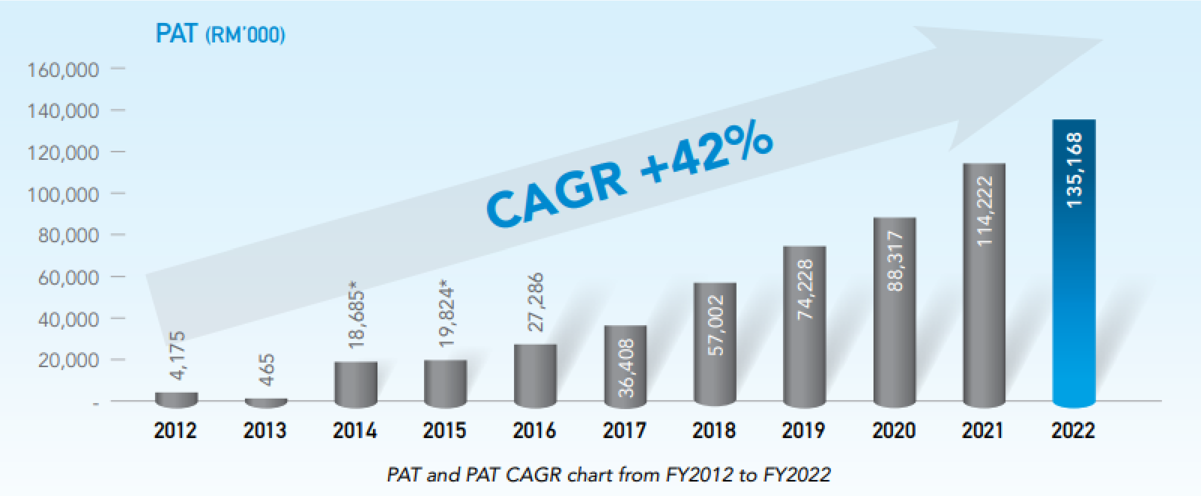
3.1 Strengths

Strong Financial Performance

In the fiscal year 2022 (FY2022), FRONTKEN exhibited a remarkable financial performance, achieving a record-breaking revenue for the tenth consecutive year. The compound annual growth rate (CAGR) of 11% in revenue over the past decade underscoring the group's sustained and robust growth over a decade. Also, the net profit margin increased marginally from 23.21% to 23.84%, indicating the company's improved profitability. Noteworthy is the outstanding 42% CAGR in profit after tax, highlighting FRONTKEN's adept management of operational efficiency over time. Examining the balance sheet reveals a substantial cash balance of RM317.4 million, while total liabilities are comparatively low at RM217.9 million, resulting in a net cash position exceeding a hundred million ringgits (Frontken Corporation Berhad, 2023). This financial strength positions FRONTKEN favorably, providing the company with ample liquidity to seize potential investment or expansion opportunities as they arise (Yeap, 2022). Thus, the exceptional financial performance serves as one of the key strengths of FRONTKEN (Frontken Corporation Berhad, 2023).



Source: Frontken Corporation Berhad Annual Report 2022



Source: Frontken Corporation Berhad Annual Report 2022

High Entry Barrier

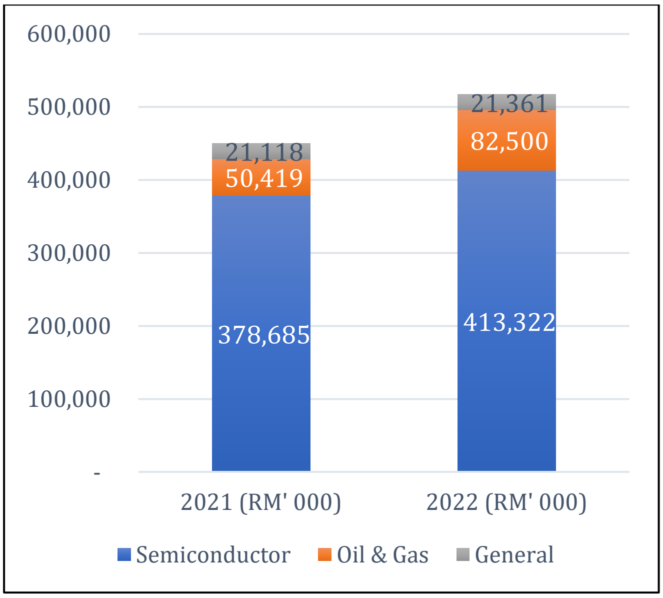
FRONTKEN'S strength lies not only in its financial performance but also in its positioning within the semiconductor advanced precision cleaning services sector, which boasts high barriers to entry. This industry demands cutting-edge technologies and specialized expertise, characterized by complexity, precision, and stringent quality standards. In this realm, the cleaning process involving the meticulous removal of dust, metal ions, and organic impurities from wafers while safeguarding their surface and electrical properties (Utmel, 2022). Amidst fierce competition in Taiwan's high-precision cleaning sector, FRONTKEN's subsidiary, Ares Green, stands out. They uphold exceptional service standards, meeting stringent turnaround times and maintaining uncompromising quality (Azhar, 2017). Ultimately, FRONTKEN excels in fulfilling clients' exacting requirements, positioning itself as a trusted partner in the semiconductor industry's critical processes.

3.2 Weaknesses

Dependence on Major Revenue Stream

Examining the weakness, FRONTKEN's heavy reliance on the semiconductor industry, which approximately 80% of its revenue derived from (as the diagrams below shows), presents a significant weakness on its revenue stream diversification. Unlike the other industries, the semiconductor industry is well-known for its cyclicality, making FRONTKEN may be vulnerable to fluctuations within this market. The industry's inherent volatility, characterized by oscillations between chip scarcity and oversupply, exposes FRONTKEN to considerable risks (Ahlsten, 2023). Despite this major revenue risk has not affected FRONTKEN's financial performance so far, it still poses a weakness that shall not be ignored as it has the potential implications.

Besides, although FRONTKEN has begun diversifying its revenue streams, especially into the oil and gas sector, the pace of this diversification appears insufficient to offset the company's exposure to the semiconductor industry's volatility. As such, FRONTKEN must intensify efforts to diversify its revenue sources to enhance its resilience against market downturns and mitigate the risks associated with its dependence on a single major revenue stream.



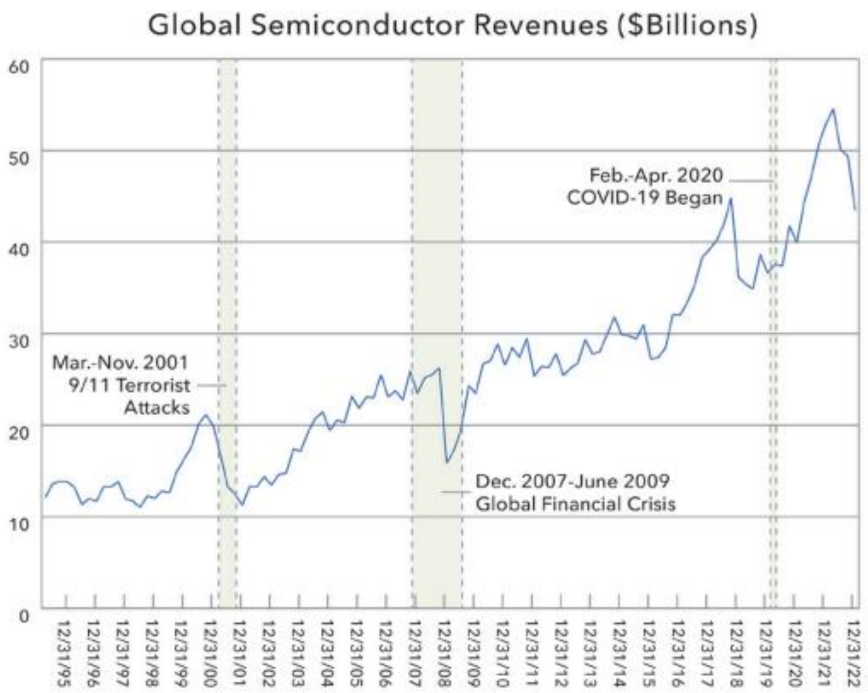
Industry	2021 (RM' 000)	2022 (RM' 000)
Semiconductor	378,685 (84%)	413,322 (80%)
Oil & Gas	50,419 (11%)	82,500 (16%)
General	21,118 (5%)	21,361 (4%)

Diagram 1 & 2: Segmental Revenue Breakdown by Industry of Frontken Corporation Berhad

3.3 Opportunities

Rising Demand Globally

On the other hand, semiconductors, one of the most valuable resources in the modern day, are the cornerstone of technology and plays a critical role in the global competition for technological supremacy (Precision Millimeterwave, n.d.). As electronic devices become increasingly integral to daily life and industries, followed by the rise of autonomous, IoT, 5G, and etc., the need for efficient maintenance and enhancement of semiconductor functionalities rising correspondingly (Morrison, 2023). Therefore, FRONTKEN, by offering essential maintenance services that ensure the optimal performance and longevity of semiconductor components, is well-positioned to capitalize on this trend. With the semiconductor industry achieving worldwide sales of USD580 billion in 2022 and is projected by McKinsey & Company (2022) to become a trillion-dollar industry by 2030, the trajectory of technological advancement indicates a continuous surge in global demand for semiconductors (Morrison, 2023). Thus, it can be expected that the demand of advanced precision cleaning and surface coating for semiconductor components will keep rising in the future accordingly with the rise of semiconductor sales, indicating the opportunity for FRONTKEN's further growth and business's sustainability.



Source: Parnassus Investments: Anatomy of a Semiconductor Cycle (Ahlsten, 2023)

3.4 Threats

Geopolitical Tensions

The major threat encountered by FRONTKEN is the geopolitical tensions, which already outlined in Political Factor part above that have engendered significant disruptions in the semiconductor industry's supply chain (Sehgal, 2023). This disruption is primarily exemplified by the ongoing US-China trade war and the strained relations between the US, China, and Taiwan. Of particular concern is Taiwan's status as the world's largest foundry, with TSMC, the largest customer of FRONKEN, holding a dominant 53% share (Akio, 2023). The geopolitical tensions surrounding China and Taiwan are especially worrisome due to their potential to disrupt the semiconductor market. The introduction of tariffs, trade restrictions, and a pervasive sense of uncertainty stemming from the trade war exacerbates these challenges. Such geopolitical tensions distort the semiconductor market, nullifying the benefits of globalization (Ting-fang, 2022). Therefore, FRONTKEN, specializing in advanced precision cleaning of semiconductors, faces indirect repercussions from these tensions, as any decrease in their customers' sales directly affects FRONTKEN's sales. In navigating this landscape, FRONTKEN must remain vigilant in assessing and adapting to the evolving geopolitical landscape to ensure resilience in the face of current challenges.

Apart from the geopolitical threat, FRONTKEN faces a myriad of threats across economic, technological, legal, and environmental domains as aforementioned under PESTLE analysis, each presenting unique challenges to its operational resilience and financial performance. Economic threats including fluctuating exchange rates and interest rate hikes that introduce volatility and hinder growth potential; technological advancements require constant adaptation to avoid obsolescence; while legal and environmental factors further complicate strategic decisions and regulatory compliance efforts.

QUESTION 2

Given that FRONTKEN concludes its fiscal year on December 31st, the most recent accessible annual report being the Annual Report for the Fiscal Year 2022 (FY2022). Therefore, in this report, the analysis and evaluation presented herein will focus on FRONTKEN's financial performance for both the FY2022 and the preceding FY2021. Notably, all calculation formulae in this assignment are adhere to the textbook Financial Statement Analysis & Valuation 6th Edition by Easton, et al. (2021).

4. Analysis on Statement of Comprehensive Income

Horizontal Analysis of Frontken Corporation Berhad

Income Statement	FY2022 (RM)	FY2021 (RM)	Change (RM)	%YoY Change
Revenue	517,182,574	450,222,252	66,960,322	14.87%
Cost of Sales	(267,592,120)	(236,382,037)	(31,210,083)	13.20%
Gross Profit	**249,590,454**	**213,840,215**	**35,750,239**	**16.72%**
Other Income	8,146,902	5,846,641	2,300,261	39.34%
Administrative Expenses	(69,159,753)	(57,588,747)	(11,571,006)	20.09%
Other Operating Expenses	(12,196,603)	(11,757,301)	(439,302)	3.74%
Finance Costs	(830,861)	(614,836)	(216,025)	35.14%
Net Impairment Losses on Financial Assets	(759,650)	140,503	(900,153)	-640.66%
Profit Before Tax (EBIT)	**174,790,489**	**149,866,475**	**24,924,014**	**16.63%**
Income Tax Expenses	(39,622,948)	(35,644,568)	(3,978,380)	11.16%
Profit After Tax	**135,167,541**	**114,221,907**	**20,945,634**	**18.34%**
Earnings Per Share (EPS) (Unit in Sen)	7.85	6.65	1.20	17.98%

In analyzing the Statement of Comprehensive Income for FRONTKEN for FY2022 and FY2021 through horizontal analysis, several key insights emerge. Firstly, the company experienced a notable 15% increase in revenue, amounting to RM67 million. This growth is a positive indicator of the company's sales performance during the fiscal year. In fact, as mentioned in the strengths under SWOT analysis, the 10-year CAGR in revenue of FRONTKEN is 11%, signifying that the Group's above-average growth rate in FY2022.

According to Annual Report (2023), the revenue increases are mainly attributed by the increased in the provision of services.

Examining the cost side, the COGS increased by RM31.2 million, reflecting a 13% rise, showing that this increase is slightly lower than the growth in revenue. Thus, the higher Cost of Sales did not proportionately offset the revenue increase, resulting in a higher gross profit, with a growth rate of 17%.

Besides, another positive aspect is the significant 39% increase in Other Income, amounting to RM2.3 million. This substantial growth in non-operating income signals potential diversification or improved performance in non-core business activities. However, the Annual Report (2023) did not mention much about this aspect.

On the downside, Administrative Expenses increased by RM11.5 million, representing a 20% rise. This higher than revenue growth in administrative costs suggests the group's increased operational or managerial expenses.

Besides, a concerning development is the substantial increase in Net Impairment Losses on Financial Assets, which rose by RM0.9 million or 641%. Such a significant surge in impairment losses are mainly attributed by the huge increase in impairment losses from trade receivables, from RM64,043 in FY2021 to RM759,650 in FY2022.

Despite the challenges, the company managed to achieve a commendable 17% increase in Profit Before Tax, totalling RM25 million. This growth indicates operational efficiency and effective cost management, though the impact of increased administrative expenses and impairment losses should be carefully considered.

Lastly, the Profit After Tax also saw a healthy 18% increase, slightly higher than the revenue growth, amounting to RM21 million, suggesting that the company is more profitable compared to the previous FY2021. Conclusively, by comparing the changes between FY2022 and FY2021 using horizontal analysis, the overall financial performance reflects positive connotations of FRONTKEN, indicating that the company's financial performance is continuously better, which is a continuation of its sustained growth performance over the past decade.

5. Financial Analysis

5.1 Profitability Ratios

Gross Profit Margin = $\frac{\text{Gross profit}}{\text{Net sales}}$

Net Profit Margin = $\frac{\text{Net profit}}{\text{Net sales}}$

Return on Equity = $\frac{\text{Net Income}}{\text{Average Stockholder's Equity}}$

Return on Assets = $\frac{\text{Net Income}}{\text{Average Total assets}}$

Financial Performance Indicators	FY2022
Gross Profit	249,590,454
(÷) Net Sales	517,182,574
Gross Profit Margin	**48.26%**
Net Income	135,167,541
(÷) Net Sales	517,182,574
Net Profit Margin	**26.14%**
Net Income	135,167,541
(÷) Average Stockholder's Equity	561,501,641
Return on Equity	**24.07%**
Net Income	135,167,541
(÷) Average Total Assets	762,228,046
Return on Assets	**17.73%**

Gross profit margin is the ratio of gross profit to net sales, which measures how much of each sales ringgit is left after deducting the cost of goods sold. A higher gross profit margin indicates that the company is more efficient in producing and selling its products or services. A gross profit margin of 48.3% of FRONTKEN suggests that after covering the COGS, the company retains 48.3% of its revenue as gross profit, which is considered high (Easton, et al., 2021).

Net profit margin is the ratio of net income to net sales, which measures how much of each sales ringgit is left after deducting all expenses, taxes, and interest (Easton, et al., 2021). A net profit margin of 26% of FRONTKEN suggests that after deducting all expenses, taxes, and interest from the revenue, the company retains 26% as net profit. This shows high profitability and effective cost management of the company, resulting in a substantial proportion of revenue translating into bottom-line profits.

Additionally, return on equity (ROE) is the ratio of net income to average stockholders' equity, which measures how much the company earns for each ringgit invested by the owners (Easton, et al., 2021). A ROE of 24% of FRONTKEN is a positive sign for the company's shareholders, demonstrating the company's ability to use shareholders' equity effectively to generate profits.

Lastly, return on assets (ROA) is the ratio of net income to average total assets, which measures how much the company earns for each ringgit of assets employed (Easton, et al., 2021). A ROA of 18% of FRONTKEN indicates that the company is efficient in utilizing its assets to generate income.

5.2 Liquidity Ratios

Current Ratio = $\dfrac{\text{Current Assets}}{\text{Current Liabilities}}$

Quick Ratio = $\dfrac{(\text{Cash \& Cash Equivalents} + \text{Account Receivables})}{\text{Current Liabilities}}$

Financial Performance Indicators	FY2022
Current Assets	505,625,591
(÷) Current Liabilities	185,899,423
Current Ratio	**2.72**
Cash & Cash Equivalents	327,441,027
(+) Account Receivables	124,086,038
(÷) Current Liabilities	185,899,423
Quick Ratio	**2.43**

The **current ratio** and **quick ratio** are key financial metrics that provide insights into a company's ability to meet its short-term obligations. The calculated current ratio of FRONTKEN of 2.72, signifies a substantial liquidity position for the company, indicating that for every ringgit of current liabilities, it holds RM2.72 in current assets. This bodes well for the company's creditworthiness, as it demonstrates a comfortable buffer to cover short-term obligations. Conversely, providing that a current ratio below 1 would be considered risky, signalling potential difficulties in meeting immediate financial obligations (Easton, et al., 2021; Paddle, n.d.).

Moving on to the quick ratio, which stands at 2.43, it provides a more conservative assessment by excluding inventory from the calculation. This ratio emphasizes FRONTKEN’s ability to meet immediate obligations with its most liquid assets. While slightly lower than the current ratio, the quick ratio still suggests a robust liquidity position, with ample liquid assets available to settle short-term liabilities promptly (Easton, et al., 2021; Paddle, n.d.).

In summary, both ratios portray the company as well-positioned to handle its short-term financial commitments. The company's strong performance in both metrics is likely to instil confidence among creditors and stakeholders, indicating a sound financial position and the ability to navigate short-term financial challenges effectively.

5.3 Efficiency Ratios

Account Receivable Turnover Rate = $\frac{\text{Net sales}}{\text{Average Account Receivables}}$

Inventory Turnover Rate = $\frac{\text{Cost of Goods Sold}}{\text{Average Inventory}}$

Asset Turnover = $\frac{\text{Net Sales}}{\text{Average Total Assets}}$

Financial Performance Indicators	FY2022
Net Sales	517,182,574
(÷) Average Account Receivables	119,842,970
Account Receivable Turnover Rate	**4.32**
Cost of Goods Sold	267,592,120
(÷) Average Inventory	20,445,202
Inventory Turnover Rate	**13.09**
Net Sales	517,182,574
(÷) Average Total Assets	762,228,046
Asset Turnover	**0.68**

An account receivable turnover rate is a financial metric that measures how efficiently a company manages its receivables by converting them into cash (Easton, et al., 2021). An account receivable turnover rate of 4.32 of FRONTKEN means that the company collects its credit sales on average 4.32 times per year, or every 84.5 days.

Besides, an inventory turnover rate is a financial metric that measures how well a company manages its inventory by measuring the number of times inventory is sold and replaced during a specific period (Easton, et al., 2021). An inventory turnover rate of 13.09 of FRONTKEN means that the company sells its inventory on average 13.09 times per year, or every 27.9 days.

Additionally, an asset turnover is a financial metric that measure a company's ability to generate sales revenue from its assets (Easton, et al., 2021). An asset turnover of 0.68 of FRONTKEN means that the company generates RM0.68 of sales for every ringgit of assets.

5.4 Capital Structure Ratios

Debt to Total Assets Ratio = $\frac{\text{Total Liabilities}}{\text{Total Assets}}$

Debt-to-Equity Ratio = $\frac{\text{Total Liabilities}}{\text{Total Shareholder's Equity}}$

Financial Performance Indicators	FY2022
Total Liabilities (÷) Total Shareholder's Equity	217,897,892 587,922,649
Debt-to-equity Ratio	**0.37**
Total Liabilities (÷) Total Assets	217,897,892 805,820,541
Debt-to-assets Ratio	**0.27**

The debt-to-equity (DE) ratio and debt-to-asset (DA) ratio are critical financial indicators that shed light on a company's capital structure and financial leverage. These ratios help assess the extent to which a company relies on debt to finance its operations and the associated risk (Easton, et al., 2021).

A DE ratio reflects the proportion of a company's financing that comes from debt compared to shareholder's equity (Easton, et al., 2021). A DE ratio of 0.37 of FRONTKEN indicates that for every ringgit of equity, the company has RM0.37 in debt. This implies a healthy capital structure with a lower reliance on debt financing.

DA ratio, on the other hand, measures the proportion of a company's assets that are financed by debt (Easton, et al., 2021). A DA ratio of 0.27 of FRONTKEN signifies that 27% of the company's assets are funded by debt, which is considered low and less dependence on external borrowing.

In summary, both the DE ratio of 0.37 and the DA ratio of 0.27 of FRONTKEN suggest that the company maintains a conservative capital structure with a low reliance on debt that can be seen as a positive sign, as it indicates a lower level of financial risk and greater stability in the company's financial position.

6. Investment Recommendations

As of 21st January 2024, the current share price of FRONTKEN is **RM3.53 per share**. In order to ascertain the viability of FRONTKEN as an investment opportunity, an assessment of its valuation is a must. For this purpose, we will employ the P/E ratio valuation method, which is a widely recognized metric within the realm of relative valuation. Relative valuation is one of the business valuation methodologies that aids investors in ascertaining a company's worth in relation to analogous entities. This approach involves comparing the company's prevailing stock price in the market to that of comparable firms or an industry benchmark. This method is relatively quick and useful when there is a cohort of analogous entities is present (FreshBooks, 2023; Kennon, 2021).

Thus, in the context of FRONTKEN, one of the semiconductor firms situated in Malaysia, we compare its P/E ratio with the semiconductor industry, as the table below shows:

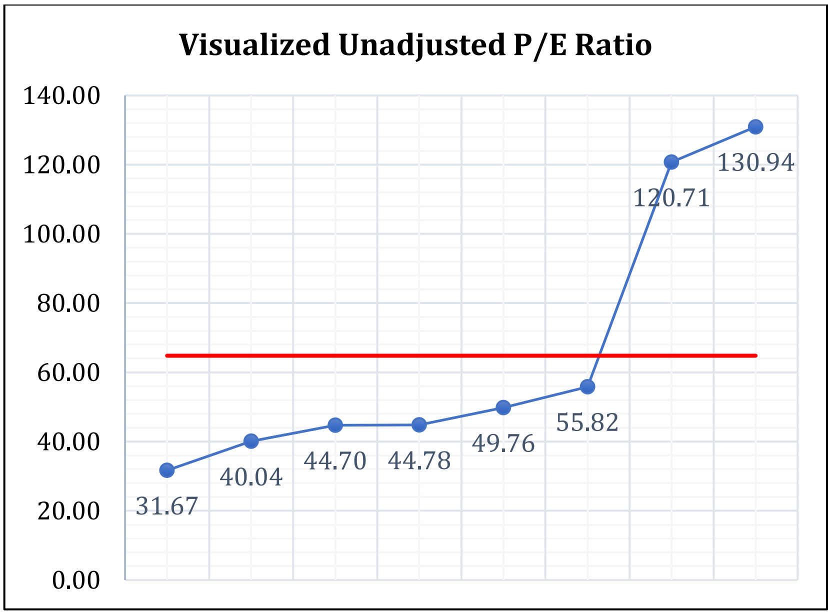
Local Semiconductor Companies

Name	Market Cap	Earnings	Shares Outstanding	EPS (sen)	Current Price	P/E Ratio (x)
INARI	RM 12.103b	RM 302,261,000	3,747,167,000	8.07	RM 3.23	40.04
VITROX	RM 6.816b	RM 152,501,000	945,420,000	16.13	RM 7.21	44.70
FRONTKN	RM 5.578b	RM 112,087,000	1,580,152,000	7.09	RM 3.53	49.76
UNISEM	RM 5.323b	RM 118,879,000	1,613,079,000	7.37	RM 3.30	44.78
D&O	RM 4.371b	RM 33,384,000	1,238,291,000	2.70	RM 3.53	130.94
UWC	RM 3.636b	RM 30,117,000	1,101,667,000	2.73	RM 3.30	120.71
SFPTECH	RM 2.196b	RM 39,339,000	2,400,000,000	1.64	RM 0.915	55.82
GTRONIC	RM 1.012b	RM 31,957,000	674,789,000	4.74	RM 1.50	31.67

From the above table, it can be seen that the P/E ratio of both D&O and UWC stand out as significant outliers that if concluding them to calculate for the industry average, only two of them are above the average of 64.80x, as table below shows.

Name	Market Cap (RM)	P/E Ratio (x)	IF Below
INARI	RM 12.103b	40.04	TRUE
VITROX	RM 6.816b	44.70	TRUE
FRONTKN	RM 5.578b	49.76	TRUE
UNISEM	RM 5.323b	44.78	TRUE
D&O	RM 4.371b	130.94	FALSE
UWC	RM 3.636b	120.71	FALSE
SFPTECH	RM 2.196b	55.82	TRUE
GTRONIC	RM 1.012b	31.67	TRUE
	AVERAGE =	**64.80**	

When visualizing the data on a graph, a noticeable gap exists between these two outliers and the rest of the values.

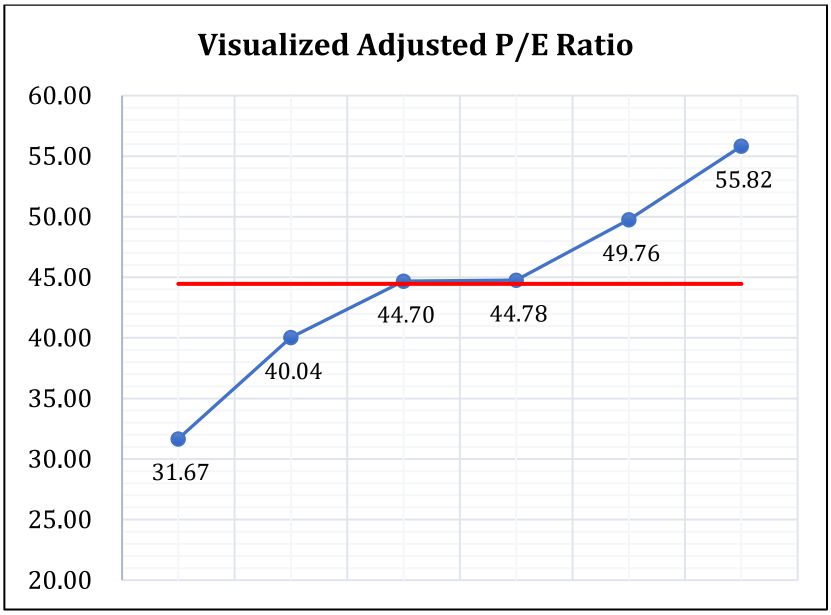


Remark: The red line in the graph indicates the industry average of 64.80x

Ergo, the removal of outliers becomes imperative to enhance the accuracy of the valuation model [1] (Sequitin, 2023). After excluding D&O and UWC from the dataset, the recalculated average P/E ratio stands at 44.46x.

Name	Market Cap (RM)	P/E Ratio (x)	IF Below	IF Within [2]
GTRONIC	RM 1.012b	31.67	TRUE	FALSE
INARI	RM 12.103b	40.04	TRUE	TRUE
VITROX	RM 6.816b	44.70	FALSE	TRUE
UNISEM	RM 5.323b	44.78	FALSE	TRUE
FRONTKN	RM 5.578b	49.76	FALSE	FALSE
SFPTECH	RM 2.196b	55.82	FALSE	FALSE
	AVERAGE =	**44.46**		

While four out of six values remain below the industry average, it is crucial to note that three of them fall within the 10% range, both above and below the industry average. Therefore, this adjusted industry average provides a more accurate benchmark for relative valuation.



Remark: The red line in the graph indicates the industry average of 44.46x

Upon comparing the industry average P/E ratio of 44.46x with FRONKEN's ratio of 49.76x, a 12% upside relative to the industry average is observed. This suggests that FRONKEN may be slightly overvalued in comparison. However, when considering FRONKEN's compound annual growth rate (CAGR) of 11% over the past decade, it becomes apparent that the current share price might have already discounted in the next fiscal year's earnings, which is the FY2023. This is attributed by FRONTKEN's consistent 10-year growth, rendering its future financial performance highly predictable, and the market holds positive outlook toward FRONTKEN's financial performance in FY2023.

Therefore, as the data extraction date is 21st January 2024 and the share price of FRONKEN might have already discounted for the FY2023 earnings, it can be concluded that its current price is at a very reasonable position in term of P/E relative valuation. Ultimately, based on the current share price, **FRONTKEN is a good investment choice** providing that it can continue its sustained growth or even become better in the future.

7. APPENDIX

[1]: Identifying outliers through Z-score statistical test. Z Score is a statistical measure that indicates how many standard deviations an observation is from the mean of the dataset. Since both 120.71 and 130.94 have Z Scores of 1.556 and 1.841 respectively, which are significantly higher than the other values listed, so they can be considered as outliers (Bhandari, 2024).

Z-Score Statistical Test

P/E Ratio (x)	Z Score
31.67	-0.922
40.04	-0.689
44.70	-0.560
44.78	-0.557
49.76	-0.419
55.82	-0.250
120.71	1.556
130.94	1.841

Mean = 64.80
Standard Deviation = 35.92

[2]: The formula of **IF Within** in Microsoft Excel. This formula is used to identify whether the value is within 10% both upside or downside from the average value.

Name	Market Cap (RM)	P/E Ratio (x)	IF Below	IF Within
GTRONIC	1.012b	=IF(ABS(Q15-Q21)/Q21<=0.1,"TRUE","FALSE")		
INARI	12.103b	40.04	TRUE	TRUE
VITROX	6.816b	44.70	FALSE	TRUE
UNISEM	5.323b	44.78	FALSE	TRUE
FRONTKN	5.578b	49.76	FALSE	FALSE
SFPTECH	2.196b	55.82	FALSE	FALSE
	AVERAGE =	44.46		

[3]: Statement of Comprehensive Income of FRONTKEN of the FY2022.

STATEMENTS OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

FOR THE FINANCIAL YEAR ENDED 31 DECEMBER 2022

	Note	The Group 2022 RM	The Group 2021 RM	The Company 2022 RM	The Company 2021 RM
Revenue	5	517,182,574	450,222,252	26,940,268	90,533,364
Cost of sales		(267,592,120)	(236,382,037)	-	-
Gross profit		249,590,454	213,840,215	26,940,268	90,533,364
Other income		8,146,902	5,846,641	807,837	721,259
Administrative expenses		(69,159,753)	(57,588,747)	(10,174,046)	(6,930,404)
Other operating expenses		(12,196,603)	(11,757,301)	(84,522)	(45,593)
Finance costs	6	(830,861)	(614,836)	-	-
Net impairment losses on financial assets	7	(759,650)	140,503	-	-
Profit before tax	8	174,790,489	149,866,475	17,489,537	84,278,626
Income tax expense	9	(39,622,948)	(35,644,568)	(2,253,154)	(1,408,470)
Profit after tax		135,167,541	114,221,907	15,236,383	82,870,156
Other comprehensive income, net of tax					
Items that Will Not be Reclassified Subsequently to Profit or Loss					
Actuarial gain/(loss)		1,557,645	(35,407)	-	-
Items that Will be Reclassified Subsequently to Profit or Loss					
Foreign currency translation differences		(16,008,540)	15,862,298	-	-
Total comprehensive income for the financial year		120,716,646	130,048,798	15,236,383	82,870,156
Profit after tax attributable to:					
Owners of the Company		123,291,868	104,503,927	15,236,383	82,870,156
Non-controlling interests		11,875,673	9,717,980	-	-
		135,167,541	114,221,907	15,236,383	82,870,156
Total comprehensive income attributable to:					
Owners of the Company		110,082,519	119,059,328	15,236,383	82,870,156
Non-controlling interests		10,634,127	10,989,470	-	-
		120,716,646	130,048,798	15,236,383	82,870,156
Earnings per ordinary share attributable to owners of the Company					
Basic (sen)	10	7.84	6.65		
Diluted (sen)	10	7.84	6.65		

[4]: Statement of Financial Position of FRONTKEN of the FY2022.

STATEMENTS OF FINANCIAL POSITION
AS AT 31 DECEMBER 2022

	Note	The Group 2022 RM	The Group 2021 RM	The Company 2022 RM	The Company 2021 RM
ASSETS					
Non-Current Assets					
Property, plant and equipment	11	229,265,006	197,794,915	12,742	5,307
Right-of-use assets	12	35,561,443	24,471,107	-	-
Investments in subsidiaries	13	-	-	153,530,654	148,572,993
Other receivables	14	160,447	-	-	-
Goodwill on consolidation	15	33,760,856	33,760,856	-	-
Deferred tax assets	16	1,447,198	1,909,744	-	-
Total Non-Current Assets		300,194,950	257,936,622	153,543,396	148,578,300
Current Assets					
Inventories	17	21,282,240	19,608,164	-	-
Trade receivables	14	124,086,038	115,599,901	-	-
Other receivables, deposits and prepaid expenses	14	17,752,015	10,123,616	63,689	69,142
Amount owing by subsidiaries	18	-	-	1,350,000	4,175,000
Short-term investments	19	11,985,670	51,737,748	7,501,407	48,643,961
Fixed deposits with licensed banks	20	13,161,038	14,008,250	-	-
Cash and bank balances		317,358,590	249,621,250	2,775,298	9,837,068
Total Current Assets		505,625,591	460,698,929	11,690,394	62,725,171
Total Assets		805,820,541	718,635,551	165,233,790	211,303,471

	Note	The Group 2022 RM	The Group 2021 RM	The Company 2022 RM	The Company 2021 RM
EQUITY AND LIABILITIES					
Equity					
Share capital	21	118,441,045	118,441,045	118,441,045	118,441,045
Treasury shares	22	(4,747,849)	(4,747,849)	(4,747,849)	(4,747,849)
Reserves	23	434,775,435	387,162,157	47,176,227	92,165,151
Equity attributable to owners of the company		548,468,631	500,855,353	160,869,423	205,858,347
Non-controlling interests	13	39,454,018	34,225,280	-	-
Total Equity		587,922,649	535,080,633	160,869,423	205,858,347
Non-Current Liabilities					
Lease liabilities	24	30,030,466	18,748,889	-	-
Other payables	25	826,453	2,930,914	-	-
Deferred tax liabilities	16	1,141,550	615,155	-	-
Total Non-Current Liabilities		31,998,469	22,294,958	-	-
Current Liabilities					
Trade payables	25	27,660,857	21,463,171	-	-
Other payables and accrued expenses	25	111,668,241	115,272,883	4,349,367	5,445,124
Bank borrowing	26	19,719,600	-	-	-
Lease liabilities	24	2,886,103	2,559,942	-	-
Current tax liabilities		23,964,622	21,963,964	15,000	-
Total Current Liabilities		185,899,423	161,259,960	4,364,367	5,445,124
Total Liabilities		217,897,892	183,554,918	4,364,367	5,445,124
Total Equity and Liabilities		805,820,541	718,635,551	165,233,790	211,303,471

[5]: Statement of Cash Flow of FRONTKEN of the FY2022.

STATEMENTS OF CASH FLOWS

FOR THE FINANCIAL YEAR ENDED 31 DECEMBER 2022

	The Group		The Company	
	2022 RM	2021 RM	2022 RM	2021 RM
CASH FLOWS FROM/(FOR) OPERATING ACTIVITIES				
Profit before tax	174,790,489	149,866,475	17,489,537	84,278,626
Adjustments for:				
Depreciation of property, plant and equipment	14,332,080	14,573,386	3,344	1,382
Depreciation of right-of-use assets	3,259,024	3,101,127	-	-
Interest expense	830,861	614,836	-	-
Unrealised (gain)/loss on foreign exchange	(1,602,546)	92,091	(19,700)	45,634
Allowance for impairment losses on trade receivables	759,650	64,043	-	-
Property, plant and equipment written off	45,054	2,714	-	-
Share grant plan	4,183,700	-	3,965,420	-
Interest income	(1,247,179)	(840,722)	(207,699)	(269,458)
Fair value gain on short-term investments	(76,694)	-	-	-
Gain on disposal of property, plant and equipment	(34,057)	(25,770)	-	-
Writeback of allowance for impairment losses on trade receivables	-	(204,546)	-	-
Dividend income from subsidiaries	-	-	(26,890,468)	(90,483,564)
Operating Profit/(Loss) Before Working Capital Changes	195,240,382	167,243,634	(5,659,566)	(6,427,380)
(Increase)/Decrease in:				
Inventories	(2,370,782)	1,086,695	-	-
Trade receivables	(11,716,329)	(8,966,769)	-	-
Other receivables and prepaid expenses	(8,099,538)	(2,536,644)	5,453	(43,674)
(Decrease)/Increase in:				
Trade payables	6,755,491	1,958,608	-	-
Other payables and accrued expenses	(888,183)	11,051,943	(1,095,757)	1,004,381
Cash Generated From/(For) Operations	178,921,041	169,837,467	(6,749,870)	(5,466,673)
Taxes paid	(36,057,594)	(31,062,257)	(295,595)	-
Net Cash From/(For) Operating Activities	142,863,447	138,775,210	(7,045,465)	(5,466,673)

[5]: Statement of Cash Flow of FRONTKEN of the FY2022. (Con't)

STATEMENTS OF CASH FLOWS

FOR THE FINANCIAL YEAR ENDED 31 DECEMBER 2022 (CONT'D)

	The Group		The Company	
	2022 RM	2021 RM	2022 RM	2021 RM
CASH FLOWS (FOR)/FROM INVESTING ACTIVITIES				
Purchase of property, plant and equipment	(52,660,343)	(82,830,229)	(10,779)	(4,388)
Dividend received from subsidiaries	-	-	27,772,909	113,688,891
Additional investment in an existing subsidiary (Note 13)	(4,739,381)	(4,240,434)	(4,739,381)	(4,240,434)
Short-term investments	(2,914,353)	-	-	-
Proceeds from disposal of property, plant and equipment	34,883	25,771	-	-
Net withdrawal/(placement) of fixed deposits with licensed banks	347,076	(8,332)	-	-
Interest received	1,247,179	840,722	207,699	269,458
Net Cash (For)/From Investing Activities	(58,684,939)	(86,212,502)	23,230,448	109,713,527
CASH FLOWS FOR FINANCING ACTIVITIES				
Drawdown of loan	19,719,600	-	-	-
Interest paid	(830,861)	(614,836)	-	-
Dividend paid by the Company (Note 27)	(64,409,007)	(52,907,389)	(64,409,007)	(52,907,389)
Dividend paid by a subsidiary to non-controlling interests	(2,084,943)	(1,421,505)	-	-
Payment of lease liabilities (Note 30(a))	(3,023,873)	(3,191,224)	-	-
Proceeds from disposal of treasury shares	-	1,655,415	-	1,655,415
Purchase of treasury shares	-	(4,120,170)	-	(4,120,170)
Share issuance expenses (Note 21)	-	(484,307)	-	(484,307)
Net Cash For Financing Activities	(50,629,084)	(61,084,016)	(64,409,007)	(55,856,451)
NET INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS	33,549,424	(8,521,308)	(48,224,024)	48,390,403
Effect of exchange rate changes	(8,467,395)	11,079,510	19,700	(45,633)
CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR	302,358,998	299,800,796	58,481,029	10,136,259
CASH AND CASH EQUIVALENTS AT END OF YEAR (Note 30(b))	327,441,027	302,358,998	10,276,705	58,481,029

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