



RESEARCH REPORT

**MOBILE WORLD INVESTMENT CORPORATION
(HSX.MWG)**

Date: June 12, 2022

Ticker: **MWG.HOSE**

Industry: **Consumer Discretionary Distribution & Retail**

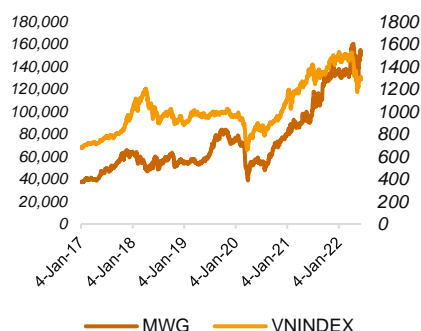
Target price: **191.126 VND**

Recommendation: **BUY**

Upside: **24,9%**
MARKET SNAPSHOT

Giá đóng cửa (VND)	150.000
52-week high (VND)	159,16
52-low high (VND)	122,2
Share outstanding (mm)	1.424
15-day average volume	1.424.033
Market Cap (VND bn)	109.803

Source: Wichart

Price history MWG vs. Vn-Index


Source: Wichart

Valuation Summary

Recommendation	BUY
FCFF - 70%	178,696
P/E (ICT)&(CE) - 30%	178,740
P/S (FMCG) - 30%	36,437
P/S (Pharmaceutical retail) - 30%	4,952
Target price	191,126
Current price	153,000
Upside	24.29%

Source: Team analysis

MWG: MASTERING THE WIND, GUIDING THE SAILS
INVESTMENT HIGHLIGHTS

We are issuing our first report on Mobile World Investment Corporation (MWG) with a BUY recommendation and a 12-month target price of VND 191,126, representing an upside of 24.9% from the closing price of VND 153,000 on June 6, 2022. Using the Discounted Cash Flow (FCFF) method and the comparative valuation (Multiple) method, DCD estimates the company's value based on three key theses:

Bach Hoa Xanh (BHX) is strengthening for a long-term race: Vietnam's retail market presents a fertile ground with substantial long-term growth potential. The grocery retail sector alone has reached a market size of USD 80 billion, yet no single company has truly dominated or captured the majority market share. In 2022, BHX halted its store expansion to reorganize its product lineup and enhance backup operations, preparing for its planned expansion into Northern Vietnam in 2023.

Explosive growth with expectations of dominating the Apple and pharmaceutical markets: Topzone and An Khang are seen as MWG's ambitious new moves into two high-potential markets: Apple products and pharmaceuticals. [1] High consumer demand, [2] A large market size of approximately VND 34,500 billion (~USD 1.5 billion) with an annual growth potential of 7%. [3] Strict regulations by Apple and government crackdowns on unauthorized imports are expected to drive Topzone's growth to USD 650 million in 2022, with an acceleration to USD 1 billion and a 40% market share by 2023. Pharmaceutical Market – An Khang [1] Vietnam's pharmaceutical industry is valued at USD 7.4 billion, with an average annual spending increase of 14%, [2] Rising post-pandemic healthcare awareness and [3] A fragmented market with 60,000 small independent pharmacies (95%), while modern retail chains hold only 3%-5% market share.

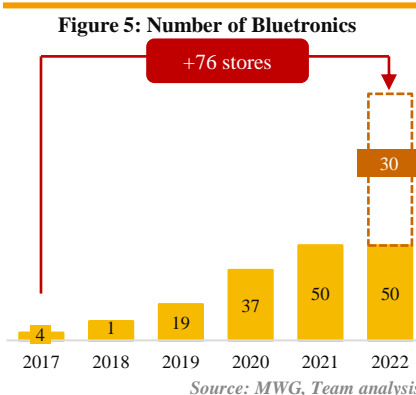
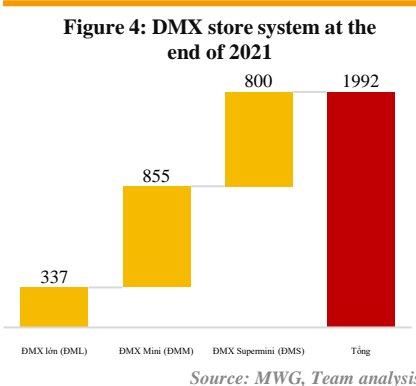
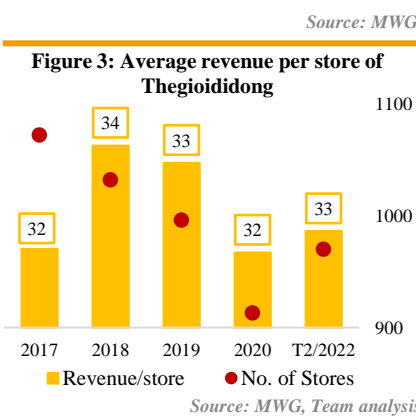
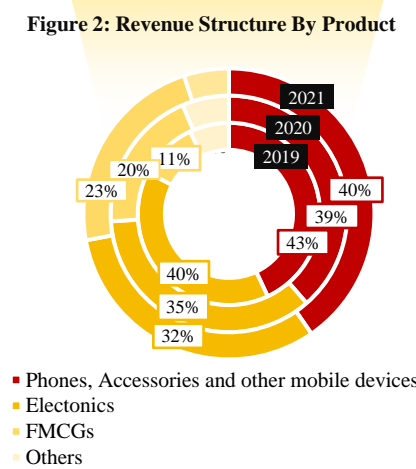
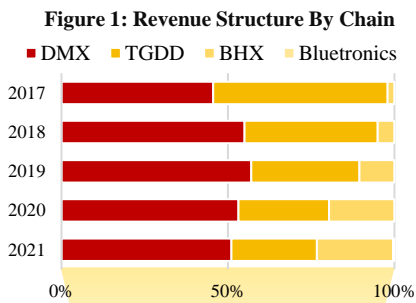
Dien May Xanh (DMX) Supermini – A strategic move to maintain market leadership: With rapid expansion, DMX Supermini had already reached 800 stores by the end of 2021. Although small in size, these stores generate significant revenue, as they target underpenetrated rural markets where modern retail formats are still scarce. As urban store revenues become saturated, the Supermini model is a new solution for revenue growth. MWG aims to expand to 1,000 Supermini stores by 2022, positioning it as a key driver of revenue growth in the ICT segment.

FINANCIAL HIGHLIGHTS

KEY FIGURE	2018A	2019A	2020A	2021A	2022F	2023F	2024F	2025F	2026F
Doanh thu thuần	86.516.287	102.174.244	108.546.020	122.958.106	152.966.854	188.404.935	214.796.853	240.783.801	267.580.989
Biên lợi nhuận gộp	17,68%	19,07%	22,07%	22,47%	22,68%	22,53%	22,77%	23,03%	23,13%
Biên EBIT	4,88%	5,50%	5,53%	5,81%	6,20%	6,22%	6,80%	7,11%	7,18%
Biên EBITDA	6,29%	6,91%	7,55%	8,19%	8,37%	8,36%	9,12%	9,66%	9,96%
Biên lợi nhuận ròng	3,33%	3,75%	3,61%	3,99%	4,35%	4,40%	5,01%	5,38%	5,43%
ROA	10,24%	9,20%	8,52%	7,78%	8,07%	8,62%	9,75%	10,54%	9,70%
ROIC	26,16%	18,41%	17,48%	13,24%	16,31%	16,96%	19,50%	20,84%	21,19%
ROE	32,06%	31,59%	25,32%	24,05%	19,68%	20,38%	21,54%	21,09%	19,51%
EPS	-	-	5.676	6.897	4.544	5.656	7.346	8.844	9.925

Source: Team analysis

BUSINESS OVERVIEW



Founded in 2004, MWG is currently the leading retailer in Vietnam, operating five main chains: Thegioididong (TGDD), Dien May Xanh (DMX), Bluetronics, Topzone, Bach Hoa Xanh (BHX), and An Khang pharmacy, along with the AVA chain, which is still in the testing phase. The company holds a dominant market position in technology and consumer electronics retail, capturing 60% of the mobile phone market and 50% of the electronics market. MWG's revenue primarily comes from selling mobile devices (ICT) and consumer electronics (CE) through two sales channels: direct sales at physical stores and online sales. Among these, DMX and TGDD remain the company's main revenue drivers, with in-store sales contributing the majority of total revenue. Future profitability will be supported by investments in expanding DMX Supermini stores, developing Topzone, restructuring BHX stores, and enhancing the value of An Khang pharmacies.

Thegioididong – Leading Mobile Phone Retail in Vietnam:

TGDD's core business is retail sales of mobile phones and other smart devices such as laptops and tablets. In 2021, TGDD contributed 25% of MWG's total revenue, marking a 7% year-over-year growth. This was fueled by rising demand for remote learning and working, with laptop sales increasing by 58%, tablet sales by 40%, and mobile phone sales by 17%. TGDD has developed the largest mobile phone retail network in Vietnam, with 985 stores (as of Q1/2022) spanning all 63 provinces (Appendix B1). However, MWG is gradually reducing the number of TGDD stores, following a strategy to: Upgrade high-revenue stores, Convert select TGDD locations into DMX/DMX Mini stores to maximize revenue per store, given the saturation of the mobile phone market in Vietnam (Figure 3). Additionally, TGDD has diversified its product portfolio by introducing fashion watches. TGDD's revenue is expected to continue growing, driven by expanding its product-service offerings and developing a network of affiliate agents to boost sales (Appendix B4).

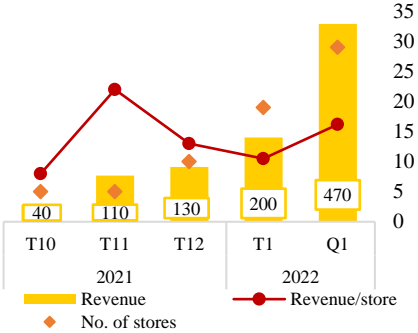
Dien May Xanh Supermini (DMS) – Growth Engine for MWG:

Launched in 2016, DMX has become Vietnam's top consumer electronics retailer, securing a 50% market share in 2021. The 1992 DMX stores cover all 63 provinces, far exceeding competitors in the electronics retail sector. The success of the DMS model has been a key driver, with each store generating over VND 1 billion (~USD 43,000) in monthly revenue (Appendix B4). MWG aims to [1] expand with an additional 1,000 DMS stores by the end of 2022, [2] implement an "All-in-One" model to optimize staffing and reduce operating costs [3] redesign DMX store layouts to increase product display efficiency, boosting revenue in areas where physical expansion is limited and [4] convert selected TGDD stores into DMX/DMX Mini outlets (Appendix B4).

Bluetronics – Strengthening Its Market Position:

Converted from the BigPhone model in June 2020, Bluetronics is currently the leading electronics retailer in Cambodia in terms of sales volume and revenue scale, with an average revenue of VND 1–1.5 billion per store per month. MWG plans to expand by adding 30 more stores, covering 25 provinces in the Cambodian market, and will cap expansion at this number. The company does not prioritize revenue growth in Cambodia but instead focuses on refining its expansion model for entry into the broader Southeast

Figure 6: Topzone’s monthly revenue



Source: TCSC, team analysis

Asian market, particularly Indonesia. MWG has partnered with Erafone to establish the PT Era Blue Electronic joint venture under the Era Blue brand.

Topzone – A New Growth Driver:

Launched in October 2021, Topzone is a mono-brand retail chain specializing in Apple products. The store system includes two formats: AAR (Apple Authorized Reseller) with a size of 100–120 m² and APR (Apple Premium Reseller) with a larger footprint of 180–220 m². In just the first three months of 2022, Topzone generated nearly VND 470 billion in revenue with 28 AAR stores and one APR store. Currently, Topzone has expanded to 52 stores, including two APR locations, across 28 provinces and cities nationwide. The chain aims to open an additional 200 stores, targeting an increase in Apple’s market share from 25% to 35% by the end of 2022, with an average revenue of VND 8–10 billion per store per month.

Bach Hoa Xanh – Slowing Expansion to Optimize Revenue per Store:

Launched as a pilot at the end of 2015, BHX is a retail chain specializing in fresh food and essential goods. As of May 2022, BHX operates 2,160 stores across southern, central, and highland provinces of Vietnam. The chain contributed 23% to MWG’s total revenue in 2021, marking a 32% year-over-year growth. After stabilizing its supply chain in the initial two years, BHX experienced rapid expansion in both revenue and store count. However, the company has recently slowed down new store openings to focus on optimizing revenue per existing store. It is now prioritizing a complete store layout overhaul to prepare for expansion into Central and Northern Vietnam from 2023. Instead of aggressive expansion, MWG is shifting focus to stores with a size of 150–200 m², targeting an average monthly revenue of VND 1 billion per store. In 2022, the company plans to continue store layout adjustments and implement competitive pricing strategies to attract customers, aiming to boost daily average revenue by 10%. MWG also has plans to IPO BHX once revenue scale, market share, and profitability reach stable levels, with a projected 20% issuance.

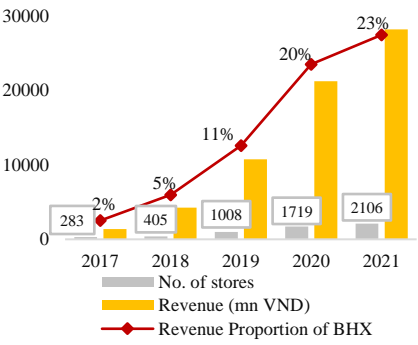
An Khang – Continued Expansion of Stores:

An Khang has currently expanded to 348 pharmacies across 26 provinces in the Southern and Central Southern regions. However, the total number of stores nationwide is still relatively low compared to competitors (Figure 8). Cumulative revenue has tripled compared to the same period last year (contributing less than 1% of MWG’s total revenue), with average monthly revenue per pharmacy at 700-800 million VND for independent stores and 400-500 million VND for pharmacies located beside BHX stores. The company will continue to invest financially and with an aim to open 800 stores by the end of 2022 and achieve a top 3 ranking in pharmaceutical sales.

CORPORATE GOVERNANCE

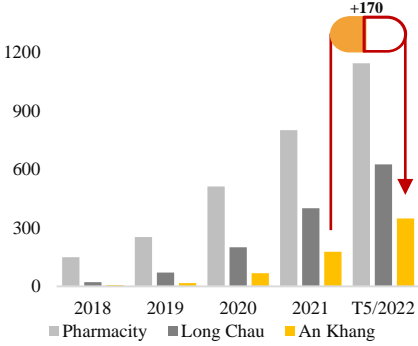
The majority of MWG's shares are held by various minority shareholders. Among the major shareholders, the largest stake is held by Retail World Investment Consulting Co., Ltd. (10.47%), followed by the Arisaig ASEAN Fund, Arisaig Asia Consumer Fund, and Mr. Tai – Chairman of MWG’s Board of Directors (2.33%). MWG’s corporate governance quality is highly rated, as it utilizes the CFA Institute’s corporate governance framework and meets nearly all the criteria (Appendix E3). The major shareholders and Board members have significant experience in finance, business, and strategic vision.

Figure 7: Revenue and Stores of BHX



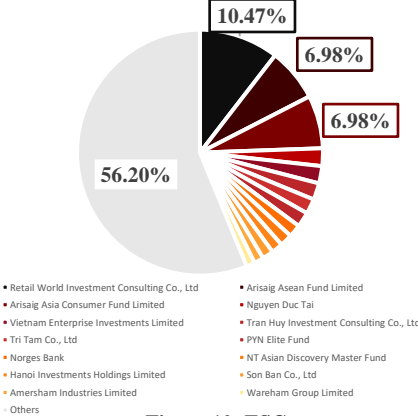
Source: MWG, team analysis

Figure 8: Number of Pharmacy Stores



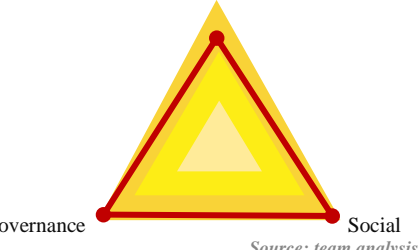
Source: MWG, team analysis

Figure 9: Shareholder Structure of MWG



- Retail World Investment Consulting Co., Ltd
- Arisaig Asean Fund Limited
- Arisaig Asia Consumer Fund Limited
- Vietnam Enterprise Investments Limited
- Tri Tam Co., Ltd
- Norges Bank
- Hanoi Investments Holdings Limited
- Amersham Industries Limited
- Others
- Arisaig Asean Fund Limited
- Nguyen Duc Tai
- Tran Huy Investment Consulting Co., Ltd
- PVN Elite Fund
- NT Asian Discovery Master Fund
- Son Ban Co., Ltd
- Wareham Group Limited

Figure 10: ESG Environmental



Source: team analysis

Figure 11: Forecast of Household Disposable Income in Vietnam (2022F -2026F)

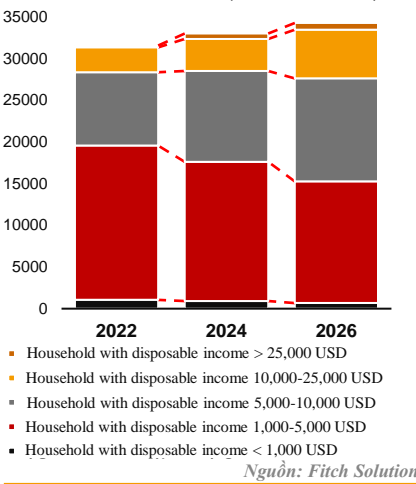


Figure 12: Import Situation of Mobile Phones (unit: million USD)

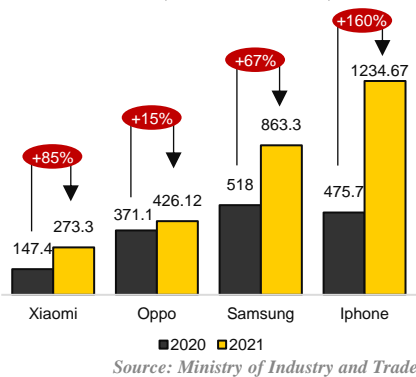


Figure 13: Average Spending on Medicine & Food per Capita in ASEAN (USD/person)

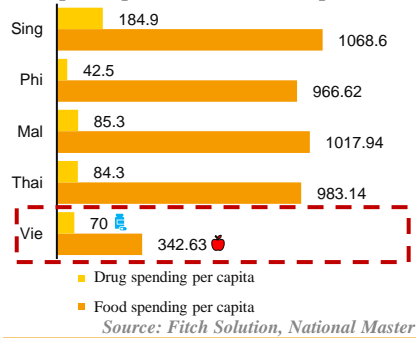


Figure 14: Forecast of Vietnam's Population Structure by Age

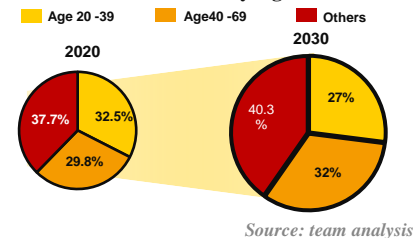
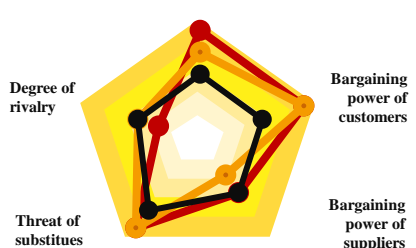


Figure 15: Five Forces Analysis
Threat of new entrants



INDUSTRY ANALYSIS| TECHNOLOGY RETAIL

In 2021, total revenue from electronic devices reached \$775.36 million, a 38% increase compared to 2020, despite the economic challenges posed by the Covid-19 pandemic. The industry outlook for the mid-term is expected to come from the growing middle class and new customer segments as distribution systems expand into areas further from city centers. However, in the long term, the market is expected to reach saturation once new customer segments are exhausted, and products are widely distributed to end-user.

Mobile Phones – Premium Segment as a Bright Spot: It is forecasted that from 2022 to 2026, GDP per capita will grow by 40%, and household consumption in central regions will gradually shift toward high-end phone brands such as Apple and Samsung (Figure 11) while id-range to low-end phones will face intense competition.

Laptops, Tablets – Limited Growth Potential: The laptop market is expected to show limited growth in 2022 compared to the surge in 2021 due to reduced demand for online work and study. However, the online trend will remain a key driver for mid-term growth.

Home Appliances – Reaching Saturation Point: Except for some cooling devices and washing machines, which are projected to grow at an annual CAGR of 11%, other segments are expected to reach saturation. Retail systems will need to adopt pricing strategies to compete with local competitors.

INDUSTRY ANALYSIS | FOOD RETAIL

Spending on F&B still accounts for a significant share of total household expenditures in Vietnam (27% - 28% of total spending), with an annual CAGR forecast of 6.74%. Growth is expected to peak in 2023 when employment conditions stabilize for the population.

Income Growth Drives Increased Food Consumption: Vietnam's food expenditure remains relatively low compared to other countries in the region, and it is expected that improving income levels will drive higher demand for food.

Rural Areas Still Lack Access to Modern Retail Systems: Northern Vietnam is expected to be the next strategic target for the BHX chain, which will directly compete with traditional markets and grocery stores, aiming to reach new customer segments.

INDUSTRY ANALYSIS | PHARMACEUTICAL RETAIL

Vietnam's pharmaceutical industry was valued at \$5 billion in 2020, with more than 22,000 types of medicines, and an estimated CAGR of around 8% for 2020-2029F.

Vietnam's Aging Population: with the 40-69 age group growing at 0.85% annually and 15% of the population expected to be over 60 by 2040, is anticipated to drive significant growth in the pharmaceutical sector.

Modern Pharmacy Chains Are Gaining Ground: Modern pharmacy chains like An Khang, Long Chau, and Pharmacy are competing to capture more market share, with improved quality and service transforming the sector.

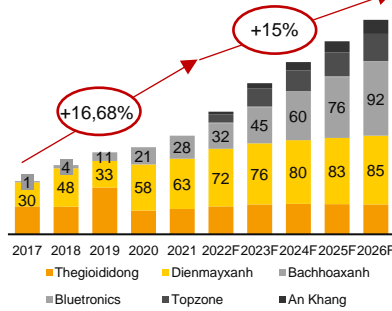
COMPETITIVE POSITION

MWG owns the largest home appliance system market share nationwide, with plans to expand into rural areas to target customer segments that have not yet had access to the system.

The BHX chain is in the process of rebranding and focusing on changing the layout of its system to prepare for strategies aimed at expanding to the North.

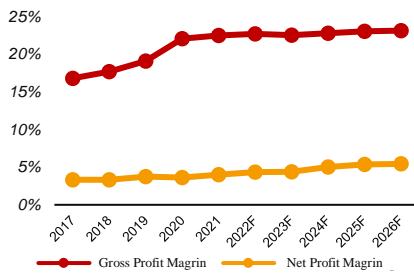
An Khang Pharmacy, leveraging the support of BHX and the MWG Group, is expected to establish a strong position in the industry.

Figure 15: Revenue Structure by Chain (Trillion VND)



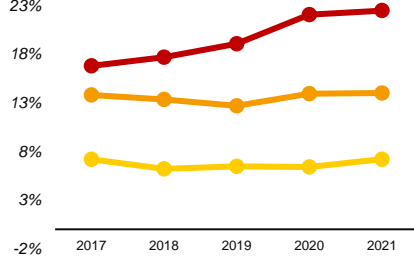
Source: Team analysis

Figure 16: Profitability Ratio



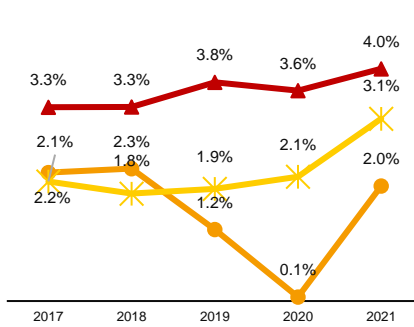
Source: Team analysis

Figure 17: Comparison of Gross Margin



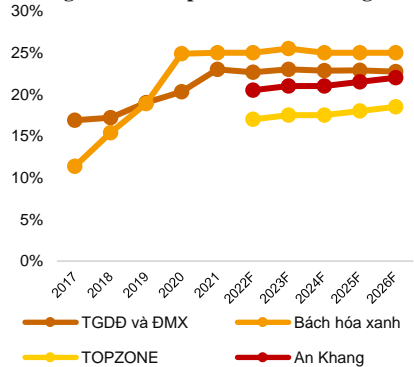
Source: Team analysis

Figure 18: Comparison of Net Margin



Source: Team analysis

Figure 19: Comparison of Net Margin



Source: Team analysis

FINANCIAL ANALYSIS

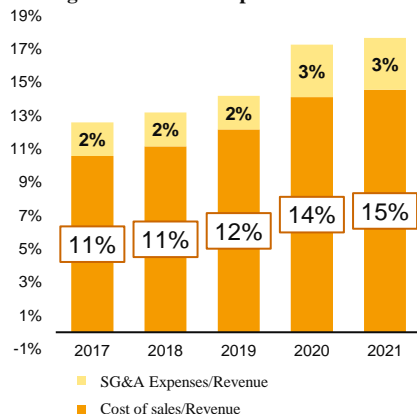
Revenue is expected to grow steadily at a double-digit rate, driven by the expansion efforts of BHX and An Khang: From 2017 to 2021, revenue showed positive growth each year, although the growth rate gradually decreased. 2021 marked a return to double-digit growth, with MWG reporting a 13.28% increase in revenue, exceeding management's target (+3%). This growth was attributed to [1] increased demand for laptops and mobile phones due to the shift to online learning and working during the fourth wave of the pandemic, and [2] the rise in demand for food and consumer goods, with BHX serving as the primary supplier during the closure of traditional markets.

Based on current growth potential, we predict MWG's revenue will grow at a CAGR of 15% from 2022 to 2026, with strong growth in 2022 and 2023, and stabilization from 2024 onward. The growth will be driven by [1] ICT and CE segments maintaining sustainable growth after market saturation following the pandemic surge, [2] Topzone expected to dominate the Apple product market in Vietnam within the next five years, with a projected 40% market share in 2023, [3] BHX changing its layout and restructuring its back-end operations, expanding stores with plans to move northward from 2023, with an average store growth rate of 24% per year, and [4] An Khang accelerating its growth to become a top 3 pharmacy chain with over 2,000 stores by 2026, capturing 10% of the pharmaceutical market share.

MWG's gross margin has remained stable at 23.1%, thanks to the growing scale advantage: Gross margin improved significantly from 2017 to 2020, with a strong increase of +5.27%, maintaining stability in 2021 compared to 2020 (+0.4%). This improvement is due to [1] larger scale leading to stronger bargaining power with suppliers, reducing procurement costs for thegioididong and dienmayxanh, [2] a shift from the electronics sector (thegioididong) to home appliances (dienmayxanh), which has a higher gross margin compared to the saturated electronics market, and [3] after the rapid expansion phase from 2015-2017, BHX's gross margin significantly improved to 25% in 2020, from a low of 11% in 2017, and continued to outperform the electronics and home appliance sectors, reaching 25% in 2021. We expect gross margin to remain stable in 2022-2026, with a slight increase, ranging from 22.5% to 23.1%, due to [1] the electronics and home appliance sectors maintaining their market position, [2] BHX continuing expansion and driving revenue through promotions, while actively negotiating with suppliers to stabilize profits, and [3] An Khang expanding its non-pharmaceutical product offerings (e.g., dietary supplements, dermocosmetics, medical devices) to achieve a higher gross margin.

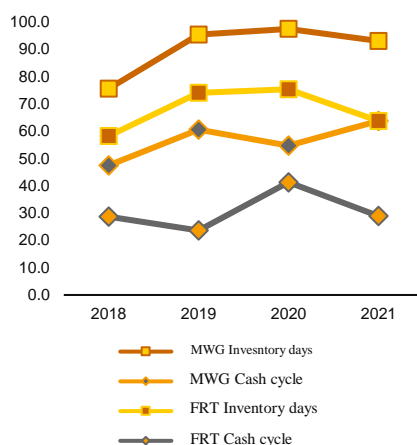
Net margin reached 5.4% due to a focus on revenue growth and cost reduction strategies. MWG's net margin has been particularly stable in the past (2017-2021), with a dip in 2020 due to the decline in electronics sales caused by COVID-19, though it was offset by growth in home appliances and BHX. Starting in 2020, selling and administrative expenses increased, accounting for a higher share of revenue, as MWG continuously expanded its new stores, particularly the DMX Supermini and BHX, while also ramping up advertising and marketing efforts.

Figure 20: SG&A Expenses/Revenue



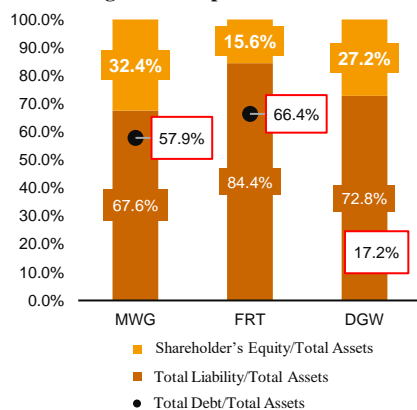
Source: Team analysis

Figure 21: Efficiency Ratios



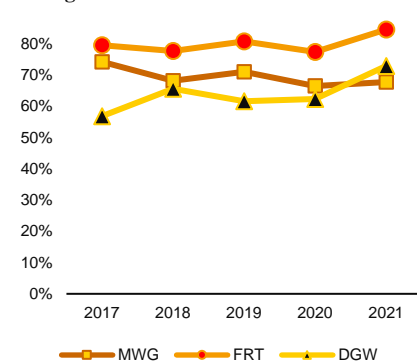
Source: Team analysis

Figure 22: Capital Structure



Source: Team analysis

Figure 23: Total Debt to Assets Ratio



Source: Team analysis

We forecast that MWG's net profit margin will continue to increase in the future (4.3% - 5.4%) due to: [1] Increasing sales expenses as they compete for market share with An Khang through multi-channel advertising and new staff for store openings; [2] Increasing administrative expenses from expanding warehouses along BHX transport routes; [3] Despite these increases, revenue growth will outpace expenses, leading to a reduction in SG&A ratio and continued net profit growth.

MWG's inventory turnover has remained above 90 days due to store expansion activities:

As a multi-sector trading company, inventory is a key focus for MWG due to its close relationship with goals such as reducing the cash cycle, interest costs, and optimizing working capital. In 2021, MWG's inventory accounted for 46.3% of total assets. The company's inventory turnover sharply increased in 2018-2019 and has remained above 90 days since 2020. This was driven by: [1] the continuous expansion of the DMX and BHX chains from 2017-2019, leading to a strong increase in SKU demand, which resulted in a 47% rise in inventory, with DMX contributing 57% and BHX contributing 12.3%; [2] expanding product categories to include new items like watches, glasses, and laptops; and [3] an increase in slow-moving goods in 2020 due to COVID-19's impact on logistics.

MWG is restructuring its inventory in line with its revenue diversification strategy. As the mobile phone and home appliance sectors enter a saturation phase, MWG has proactively reduced its inventory in these categories while increasing stock in higher-margin products such as pharmaceuticals, food, and installation materials for its expansion into these sectors. Compared to direct competitors in the Technology and Pharmaceutical sectors, like FRT, MWG has higher inventory turnover, primarily due to the 50% share of home appliances in its inventory, which have longer turnover times and are not part of FRT's product range. This means MWG cannot be conclusively said to have less efficient sales than FRT. In fact, when considering metrics like days sales outstanding and days payable outstanding, MWG's overall cash cycle turns more efficiently.

MWG has a stable financial position with a trend toward reducing financial leverage: From 2017-2019, MWG reduced its debt proportion, with a slight increase in 2019-2021. Currently, MWG has a debt ratio of 68%, with loans making up 58% of total assets. After adjusting for lease commitments, we estimate a higher debt-to-assets ratio of 76%. Short-term debt accounts for 90% of total debt, mainly for inventory stocking and store expansion. Retail companies generally use high leverage, so MWG's liquidity and payment risk are considered average. Compared to industry peers like FRT and DGW, MWG has lower leverage and higher retained earnings, and with BHX fully funded by equity, MWG's total debt-to-equity ratio is similar to that of other listed retailers in Vietnam like DGW (2x) and U.S. companies like Walmart and Costco (2x). We expect MWG to reduce financial leverage in the future, with BHX expansion likely supported by an IPO if it reaches breakeven as planned.

Figure 24: Valuation summary

Method	Percent tage	Price	Target price
FCFF	70%	178.696	191.126
Multiple	30%	220.129	

Source: Team analysis

Figure 25: Estimated WACC Results

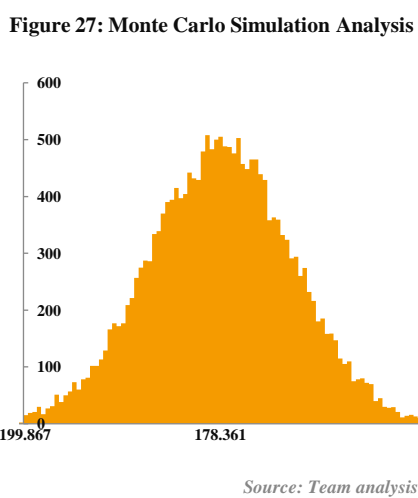
WACC Calculation	
Risk free rate	4%
Unleveraged Beta	0.5
D/E	1.21
Tax rate	1.3%
Forecasted leveraged beta	1.102
Risk premium	8.21%
Cost of equity	13%
Interest rate	3.5%
D/(D+E)	43.9%
WACC	8,84%

Source: Team analysis

Figure 26: Peers Comparison

ICT & CE	Nation	Relative P/E
Digiworld Corporation	Vietnam	12
FPT DIGITAL RETAIL JSC	Vietnam	11
Com7 PCL	Thailand	12
Erajaya Swasembada Tbk (ERAA)	Indonesia	00
International Housewares Retail Co Ltd	HongKong	0,96
FMCG	Nation	Relative P/S
Masan Group Corporation	VietNam	04
Vietnam Dairy Products JSC	VietNam	07
Sumber Alfaria Trijaya Tbk PT	Indonesia	06
Taiwan FamilyMart Co Ltd	Taiwan	04
Pharaceutical retail	Nation	Relative P/S
Kimia Farma Persero Tbk	Indonesia	05
Robinsons Retail Holdings Inc	Philippines	02
Kalbe Farma Tbk PT	Indonesia	00
Shanghai No1 Pharmacy Co Ltd	China	02
NanJing Pharmaceutical Co Ltd	China	01

Source: Team analysis



VALUATION

We forecast MWG’s business results based on the number of new store openings and revenue growth per store (SSSG) for the following chains: Thegioididong, DMX, Bluetronics, Topzone, BHX, and An Khang. The target price for MWG stock is calculated as a weighted average of two methods: discounted cash flow (70%) and price-to-earnings multiple (30%). The target price for MWG shares is VND 191,126 per share, representing an upside of 24.92% compared to the closing price on June 6, 2022

WACC

We forecast MWG’s business results based on the number of new store openings and same-store sales growth (SSSG) for the chains: Thegioididong, DMX, Bluetronics, Topzone, BHX, and An Khang. The target price for MWG is calculated as a weighted average of two methods: discounted cash flow (70%) and price-to-earnings multiple (30%). The target price for MWG shares is VND 192,126 per share, with an upside of 24.92% compared to the closing price on June 6, 2022.

DCF METHODOLOGY

With expectations to manage assumptions effectively and align with the company’s capital structure, we use the discounted free cash flow (FCFF) method for the years 2022-2026. Specifically, we expect MWG’s revenue growth to have a CAGR of 15%, with new revenue from the Topzone and An Khang chains. By 2026, the number of stores is projected to reach 10,775, doubling the total store count in 2021. Based on other detailed assumptions ([Appendix D1](#)), we estimate the target price from this method to be VND 178,692 per share.

MULTIPLE VALUATION

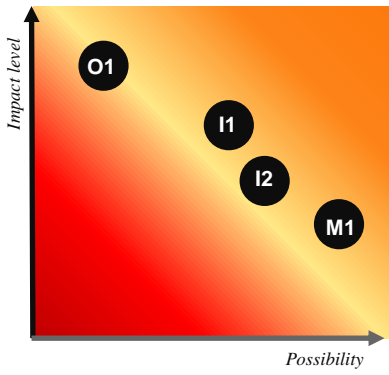
For the stable growth of ICT & CE sectors (Thegioididong, DMX, Topzone, Bluetronics), we use the P/E method, which results in a target price of VND 178,740 per share. For the BHX and An Khang chains, which are in the startup phase with negative profits, we use the P/S method. The P/S target values for these chains are VND 36,437 and VND 4,932 per share, respectively. With a market-oriented valuation approach to strengthen investment recommendations, we select companies with similar business models in markets that are comparable to Vietnam, adjusting ([Appendix D3](#)) to derive the expected share values for MWG.

SENSITIVITY ANALYSIS

We conducted a Monte Carlo simulation to examine how different scenarios could impact the stock value. By testing 10,000 iterations of assumed variables ([Appendix D4](#)), we found that the most significant factor affecting the stock value using the FCFF method is the average revenue per store per month for BHX, with an impact of 59.8%. The number of new stores for DMX follows as the next most influential factor, while the impacts from other chains were negligible on the stock value according to the FCFF method. This highlights the importance and influence of BHX on MWG.

RISK ANALYSIS

Figure 28: Risk Heat Map



Source: Team analysis

Figure 29: Risk Matrix

Impact level

	Low	Medium	High
High	O		
Medium		I	M
Low			

Possibility

Source: Team analysis

[M1] Market Risk | Risk of Interest Rate Increase

As the economy recovers from the pandemic and inflation rises, it is putting pressure on central banks to increase interest rates. The chart... shows that high inflation could drive interest rate hikes. MWG has a debt ratio of 68% of total assets, and an increase in interest rates will affect the rise in interest expenses and the WACC of MWG.

Impact Level: According to our analysis, a 1% increase in interest rates would lead to a stock price of 187,551.50 VND (a decrease of 1.87% compared to the target price).

Mitigation: Currently, and looking forward, MWG is making efforts to reduce financial leverage, utilizing equity capital and IPOs to finance ongoing projects. If MWG increases leverage to finance new or expanded projects, we believe that the company's scale advantage, diverse product range, and stable profits will offset this impact.

[I1] Industry Risk | ICT and CE Retail Sector Saturation, High Competition

The market for distributing ICT and CE products has low gross margins and significant competition, making it difficult to achieve superior profits without a competitive advantage. In addition to facing competition from retail chains with similar business models like FRT, MWG is also up against the pressure from small independent stores selling products at lower prices than those distributed by the company.

Impact Level: According to our analysis, a 1% increase in COGS for the ICT and CE sector would lead to a stock price of 159,207.58 VND (a decrease of 16.70% compared to the target price).

Mitigation: MWG is shifting its business model to new sectors with higher gross margins. Evidence of this is MWG's plan to convert old store formats to new ones and expand its new sector stores.

[I2] Industry Risk | Technology is Easily Replaced, Short Product Lifecycles Impacting Inventory

The retail industry for information technology products and mobile devices is constantly updated with new features and improved models to meet the ever-changing consumer demands. This consumer behavior exposes the company to the risk of unsold inventory, which incurs additional costs due to the constant need to purchase new technology products. Furthermore, the inventory is financed by short-term loans, and when the company is unable to sell off the inventory, it faces liquidity issues, leading to extended periods of interest and short-term debt repayment. This increases the company's interest costs, which forces the company to reduce prices to recover cash.

Impact Level: According to our analysis, a 1% decrease in the revenue per store growth rate for ICT products would result in a stock price of 163,794.60 VND (a decrease of 14.30% compared to the target price).

Mitigation: MWG has a large scale and good relationships with suppliers, enabling it to forecast and update market demand, ensuring that inventory levels are always in line with actual demand. Therefore, this risk is mitigated.

[O1] Operational Risk | Resource Diversification and Failure in New Ventures

MWG is working to shift its structure towards both old and new sectors, such as pharmaceuticals with An Khang, groceries with BHX, the AVA ecosystem, and electronics in Indonesia with EraBlue. We observe that MWG is trying to diversify its product portfolio with the strategy of covering all product categories, along with ambitions to expand internationally. However, resource diversification may lead to a loss of focus on individual sector strategies.

Impact Level: According to our analysis, a 1% increase in WACC would result in a stock price of 170,017 VND (a decrease of 11.05% compared to the target price).

Mitigation: For each sector, MWG specializes in teams responsible for them and prepares contingency plans in case the market does not show enough potential to minimize losses.

APPENDIX A. FINANCIAL STATEMENTS

- Appendix A1: Income Statement
- Appendix A2: Balance Sheet
- Appendix A3: Cash Flow Statement
- Appendix A4: Key Financial Ratios
- Appendix A5: Benish M-Score

APPENDIX B. BUSINESS OVERVIEW

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- Appendix B4: MWG’s Store Chains
- Appendix B5: MWG’s Store Network

APPENDIX C. INDUSTRY OVERVIEW AND COMPETITION

- Appendix C1: MWG’s Retail Industry Value Chain
- Appendix C2: Porter’s Five Forces Model Analysis
- Appendix C3: An Khang Store Analysis
- Appendix C4: Analysis of New Layouts of BHX
- Appendix C5: Geospatial Analysis

APPENDIX D. VALUATION

- Appendix D1: Assumptions of DCF Valuation Method
- Appendix D2: Determination of Weighted Average Cost of Capital (WACC)
- Appendix D3: Multiple Valuation Method
- Appendix D4: Monte Carlo Simulation Analysis

APPENDIX E. CORPORATE GOVERNANCE AND ESG

- Appendix E1: Environmental (E)
- Appendix E2: Social (S)
- Appendix E3: Corporate Governance Evaluation (G)
- Appendix E4: MWG’s Board of Directors

No.	Abbreviation	Full term
1	TGDD	The gioi di dong (thegioididong.com)
2	DMX	Dien may xanh (diemayxanh.com)
3	BHX	Bach hoa xanh (bachhoaxanh.com)
4	ICT	Information and communications technology
5	CE	Consumer Electronics
6	DMS	Dien may xanh Supermini
7	DMM	Dien may xanh Mini
8	AAR	Apple Authorized Reseller
9	APR	Apple Premium Reseller

APPENDIX A: FINANCIAL STATEMENTS

APPENDIX A1: INCOME STATEMENT

Unit: Million VND	2017	2018	2019	2020	2021	2022F	2023F	2024F	2025F	2026F
Net revenue from sale of goods and services	66.339.804	86.516.287	102.174.244	108.546.020	122.958.106	152.966.854	188.404.935	214.796.853	240.783.801	267.580.989
Costs of goods sold	55.198.025	71.224.159	82.686.445	84.591.522	95.325.974	118.267.146	145.954.671	165.882.033	185.341.243	205.701.416
Gross profit	11.141.779	15.292.128	19.487.799	23.954.497	27.632.132	34.699.709	42.450.264	48.914.819	55.442.558	61.879.573
Income from financial activities	250.510	342.084	631.178	794.122	1.287.956	1.352.354	1.419.971	1.490.970	1.580.428	1.675.254
Expenses from financial activities	234.287	436.573	569.755	594.152	714.707	904.810	966.089	1.114.506	1.093.102	1.247.121
- In which: Interest expenses	233.202	436.417	568.137	594.004	674.428	893.707	950.294	1.092.974	1.064.900	1.209.586
Gain (loss) in profits of associates	-	(2.101)	(3.473)	(3.707)	(2.211)	(4.391)	(5.077)	(5.272)	(6.437)	(6.977)
Selling expenses	7.017.061	9.659.741	12.437.283	15.333.799	17.914.173	21.415.360	25.811.476	28.997.575	32.505.813	36.123.434
General and administrative expenses	1.345.497	1.761.614	2.073.783	3.404.432	3.823.390	5.138.931	6.329.476	6.786.520	7.366.796	8.186.657
Operating profit	2.795.444	3.774.182	5.034.683	5.412.530	6.465.607	8.588.570	10.758.118	13.501.916	16.050.839	17.990.638
Other income	17.685	33.233	41.557	43.513	54.873	64.792	81.941	92.201	104.039	115.238
Other expenses	3.816	21.097	22.793	46.307	48.896	63.044	76.285	87.749	97.929	109.070
Other profit	13.868	12.136	18.764	(2.795)	5.977	1.749	5.656	4.452	6.109	6.168
Earning Before Interest and Tax	2.809.312	3.786.319	5.053.447	5.409.735	6.471.584	8.590.319	10.763.774	13.506.368	16.056.948	17.996.806
Current corporate income tax expense	639.744	933.837	1.248.353	1.598.414	1.632.976	2.050.995	2.600.901	2.899.306	3.267.504	3.645.615
Deferred corporate income tax expense	(37.329)	(27.827)	(31.146)	(108.551)	(62.819)	(115.562)	(119.295)	(149.139)	(159.821)	(181.698)
Net profit after tax	2.206.897	2.880.309	3.836.240	3.919.873	4.901.427	6.654.886	8.282.168	10.756.201	12.949.266	14.532.889
Equity holders of non-controlling interest	1.218	1.585	1.971	2.105	2.557	3.074	3.852	4.354	4.902	5.436
Net profit after tax of parent company	2.205.680	2.878.724	3.834.270	3.917.768	4.898.869	6.651.812	8.278.315	10.751.847	12.944.364	14.527.453

APPENDIX A2: BALANCE SHEET

Unit: Million VND	2017A	2018A	2019A	2020A	2021A	2022F	2023F	2024F	2025F	2026F
Current Assets	18.862.861	23.371.994	35.011.896,9	37.317.234	51.955.257	68.268.394	77.842.032	87.916.690	96.497.049	119.694.904
Cash And Cash Equivalents	3.410.983	3.749.550	3.115.236	7.347.857	4.142.015	15.191.704	15.373.246	21.499.100	21.515.604	40.291.145
Short-term Financial Investment	-	50.922	3.137.000	8.057.318	14.236.626	14.236.626	14.236.626	14.236.626	14.236.626	14.236.626
Short-term Receivables	2.765.847	1.542.529	1.815.085	1.595.251	3.162.122	3.810.168	4.871.403	5.410.175	6.278.645,9	6.709.005
Inventory	12.050.162	17.446.005	25.745.428	19.422.177	29.167.232	33.482.468	41.451.060	44.600.358	52.041.135	55.766.694
Other Current Asset	635.867	582.987	1.199.146	894.629	1.247.261	1.547.427	1.909.696	2.170.429	2.425.036	2.691.432
Non-current Assets	3.959.802,9	4.750.536	6.696.198	8.713.646	11.016.147	14.237.397	18.246.309	22.383.397	26.380.089	30.184.719
Long-term Receivables	242.116	313.775	374.563	439.493	482.389	482.389	482.389	482.389	482.389	482.389
Fixed Assets	3.463.658	3.333.147	5.403.777	7.294.961	9.647.168,9	12.654.929	16.541.490	20.603.131	24.623.892	28.361.814
Long Term Assets In Progress	35.457	256.832	87.430	132.620	79.697,9	247.550	304.900	347.611	292.250	324.775
Long-term Investments	-	59.937	56.464	52.757	-	-	-	-	-	-
Other Long-term Assets	218.571	786.843	773.963	793.813	806.891	852.527	917.528	950.265	981.558	1.015.740
Total Assets	22.822.664	28.122.531	41.708.095	46.030.880	62.971.404	82.505.792	96.088.341	110.300.087	122.877.138	149.879.624
Liabilities	16.913.747,9	19.139.496	29.564.503	30.549.190	42.593.158	48.689.810	55.454.771	60.374.895	61.467.260	75.401.436
Current Liabilities	15.713.814,9	17.929.433	28.442.366	29.422.513	42.593.158	48.689.810	55.454.771	60.374.895	61.467.260	75.401.436
Non-current Liabilities	1.199.933	1.210.063	1.122.136	1.126.676	-	-	-	-	-	-
Owner's Equity	5.908.916	8.983.035	12.143.592	15.481.689	20.378.246	33.815.981	40.633.570	49.925.191	61.409.878	74.478.187
Capital	5.908.916	8.983.035	12.143.592	15.481.689	20.378.246	33.815.981	40.633.570	49.925.191	61.409.878	74.478.187
Other Fund	-	-	-	-	-	-	-	-	-	-
Total Equity	22.822.664	28.122.531	41.708.095	46.030.880	62.971.404	82.505.791	96.088.341	110.300.087	122.877.138	149.879.623

APPENDIX A3: CASH FLOW STATEMENT

Unit: Million VND	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Net Profit Before Tax	2.206.897	2.880.309	3.836.240	3.919.873	4.901.427	6.654.886	8.282.168	10.756.201	12.949.266	14.532.889
Depreciation and amortisation	689.714	1.222.869	1.442.827	2.195.583	2.920.714	3.323.047	4.045.859	4.995.899	6.130.873	7.442.516
Provision for decline in value of investments	125.969	126.084	90.496	58.367	179.551	166.507	222.562	80.490	220.368	84.382
NWC	(245.716)	(1.968.501)	(6.454.640)	5.150.738	(6.997.177)	(807.145)	(3.946.974)	(2.166.077)	(2.602.100)	(2.962.129)
Other adjustment	(113.200)	374	(201.004)	(532.132)	(833.124)	(407.195)	(488.661)	(354.862)	(347.292)	(361.970)
Net Cashflow from Operating Activities	2.663.664	2.261.135	(1.286.081)	10.792.429	171.390	8.930.100	8.114.953	13.311.651	16.351.115	18.735.687
Purchase and construction of fixed assets and other long-term assets	(2.065.070)	(1.495.932)	(3.066.921)	(3.911.358)	(4.976.877)	(6.437.268)	(7.928.378)	(9.038.858)	(10.034.881)	(11.151.571)
Proceeds from disposals of assets	180	1.340	1.291	2.018	1.107	-	-	-	-	-
Loans provided to related parties and other	(210.280)	(85.923)	(8.997.470)	(11.512.469)	(19.225.219)	-	-	-	-	-
Collection of loans provided to related parties and other	125.580	0	5.911.392	6.512.150	12.163.994	-	-	-	-	-
Payments for equity investments in other entities	0	(828.167)	0	0	(16.385)	-	-	-	-	-
Interest and dividend received	29.375	64.287	278.946	335.398	798.510	-	-	-	-	-
Net Cashflow from Investing	(2.120.215)	(2.344.394)	(5.872.762)	(8.574.261)	(11.254.870)	(6.437.268)	(7.928.378)	(9.038.858)	(10.034.881)	(11.151.571)
Proceeds from issuance of ordinary shares	92.467	703.840	90.455	105.200	228.253	7.515.140	0	0	0	0
Money to return contributed capital to owners, buy back shares of the issued enterprise	0	(730)	(4.850)	(6.041)	(2.320)	-	-	-	-	0
Payments of loan	29.465.789	31.893.805	45.905.952	51.168.161	63.936.208	72.142.959	87.572.803	101.188.040	102.662.770	131.962.826
Payments for principal of finance leaser	(27.456.000)	(31.690.849)	(38.801.962)	(48.573.997)	(56.045.131)	(70.368.952)	(86.113.256)	(97.870.400)	(107.497.921)	(119.306.821)
Dividend paid to owner	(231.719)	(485.862)	(665.094)	(678.909)	(239.519)	(732.290)	(1.464.579)	(1.464.579)	(1.464.579)	(1.464.579)
Net Cashflow from Financing Activities	1.870.537	420.205	6.524.502	2.014.415	7.877.491	8.556.857	(5.033)	1.853.061	(6.299.730)	11.191.425
Net Cash Flow during The Period	2.413.986	338.460	(634.341)	4.232.584	(3.205.988)	11.049.689	181.542	6.125.854	16.504	18.775.541
Cash and Cash Equivalents at The Beginning of The Period	996.984	3.410.983	3.749.550	3.115.237	7.347.857	4.142.016	15.191.704	15.373.246	21.499.101	21.515.604
Cash and Cash Equivalents at The End of The Period	3.410.983	3.749.550	3.115.237	7.347.857	4.142.016	15.191.704	15.373.246	21.499.101	21.515.604	40.291.145

APPENDIX A4: KEY FINANCIAL RATIOS

	2017A	2018A	2019A	2020A	2021A	2022F	2023F	2024F	2025F	2026F
LIQUIDITY RATIO										
Current ratio	1,20	1,30	1,23	1,27	1,22	1,40	1,40	1,46	1,57	1,59
Quick ratio	0,43	0,33	0,33	0,61	0,54	0,71	0,66	0,72	0,72	0,85
Cash Ratio	0,22	0,21	0,11	0,25	0,10	0,31	0,28	0,36	0,35	0,53
SOLVENCY RATIO										
(D+E)/E	3,86	3,13	3,43	2,97	3,09	2,44	2,36	2,21	2,00	2,01
Interest Coverage Ratio	13,05	9,68	9,89	10,11	10,60	10,61	12,33	13,36	16,08	15,88
Cash Coverage Ratio	16,00	12,48	12,43	13,80	14,93	14,33	16,58	17,93	21,84	22,03
ASSET MANAGEMENT RATIO										
Inventory Turnover		4,83	3,83	3,75	3,92	3,78	3,90	3,86	3,84	3,82
Days of inventory on hand (DOH)		75,58	95,33	97,45	93,02	96,68	93,70	94,67	95,16	95,65
Receivables Turnover		40,16	60,86	63,66	51,69	43,88	43,40	41,78	41,20	41,21
Average Collection Period		9,09	6,00	5,73	7,06	8,32	8,41	8,74	8,86	8,86
Payable Turnover		9,81	8,96	7,53	10,05	8,98	9,10	8,94	8,99	8,80
Average Collection Period		37,20	40,72	48,46	36,32	40,67	40,12	40,81	40,58	41,47
Assets Turnover		3,40	2,93	2,47	2,26	2,10	2,11	2,08	2,07	1,96
PROFITABILITY RATIO										
Gross Profit Margin	16,80%	17,68%	19,07%	22,07%	22,47%	22,68%	22,53%	22,77%	23,03%	23,13%
Operating Profit Margin	3,33%	3,33%	3,75%	3,61%	3,99%	4,35%	4,40%	5,01%	5,38%	5,43%
Net Profit Margin	4,59%	4,88%	5,50%	5,53%	5,81%	6,20%	6,22%	6,80%	7,11%	7,18%
EBIT Margin	5,63%	6,29%	6,91%	7,55%	8,19%	8,37%	8,36%	9,12%	9,66%	9,96%
EBITDA Margin	9,67%	10,24%	9,20%	8,52%	7,78%	8,07%	8,62%	9,75%	10,54%	9,70%
ROA	37,35%	32,06%	31,59%	25,32%	24,05%	19,68%	20,38%	21,54%	21,09%	19,51%
ROE	25,70%	26,16%	18,41%	17,48%	13,24%	16,31%	16,96%	19,50%	20,84%	21,19%
MARKET VALUE RATIO										
EPS				5,676	6,897	4,544	5,656	7,346	8,844	9,925
GROWTH RATIO										
Operating Profit Growth Rate		30,41%	18,10%	6,24%	13,28%	24,41%	23,17%	14,01%	12,10%	11,13%
Gross Profit Margin Growth Rate		37,25%	27,44%	22,92%	15,35%	25,58%	22,34%	15,23%	13,35%	11,61%
EBIT Growth Rate		30,51%	33,19%	2,18%	25,04%	35,77%	24,45%	29,87%	20,39%	12,23%
EAT Growth Rate		23,22%	48,31%	10,36%	36,80%	31,02%	16,46%	14,79%	11,40%	21,98%
Total Assets Growth Rate		14,10%	58,64%	3,45%	44,76%	14,31%	13,89%	8,87%	1,81%	22,67%
Short-term Debt Growth Rate		13,16%	54,47%	3,33%	39,42%	14,31%	13,89%	8,87%	1,81%	22,67%
Debt Growth Rate		52,03%	35,18%	27,49%	31,63%	65,94%	20,16%	22,87%	23,00%	21,28%
FINANCIAL LEVERAGE GROWTH RATIO										
Short-term Debt/Total Debt	92,91%	93,68%	96,20%	96,31%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%
Borrowings/Total Assets	40,22%	36,81%	47,87%	54,84%	57,87%	54,26%	50,28%	51,67%	42,89%	51,75%
D/A	74,11%	68,06%	70,88%	66,37%	67,64%	59,01%	57,71%	54,74%	50,02%	50,31%
E/A	0,26	0,32	0,29	0,34	0,32	0,41	0,42	0,45	0,50	0,50
Short-term Debt/Equity	2,66	2,00	2,34	1,90	2,09	1,44	1,36	1,21	1,00	1,01
Borrowings/Equity	1,15	0,78	1,17	1,08	1,21	0,78	0,69	0,62	0,43	0,52
Short-term Debt/Equity	2,86	2,13	2,43	1,97	2,09	1,44	1,36	1,21	1,00	1,01
CASHFLOW RATIO										
Cashflow from Operating/Net Revenue	4,02%	2,61%	-1,26%	9,94%	0,14%	5,84%	4,31%	6,20%	6,79%	7,00%
Cashflow from Operating/Short-term Debt	16,95%	12,61%	-4,52%	36,68%	0,40%	18,34%	14,63%	22,05%	26,60%	24,85%
Net Cashflow/Short-term Debt	15,36%	1,89%	-2,23%	14,39%	-7,53%	22,69%	0,33%	10,15%	0,03%	24,90%
Cashflow from Operating/Equity	11,67%	8,04%	-3,08%	23,45%	0,27%	10,82%	8,45%	12,07%	13,31%	12,50%
Cashflow from Operating/Operating Profit	95,29%	59,91%	-25,54%	199,40%	2,65%	103,98%	75,43%	98,59%	101,87%	104,14%
Cashflow from Operating/Debt	15,75%	11,81%	-4,35%	35,33%	0,40%	18,34%	14,63%	22,05%	26,60%	24,85%

APPENDIX A5: BENEISH M-SCORE

We use the 8-variable Beneish M-score model to assess whether a company’s earnings are likely to be manipulated. If the M-score is less than -2.22, it indicates that the company is unlikely to manipulate its earnings, and vice versa.

[1] Formula:

M-Score = -4.48 + 0.092xDSRI + 0.528xGMI + 0.404xAQI + 0.892xSGI + 0.115xDEPI - 0.172xSGAI + 4.679xTATA - 0.327xLVGI

[2] Result:

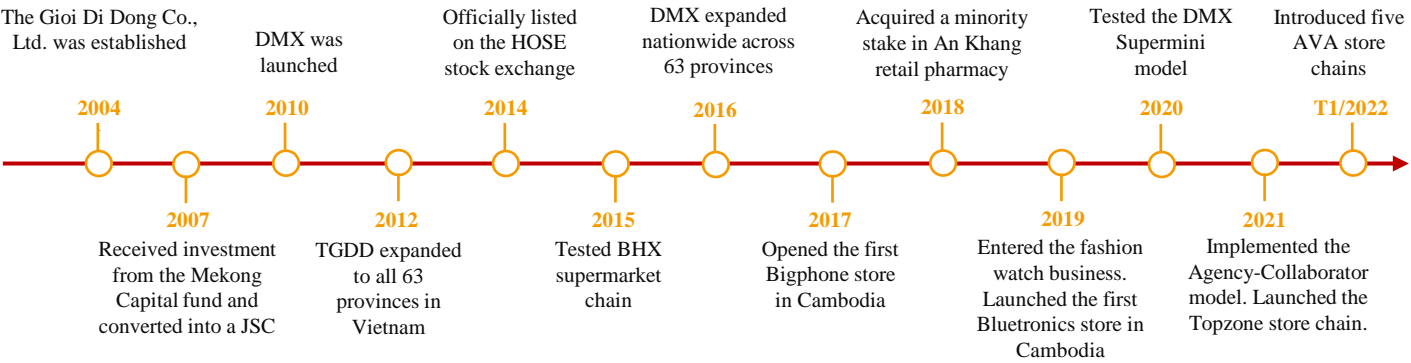
Financial Ratio Indexes	2018	2019	2020	2021
Days Sales Receivable Index (DSRI)	0,43	1,00	0,83	1,75
Gross Margin Index (GMI)	0,95	0,93	0,86	0,98
Asset Quality Index (AQI)	2,24	0,62	0,99	0,73
Sales Growth Index (SGI)	1,3	1,2	1,1	1,1
Depreciation Index (DEPI)	0,64	1,27	0,90	0,99
Sales, General and Administration Expense Index (SGAI)	1,00	1,00	1,55	0,99
Leverage Index (LVGI)	0,92	1,04	0,94	1,02
Total Accrual on Total Assets (TATA)	0,02	0,12	-0,15	0,08
Beneish M-Score (8 variables)		(2,71)	(3,48)	(2,58)

[3] Conclusion:

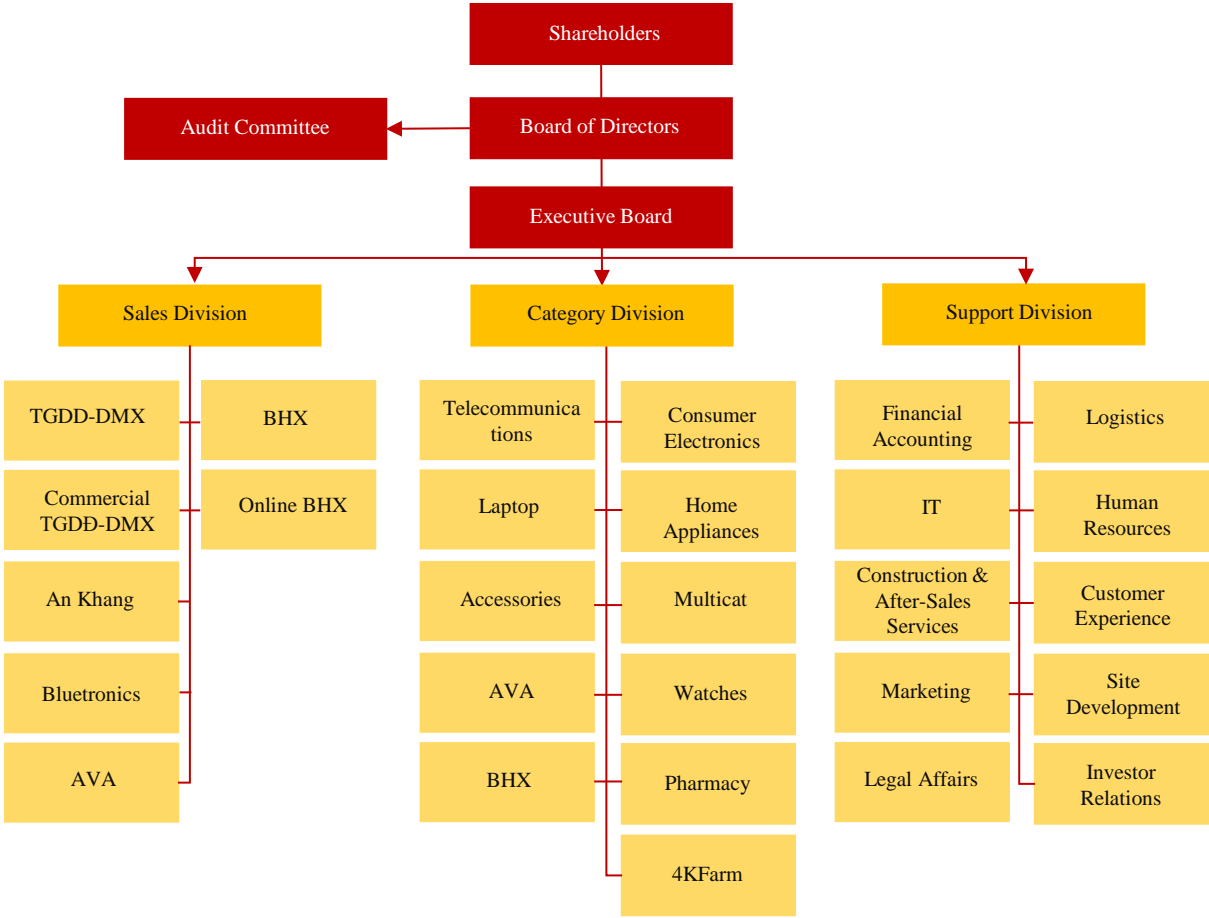
MWG has a Beneish M-score < (2.22) from 2018-2021, meaning that it is not likely to have manipulated their earnings

APPENDIX B. BUSINESS OVERVIEW

APPENDIX B1: HISTORY AND DEVELOPMENT OF MWG



APPENDIX B2: COMPANY’S BUSINESS MODEL



APPENDIX B3: LIST OF SUBSIDIARIES AND AFFILIATES

No.	Company	Business Sector	Location	capital contribution (bn)
1	Mobile World Investment Corporation	Electronics Trading	HCMC	3.626
2	Bach Hoa Xanh Trading JSC	Food Trading		12.825
3	The Gioi Di Dong IT One-Member Co., Ltd	IT		538
4	Tan Tam Installation, Repair, and Warranty Services JSC	Machinery and Equipment Repair		Indirect investment
5	An Khang Retail JSC	Pharmaceutical Retail		Indirect investment
6	Toan Tin Logistics JSC	Logistic		5
7	Vui Vui Co., Ltd	E-commerce		Indirect investment
8	Tran Anh Digital World JSC	Electronics Trading	Ha Noi	861
9	4K Farm JSC	Agricultural Cultivation and Processing	Vung Tau	100
10	MWG (Cambodia) Co., Ltd	Electronics Trading	Campuchia	Indirect investment

APPENDIX B4: MWG'S STORE CHAINS

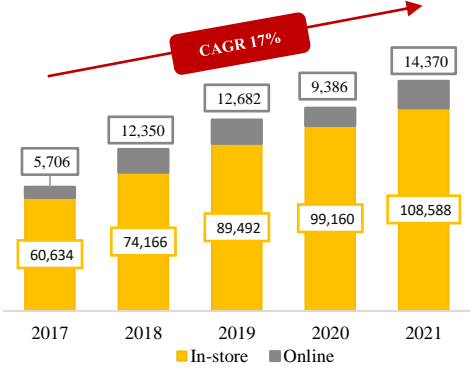
THE GIOI DI DONG CHAIN

The online sales channel continued its strong growth: reaching 1,470 bn VND in 2021 (+53% YoY), accounting for 12% of MWG's total revenue. Specifically, TGDD and DMX contributed VND 1,305 billion (+47% YoY) in online revenue, making up 14% of the total revenue of these two chains. Additionally, over 2 million online orders from BHX were successfully fulfilled in 2021, contributing 3% to the chain's total revenue. Currently, BHX only provides delivery services in select provinces and cities in the South Central Coast, Central Highlands, Southeast, and Mekong Delta regions. With two websites - thegioididong.com and dienmayxanh.com - serving mobile and consumer electronics shopping needs, MWG is the largest contributor to online revenue in Vietnam's phone and electronics retail market. The traffic share of thegioididong.com and dienmayxanh.com is the highest among all ICT and CE retail websites (as of Q4/2021). The company's Superapp project (integrating all three online sales platforms into a single app) has been postponed as MWG needs more time to enhance its existing online channels. Instead, the company is focusing its resources on implementing new initiatives for the year, such as the DMS chain and upgrading BHX.

Agent-Associate Model

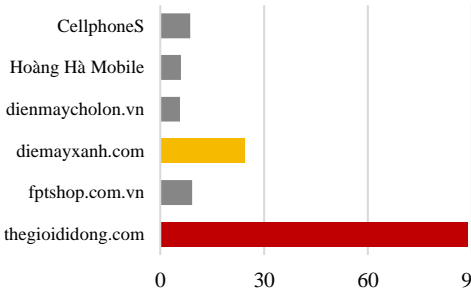
In mid-May 2021, MWG launched a pilot of the Agent-Associate model (AA) and successfully onboarded over 160 associates in Ho Chi Minh City, Dong Nai, Ba Ria-Vung Tau, and other provinces. By the end of 2021, the number of associates had grown to 400, contributing VND 550 billion in revenue for TGDD and DMX. MWG's management aims to expand the network to 1,000 associates, which is expected to increase market share by 7% by tapping into sales in small provinces and rural areas. This channel will be a key driver of MWG's overall growth. Currently, MWG holds 50% of the mobile phone and electronics retail market - with 30% held by other retail chains and 20% by small independent stores. However, these smaller stores must offer lower prices than TGDD and DMX to remain competitive. MWG offers attractive incentives to its AA network. For each product sold (which retains all of TGDD's promotional, return, and warranty policies), associates receive a 5%-20% commission after a 15-day successful delivery period. MWG also provides upgraded sales tools and storefront investments to enhance brand visibility for its associates.

Figure 30: Revenue Structure by Channel



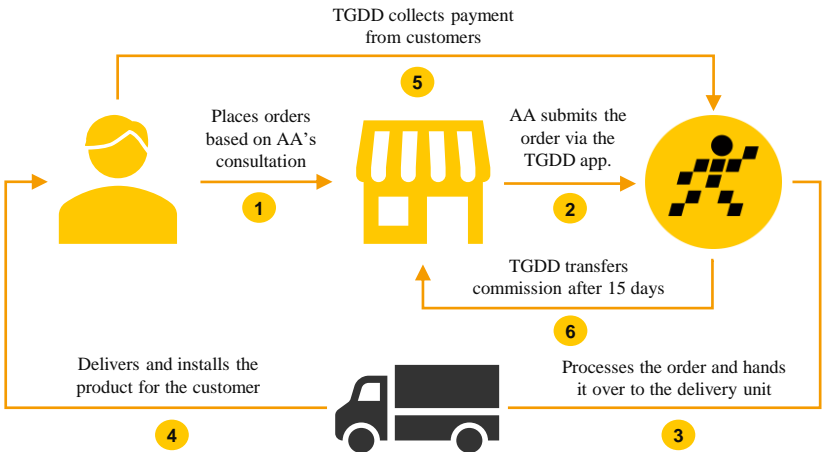
Source: MWG

Figure 31: Traffic of Vietnam's Mobile Phone and Consumer Electronics Retail Websites in Q4/2021 (Million Visits/Month)



Source: KBSV

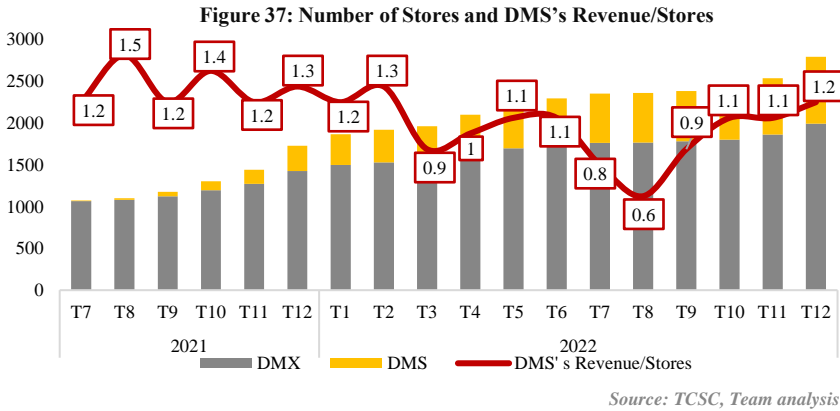
Figure 32: Operational Model of the Agent-Associate System



Source: Team analysis

DIEN MAY XANH CHAIN

The electronics retail chain currently operates 800 DMS stores, 855 DMM stores, and 337 DML stores. After six months of launch, DMS has expanded across 61 provinces and gained market share by adopting a model that reduces store size, focusing on low-income residential areas and rural regions. Competitors like Nguyen Kim and FRT have faced challenges with this model due to limitations in logistics resources and the ability to manage a large number of stores. MWG plans to open 20 DMX Flagship centers, each covering 3,000–5,000 m², in early Q3/2022 or Q4/2022 to cater to high-end customers in major urban areas.



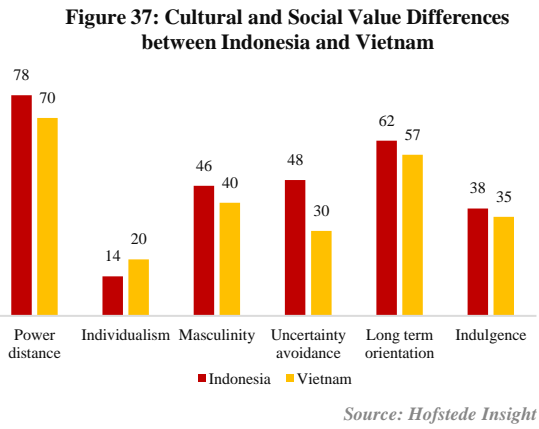
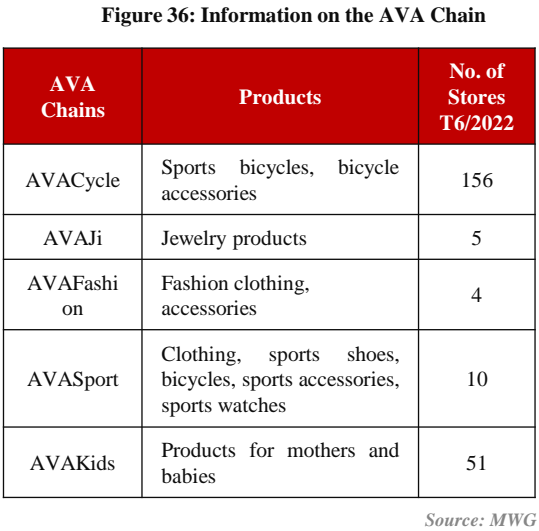
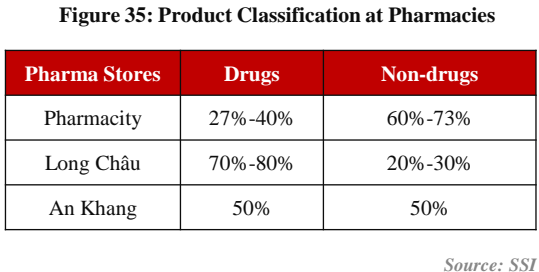
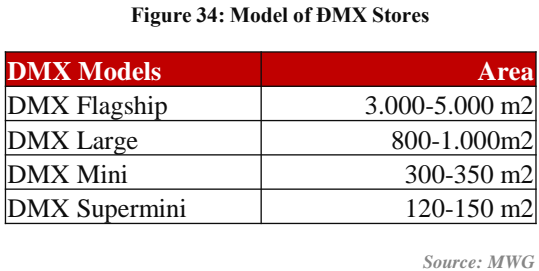
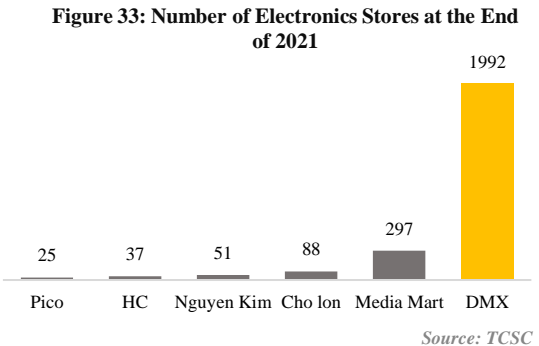
AN KHANG PHARMACY CHAIN

Previously, An Khang only operated in Ho Chi Minh City, but after integrating with BHX, the pharmacy chain has expanded to neighboring southern provinces. An Khang now sells not only pharmaceuticals and medical equipment but also non-drug products (accounting for 50%) (Figure 35), such as beverages and health supplements. Similar to Pharmacy and Long Châu, An Khang offers a return and exchange policy for certain product categories – medications, supplements, medical devices, cosmetics, and medical machines – within 24 hours. This sets it apart from traditional pharmacies.

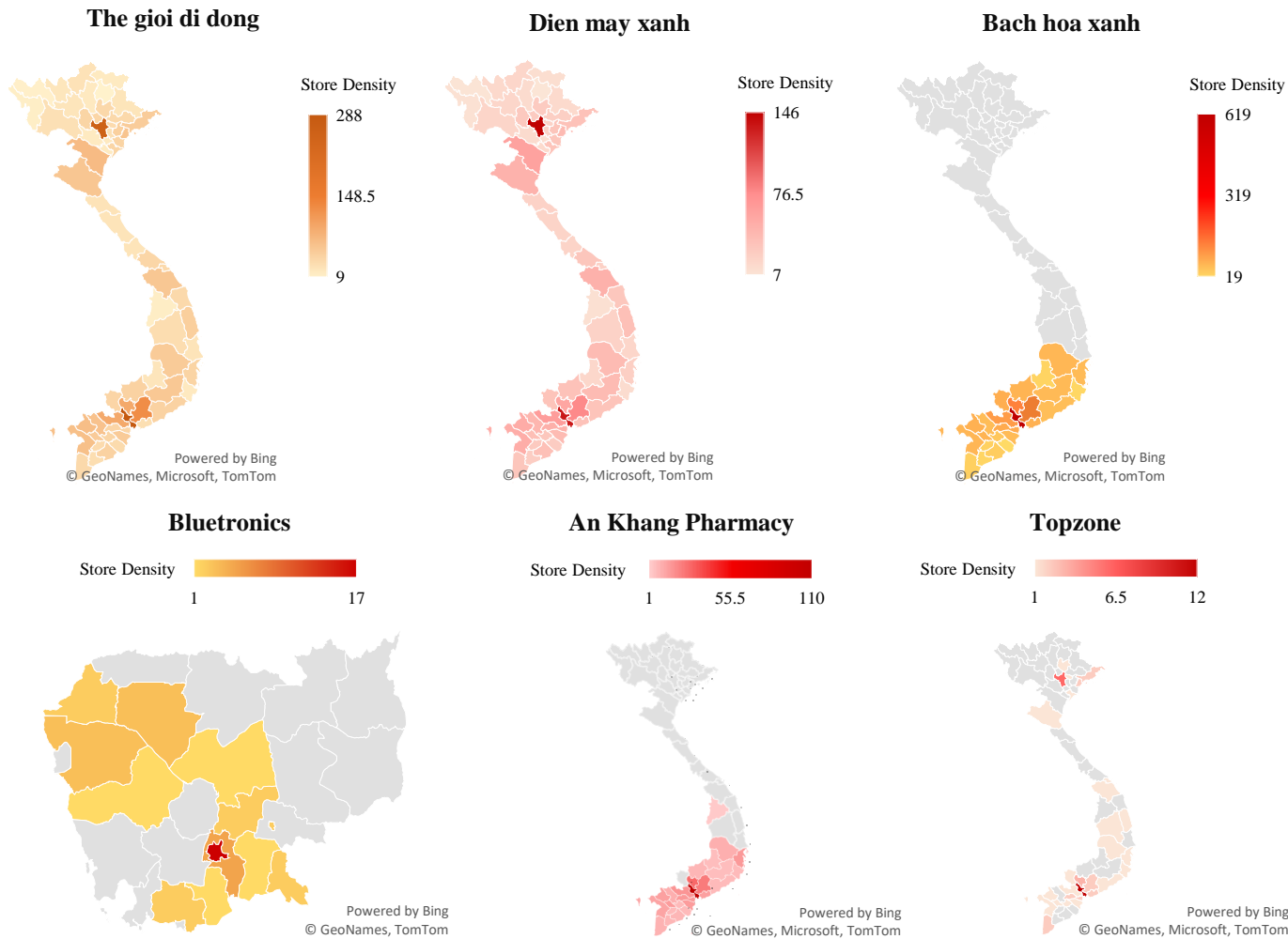
OTHER BUSINESS SECTORS

AVA Ecosystem: In January 2022, MWG launched 5 AVA chains with 12 standalone stores, including AVAKids, AVAFashion, and AVASports, as well as shop-in-shop concepts AVAJi and AVACycle (Figure 36). MWG has become the largest bicycle retailer in Vietnam, with around 150 retail points currently. However, as the AVA chain is still in the testing phase, we have chosen not to include it in our valuation for a more cautious approach.

Era Blue: On March 15, MWG partnered with PT Erafone Artha Retailindo (Erafone), a subsidiary of Erajaya Group, to establish a joint venture, PT Era Blue Elektronik (Era Blue brand). Despite cultural differences, Indonesia shares similar shopping habits with Vietnam (Figure 37). With Erafone's local market expertise and MWG's experience in the electronics sector, Era Blue is expected to tap into the growing IT and electronics market in Indonesia, which has significant growth potential with a GDP and population size three times that of Vietnam.



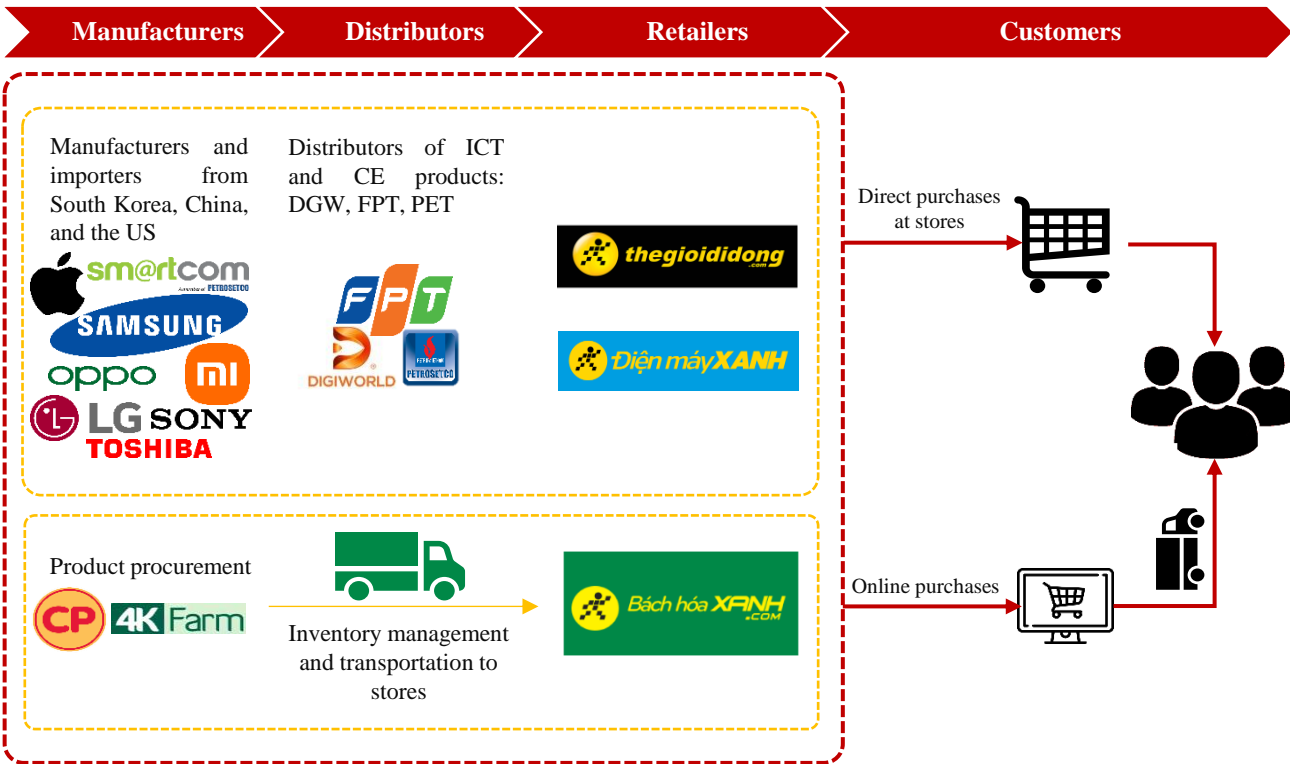
APPENDIX B5: MWG'S STORE NETWORK



Nguồn: MWG, Nhóm phân tích

APPENDIX C. INDUSTRY OVERVIEW AND COMPETITION

APPENDIX C1: MWG'S RETAIL INDUSTRY VALUE CHAIN



THREAT OF SUBSTITUTES

Retail technology - 5

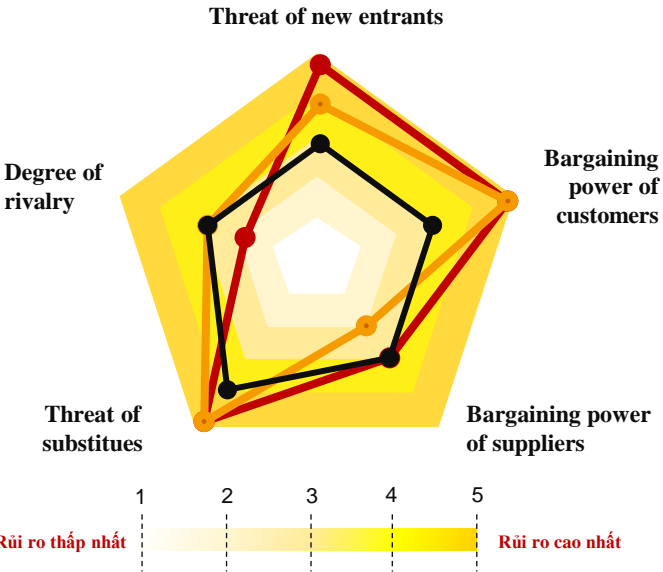
There is high pressure for substitution, with businesses striving to expand retail channels from offline to online, allowing customers the freedom to choose. Customer care programs and warranty services are increasingly improving among retailers.

Food retail - 5

Traditional market channels are gradually being replaced by modern systems with stabilized prices and guaranteed products. E-commerce channels are also receiving more focus, especially during and after the Covid-19 period.

Pharmaceutical retail – 4

Retail pharmacies operated by small businesses are the main channel for supplying products to the domestic market, while the emergence of more modern systems is expected to reshape this market.



THREAT OF NEW ENTRANTS

Retail technology - 5

- The market is highly competitive, with the retail market share being dominated by large and reputable brands.
- The market is gradually becoming saturated as the market share is increasingly shaped by domestic enterprises.

Food retail - 4

- The Coopmart and Winmart supermarket systems are the leaders nationwide.
- The frequent emergence of the BHX chain, which combines features of both supermarkets and traditional markets, will intensify market competition.

Pharmaceutical retail - 3

- In the OTC channel, there is still room for the development of pharmacy chains
- However, market share is rapidly expanding with the strong presence of three pharmacy chains - Pharmacity, Long Châu, and An Khang - thanks to their abundant resources.

DEGREE OF RIVALRY

Retail technology - 2

- Vietnam’s retail market has experienced massive growth, requiring businesses to have substantial financial resources and innovative business strategies to expand market share.
- The government has taken measures to curb the influx of unauthorized imported goods

Food retail - 3

- Establishing large-scale logistics and warehousing systems to ensure a stable supply chain remains a significant challenge for entering Vietnam’s billion-dollar food retail market.
- Businesses must adopt competitive pricing strategies and offer high-quality, diverse products.

Pharmaceutical retail - 3

- New entrants will face fierce competition in the market share race against rapidly expanding Pharmacity, Long Châu, and An Khang.
- Pressures related to workforce availability, supply chain stability, and fuel costs pose substantial barriers to entry in this lucrative market.

BARGAINING POWER OF CUSTOMERS

Retail technology - 5

Customers have full autonomy in selecting products based on their needs and are free to choose suppliers that offer competitive pricing within their desired segment and the best customer service.

Food retail - 5

Consumers have a wide range of options, from traditional markets and convenience stores to modern retail chains, all providing diverse products with guaranteed origins.

Pharmaceutical retail - 3

- Product selection is still somewhat limited due to a lack of consumer awareness in making informed choices
- Pharmacies and retail stores are increasingly targeting customers with various promotions, thereby giving consumers greater freedom in choosing their preferred pharmacy.

BARGAINING POWER OF SUPPLIERS

Retail technology - 3

- Suppliers are often well-established brands in the market, offering products with unique characteristics. Retailers have limited opportunities to negotiate high discount rates.
- However, there is considerable product overlap among suppliers in the budget segment.

Food retail - 2

- Vietnam, as one of the world’s leading agricultural countries, has an abundant supply, which weakens suppliers’ bargaining power.
- Except for well-known domestic brands and products that are not readily available locally, suppliers still have significant opportunities.

Food retail - 3

- They have an advantage when dealing with independent pharmacies, holding a large share of the market.
- However, the recent emergence of large pharmacy chains with high-volume purchasing requirements is gradually reducing the bargaining power of domestic pharmaceutical suppliers..

APPENDIX C3: AN KHANG STORE ANALYSIS – THE JOURNEY TO ASSERT ITS POSITION

Unlike other pharmacies currently in the market, An Khang operates under two models: standalone stores (Figures 1 and Figure 2) and stores adjacent to BHX (Figure 3)

Figure 1

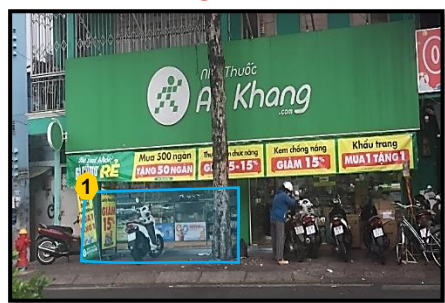


Figure 2



Figure 3



Source: Team research

- 1
- The design features a standing counter for smaller stores, while larger stores include seating areas, allowing customers to have a better experience and receive more effective consultations from in-store pharmacists.
- 2
- With a product mix of 50% pharmaceuticals and 50% other essential goods, An Khang enables customers not only to purchase medicine with pharmacist assistance but also to shop for daily necessities. This sets it apart from traditional pharmacies and Long Chau, where customers typically have to make purchases from outside the counter.
- 3
- For stores adjacent to BHX, a wide connecting aisle between the two stores allows An Khang to benefit from the high customer traffic of BHX, increasing brand visibility.

Limitations: Currently, An Khang stores lack prime locations compared to competitors in the industry. Although the in-store shopping model allows customers to enter the store freely, the small store size and limited product variety may be drawbacks for consumers.

APPENDIX C4: ANALYSIS OF NEW LAYOUTS OF BHX

In 2022, BHX focused on revamping its store layout to create a more user-friendly shopping experience. Shelves were stocked with a wider variety of products, and floor space was optimized for better utilization.



Fixed price tags replaced stickers, reducing price updates



Hinged display boards were installed for smoother checkout processes



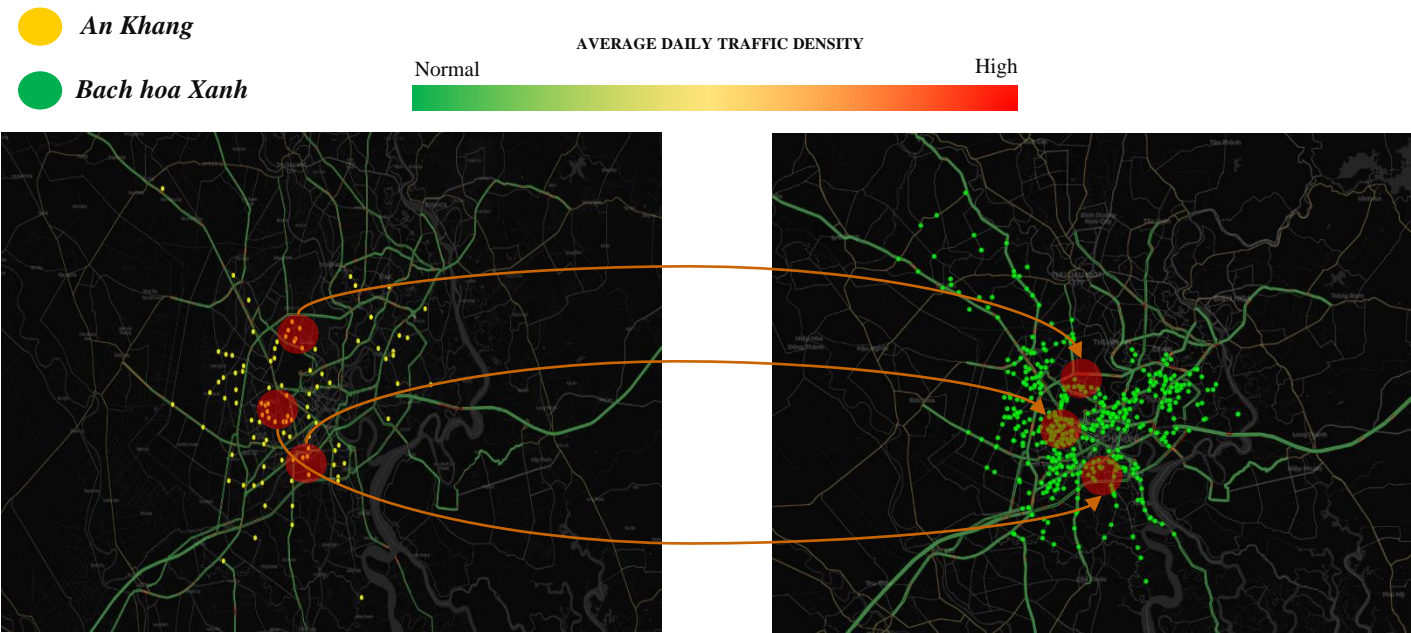
Signage was upgraded with clearer section markers for easier navigation



More fridges were added to enhance the storage for fresh food and perishable goods.

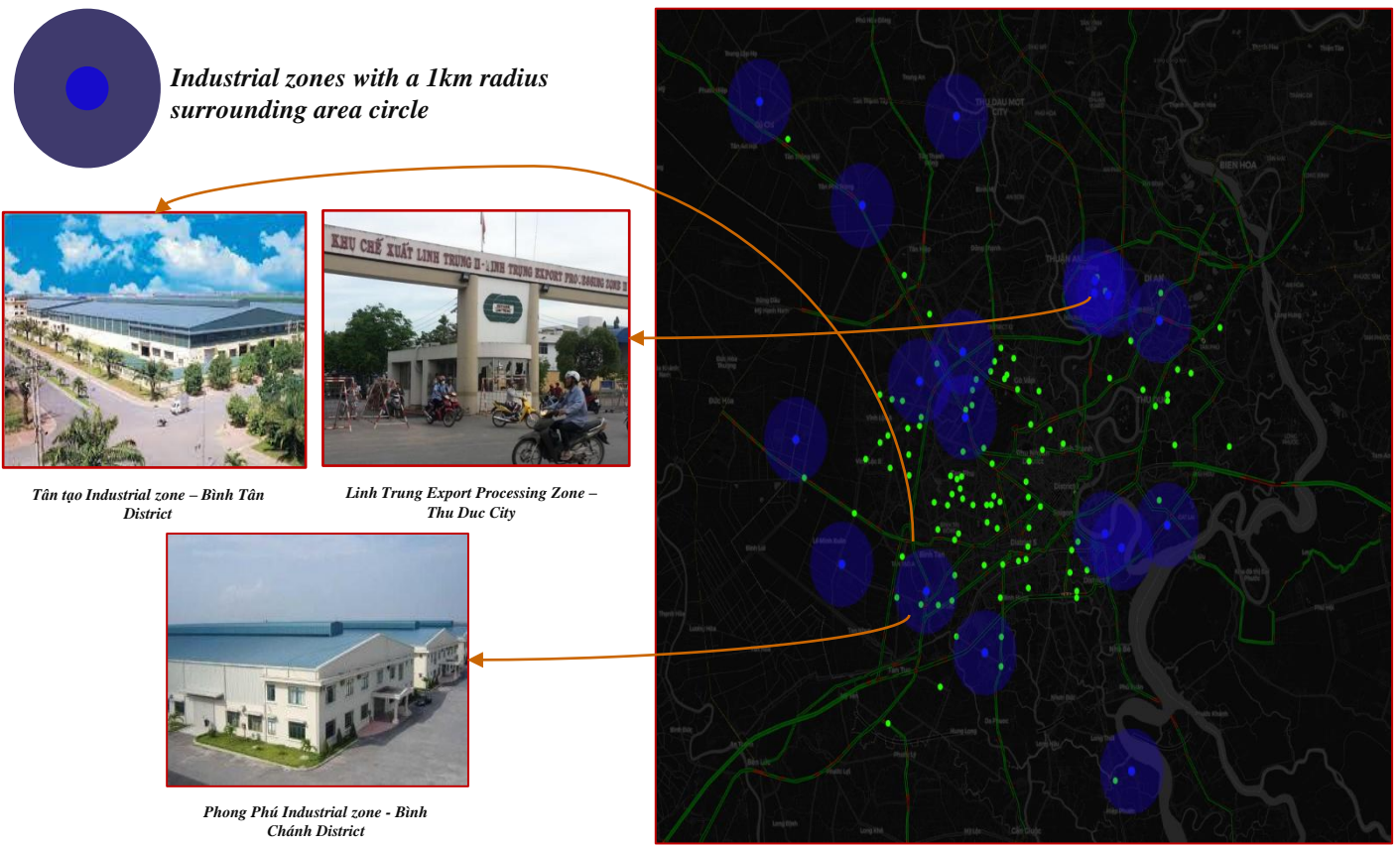
APPENDIX C5: GEOSPATIAL ANALYSIS – BACH HOA XANH – AN KHANG

The team visualized the data of An Khang and BHX stores and found that An Khang is highly concentrated in areas where BHX already has a strong presence.



This suggests that An Khang is leveraging BHX’s brand power to boost its own brand recognition, while competitors incur higher marketing and rental costs.

Additionally, the team observed that some An Khang stores are expanding to areas outside city centers. A significant number of stores are concentrated in industrial areas such as Binh Chanh, Thu Duc, and Binh Tan, which have many industrial zones.



The shift to these areas indicates the growing health needs of the local population, especially since Thu Duc, Binh Chanh, and Binh Tan had the highest infection and mortality rates during the pandemic. Therefore, this trend is completely justified.

APPENDIX D1: ASSUMPTIONS OF DCF VALUATION METHOD

Store	Assumptions
TGDD	<p>Number of Store: By 2026, we estimate that the total number of TGDD stores will be around 965. Regarding new store openings from 2022 to 2026F, MWG has been converting underperforming TGDD stores into DMX and DMX Mini stores. We assume that during this period, 20-30 stores will be converted each year. Additionally, with new TGDD store openings from 2022 to 2023, the total number of stores is expected to increase by 50. However, from 2024 to 2026, to mitigate sales declines and considering that the demand for telecommunications and electronics products is no longer growing strongly, 55 stores are expected to be closed.</p> <p>Revenue: According to Fitch's forecast, consumer spending on electronic devices such as PCs, cameras, and mobile handsets is expected to increase by 13.8% in value compared to 2021. However, in the long run, categories like PCs and laptops will not see strong growth due to limited expansion opportunities and the diminishing impact of online learning and remote work. Meanwhile, the mobile phone segment is projected to have a CAGR of 6.92% from 2022 to 2026. TGDD has also diversified its product portfolio to include watches and eyewear, which have shown strong growth. We expect SSSG (Same-Store Sales Growth) to reach 7% in 2022 but gradually decline and stabilize at 1.5% in the 2025-2026 period.</p>
DMX	<p>Number of Store: MWG aims to reach 1,000 DMX Mini stores in 2022. With the existing 800 DMX Supermini stores, we estimate that an additional 230 DMX stores will be added, including both new openings and conversions from TGDD stores. From 2023 to 2026, as many segments in the consumer electronics sector approach saturation, the revenue growth of standard DMX stores is expected to slow. Meanwhile, DMX Supermini and Mini stores have already established a strong presence in rural and remote areas. As a result, the number of new store openings will decline, with a total of 250 new stores expected during this period.</p> <p>Revenue: The consumer electronics market is nearing saturation, with home appliances no longer attracting as much consumer interest as before. However, the refrigeration segment, particularly refrigerators, is expected to see strong recovery, with a projected CAGR of 6.15%, while washing machines are expected to grow at a CAGR of 10.19% during the 2022-2026 period. Combined with positive revenue growth from Dien May Xanh Mini and Supermini stores, we forecast that DMX's revenue CAGR for this period will reach 4.5%.</p>
Bluetronics	<p>Number of Store: In 2021, Bluetronics had 50 stores across 13 out of 25 provinces in Cambodia. The plan for 2022 is to open an additional 30 stores, reaching a total of 80 stores across all 25 provinces. MWG does not plan to expand further in the following years but will maintain a stable store count.</p> <p>Revenue: The ICT and CE markets in Cambodia are experiencing strong growth. Bluetronics, with its continuously changing promotional strategies and rapid expansion, is currently "dominating the majority of the market share." We expect Bluetronics' SSSG in Cambodia to remain at 5-6%.</p>
Topzone	<p>Number of Store: With the goal of rapidly capturing Vietnam's Apple product market in 2022/23 and benefiting from a large market valued at approximately VND 34,500 billion, with a growth potential of around 7% per year, MWG began aggressively expanding its store network in 2022. We anticipate that by 2023, 200 Topzone stores will be operating nationwide. Since MWG does not have significant expansion plans beyond this milestone, we expect a slowdown in new store openings to maintain revenue stability per store and prevent market dilution. By 2026, the total number of stores is projected to reach 250.</p> <p>Revenue: The tightening of regulations on hand-carried Apple products serves as a key growth driver for Topzone. With two store models—AAR (VND 6-8 billion per month) and APR (VND 10-15 billion per month)—Topzone's estimated revenue in 2022 is around USD 600 million. MWG aims to achieve USD 1 billion in revenue, securing a 40% market share and becoming the largest Apple distributor in the region. From 2024 to 2026, SSSG (Same-Store Sales Growth) is expected to remain at 7%.</p>

Store	Assumptions
BHX	<p>Number of Store: In 2022, BHX focused on changing its store layout and implementing operational backup strategies to improve revenue. As a result, the number of new store openings was expected to be limited to around 64. In 2023, MWG planned to expand into the northern region; however, due to strong competition from the Winmart chain and certain demographic barriers, we estimate that by 2026, the BHX chain will reach 5,000 stores.</p> <p>Revenue: Following layout and operational adjustments, SSSG is expected to increase by 10%. However, from 2023 onward, with expansion plans and aggressive discount and promotional strategies to attract customers, the average SSSG for this period is projected to be 6%.</p>
An Khang Pharmacy	<p>Store Count: We believe that 2022-2023 is a strong acceleration phase for An Khang’s store expansion. By 2026, the total number of stores is expected to reach 2,008. With its experience and solid foundation, MWG is confident that despite entering the market later, it can close the gap with two major competitors—Pharmacy and Long Châu—while capturing around 10% of the market share.</p> <p>Revenue: The pharmaceutical industry is valued at approximately USD 7.4 billion, with annual pharmaceutical spending growing at an average rate of 14%. Currently, over 95% of pharmacies in Vietnam are small independent stores. Following the pandemic, the industry has significant growth opportunities, particularly in functional foods and vitamins. An Khang operates under two models: the An Khang-BHX combination model, generating VND 400-500 million in revenue per month, and the independent model, generating VND 700-800 million per month. We estimate the average monthly revenue per store to reach VND 500 million in 2022. An Khang’s product portfolio is more balanced than other pharmacy chains, with a 50-50 split between pharmaceutical products and other health-related items. Additionally, An Khang is implementing several strategic changes, including redefining its business model, redesigning store layouts, restructuring its product portfolio, and launching a new website. The projected SSSG is expected to remain at 10-12% from 2023-2025 before declining to 8% in 2026.</p>
Gross Profit	<p>We expect the gross profit margin for the ICT and CE segments to remain stable at 23%. Meanwhile, after analyzing the gross profit margins of competitors such as F.Studio, we estimate that Topzone’s margin could reach 11% in 2022 and gradually increase to 15% by 2024. As MWG captures 40% of the Apple market in Vietnam, it will gain significant advantages in negotiations and discounts.</p>

APPENDIX D2: DETERMINATION OF WEIGHTED AVERAGE COST OF CAPITAL (WACC)

WACC of MWG is 8,84%.

Risk-free rate: 10-Year Bond Yield

Leveraged Beta/ Unleveraged Beta: The leveraged beta is estimated based on the one-year volatility between the VN Index and MWG’s stock price. The unleveraged beta is the beta value adjusted for the Debt/Equity ratio and tax rate.

Market Risk Premium: Based on Professor Aswath Damodaran’s research estimate for the Vietnamese market.

Cost of Equity: Using the CAPM model, MWG’s cost of equity is calculated at 13%.

Cost of Debt: Based on the company’s Debt / (Debt + Equity) structure for 2022.

WACC Calculation		
Risk free rate	4,0%	
Unleveraged Beta	0,50	
D/E	1,21	
Tax rate	1,3%	
Forecasted leveraged beta	1,102	
Risk premium	8,21%	
Cost of equity	13,0%	
Interest rate	3,5%	
D/(D+E)	43,8%	
WACC	8,84%	

Beta L

1,1

D/E

1,2

Tax rate

1,3%

Beta U

0,50

APPENDIX D3: MULTIPLE VALUATION METHOD

We selected companies from five countries in the **Asia-Pacific region**, including **Indonesia, Thailand, China, Taiwan**, and the **Philippines**, with similar characteristics in terms of trade regulations, demographics, and market development speed by sector (ICT & CE market, Pharmaceutical market, and FMCG market) compared to Vietnam. Through two adjustment processes (market adjustments and internal business adjustments of the companies), we identified appropriate P/E and P/S values for the businesses.

ICT & CE		(CAGR 2019-2021)	(Average 2019-2021)					Historical	2017	2018	2019	2020	2021
Ticker	Nation	Revenue growth	GPM	ROE	Beta	Market P/E	P/E(LTM)	Relative P/E (LTM)	P/E 2017	P/E 2018	P/E 2019	P/E 2020	P/E 2021
DGW VN Equity	Vietnam	58,00%	6,82%	28,08%	1,08	13,85	15,58	1,12	10,58	8,39	5,81	13,79	16,56
FRT VN Equity	Vietnam	6,48%	12,80%	18,18%	1,77	13,85	20,86	1,51	0	14,49	8,06	120,3	17,84
COM7 TB Equity	Thailand	22,00%	13,10%	42,20%	1,32	19,88	36,2	1,82	31,96	20,95	26,24	31,45	37,33
ERAA IJ Equity	Indonesia	14,20%	10,00%	11,40%	1,67	13,92	8,31	0,60	6,28	8,03	19,51	11,46	9,38
1373 HK Equity	HongKong	47,15%	45,90%	21,80%	0,7	10,93	10,52	0,96	14,43	10,89	12,41	9	7,67
Industry average		29,57%	18%	24,33%	1,308			1,20	0,83	0,86	0,97	2,58	1,15
Comparison with industry peers	0,98x	1,27	0,97	0,98	1,08	P/E VN	13,85						
ICT&CE		1,79%	21,2%	26,99%	0,95	Beta Ngành	1,32						
Market-adjusted target P/E ratio		P/E VN	13,85					16,65	11,48	11,85	13,46	35,76	15,89
Relative adjustment							0,98x						
Target P/E adjusted from operational performance								16,42	11,31	11,69	13,27	35,26	15,67

Mean	14,47
MWG	2022F
Earnings after tax	6.740,9
BHX and An Khang's earnings after tax (estimated)	9.040,9
ICT&CE's earnings after tax	731.854.815
Outstanding shares	12.353
EPS Forward	178.740

FMCG		(CAGR 2019-2021)	(Average 2019-2021)				Historical	2017	2018	2019	2020	2021
Ticker	Nation	Revenue growth	GPM	Beta	Market P/E	P/S(LTM)	Relative P/S (LTM)	P/S 2017	P/S 2018	P/S 2019	P/S 2020	P/S 2021
MSN VN Equity	VietNam	54,03%	25,81%	0,8	13,85	1,97	0,14	2,14	2,19	1,76	1,35	2,27
VNM VN Equity	VietNam	4%	45,57%	0,7	13,85	2,38	0,17	5,93	3,98	3,6	3,81	2,96
AMRT IJ	Indonesia	7,87%	20,36%	0,38	13,92	0,87	0,06	0,41	0,58	0,5	0,44	0,59
5903 TT	Taiwan	3,74%	36,42%	0,31	11,96	0,51	0,04	0,62	0,66	0,63	0,69	0,66
Industry average		17,41%	32,04%	0,5475	13,395		0,10	0,17	0,14	0,12	0,12	0,12
Comparison with industry peers	0,96x	0,72	1,07	0,91		P/E VN	13,85					
Bach Hoa Xanh		62,18%	22,93%	0,70				2,30	1,88	1,65	1,60	1,65
Market-adjusted target P/S ratio												
Relative adjustment						0,96x						
Target P/S adjusted from operational performance								2,22	1,82	1,59	1,55	1,59

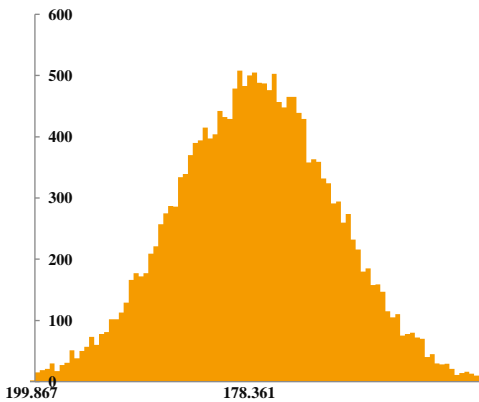
BETA (BHX)	
Beta L	0,5
D/E	0%
tax rate	0,0%
Beta U	0,55
Adjusted Beta	0,70

Revenue in 12 months forward	31.981.296
Outstanding shares	731.854.815
Mean	1,59
Revenue/COGS in 2022	22.883,84
P/S FW	1,59
Price	36,437

Pharaceutical retail		(CAGR 2019-2021)	(Average 2019-2021)				Historical	2017	2018	2019	2020	2021
Ticker	Nation	Revenue growth	GPM	Beta	Market P/E	P/S(LTM)	Relative P/S (LTM)	P/S 2017	P/S 2018	P/S 2019	P/S 2020	P/S 2021
KAEF IJ Equity	Indonesia	16,27%	36,73%	-0,48	13,92	0,64	0,05	2,45	1,71	0,74	2,36	1,05
RRHI:PM	Philippines	-0,56%	22,53%	0,5	22,49	0,53	0,02	1,16	0,84	0,77	0,68	0,65
KLBF:IJ	Indonesia	7,71%	44,19%	0,62	13,92	2,8	0,20	3,1	2,7	2,9	2,5	2,2
600833 CH Equity	China	10,0%	18,52%	1,14	12,34	1,45	0,12	1,99	1,73	1,69	1,37	1,49
600713 CH Equity	China	14%	6,49%	1,05	12,34	0,11	0,01	0,19	0,14	0,13	0,12	0,11
Industry average		9,48%	25,69%	0,566			0,08	0,13	0,10	0,09	0,10	0,08
Comparison with industry peers	0,75	1,09	1,26	1,57		P/E VN	13,85					
An Khang Pharmaceutical												
Market-adjusted target P/S ratio								1,74	1,41	1,23	1,38	1,08
Relative adjustment						0,75						
Target P/E adjusted from operational performance								1,31	1,06	0,92	1,04	0,81

Outstanding shares	152.966.854,4
Revenue/COGS in 2022	731.854.815
Mean P/S	4784,401286
P/S FW	1,04
Price	1,04
Outstanding shares	4.952
MWG's price per share	220,129

APPENDIX D4: MONTE CARLO SIMULATION ANALYSIS



We conducted a Monte Carlo simulation analysis to determine the sensitivity of the model to 12 variable changes, specifically the number of new store openings and the average monthly revenue growth for each chain. After 10,000 iterations, we found that in the best-case scenario, the highest price based on the discounted cash flow method, influenced by store expansions and SSSG, was 212,841 VND, while in the worst-case scenario, the value reached 147,671 VND. Additionally, there is a 99.971% certainty that the price will be higher than the closing price on June 6, 2022, reinforcing our recommendation.

APPENDIX E1: ENVIRONMENTAL (E)

Impact of CO2 Emissions | Use of Eco-Friendly Packaging (3.5):

Currently, 100% of the packaging used in TGDĐ and ĐMX stores is environmentally friendly PP plastic, which can be collected and recycled, minimizing waste. At BHX stores, biodegradable plastic packaging is used, which decomposes within six months. Additionally, the AVA ecosystem stores are testing paper packaging alongside eco-friendly PP plastic.

The company has policies to reduce packaging waste by allocating packaging quantities based on projected order volume and product categories. The remaining packaging at the end of each cycle serves as a basis for adjusting future supply. Store employees also ask customers if they need packaging before wrapping their purchases, encouraging the use of reusable fabric bags.

Waste Management | Enhancing Waste and Wastewater Treatment (3.5):

Most waste at MWG consists of household waste, which is collected at warehouses, stores, and offices and disposed of according to legal regulations. Electronic waste such as batteries, accessories, and watches is collected, sorted, and processed. After assessment, electronic waste is transferred to licensed third-party processors for maximum reuse. MWG is currently collaborating with Vietnam-Australia Environmental Corporation for electronic waste management.

Resource Consumption | Implementing Measures to Reduce Electricity Usage (3.0):

Since 2013, all MWG supermarkets have been equipped with automatic light sensors that turn on signage lights at 6 PM or when it gets dark and turn them off at 10 PM daily. Additionally, automated systems control store lighting and air conditioning, turning them on at 7 AM and off at 11 PM. The use of LED lighting in offices increased from 95% to 100% in 2021. The company plans to install rooftop solar power in 200 more stores by 2022 to reduce electricity consumption, ensuring efficient and non-wasteful energy use while minimizing environmental impact.

APPENDIX E2: SOCIAL (S)

Community | Active Participation in Social Activities and Corporate Social Responsibility (4.0):

MWG launched the “Million Loves – Thousands of Tons of Rice” campaign, donating over 2,000 tons of rice worth more than 20 billion VND to 100,000 disadvantaged households in Vietnam and Cambodia during the pandemic. In 2021, MWG contributed 10 billion VND to the “Mái Ấm Thế Giới Di Động” charity fund. With additional support from philanthropists, the total sponsorship fund exceeded 45 billion VND for COVID-19 relief efforts in Ho Chi Minh City and Binh Duong. Nearly 30 billion VND was allocated to support 4,500 orphaned and underprivileged students in Ho Chi Minh City and neighboring provinces. Additionally, MWG organized a corporate running event where every kilometer run contributed at least 1,000 VND to social charity funds.

Employees | Clear Labor Policies and Employee Benefits (3.5):

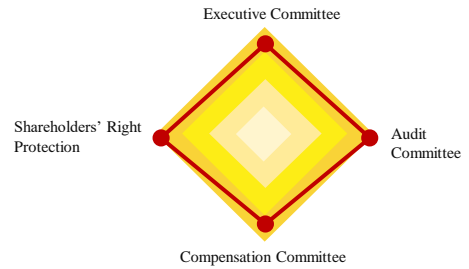
MWG complies with regional minimum wage regulations and monitors market salary trends to implement fair compensation policies for each department. The company has a well-defined internal promotion policy, allowing employees to apply for managerial positions after just six months if they meet customer service criteria. MWG also provides training programs across its retail chains, including TGDD, DMX, BHX, An Khang pharmacies, and supporting divisions.

According to MWG’s 2020 Employee Engagement Survey, the company recorded a 92% engagement rate. Among the 47,826 survey participants, 96% expressed pride in working at MWG, 86% were satisfied with their direct managers, and 94% had confidence in the company’s leadership.

APPENDIX E3: GOVERNANCE (G)

A governance quality assessment system based on the CFA Institute Corporate Governance Manual for Investors. Companies are rated on a scale from 1 to 4:

- 1 – The company does not comply with any criteria.
- 2 – The company does not comply with some criteria.
- 3 – The company complies with some criteria.
- 4 – The company has good policies based on these criteria.



CFA INSTITUTE FRAMEWORK CORPORATE GOVERNANCE			
EXECUTIVE COMMITTEE			
CRITERIA	DESCRIPTION	RATING	COMPANY POLICIES
Independence	Independent members with sufficient capacity to check corporate governance performance	4	One-third of its BoD is independent
Accountability	Governance practices should reflect a board that is answerable to its owners	4	The BoD provides clear, accurate, and comprehensive reports.
Responsiveness	Directors must be responsive to the wishes of its shareholders as expressed through elections or votes on shareholder proposals and respond accordingly	4	Ensured access to information, direct engagement, voting rights, and participation in key decisions.
Competence	Directors should add value through skills or expertise in a particular field	4	The Chairman, along with all 3 independent directors and 2 executive members, possesses expertise and experience in Finance and Business.
Elections	Annually elected directors	4	The election regulations are transparent and detailed during annual general meetings. BoD members are elected through a cumulative voting system
Board Attendance	Annually elected directors, adequate attendance at board and committee meetings.	4	All members attended meetings fully (11/11), except for two members appointed in mid-2021
Directorship	Number of board directorships	3	There are 3/9 executive members, including Mr. Tùng, a founding member newly appointed in March 2022
Board Diversity	The diversity of BoD	2	No female members on the BoD, but includes foreign members
Related Party Transactions	Absence of material related party transactions.	3	All related-party transactions are fully disclosed
Board Members	Board of at least 5 but no more than 11 members.	4	The BoD consists of 9 members
Independent Members	At least 20% of BoD to be independent members	4	The BoD has 3 independent directors (accounting for 33%)
Role Delegation	Role of CEO and Chair should be separate	4	Mr. Nguyen Duc Tai is the Chairman of the BoD. Mr. Tran Huy Thanh Tung is the CEO.
Committees	Established Executive, Audit, Compensation, Nominating, and Compliance Committee	3	Only an Audit Committee (1/3 of independent directors perform this function), which operates under the BoD, no RC or HRC
Average score		3.6	

AUDIT COMMITTEE

Independent Audit	Auditor should provide an impartial and professional opinion. Independence is compromised when the auditor receives significant payments for non-audit work.	4	The Chairman of the Audit Committee is an independent director, owns 0% of shares, and previously held the position of Chief Accountant. FS are recorded as being fairly and accurately presented in all material aspects, in accordance with VAS and relevant legal regulations
Independent Audit	Board's Audit Committee should be independent	4	The auditing firm is Ernst & Young Vietnam Ltd. AC monitors and evaluates the independence and objectivity of the auditing firm and the effectiveness of the audit process.
Financial Integrity	Company's financials should have integrity. (Items that raise concerns include changes in auditors, irregularities over many years, material weaknesses in the company's controls, certain restatements, and excessive fees paid for non-audit work)	4	The financial statements are publicly and fully disclosed and have received high ratings from auditors. The AC also ensures that auditors follow all necessary quality control procedures.
Selection of Auditor	Company should allow shareholders to ratify the selection of the auditor	4	The AC recommends the appointment/dismissal and contractual terms for the independent auditor, which are then approved by the BoD and ratified by shareholders at the Annual General Meeting (AGM)
Average score		4	

COMPENSATION COMMITTEE

Performance Metrics	Performance metrics should encourage executives to make decisions that benefit shareholders	3	There is a compensation and bonus scheme for achieving and exceeding annual targets
Performance Metrics	Performance Metrics should be communicated to shareholders	4	The Management Board publicly discloses the company's annual report, which is approved at the AGM
Performance Metrics	A portion of executive compensations should be in the form of equity	3	MWG has a dividend payment policy and an ESOP issuance program, serving as an incentive bonus for the Executive Board and senior management
Average score		3.3	

SHAREHOLDER RIGHTS' PROTECTION

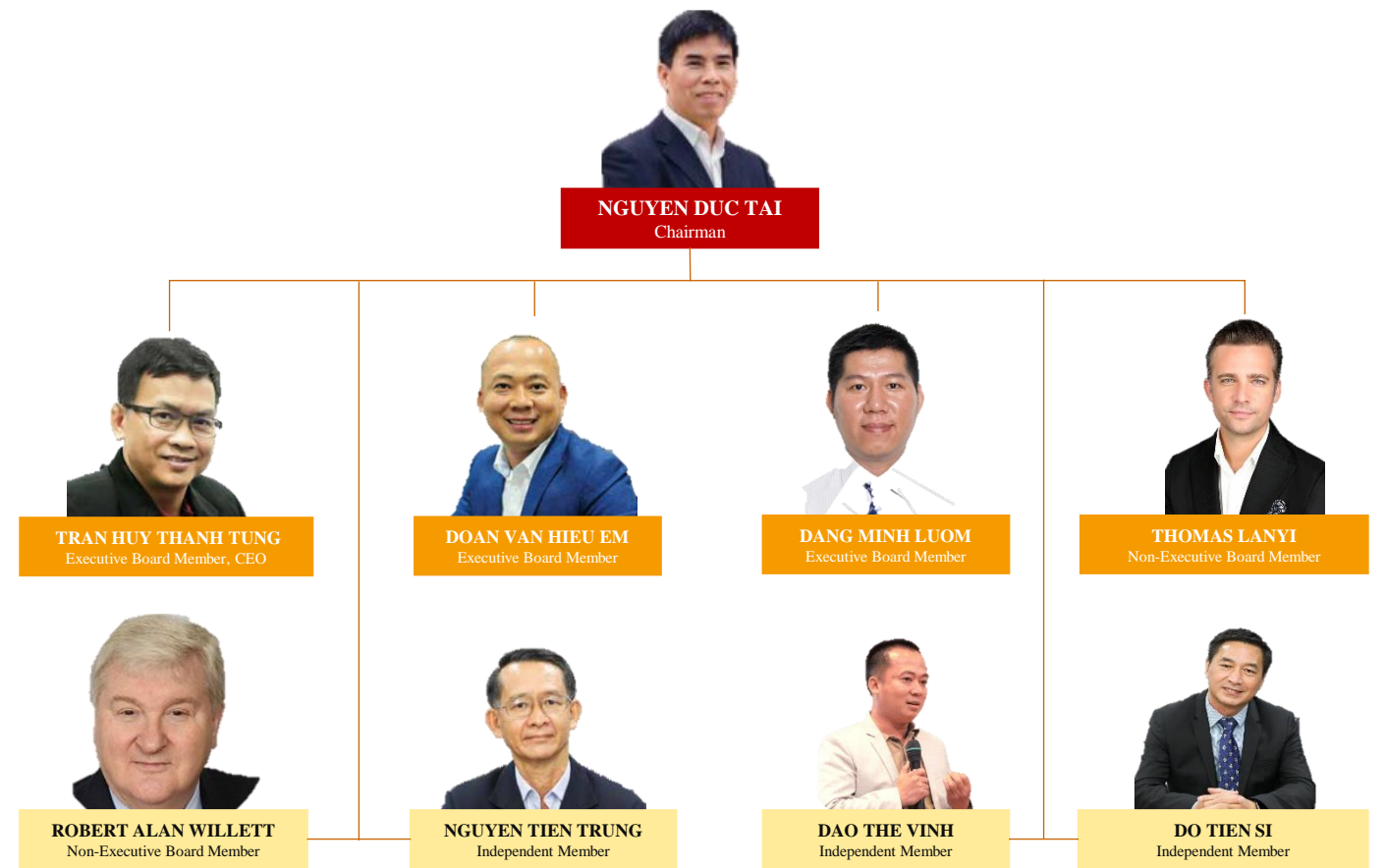
	Right to Dividend	4	The BoD proposes the dividend payout ratio, which is then approved by the AGM and regulated by the company's Charter
	Absence of supermajority vote requirements	4	Decisions are based on the approval of 51% of total voting shares present at the meeting, except for certain items specified in the company's Charter
	Right of shareholders to call special meetings	4	Minority shareholders have the right to propose meetings and include items directly related to the company's business operations
	Information	4	Shareholders have full access to company information, the right to object, and to request fair value compensation for their shares
	Appraisal rights		

Average score

4

OVERALL RATING

3.7



Name	Position	Educational Level	Work Experience
Nguyen Duc Tai	Chairman	Bachelor’s degree from the University of Economics Ho Chi Minh City and Master’s degree from CFVG Management Institute	<ul style="list-style-type: none">May 17, 2014 – March 26, 2019: CEO of Mobile World Investment Corporation (MWG)2001 – 2003: Branch Director at Phuong Huy The Ky 21 Company2003 – 2004: Head of Strategic Development at S-Fone2004 – 2007: Sales and Marketing Director at Mobile World JSC2007 – May 2014: Chairman of the Board at Mobile World Investment Corporation, concurrently CEO at Mobile World JSCSince May 2014: Chairman and CEO at Mobile World Investment Corporation
Tran Huy Thanh Tung	Executive Board Member, CEO	Bachelor’s degree in Economics from the University of Economics Ho Chi Minh City	<ul style="list-style-type: none">One of the five co-founders of MWGSince 2012: Head of the Supervisory Board at MWG2004 – 2012: Chief Financial Officer at MWG1997 – 2004: Chief Accountant at Mabuchi Motor Vietnam Co., Ltd.Current positions at other organizations: Director of Tran Huy Investment Consulting Co., Ltd, Board Member of Mobile World JSC, Board Member of Electronic World Trading JSC
Doan Van Hieu Em	Executive Board Member	Bachelor’s degree in Accounting – University of Finance and Marketing	<ul style="list-style-type: none">Over 10 years of experience in business development in the Electronics & Telecommunications sectorOctober 2018: Appointed as CEO of MWG
Dang Minh Luom	Executive Board Member	Bachelor’s degree in Economics – University of Economics Ho Chi Minh City	<ul style="list-style-type: none">Since 2007: Human Resources Director at MWGMay 17, 2014: Appointed as a Board Member of MWG

Name	Position	Educational Level	Work Experience
Thomas Lanyi	Non-Executive Board Member	Bachelor's degree in Finance - Accounting – University of Finance and Marketing	<ul style="list-style-type: none"> 2012: CDH Investment Advisory Pte Ltd May 15, 2021: Non-executive Board Member of MWG
Robert Alan Willett	Non-Executive Board Member		<ul style="list-style-type: none"> Former Executive Director at BestBuy International
Nguyen Tien Trung	Independent Member, Chairman of the Audit Committee	MBA – Vietnam-Belgium Master of Business Administration Program	<ul style="list-style-type: none"> Previous roles at Savico: Chief Accountant, Director of Category Management & Development, Director of Research & Development
Dao The Vinh	Independent Member	Bachelor's & Master's degrees – Russian State Hydrometeorological University	<ul style="list-style-type: none"> Founding Shareholder & CEO – Golden Gate Trading Services JSC
Do Tien Si	Independent Member	MBA – INSEAD (France) & Tsinghua University (China)	<ul style="list-style-type: none"> Founding Shareholder, CEO & Vice Chairman – Pomina Steel JSC