

ENVIRONMENTAL, SOCIAL, AND GOVERNANCE (ESG) DISCLOSURE AND FIRMS FINANCIAL INDICATORS: ANALYSIS OF SEMICONDUCTOR INDUSTRY

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ABSTRACT

Environmental, social, and governance (ESG) disclosure is a set of disclosure that firms make with regard to environmental considerations including corporate policies to preserve the environment, social consideration, and governance. These three key areas are the important pillars of sustainability and ethical consideration. Despite relying on financial reporting, integrating ESG disclosure in decision-making has become a trend among investors. This paper examines the impact of ESG disclosure and firms' financial indicators among Malaysian Semiconductor firms. This study analyses five semiconductor firms listed in Bursa Malaysia. Data on ESG disclosure and data on the financial indicators were both gathered from the financial statement. This study finds that firms that disclose ESG in their financial report have good financial indicators as an investment in ESG is able to create competitive advantages in firms. Furthermore, the formation of the sustainable committee in the firms is also able to help the firms to structure their ESG investment strategies. Our study provides a benchmark for practitioners on the best practices of ESG disclosure as the sample of the study is among the firms that received FTSE4Good Bursa Malaysia (F4GBM) Index recognition. Thus, the directors may need to improve their ESG disclosure as this report becomes an integral element of decision-making for future investment opportunities among investors. This study is different as this study compared current ESG disclosure to next year's financial performance. This method provides meaningful information as current disclosure will have a significant effect on future performance.

Keywords: *Environmental, Social and Governance (ESG), Corporate Governance, Competitive Advantages*

1.0 INTRODUCTION

In 1987, the United Nations Brundtland Commission defined sustainability as "meeting the needs of the present without compromising the ability of future generations to meet their own needs". According to the Cambridge Dictionary, environmental, social, and governance (ESG) is a way of judging a company by things other than its financial performance such as its policies relating to the environment, the well-being of its employees (social), and compliance with governance.

ESG disclosure becomes part of additional evaluation criteria among the investor in evaluating future investment opportunities despite solely relying on financial performance. Empirical evidence found that firms with ESG disclosure are being rated as good firms by investors

(Albitar et al, 2020; Farooq, 2015). Firms that invest in ESG care for society and the environment may have better ascendancy, sustainable growth, and less earnings volatility (Kumar, 2020).

Therefore, firms with good ESG disclosure have a competitive advantage (Hawanini et al., 2003; Schramade and Schoenmaker, 2018), lesser cost of debt, and better governance (Sciarelli et al., 2021). Besides, ESG disclosure is able to increase a firm's reputation, increase investor confidence, and reduce regulatory restrictions on its investment portfolios (Porter et al., 2019). These benefits are gained through the integration of ESG into the firm's business model.

Due to the immersed benefit of the ESG disclosure, Malaysia is taking a further step by requiring firms to disclose policies and implementation of ESG in its annual report (Malaysian Code of Corporate Governance, 2021). Moreover, ESG and Corporate Social Responsibility (CSR) are mandatory for all public listed firms (PLC) in Malaysia. The reporting and disclosure in the annual report are based on the CSR Reporting Framework (2016) and Sustainability Framework (2015). The government's involvement can be seen through its action in integrating CSR into Tenth Malaysia Plan and Companies Act 2016, from a legal perspective. FTSE4Good Bursa Malaysia Index measures the performance of PLCs that demonstrate strong environmental, social, and governance (ESG) practices.

Furthermore, Malaysia introduces Sustainability Development Goals (SDGs) that consist of 17 SDGs including affordable and clean energy, decent work and economic growth, reducing inequities, sustainable cities and communities, climate action, life below water, and life on land. The firms respond to the government plan by including these SDGs in their operation. Besides that, these steps have improved transparency and gained the trust of investors. Based on statistics among the top 100 firms, 97 percent of firms are reporting their corporate sustainability performance compared with the 72 percent global average. Malaysia also has been ranked as the top pioneer in CSR reporting globally (Peng, 2018). As result, the introduction of FTSE4Good Bursa Malaysia Index in 2014 and the adoption of the SDGs resulted in an ostensive increase in ESG disclosure among firms.

Based on content analysis of top Malaysian listed semiconductor firms, we found that firms that invest in the ESG will have good ESG disclosure and have better financial performance proxied by financial position, profit, and cash flows. Our findings reveal that the good ESG disclosure in the current year is able to boost next year's financial performance. Our findings also align with Malaysian evidence by Jasni et al. (2020) found that the Malaysian telecommunication industry gains a competitive advantage over its competitors through ESG disclosure. This paper provides two aims to analyze the ESG disclosure of the top five selected Malaysian listed semiconductor firms and their business sustainability. It looks into the impact of ESG disclosure and how it enables the creation of competitive advantage and improves financial performance.

The paper is organised as follows. The next section reviews the literature with regard to ESG and competitive advantage. The third section describes the research methodology which is based on the analysis of the firm's report. The main findings obtained are explored in the fourth section. Finally, conclusions and recommendations are elaborated in the final section.

2.0 LITERATURE REVIEW

Stakeholder Value Creation Chain Model

The 'Stakeholder Value Creation Chain model that was developed by Pay Governance demonstrates the relation of ESG strategy, the stakeholder model, and firm value. The model captures the strengthening carryover impact of stakeholders' commitments to the financial victory of the company. Employee engagement increases the business performance of a

company by increasing productivity and customer satisfaction. Emphasising mutual relationships with stakeholders with the constructed ESG strategies, a company would be able to retain its employees, create a public image through community partnership, and strengthen the supply chain through interdependency and trust. Loyal customers can be obtained which will increase competitive advantage through 'word of mouth marketing.

ESG disclosure strategy focuses on performance and can be attractive to shareholders in the long term. Maintaining integrity in the disclosure report will be more attractive to ESG investors and mitigates governance risks. Indirectly, it creates a brand image of the company and sustainability in business. Employees too prefer to work in environmentally friendly companies. Well-structured ESG strategy increases stakeholders' loyalty and trust. This creates a positive externality impact on customers and shareholders. Well-established ESG strategy optimises stakeholders' value creation and enhances shareholders' value. A company would be able to achieve desired results by aligning the stakeholder's value creation chain.

ESG disclosures allied with the company's competitive advantage as the company provides sustainable solutions to social and environmental issues. The company is also able to redefine their business and products in line with the society's requirements, demand and needs with better environmental protection which creates better quality life (Porter et al., 2019). Alareeni and Hamdan (2020) examined S&P 500-listed companies in the US in the period of 2009 to 2018 and found that performance of the firms improved through ESG disclosure but environmental disclosure reduces firms' performance. In the UK, environmental disclosure has negative correlation with consequent financial performance (Balabanis et al., 1998).

Positive relationship between ESG disclosure and performance is also found in further studies in developed countries. This is due to higher ESG disclosure allied with lower information risk (Aerts, W., Cormier, D., & Magnan, M. (2007). Nemoto, and Liu (2020) suggested that borrowing costs are lower in the countries where ESG disclosures are high per dataset studies from 2007 to 2012 of 23 Organization for Economic Co-operation and Development (OECD). Firms gain competitive advantages through lower yield spread which results in lower risks and financing costs of allied bond issuance of the firm (Amiraslani et al., 2017). This confirmed by Sherwood and Pollard (2018), institutional investor's return with lower risks with integration of ESG.

Government ownership and introduction to corporate governance standards encourages increase in CSR disclosures and company's performance (Arayssi & Jizi, 2019). Investor's confidence will be boosted with recognition by government and financial institutions, concurrently expanding the company's competitive advantages in the form of lower average capital cost. ESG disclosure inspires companies to obtain competitive advantage through innovation by generating superior performance and maximising shareholder's wealth (Ruan, 2021). In Malaysia, ESG disclosure gave effect both directly and indirectly with support from government in the form of standard setting, facilities, and resources to the firm's competitive advantage and long-term performances (Mohammad & Wasiuzzaman (2021). Atan et al. (2018), through their studies, found positive implications between ESG disclosure and the weighted average cost of capital.

3.0 RESEARCH METHOD

The population of this study consists of 12 semiconductor firms listed in the Main, ACE, and LEAP markets of Bursa Malaysia. The final sample of the study is considered the top five semiconductor firms based on their market capitalisation. Besides that, these firms also received FTSE4Good Bursa Malaysia (F4GBM) Index recognition. ESG disclosure and financial indicators of these companies were analysed using sustainability statements and financial statement reports gathered from Bursa Malaysia and S&P Global Market Intelligence.

The final sample of this study consists of five selected semiconductor companies namely: Malaysian Pacific Industries Berhad, Unisem (M) Bhd, Inari Amertron Berhad, Globetronics Technology Berhad, and Frontken Corporation Berhad.

Table 1: Analysis Data Selection Methodology

	ESG Disclosure (Annual Report Year)	Financial Statement (The Wall Street Journal Year)
MPI	2020	2021
Inary	2020	2021
Unisem	2019	2020
Gtronic	2019	2020
Frontken	2019	2020

4.0 FINDINGS

4.1 Company Overview and ESG Disclosure

4.1.1 Malaysian Pacific Industry (MPI)

MPI started in 1972, and it is one of the largest conglomerates in Asia, under The Hong Leong Group. MPI subsidiaries are Carsem & Dynacraft. The majority share (97%) of MPI is held by Carsem, which is a leading provider of turnkey services including packaging and testing. Carsem’s covers a wide product offering range and produces over a 100 million units per week and supplies to various market sectors such as telecommunication, information technology, consumer, automotive and industrial.



Figure 3: Aspects crucial to MPI's business (MPI Annual Report, 2020)

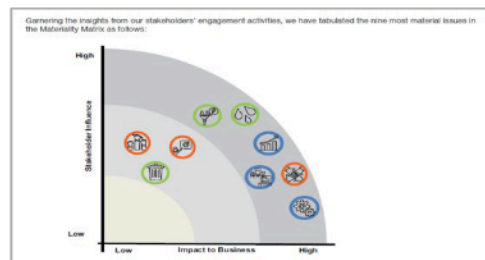


Figure 4: Tabulation of nine most material issues (MPI Annual Report, 2020)

MPI's is committed towards United Nations Sustainable Development Goal 13 on Climate Action. As an ISO 14001:2015 certified company it is compliant with the environmental Safety and Health requirements. The company focuses on Economic, Environment, Social and Governance to sustain the industry and obtain market competitive advantages. The company is actively involved in energy saving, water management, and waste management activities and regularly monitors and assess through key metrics including energy consumption, greenhouse gas emissions, water, and waste management. With the efforts put in place, MPI successfully achieved 10% reduction in energy consumption, 7% reduction in net water savings index, zero landfill waste, and 68% achievement for versatile and cross-training. The company also registered zero fatality injuries.

Human rights, corporate social responsibility, training, and education are the main focus of MPI as they perceive all development is dependent upon the exhibition of human

capital. MPI introduces the Graduate Development Program (GDP) which is to attract graduates and develop and equip them with relevant industry experience. The graduates will be equipped with multiple process skill knowledge and assigned each candidate to a well-experienced mentor to coach along the program. This program in a way to retain the graduates with Carsem, the candidates mainly will join as an assembly, test and quality assurance engineer. On the job training will be provided and they also will undergo a cross-training program to enhance competencies as an engineer and to obtain the necessary knowledge of a technician.

MPI also focuses on a talent development program from the core whereby the company collaborates with educational institutions by enhancing the curriculum in terms of meeting industry requirements. The company’s human resource development strategy, especially on the technical knowledge enhancement, creates the opportunity for the company to train and develop candidates as required by the process and maintain job offers to the local residents as they are prepared to meet the company’s work requirements. Besides that, contribution to society increases the ability of the firm to accomplish more objectives in various aspects. The supports three key areas which are board leadership and effectiveness, effective audit and risk management, integrity in corporate reporting, and meaningful relationships with stakeholders.

4.1.2 Inari Amertron Berhad (Inari)

Inari Amertron Berhad, involved in the OSAT & electronics manufacturing services (EMS) industries. This company has 14 owned subsidiaries; Inari Technology Sdn Bhd, Amertron Global Group are the key subsidiaries. Inari Technology, semiconductor company is a leading handful of OSAT providers in the ASEAN region. Inari’s key business is to provide DC and RF wafer testing, chip sip assembly and other related services, certified ISO9001 Quality Management System and ISO14001 Environmental Management System (QMS) certifications.

Inari believes that corporate governance as well as economic, environmental and social responsibility are the core of business sustainability. The company committed to implant sustainability in their organizational culture and business strategy to reduce risk and achieve competitive advantages. The company being transparent to its stakeholders, shared a fourth sustainability statement providing reliable ESG and corporate governance information. The company also remains committed in executing business strategy in line with the Economic, Environmental and Social (EES) target and implementing sustainability business practices towards long term and responsible growth besides maintaining financial performance.



Figure 5: Four Sustainability Pillars (Inari’s Annual Report, 2020)

Bursa Malaysia Securities Berhad added Inari into the FTSE4Good Bursa Malaysia (F4GBM) Index as recognition for its compliance to globally recognised standards and strong demonstration of ESG practices. This represents the outstanding achievement of Inari towards balancing profitability and sustainability. The board established Sustainability and Risk Management Committee (SRMC), which holds primary responsibility to assist the board in identifying corporate risks and overseeing business sustainability.

Besides this the Sustainability and Integrity Working Group (SIWG), comprises the company’s management and representatives from various departments led by the Chief Executive Officer (CEO), responsible for materiality assessment. This committee undertakes the role in evaluating, monitoring, executing and implementing the sustainability initiatives in aligning with the Group’s vision, mission and corporate beliefs. The company identifies its sustainability mediums through the material assessment per below materiality assessment matrix. As the sustainability mediums are knowingly interconnected, change in one often can have an impact on others. Four (4) material sustainability mediums have been identified by Inari which are related to their business with the utmost impact on stakeholders’ decisions, which are customer satisfaction, innovation, energy usage and corporate governance and ethics. Besides that, the other twelve items are continuously monitored and reported.

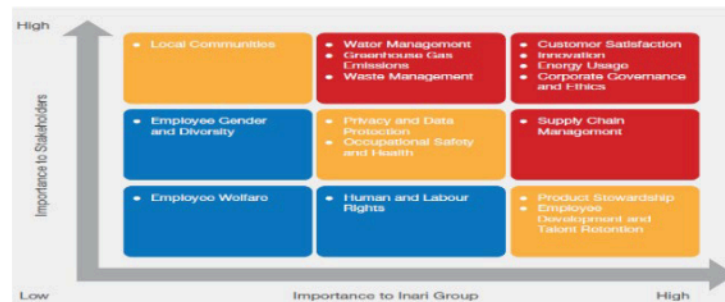


Figure 6: Materiality Assessment (Inari’s Annual Report, 2020)

Activities and practices established by this company toward Inari promises its customers to deliver quality services and products through good business conduct and ethics and good returns to shareholders. Customer satisfaction is the utmost goal of this company, hence supply chain management, privacy and data protection and innovation are the key sustainability strategy. Inari focused on energy saving, water management, waste management, product stewardship and air quality management. As part of energy saving activity, Inari works on reengineering of production equipment and support systems. The company uses LED lighting and converts air cooled air conditioners to centralised chilled water air conditioners. As part of a further energy saving program, the company will invest in solar panels.

3R (Recover, Reuse, Recycle) program for waste saving introduced by Inari and through investment in industrial effluent treatment system, increase efficiency in extracting pollutants, cleaner waste discharged, collaboration with hi-tech waste recycler, reuse of packaging materials and placing recycle bin plantwide the company achieved the objective which enables the company to minimize operational cost.

The company’s initiative and contributions are recognised locally and internationally by awarding several certifications. Besides that, as part of social sustainability, Inari focuses on gender diversification, employee development, human and labour rights, occupational safety and health and employee welfare. The company is with 70% of local employees proving its priority given to local communities. ‘Giving Back’ policy is practiced by Inari which can be seen through its social activities. As part of the practice, Inari organises blood donation campaigns, adapting schools via Penang STEM 4.0 and other remarkable community activities. Transparency of Inari in its ESG disclosure boosted financial performance in the semiconductor market.

4.1.3 Unisem Malaysia Berhad

Unisem Malaysia Berhad was established in 1989, currently known as one of the successful electronic companies. Unisem is a packaging and test house, offers turnkey

services to its customers which includes design, assembly, test, failure analysis and electrical and thermal characterization. Unisem has its factories in Ipoh, Malaysia and Chengdu, China with worldwide employees about 7000, approximately with certification from ISO9001 Quality Management System and ISO14001 Environmental Management System (QMS) certifications. Unisem is playing its part in supporting the United Nations General Assembly (“UN”) Sustainable Development Goals (“SDGs”). The company established strategies as follows in achieving long-term value creation and business sustainability. As part of the actively growing semiconductor company, Unisem is collaborating ESG requirements to evolve and obtain business relationships.



Figure 7: Value creation Process and Business Model (Unisem Annual Report, 2019)

Unisem believes that corporate governance as well as economic, environmental and social responsibility are the core of business sustainability. The company committed to implant sustainability in their organizational culture and business strategy to reduce risk, achieve competitive advantages, and increase financial performance. The company is transparent to its stakeholders, sharing annual sustainability statements providing reliable ESG and corporate governance information. The company also remains committed in executing business strategy in line with ESG target and implementing sustainability business practices towards long term and responsible growth besides maintaining financial performance.

Bursa Malaysia Securities Berhad added Unisem into the FTSE4Good Bursa Malaysia (F4GBM) Index as recognition for its compliance to globally recognised standards and strong demonstration of ESG practices. This represents outstanding achievement of the company towards balancing profitability and sustainability. For sustainability governance, Unisem’s board established a strategic sustainability direction led by the board of directors. The board will be assisted by the Sustainability Committee (SC) chaired by Senior Independent Director of the Group, responsible to advise the board on recommending and advising sustainability business strategies and related policies for adoption. Sustainability Working Committee (SWC) with the leadership of Group Chief Operating Officer (GCOO) responsible to manage individual sustainability activities. Each site reviews stakeholder engagement and prioritization as well as materiality assessment on an annual basis. The committee also undertakes the role in evaluating, monitoring, executing and implementing the sustainability initiatives in aligning with the Group’s vision, mission and corporate beliefs.



Figure 8: Unisem Materiality Matrix (Unisem Annual Report, 2019)

As to address environmental and social concerns raised by SWC, GRI Standards and the ESG indicators of FTSE4Good Bursa Malaysia, Unisem perform materiality assessment to consider sustainability risks and opportunity for the company to be competitive in the industry. Materiality assessment reflects the company's economic, environmental and social impacts and essentially influences the assessments and pronouncements of the stakeholders. Activities and practices established by this company towards promises to its customers to deliver quality services and products through good business conduct and ethics and good returns to shareholders. Customer satisfaction is the utmost goal of this company, hence supply chain management, privacy and data protection and innovation are the key sustainability strategy.

Unisem focused on energy saving, effluents management, waste reduction management, product stewardship and air quality management. Reuse of purified water – 'Ultra Purified Water' with proper recycling system and reuse water collection system helped the company to meet its water consumption goal. Unisem allocates its fund for employee benefit programs including employee welfare benefits, including medical insurance, maternity and paternity leave, housing loan subsidy and parking facility for special needs. As to encourage healthy living, the company motivates its employees through sponsoring sports and recreation activities. The company is able to reduce turnover of the employee which increases productivity efficiencies.

The company's initiative and contributions are recognised locally and internationally by awarding several certifications. Besides that, as part of social sustainability, Unisem focuses on gender diversification, employee development, human and labour rights, freedom of associations, occupational safety and health and employee welfare. 'We Care We Can' policy is practiced by Unisem which proves its priority towards employee benefits and also can be seen through its social activities. As part of the practice, Unisem organises blood donation campaigns, donation for welfare homes and other remarkable community activities. Transparency of Unisem in its ESG disclosure is able to increase the firm's financial indicators.

4.1.4 Frontken Corporation Berhad

Frontken Corporation Berhad, a leading service providing company especially in advanced precision cleaning and surface treatment for semiconductor companies was established in 1996. Fronken is a Bursa Malaysia Securities Berhad's main market listed company with 1130 employees continuously outdoes customer hopes in terms of product and services that make the parts last longer, better performance and recyclable. The company arranged additional capitals to fully support and accomplish sustainability initiatives. Frontken believes the initiatives they aimed at would be able to obtain competitive advantages in terms of increasing enterprise value, conserving integrity, business growth and reputation achievable through ESG disclosure.

The company committed to implant sustainability in their organizational culture and business strategy to reduce risk and achieve competitive advantages. The company being transparent to its stakeholders, shared a fourth sustainability statement providing reliable ESG and corporate governance information. Sustainability Development Committee formed with the leadership of its Chief Executive Officer (COO) which is responsible to ensure company's long term value creation and sustainability by referring to ESG factors as guiding principles. Towards achieving market competitiveness, the company structured sustainability development master plan (SMP) referring to six areas towards generating typical competitive capabilities in business and to achieve sustainable development.

To assess shifts in stakeholders' priority, Frontken constantly reviews risks and opportunity references to market requirement and demand and identifies sustainability dimensions through materiality analysis and assessment. As to address environmental and social concerns raised by GRI Standards, Responsible Business Alliances, UN Global compact and the ESG indicators of FTSE4Good Bursa Malaysia, Frontken uses materiality assessment to consider sustainability risks and opportunity for the company to be competitive in the industry. Materiality assessment reflects the company's economic, environmental and social impacts and essentially influences the assessments and pronouncements of the stakeholders.

Activities and practices established by this company towards promises to its customers to deliver quality services and products through good business conduct and ethics and good returns to shareholders. Customer satisfaction is the utmost goal of this company, hence supply chain management, customer data protection and innovation are the key sustainability strategies. Frontken focused on energy saving, water management, waste reduction management, and air quality management. Effort in reducing waste through waste recycling projects enables the company to save 5.8% water consumption compared to the earlier year.

The company's initiative and contributions recognised locally and internationally by awarding several certifications. Besides that, as part of social sustainability, Frontken focuses on employee development, human and labour rights, freedom of associations, occupational safety and health, employee welfare and new norm arrangement for Covid free workplace. Such efforts help Frontken to retain its employees with a retention rate of 98.94%, highest among all the other companies. As part of the practice, the company organizes blood donation campaigns, PPE donation to hospitals and other remarkable community activities. Therefore, good disclosure and transparency in the Frontken's ESG disclosure able to increase financial performance through competitive advantage gained from the investors.

4.1.5 Globetronics Technology Berhad

Globetronics Technology Berhad (GTB) was started in 1991, a semiconductor company with multiple facilities in Malaysia and globally, known for bringing the latest miniature components for smart devices. This company is devoted to focus on managing Economic, Environment, Social and Governance (EESG) without compromising profitability and to be sustainable in the long term. Key material matters of this company mainly will be customer satisfaction, employee welfare, procurement practices, 3R (reduce, reuse, recycle) rules in business operation and for the environment will be renewable energy sources.

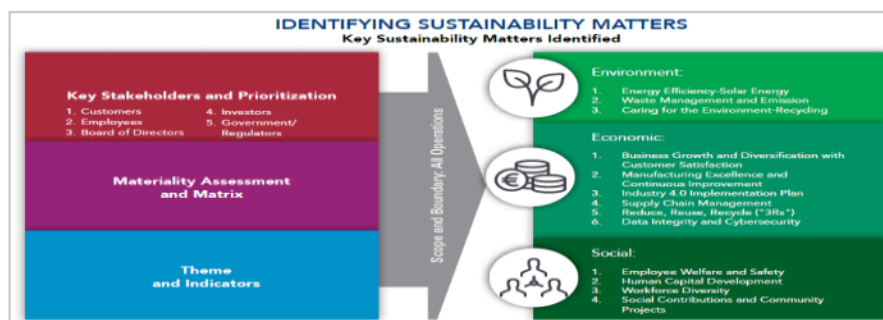


Figure 9: Identifying sustainability Matter to define Operations Scope and Boundary, (GTB Annual Report, 2019)

GTB constantly reviews risks and opportunity references to market requirement and demand and identifies sustainability dimensions through materiality analysis and assessment. As to address environmental and social concerns raised by GRI Standards, Responsible Business Alliances (RBA), UN Global compact and the ESG indicators of FTSE4Good Bursa Malaysia, GTB uses materiality assessment to consider sustainability risks and opportunity for

the company to be competitive in the industry. Materiality assessment reflects the company’s economic, environmental and social impacts and essentially influences the assessments and pronouncements of the stakeholders.

Environment, Social and Governance committee formed with the leadership of its Chief Executive Officer (COO) which is responsible to ensure company’s long term value creation and sustainability by referring to ESG factors as guiding principles. Towards achieving market competitiveness, the company structured sustainability development strategies towards generating typical competitive capabilities in business and to achieve sustainable development.

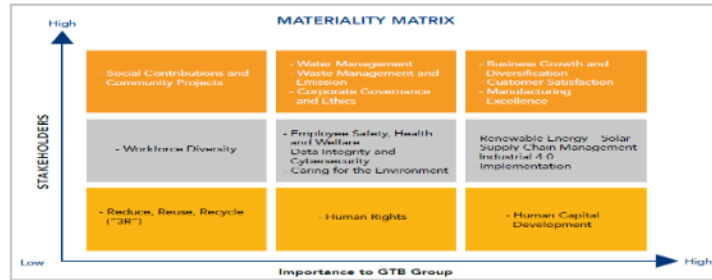


Figure 10: Materiality Matrix (GTB Annual Report, 2019)

Customer satisfaction is the utmost goal of this company, hence supply chain management, customer data protection and innovation are the key sustainability strategies. Activities and practices established by this company towards promises to its customers to deliver quality services and products through good business conduct and ethics and good returns to shareholders. GTB focused on energy saving, water management, waste reduction and emission management, and air quality management. Solar panel project reduces usage of the electricity by 4.2 sun hours per day and carbon emission. Recycling and reuse of waste leads the company to manage waste successfully and helps to reduce operational cost.

The company’s initiative and contributions are recognised locally and internationally by awarding several certifications. Besides that, as part of social sustainability, GTB focuses on data integrity and Cyber security where the IT system adequacy re-evaluated timely to keep the system up to date and competitive as required by stakeholders. Employee development program, human and labour rights, freedom of associations, occupational safety and health, employee welfare and new norm arrangement for Covid free workplace are also high priority of the company as it believes human capital is the greatest asset. As part of the practice, the company organizes blood donation campaigns, PPE donation to hospitals and

other remarkable community activities. Thus, the ESG investment and disclosure in GTB is able to gain investors' confidence and increase the firm's financial performance.

Table 2: Company data analysis – ESG disclosure through Sustainability Statements (Source: Annual Reports)

Based on the ESG disclosure analysis, selected semiconductor companies are in line with the requirements of Code of Corporate Governance (MCCG, 2012), which endorses firms directors to disclose policies and implementation of ESG in its annual report. Environmental sustainability activities are put in place especially in the aspects of water management, energy management and waste management. The semiconductor industry is seriously working on the reduction in energy consumption, water consumption and reduction in Green House Gas emission.

Company Data Analysis – ESG Disclosure through Sustainability Statements				
Company	Industry	Environment	Social	Governance
Frontken	Semiconductor	- Energy Management and GHG Emission - Waste Management - Water Management	Focus on customer - Customer Satisfaction - Customer Privacy and Data Privacy People - Occupational Health and Safety - Employee Welfare - Labor Rights - Local Communities - Equal opportunities - New norm - Covid 19	- Sustainability Governance Policy adoption - Code of Conduct - Risk Management - Growing the business - Technology & Innovation - Supply Chain Management - Anti Corruption
Globetronics	Semiconductor	- Energy Management and GHG Emission - Waste Management - Water Management	Focus on customer - Customer Satisfaction - Customer Privacy and Data Privacy, Cybersecurity People - Occupational Health and Safety - Employee Welfare - Labor Rights - Local Communities - Equal opportunities - New norm - Covid 19	- Sustainability Governance Policy adoption - Code of Conduct - Risk Management - Growing the business - Technology & Innovation - Supply Chain Management - Anti Corruption
MPI	Semiconductor	- Energy Management - Waste Management - Water Management - Product Stewardship	- Training and Development - Human rights - Employee engagement - Employee welfare - Customer satisfaction - Local communities - Charity Activities - Awards (Educational, performance) - New norm - Covid 19	- Sustainability Governance - Board leadership, standard/policy adoption - Strengthening CG Culture - Effective audit and risk management - Integrity in corporate reporting and meaningful relationship with stakeholders - Growing the business - Technology & Innovation - Supply Chain Management - Anti Corruption
Unisem	Semiconductor	- Energy Management and GHG Emission - Effluents and Waste Management - Water Consumption - Product Stewardship	Focus on customer - Customer Satisfaction - Customer Privacy and Data Privacy People - Occupational Health and Safety - Employee Welfare - Labor Rights - Local Communities - New norm - Covid 19	- Sustainability Governance - Stakeholder Inclusivity - Materiality Assessment and Materiality Matrix of Unisem - Growing the business - Technology & Innovation - Supply Chain Management - Anti Corruption
Inari	Semiconductor	- Energy Management and GHG Emission - Effluents and Waste Management - Water Consumption - Product Stewardship	Focus on customer - Customer Satisfaction - Customer Privacy and Data Privacy People - Occupational Health and Safety - Employee Welfare - Labour Rights - Local Communities - New norm - Covid 19	- Sustainability Governance - Stakeholder Inclusivity - Materiality Assessment and Materiality Matrix - Growing the business - Technology & Innovation - Supply Chain Management - Anti Corruption

Awareness programs being carried out to educate the stakeholders on the environmental compliances. The companies comply with the environmental regulatory, national and international standards by certifying their company for ISO14001, Environmental Management System. Continuous improvement activities and projects put in place to reduce industrial waste and minimize water and energy consumption. Semiconductor industry is also working on the technology development to have alternative materials to comply with to eliminate the ROHS restricted substances.

As for the social context, the companies are investing in talent development programs, employee welfare, employee social and sports activities and educational and performance awarding. Labour standards being adopted and as evidence the companies are disclosing human rights compliances, gender diversification, child labour avoidance and working hour, wages and benefits. Employees are provided with a harassment free working environment. New norm working environment has been created in order as Covid 19 preventive measure.

Government and internal SOPs made mandatory to be compliance. The companies enforce the employees to follow structured guidelines all the time to minimize the risks of Covid spread.

In the context of governance, the companies are in compliance with the local and international trade laws, international and national standards and regulations. To obtain competitive advantage, the companies have a high business relationship with its stakeholders demonstrating high business integrity. Semiconductor industry strictly prohibits bribery, money laundering and corruption. The companies adopt the Anti Bribery and Corruption law. Customer’s as well employee’s data privacy being maintained and protected. Advanced Cyber security systems have been worked out to prevent leakage of confidential information and to protect intellectual data. Automation and online systems as part of the factory automation and innovation strengthens productivity of the industry and enables the companies to be sustainable in the business. The industry also maintained integrity in corporate reporting and disclosure of the financial and non-financial activities and maintained relationships with stakeholders.

4.2 Business Performance of The Selected Semiconductor Companies

4.2.1 Malaysian Pacific Industry

Based on the Income Statement of 2021, the company has reported growth in its overall business performance. The company registered net income growth of 77.67%, sales revenue of 1.98billion with sales revenue growth 27.62%. MPI’s net operating cash flow growth is 34.13% with free cash flow of 72.28million. Total asset value of the company is 2.56billion which registered 27.40% of growth with total shareholder’s equity of 1.70billion. Overall, based on the financial highlights review, MPI had registered continuous growth which is the evidence of business sustainability and obtained competitive advantage in the market.

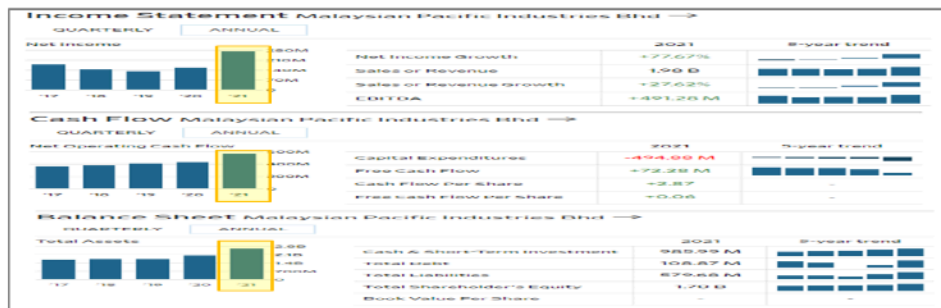


Figure 11: MPI's Income Statement (Source: The Wall Street Journal – Financials)

4.1.2 Inari Amertron Berhad

Based on the Income Statement of 2021, the company has reported growth in its overall business performance. The company registered net income growth of 112.18% with sales revenue of 1.43billion. Inari’s net operating cash flow growth is 40.19% with free cash flow of 486.47million. Total asset value of the company is 1.84billion which registered 24.25% of growth with total shareholder’s equity of 1.37billion. Overall, based on the financial highlights review, Inari had registered continuous growth which is the evidence of business sustainability and obtained competitive advantage in the market.

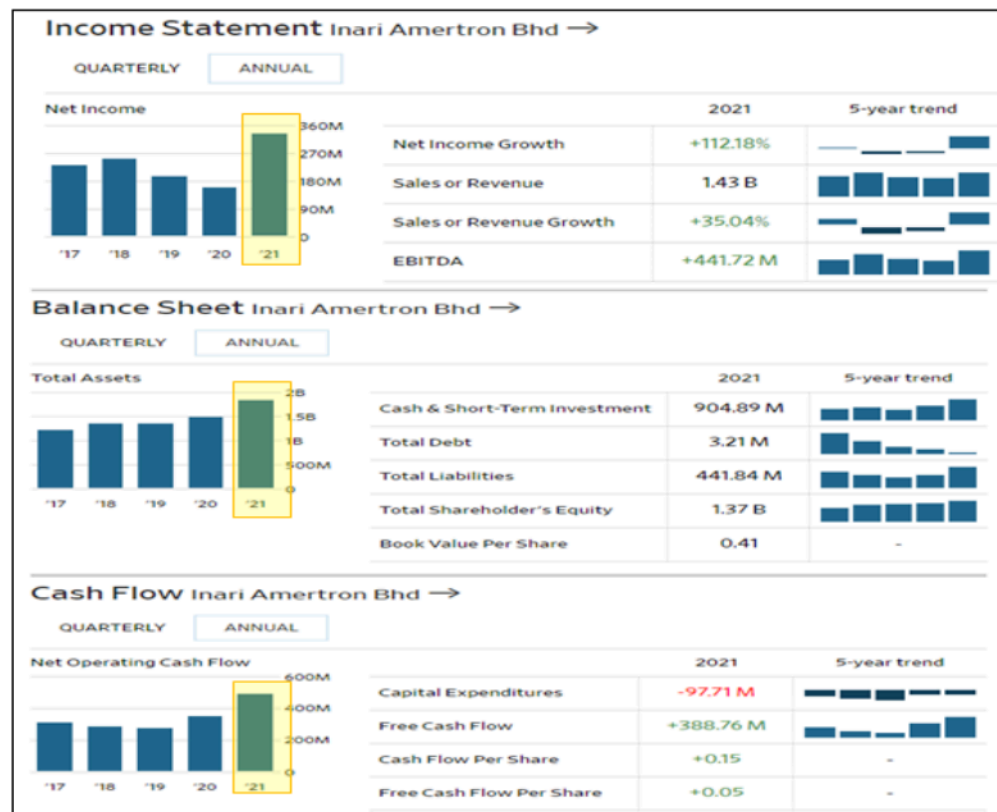


Figure 12: Inari's Income Statement (Source: The Wall Street Journal – Financials)

4.1.3 Unisem Malaysia Berhad

Based on the Income Statement of 2020, the company has reported growth in its overall business performance. The company registered net income growth of 78.90% with sales revenue of 1.29billion. Unisem's net operating cash flow growth is 84.47% with free cash flow of 53.28million. Total asset value of the company is 2.27billion which registered 28.16% of growth with total shareholder's equity of 1.77billion. The company observed a sharp drop in its business performance which is due to the US-China trade war, a direct effect on its decline of US RF business. As the supply was affected, Unisem also slapped with stricter regulation of carbon emission as it affects their inventory clearance. Closure of the Batam factory also impacted the company's performance in the year 2019. Overall, based on the financial highlights review for the year 2020, Unisem had registered continuous growth which is the evidence of business sustainability and obtained competitive advantage in the market.

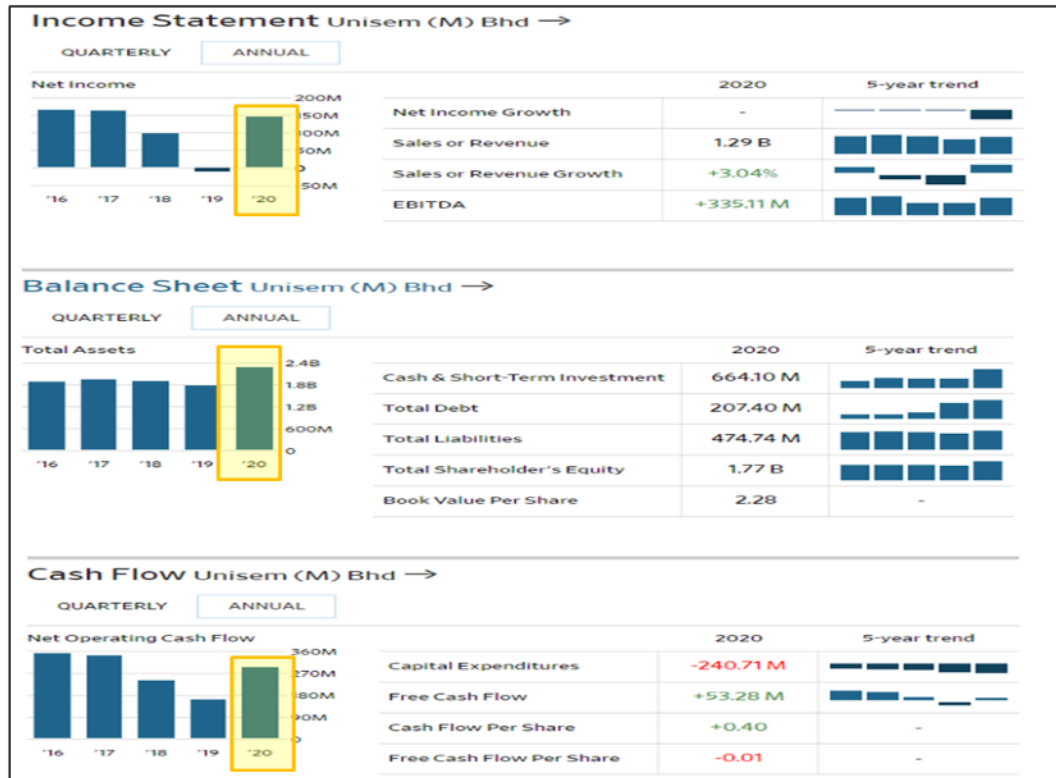


Figure 13: Unisem's Income Statement (Source: The Wall Street Journal – Financials)

4.1.4 Frontken Corporation Berhad

Based on the Income Statement of 2020, the company has reported growth in its overall business performance. The company registered net income growth of 18.50% with sales revenue of 368.32million. Frontken's net operating cash flow growth is 4.36% with free cash flow of 112.57million. Total asset value of the company is 618.27million which registered 19.88% of growth with total shareholder's equity of 439.99million. Overall, based on the financial highlights review for the year 2020, Frontken had registered continuous growth which is the evidence of business sustainability and obtained competitive advantage in the market.

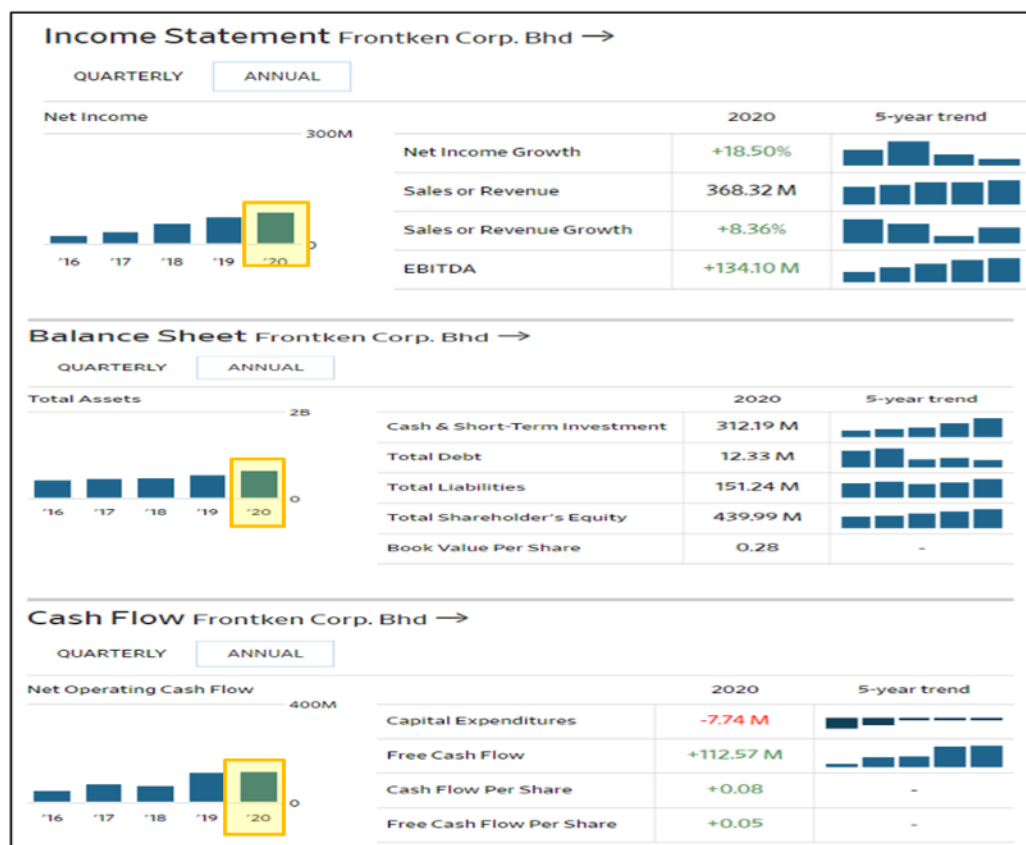
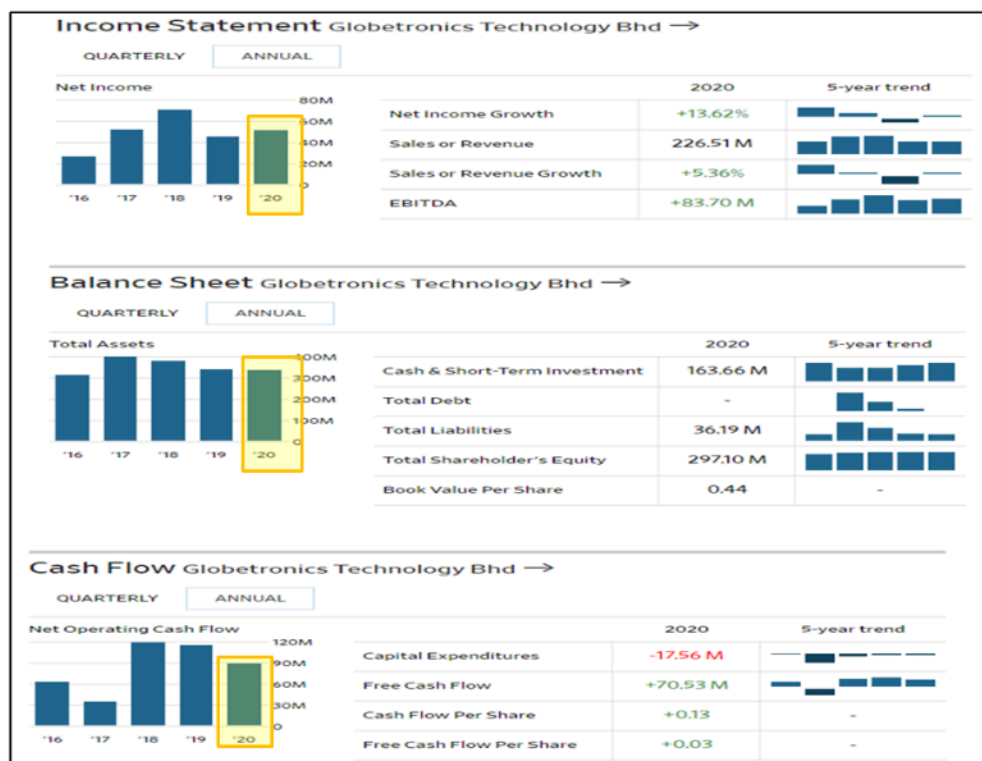


Figure 14: Frontken's Income Statement (Source: The Wall Street Journal – Financials)

4.1.5 Globetronics Technology Berhad (GTB)

Based on the Income Statement of 2020, the company has reported growth in its overall business performance. The company registered net income growth of 13.62% with sales revenue of 226.51million. GTB's net operating cash flow growth is -22.7% with free cash flow of 70.53million. Total asset value of the company is 333.69million which registered -1.21% of drop with total shareholder's equity of 297.10million. Based on the financial highlights review for year 2020, GTB is able to register income growth though overall its business declined which requires robust business sustainability strategy including risk analysis and contingency plan to obtain a competitive advantage in the market.

15:



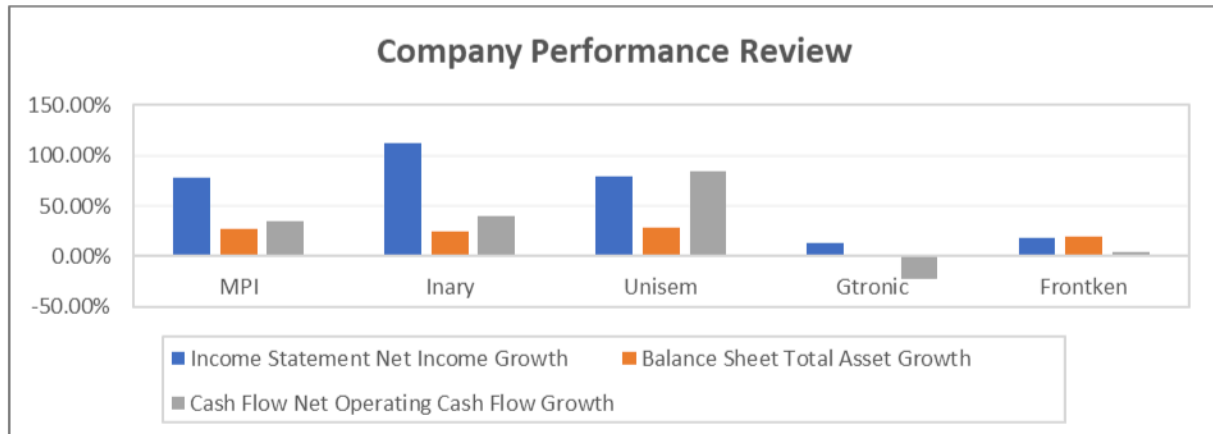
Figure

Globetronics's Income Statement (Source: The Wall Street Journal – Financials)

Based on the financial analysis reference to three major financial statements of each selected company's - MPI, Inari, Unisem, and Frontken registered growth in all three major financial statements while GTB recorded drop in total assets and net operating cash flow. GTB's Income statement recorded growth of 13.62%. In general, the company recorded growth in overall performance and able to gain shareholders trust with the shareholder's equity of 297.10million

Table 3: Financial Performance – Growth percentage compare to earlier reporting year (Source: Individual company's Annual Report)

	Financial Statement (Annual Report of Year)	Income Statement	Balance Sheet		Cash Flow
		Net Income Growth	Total Asset Growth	Total Shareholder's Equity	Net Operating Cash Flow Growth
MPI	2021	77.67%	27.40%	1.70B	34.13%
Inary	2021	112.18%	24.25%	1.37B	40.19%
Unisem	2020	78.90%	28.16%	1.77B	84.47%
Gtronic	2020	13.62%	-1.21%	297.10M	-22.70%
Frontken	2020	18.50%	19.88%	439.99M	4.36%



Graph 1: Company Performance Overview (Source: Individual company's Annual Report)

5.0 CONCLUSION AND RECOMMENDATION

Analysis of the ESG disclosure and the financial statement shows that investing and good ESG disclosure give effect to business growth and create a competitive advantage among firms. Stakeholders have been benefiting from the industry's ESG focus and effect on society. Better reputation and shareholder acceptance encourage participation of the companies in ESG activities besides compliance with the FTSE4Good Bursa Malaysia Index. ESG disclosures reduce data asymmetry and improve investors' alertness and recognition of the firm's investment strategies.

Furthermore, investment in ESG is able to reduce societal issues while enabling firms to manage their resources efficiently. In Malaysia, shareholders obtain better value in terms of business returns and not only gain market acceptance. Our findings show that investment and good ESG disclosure among semiconductor firms give a positive effect on the firm's financial indicators as these firms show a strong financial position, high revenue, and better cash flows. Although these firms were affected due to the Covid-19, their financial performance showed a constant and increasing trend. Investment in ESG is able to reduce cost, gain investors' confidence, and indirectly create a competitive advantage. Our findings align with the stakeholder's theory that ESG increases a firm's competitiveness and financial performance.

ESG disclosure enables the firms to tap in the new markets and business expansion. With growing awareness of the ESG requirements and disclosure, customers especially in the semiconductor industry are moving forward with environmental safety products. Business growth of the semiconductor firms proves that ESG disclosure increases shareholders' trust. Besides that, better environmental requirements implementation helps to reduce the operational cost including water and energy consumption cost. Significant resource management helps firms to reduce turnover rates and overall talent development costs. High integrity and data protection policy increase customers' trust and confidence. Directly increasing business opportunities and competitiveness. Effective governance structure and combination of ESG in firms will attract the best talent, build reliable customers, and increase shareholder value.

ESG disclosure and governance also help firms to prevent regulatory pressure and reduce the risk of government and legal action, which leads to greater strategic freedom. They are also able to retain quality employees when the company recorded positive environmental effects and at the same time increase productivity, an organization can minimize waste and quality problems by retaining experienced and quality employees which contributes to increasing productivity and profit.

Local community engagement, and 'give back' policy practices by the companies show the maximises local recognition by the society and state government. As the company serves and shares earnings with local communities in the form of donations and other local social development programs, the action also increases satisfaction among its employees. A company will be recognized as a responsible industry player who reinvests in the society and communities it functions directly creating business sustainability and competitive market competitiveness. CSR has positive properties on long-term firm performance and delivers direct and indirect value to firms through positive response from stakeholders. Allocation of capital in a more promising manner through ESG disclosure enhances returns and more sustainable business opportunities. Expected returns to shareholders can be obtained by paying off investments and optimization of processes and resources.

ESG disclosure shall be made mandatory requirements on ESG disclosures in Malaysia for all firms. Government to introduce benefits in form of tax exemption, incentives, and subsidies for firms disclosing ESG on an annual basis. Public awareness of the ESG requirements and the importance of the information to be increased to motivate companies to disclose ESG on an annual basis. As the Covid-19 pandemic gives a big impact to the industry's economy globally, risk management and contingency plans and actions to be part of the ESG disclosure to ensure business sustainability.

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