

**DISCOUNTED CASH FLOW VALUATION OF MEGA  
LIFESCIENCES PUBLIC COMPANY LIMITED**



**A THEMATIC PAPER SUBMITTED IN PARTIAL  
FULFILLMENT OF THE REQUIREMENTS FOR  
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Thematic paper  
entitled  
**DISCOUNTED CASH FLOW VALUATION OF OF MEGA  
LIFESCIENCES PUBLIC COMPANY LIMITED**

was submitted to the College of Management, Mahidol University  
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Nutthakamol Kamolrat

**DISCOUNTED CASH FLOW VALUATION OF MEGA LIFESCIENCES PUBLIC COMPANY LIMITED**

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M.M. ( FINANCIAL MANAGEMENT)

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**ABSTRACT**

This thematic paper aims to estimate the intrinsic value of Mega Lifesciences Public Company Limited (MEGA) by using discounted cash flow valuation method (FCFF). The estimated share value should reflect the company's fundamentals, expected future performance and the risk. MEGA is operating in developing countries or emerging markets, and the nominal GDP growth of these countries are relatively high. I expect that this will lead to high demand for dietary supplement products as the company's sales is directly related to disposable income based on historical information. The target price on December 31st, 2020 of MEGA was estimated to be 43.17 baht with an upside of 27% when compared to the market price 34 baht on November 13th, 2020. Accordingly, we recommend to BUY. Another important move that MEGA made recently in order to bring the company further growth was acquiring PT Futamed Pharmaceuticals, a manufacturing plant in Indonesia, so that it can sell new drugs and technologies in the Indonesian market, and it also acquired Sando.

Ultimately, we hope that this study will be useful and able to guide interested investors regarding the intrinsic valuation of Mega Lifesciences Public Company Limited.

**KEY WORDS:** MEGA/ Valuation/ Discounted cash flow/ Pharmaceutical/ Dietary supplement products

41 pages

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## CHAPTER I INTRODUCTION

### 1.1 Company introduction

MEGA is a leading pharmaceutical and nutraceutical company that involves in the health and wellness industry in developing countries under its brand “Mega We Care”. Also, MEGA is a leading distributor of pharmaceutical and OTC products under its brand “Maxxcare” in Indochina, consisting of Myanmar, Vietnam and Cambodia.

Market capitalization of MEGA’s listed stock is THB 28,117.79 mn, which is considered to be a mid-cap stock and it is a member of the SET100 index. The average trading volume within the past 1 year is 2,116,542.37 shares.

**Table 1.1 Market profile**

<b>Market Profile</b>	
<b>Closing price</b>	THB 32.25
<b>52-Week Price Range</b>	THB 41.25
<b>Share Outstanding</b>	871.87 M
<b>Market Cap.</b>	28,117.79 M
<b>Dividend Yield</b>	2.14
<b>TTM P/E</b>	23.5
<b>NTM P/E</b>	22.22
<b>TTM P/BV</b>	4.8
<b>ROE</b>	19.14%
<b>EPS</b>	THB1.31
<b>Dividend per share</b>	THB0.71

Source: Reuters and SET

## 1.2 Recent developments of MEGA

Recently, MEGA acquired PT Futamed Pharmaceuticals which is a manufacturing plant in Indonesia. This action will build the path for MEGA to sell new drugs and technologies in Indonesian market. Another important move was the acquisition of Sandoz, a global leader in generic and biosimilar medicines, in Ethiopia and Myanmar.

According to our team earnings forecast, the operating revenue will have a compound growth rate of 9.8% between 2020 and 2025. Gross profit margin is 40%, slightly decreased from 2019 due to the fact that the firm changed its business model to distribute more lower margin products (Maxxcare). SG&A is 26% of operating revenue as we approximated it according to management discussion of 9M20 that SG&A was 26.3%. From 2020 to 2025, EBIT and net profit compounded growth is expected to be 10.2%, 10.3%, respectively.

**Table 1.2 Earning forecast of MEGA**

Income Statement (Mthb)	2015	2016	2017	2018	2019	2020F	2021F	2022F	2023F	2024F	2025F
<b>Revenue</b>	7,945	8,810	9,597	10,182	11,130	12,709	14,049	15,498	16,980	18,526	20,265
Investment income	28	14	16	22	15	15	15	15	15	15	15
Net foreign exchange gain	101.92	0	0	0	0	0	0	0	0	0	0
Other income	22	18	27	102	34	30	30	30	30	30	30
<b>Total revenue</b>	8,097	8,842	9,640	10,306	11,179	12,754	14,094	15,543	17,025	18,571	20,310
<b>COGS</b>	4,538	5,123	5,277	5,791	6,551	7,653	8,456	9,326	10,215	11,143	12,186
<b>% of revenue</b>	57%	58%	55%	57%	59%	60%	60%	60%	60%	60%	60%
<b>Gross Profit</b>	3,558	3,719	4,363	4,515	4,628	5,102	5,637	6,217	6,810	7,428	8,124
<b>Selling and Administrative Expenses</b>	2,718	2,674	2,965	3,052	3,176	3,343	3,695	4,030	4,415	4,817	5,269
<b>% of revenue</b>	34%	30%	31%	30%	29%	26%	26%	26%	26%	26%	26%
Selling expenses	1,717	1,634	1,856	1,886	1,899	2,006	2,217	2,418	2,649	2,890	3,161
Administrative expenses	1,001	1,041	1,109	1,166	1,278	1,337	1,478	1,612	1,766	1,927	2,108
Net foreign exchange loss	-	90	72	15	78	0	0	0	0	0	0
<b>EBIT</b>	841	955	1,327	1,447	1,373	1,759	1,943	2,188	2,395	2,612	2,855
Finance costs	13	22	26	34	65	62	60	62	69	75	83
Share of loss of associates and joint ventures	0	0	2	4	9	5	5	5	5	5	5
<b>Profit before income tax expense</b>	828	933	1299	1409	1299	1,693	1,878	2,120	2,322	2,531	2,767
Tax expense	132	138	186	203	160	339	376	424	464	506	553
<b>Profit for the year</b>	696	795	1113	1206	1139	1,354	1,502	1,696	1,857	2,025	2,214

### 1.3 Valuation and investment recommendation summary

We recommend to BUY this stock with the target share price of 43.17 baht from discounted cash flow valuation with upside of 27.0%. The company has high potential growth in developing market that the company significantly expanded capacity which leads MEGA to capture higher market shares in dietary supplement market. Also, MEGA performed excellent in 9M20, so we expect that it will have a strong financial report in this year. However, the current stock price may already reflect this information.

**Table 1.3 Target price of MEGA (DCF valuation)**

Share price	Bt 34.00
Target price	Bt 43.17
Upside	+27.0%

## **CHAPTER II**

### **BUSINESS DESCRIPTION**

#### **2.1 Business overview**

Mega Lifesciences Public Company Limited is an international manufacturer and distributor of pharmaceutical, nutraceutical products, and fast moving consumer goods (FMCG). The company was founded by Mr. Kirit Shah, and was established in 1982 with an initial registered capital of 5 million baht. The business has started by producing soft gelatin capsules (OEM) with the production capacity of 230 million soft gel capsules annually, and also known as the first manufacturer in Thailand who produced soft gel at that time.

In 1986, the company started to produce Nifedipine (medicine for hypertension and chest pain) for Berlin Pharmaceutical Industry Co., Ltd. and became an exclusive manufacturing partnership because Nifedipine was a very successful flagship product, and it created a reputation for the company as a pharmaceutical products manufacturer.

In 1994, this year was the beginning of the branded products business of Mega We Care™.

In 1995, the company decided to expand the market to another country by opening a representative office in Vietnam and set up a subsidiary in Myanmar and Cambodia. Those actions were for selling its own Mega We Care™ branded products.

In 2000, the company separated its business operations into 2 divisions which are branded products business (Mega We Care™ trademark), and distribution business (Maxxcare™ trademark). It also offered the excess capacity to produce the products under customer's brand (OEM services)

In 2002, the company expanded its capacity by leased land, building in Dandenong, Melbourne, Australia to construct a manufacturing plant. This manufacturing facilities produce packages tablets, hard capsules and powders.

## **2.2 Corporate strategy and long term goals**

### **2.2.1 Mega vision**

Mega's Vision is to 'Create a Thinking Organization which will change before it is forced to Change. An Organization which will live and grow beyond each one of us'

### **2.2.2 Mega objective**

Mega's Objective is to create value by marketing and selling medicines and medicinal supplements in developing countries.

### **2.2.3 Long term goals**

Mega tries to maintain its current market share, expects to double core business revenue within 5-7 years and to increase the revenue in sub-Saharan Africa to follow the term of 'Build Africa' and penetrates further in the natural herbal products business. Ultimately, attempting to change the company position to be a health care company.

## **2.3 Business segment**

MEGA operates 3 business segments as following;

### **2.3.1 Mega We Care™ branded products business**

The company develop, manufactures, markets and sells nutraceutical products, prescription pharmaceutical products and OTC (Over the counter) products.

### **2.3.2 Maxxcare™ distribution business**

The company markets, sells and distributes diverse branded prescription pharmaceutical products, OTC (Over the counter) and FMCG (Fast-moving consumer goods) products. This business operates in three countries, consisting of,

Myanmar, Vietnam, and Cambodia. Main clients are leading domestic and international pharmaceutical and FMCG (Fast-moving consumer goods) companies.

### 2.3.3 OEM business

Company's manufacturing facilities in Thailand and Australia offer excess production capacity to third-party customers.

## 2.4 Business segment revenue

Big portion of revenue comes from Mega We Care™ branded products business and Maxxcare™ distribution business by 49.1% and 48.4%, respectively, in fiscal year 2019.

	Year ended December 31, 2017 <sup>5</sup>		Year ended December 31, 2018 <sup>5</sup>		Year ended December 31, 2019	
	Amount	% of total <sup>1</sup>	Amount	% of total <sup>1</sup>	Amount	% of total <sup>1</sup>
(in millions of THB, except percentages)						
Maxxcare™ distribution business	3,865.4	40.6	4,442.1	43.1	5,215.1	46.6
Intersegment revenue (charge) <sup>2</sup>	179.1	1.9	188.9	1.8	198.9	1.8
<b>Maxxcare™ distribution business<sup>3</sup> (after addition of intersegment charges)<sup>3</sup></b>	<b>4,044.5</b>	<b>42.5</b>	<b>4,631.0</b>	<b>44.9</b>	<b>5,414.0</b>	<b>48.4</b>
Mega We Care™ branded products business	5,134.1	54.0	5,456.7	53.0	5,675.3	50.9
Intersegment revenue (charge) <sup>2</sup>	(179.1)	(1.9)	(188.9)	(1.8)	(198.9)	(1.8)
<b>Mega We Care™ branded products business (after deduction of intersegment charges)<sup>2</sup></b>	<b>4,955.0</b>	<b>52.1</b>	<b>5,267.8</b>	<b>51.2</b>	<b>5,476.4</b>	<b>49.1</b>
<b>OEM business</b>	<b>466.5</b>	<b>4.9</b>	<b>282.9</b>	<b>2.7</b>	<b>239.4</b>	<b>2.1</b>
<b>Other income<sup>4</sup></b>	<b>47.2</b>	<b>0.5</b>	<b>124.3</b>	<b>1.2</b>	<b>49.4</b>	<b>0.4</b>
<b>Total</b>	<b>9,513.2</b>	<b>100.0</b>	<b>10,306.0</b>	<b>100.0</b>	<b>11,179.2</b>	<b>100.0</b>

**Figure 2.1 Revenue by segments**

Source: Company Report 2019

Revenue from key geography regions, namely, Southeast Asia (Thailand, Myanmar, Vietnam, Cambodia, Malaysia, Philippines, Indonesia and Singapore) and Africa (Sub-Saharan region).

Business segment	Year ended December 31, 2017 <sup>5</sup>		Year ended December 31, 2018 <sup>5</sup>		Year ended December 31, 2019	
	Amount	% of total <sup>1</sup>	Amount	% of total <sup>1</sup>	Amount	% of total <sup>1</sup>
(in millions of THB, except percentages)						
<b>Maxxcare™ distribution business<sup>2</sup></b>						
• Southeast Asia <sup>4</sup>	4,044.5	100.0	4,631.0	100.0	5,414.0	100.0
• Africa <sup>4</sup>	-	-	-	-	-	-
• Others	-	-	-	-	-	-
<b>Total</b>	<b>4,044.5</b>	<b>100.0</b>	<b>4,631.0</b>	<b>100.0</b>	<b>5,414.0</b>	<b>100.0</b>
<b>Mega We Care™ branded products business<sup>3</sup></b>						
• Southeast Asia	3,943.5	79.5	4,197.2	79.7	4,254.7	77.7
• Africa	587.3	11.9	574.2	10.9	653.4	11.9
• Others	424.2	8.6	496.4	9.4	568.3	10.4
<b>Total</b>	<b>4,955.0</b>	<b>100.0</b>	<b>5,267.8</b>	<b>100.0</b>	<b>5,476.4</b>	<b>100.0</b>
<b>OEM business</b>						
• Southeast Asia	17.7	3.8	24.7	8.7	11.9	5.0
• Africa	-	-	-	-	-	-
• Others	448.8	96.2	258.2	91.3	227.5	95.0
<b>Total</b>	<b>466.5</b>	<b>100.0</b>	<b>282.9</b>	<b>100.0</b>	<b>239.4</b>	<b>100.0</b>
<b>Total revenue</b>	<b>9,466.0</b>	<b>100.0</b>	<b>10,181.7</b>	<b>100.0</b>	<b>11,129.8</b>	<b>100.0</b>

Figure 2.2 Revenue by regions  
Source: Company Report 2019

## 2.5 Value chain

### 2.5.1 Support activities

2.5.1.1 Infrastructure - Plans to have new product launch at the right time and plans the production effectively to meet the sufficient inventory level.

2.5.1.2 Human Resource Management - Arranges various training programs & workshops to employees at Mega Lifesciences, i.e. E-Learning which can be accessed 24/7 via personal devices.

2.5.1.3 Technology Development - Provides quality products and services with constant improvement and innovation.

2.5.1.4 Procurement - Procures raw material from suppliers at a reasonable price in order to maintain the quality and support suppliers in the long run and to have a long-term partner. Mega We Care™ branded products business and OEM



business rely on 4 types of raw materials. 1.Active ingredients 2. Excipient 3. Packaging 4. Gelatin.

### **2.5.2 Primary activities**

2.5.2.1 Inbound Logistics - obtain 4 types of raw materials.

1.Active ingredients 2. Excipient 3. Packaging 4. Gelatin.

2.5.2.2 Operations - Produce Herbal medicines, Probiotics for life, Eugica (Natural cold & cough care, Medical nutrition, Condition specific vitamins.

2.5.2.3 Outbound Logistics - distribute products across south east Asia, and Africa to clients, namely, leading domestic and international pharmaceutical and FMCG (Fast-moving consumer goods) companies.

2.5.2.4 Marketing & Sales – sales products throughout 34 countries and advertises on public television channels.

2.5.2.5 Services - provides company visitation to customer regularly and provides knowledge building programs by key speakers and other programs.

## **2.6 SWOT analysis**

### **2.6.1 Strengths**

2.6.1.1 A leader in pharmaceutical and nutraceutical in fast growing developing markets, particularly in Myanmar where it contributed 70% proportion in overall Maxxcare business in FY19.

2.6.1.2 A leader in distribution of pharmaceutical and OTC products in Myanmar, Vietnam and Cambodia.

### **2.6.2 Weaknesses**

2.6.2.1 Expiry in manufacturing license may cause the company to disrupt the production line.

### **2.6.3 Opportunities**

2.6.3.1 New market in Colombia.

2.6.3.2 The governments of Myanmar and Vietnam permitted MEGA's subsidiaries to import more pharmaceutical and consumer goods to their countries. As a result, the proportion of Maxxcare sales increased.

2.6.3.3 The supplement market in Asian countries is growing. In 2017, the proportion of supplement sales in Asian market was highest compare to the world. (Source: Nutrition Business Journal)

### **2.6.4 Threats**

2.6.4.1 Consumer real disposable income stalls or decreases could impact the demand for products.

2.6.4.2 Expiring patents.

2.6.4.3 Changes in laws and regulations, particularly in Myanmar, Vietnam and Cambodia.

2.6.4.4 Changes in consumer preferences.

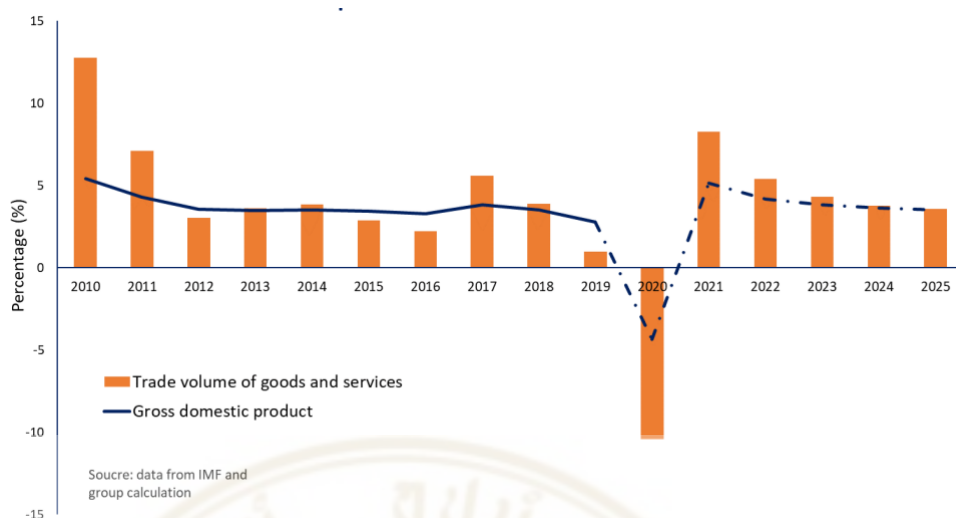
## **CHAPTER III**

### **ANALYSIS OF MACROECONOMY, INDUSTRY AND COMPETITORS**

#### **3.1 Macro-Economies analysis**

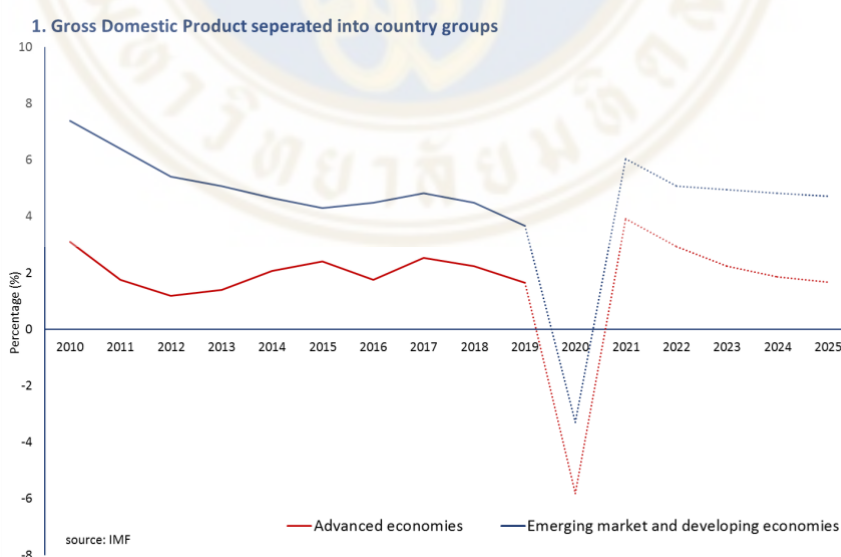
##### **3.1.1 Global gross domestic product**

Global economy growth is forecasted at -4.4% in 2020 according to world economy outlook released data from International Monetary Fund. In 2H2020, developed economies mostly activity resume rapidly more than expected after lockdowns were reduced, but many countries are still partially re-opened, and some are reinstating partial lockdowns. Global growth is projected at 5.2% in 2021 recovery from the previous year with downtrend forecast due to expectation of continued social distancing. The growth forecasts indicate broad negative production gaps and increased unemployment rates this year and in 2021 over advanced and emerging market economics. In the long term, after recovery in 2021 the global growth is gradually slow about 3.2% as before pandemic level for advanced and emerging market economies. The pandemic will increase inequality and poverty. People who live with daily wage probably confront income losses. Moreover, about 90 million people could drop below the \$1.90 a day income. The projection is based on continued social distancing into 2021 and it will gradually fade as vaccines are produced and expanded. Local transmission would decrease to low level at the end of 2022. The huge impacts of the pandemic will drag potential productivity growth, investment in physical capital and technology blending with material of production.



**Figure 3.1 World gross domestic product**

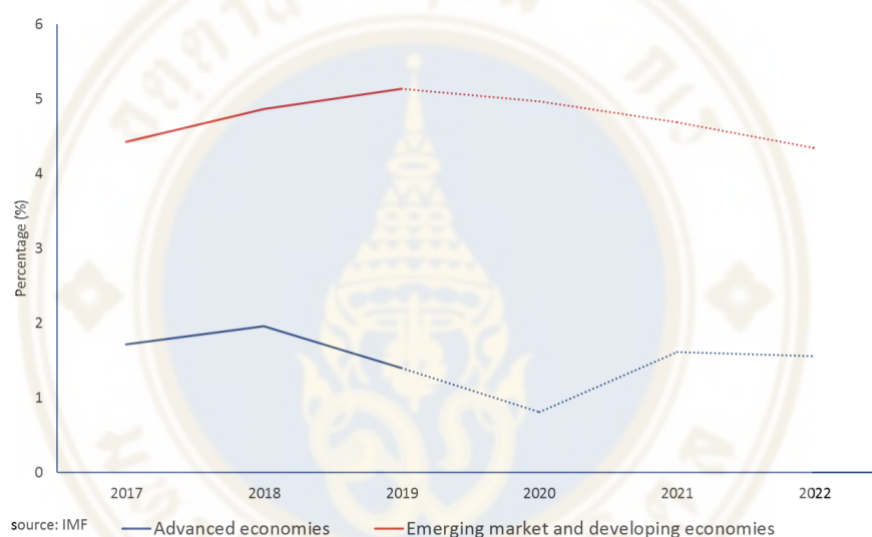
All emerging market and developing economy are expected to contract more than -4% in 2020 before rebounding about 8% in 2021 (IMF, World Economic Outlook, October 2020), overview remains uncertain due to the continuing spread of pandemic and fragile health care systems. The most critically affected countries with large tourist sectors and the greater dependence on external finance, including remittance.



**Figure 3.2 Gross domestic product separated into country groups**

### 3.1.2 Global inflation

Inflation in advanced economies continues below pre-pandemic level, emerging market and developing economies decreases sharply. Inflation remains low due to consumers increase spending on goods or services that they had been forced to delay consuming because of lockdowns and restriction on movement. They also highly perceive risk of joblessness and falling sick by prompted saving. In addition, lenders have lower leading as borrow service due to the high debt occurred during pandemic and concerning about the limited of monetary policy's ability to generate demand (IMF, World Economic Outlook, October 2020 P.3)



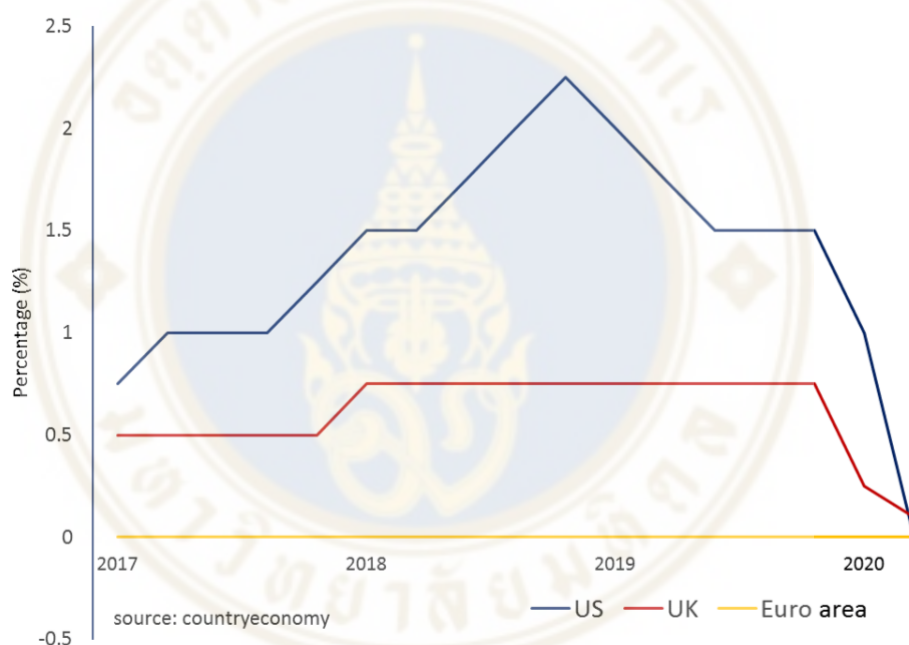
**Figure 3.3 Global inflation (average consumer prices)**

### 3.1.3 Monetary policy rate

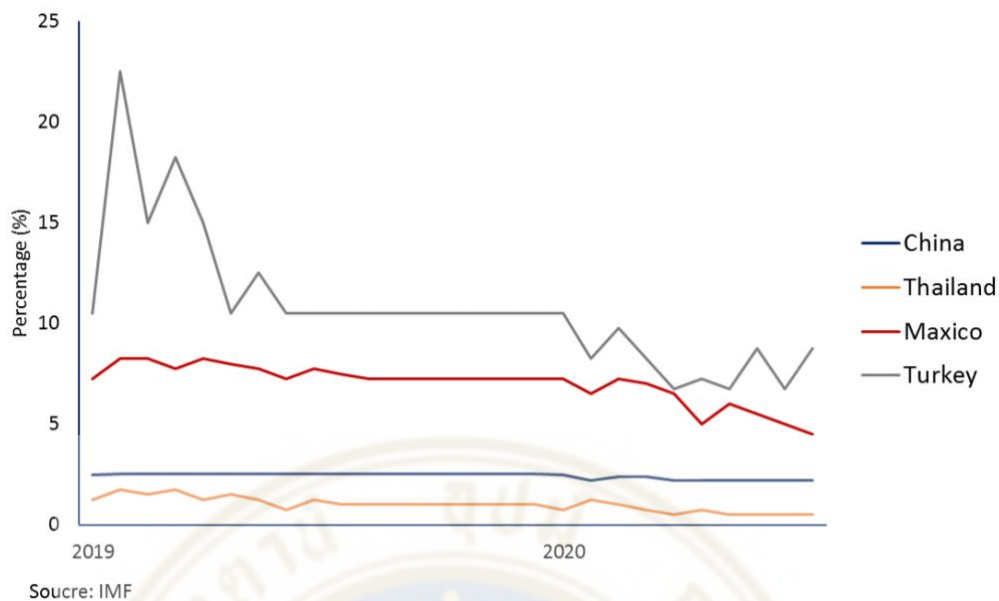
Many countries in advanced economies confront the prompted challenge of restraining of the virus spread, improving health system and developing a treatment as well as stimulating economies from the pandemic (A World Bank Group, Global Economies Prospects) The central bank in many advanced economies are using quantitative easing on a huge scale and developing new tools to support demand and financial market. Advanced economy central banks suddenly ease monetary policy rate cutting policy rates in most advanced economies close to or below zero at the same time, the central banks have executed extra measures to ease tight credit markets. In the other hand, central bank in emerging market and developed economies also response the

pandemic immediately by sharply cutting their policy rate using various monetary and financial policy to support the flow in financial market. Some have implemented easing program by asset purchase which mostly is government bonds and private bonds to stabilize yield of long maturity which sharply increase among tight liquidity.

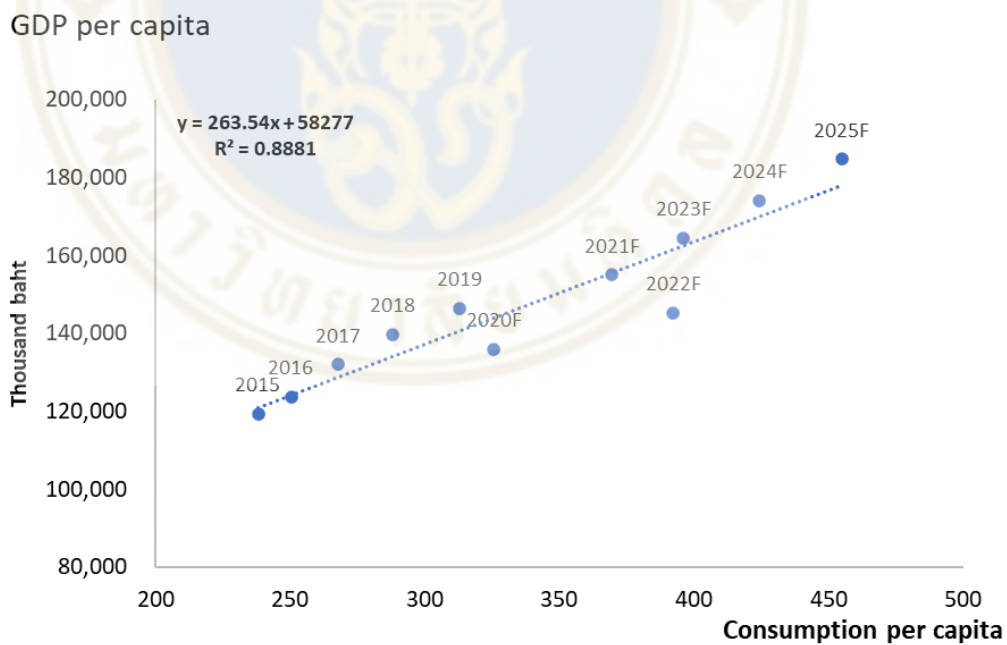
According to management's discussion in 1H2020, MEGA's operating revenues was not impacted by the COVID-19 crisis due to the product characteristics that support the situation as consumption per capita for dietary supplements is stable in 2020F and expected to increase by CAGR 7.77% till 2025F, according to the forecast from Euromonitor.



**Figure 3.4 Advanced economies policy rate**

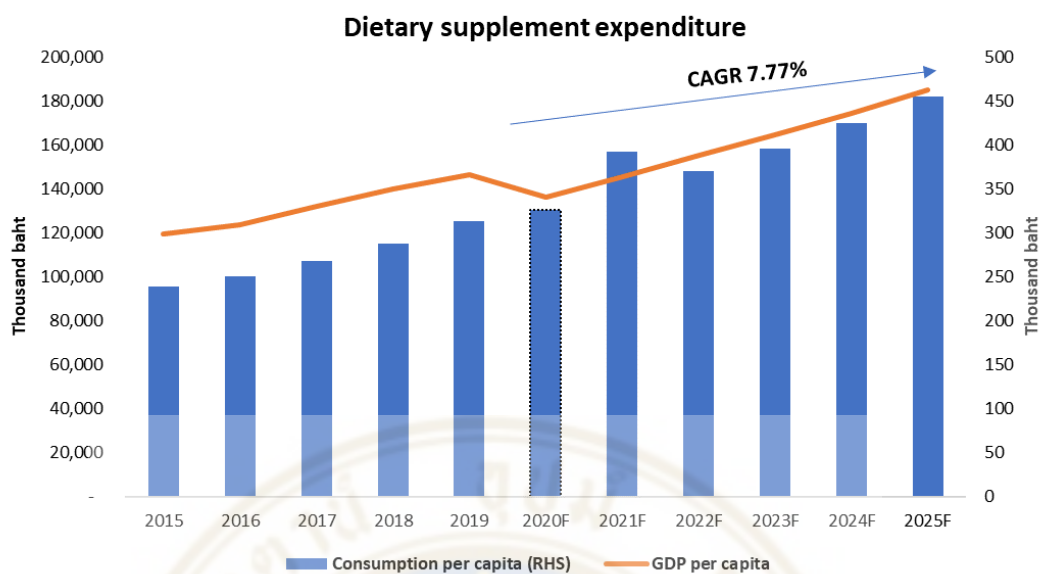


**Figure 3.5 Emerging market economies policy rate**



**Figure 3.6 GDP per capita**

Source: Euromonitor and team calculation



**Figure 3.7 Dietary supplement expenditure**

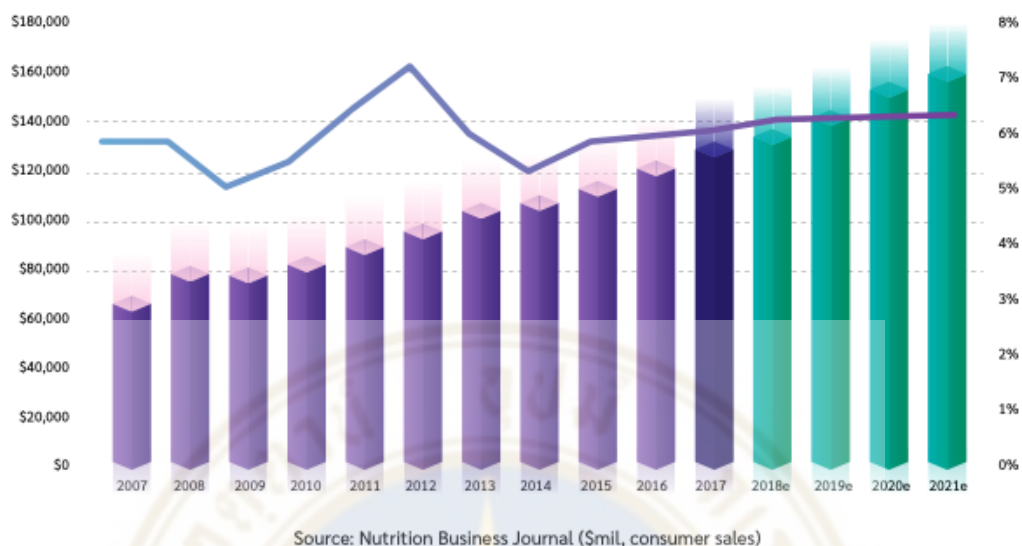
Source: Euromonitor and team calculation

### 3.2 Industry analysis

Dietary supplement is the greatest section of the Consumer Health market which contains six main product sections: 1) Vitamins 2) Minerals 3) Herbs 4) Meal Supplements 5) Sports Nutrition Supplements 6) Specialty Supplement. Consumer awareness regarding preventative healthcare and aging population are driving the global dietary supplement market. Moreover, dietary supplement is the key product for Mega Lifesciences and a key supporter to the Consumer Health Business. According to the graph, global supplement sales are continuously increasing. We expect the sales to reach approximately \$160,000 in 2021.



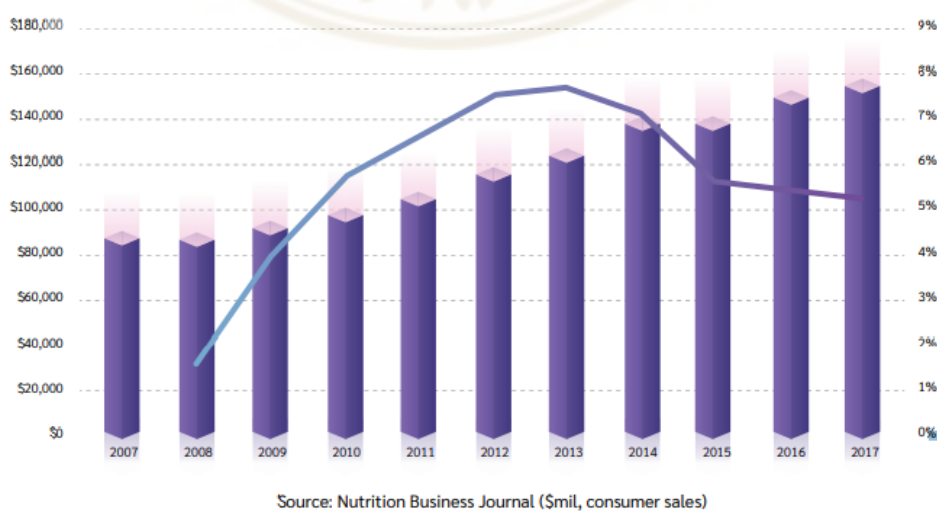
### Global Supplement Industry Sales and Growth, 2007-2021e



**Figure 3.8 Global supplement industry sales and growth, 2007-2021**

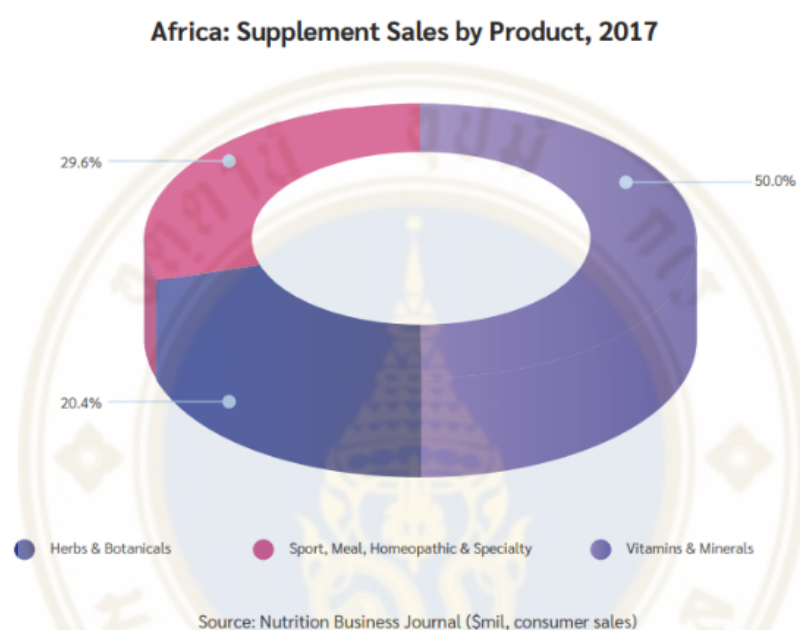
In Asia, overall countries are growing faster than the U.S market. As China, India, Japan and other Asian countries were spending the money on supplements more than the U.S. due to consumers access through digital information, increasing their knowledge of medicine advantages and preventing future illness.

### Asia: Supplement Sales and Growth, 2007-2017



**Figure 3.9 Supplement sales and growth, 2007-2017**

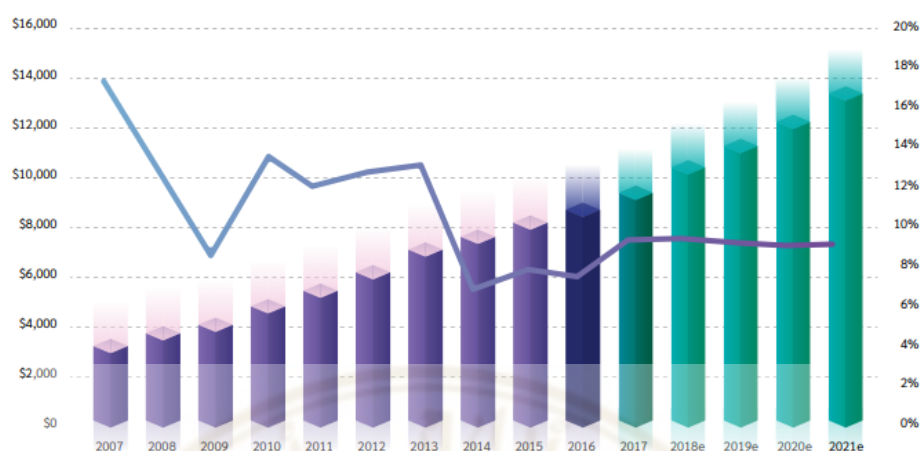
In Africa, vitamins and dietary supplement industry are in an emerging market which offers high opportunity to grow due to increased health awareness driving the market, increasing self-medication and new distribution networks. Consumers are mostly willing to purchase products as part of their daily lives. Therefore, the most preference is Vitamins, market value of \$155 million, due to accessibility of broader manufacturers and distributors



**Figure 3.10 Supplement sales by product,2017**

In Central and south America, In Q2 2018, overall VMS retail sales in Latin America grew by 14 percent to \$1.7 billion. Despite growth of just 6 percent, multivitamins remain the largest subcategory, generating 22 percent of revenue. Moreover, vitamins and dietary supplement are less restrictive legislation than other Over-the-Counter (OTC) medicine categories. In addition, advantages from unrestricted distribution regulation and less control approval process cause potential accessibility in term of barrier of entry in the industry. Strong growth is forecasted to continue as well as increase consumer interest in healthiness.

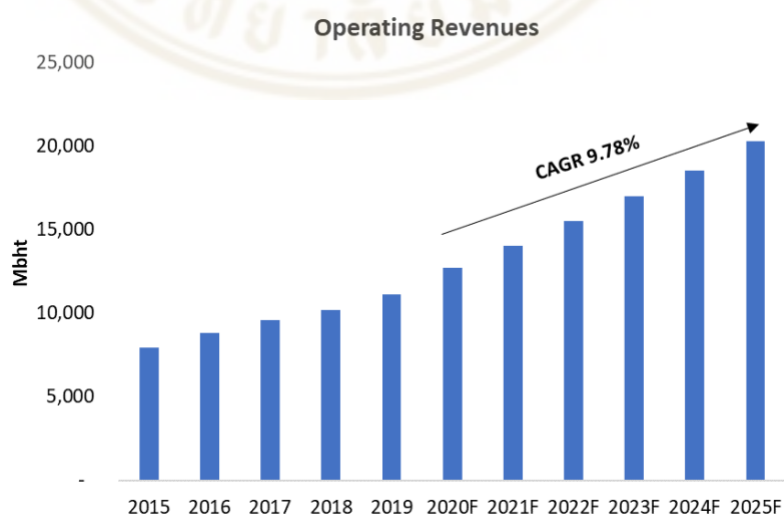
**Latin America: Supplement Sales and Growth, 2007-2021e**



Source: Nutrition Business Journal (\$mil, consumer sales)

**Figure 3.11 Latin American: Supplement sales and growth, 2007-2021**

In summary, our operating revenue forecasted shows that the expected compounding growth rate is approximately 9.78% due to MEGA is operating in the developing countries which has high potential to grow further in the future. Particularly in Myanmar, the market size of Myanmar is only 1 to 10 of Thailand, so it has extremely high potential growth. As Myanmar's supplement market rise, we expect the revenue of MEGA to increase as well.



**Figure 3.12 Operating revenues**

Source: Team calculation

### **3.3 Competition analysis**

#### **3.3.1 Five force model**

3.3.1.1 Buyer power (High) – MEGA's products are supplements. Customers may be sensitive to the price as it's not necessary in daily life. By raising prices, the company must consider that buyers can compare the price with the alternative products on the internet easily.

3.3.1.2 Threat of substitutes (Moderate) – Some people may prefer to consume supplement drinks instead of vitamins. If the company raises vitamin's prices, consumers might find it expensive. They switch to consuming supplement drinks, and this impacts the sales of MEGA.

3.3.1.3 Rivalry within the Industry (High) – MEGA have both international and domestic rivals. Most of rivals have stayed within the industry for many years and are well perceived by the customer. Not only dietary supplement has low product differentiation, but also has low switching costs.

3.3.1.4 Threat of new entrants (Low) – New domestic and foreign competitors require great investments in research and development, technical know-how, and distribution. This makes it less likely new companies enter the industry and bring the negative impact to the business.

3.3.1.5 Supplier power (Moderate) – MEGA do not have long-term supply agreements with the raw material suppliers which leads to high risk of shortage in supply and varying market price. In that case, MEGA must acquire raw materials from different suppliers, who might charge a higher price or provide raw materials that do not meet expected quality.

### **3.4 Company's current situation of 9M20**

In 2020, MEGA has change its business structure by increasing sale proportion of Maxxcare due to the government of Myanmar and Vietnam permitted MEGA's subsidiaries to import pharmaceutical and consumer goods to their countries

alongside with the local importers. The business re-structured will affect to the revenue, gross profits and SG&A expenses, but not to the EBITDA and net profits.

According latest Management Discussion & Analysis 9M20, the operating revenue was THB 9,092mn (increase by 12.5% YoY). Gross profit was THB 3,596mn (39.6% of operating revenue), it was considered to be constant during the year. SG&A expenses was THB 2,389mn, nearly flat YoY. Net profit was THB 963mn (increase by 27.4% YoY).

**Table 3.1 9M20 performance**

	<i>in thousand baht</i>		
	9M19	9M20	Change
<b>Operating revenue</b>	8,078,197	9,091,637	12.5%
Other Income	38,415	70,534	83.6%
Gain on Foreign Currency Exchange	-	43,008	
Gain on Disposal of Investments	12,781	10,786	-15.6%
Other Incomes - Others	25,634	16,740	-34.7%
<b>Total Revenues</b>	8,116,612	9,162,171	12.9%
Cost of goods sold	4,759,857	5,565,368	16.9%
<b>Gross profit</b>	3,356,755	3,596,803	7.2%
<b>Selling and Administrative Expenses</b>	2,396,843	2,389,281	-0.3%
Selling Expenses	1,436,696	1,474,595	2.6%
Administrative Expenses	960,147	914,686	-4.7%
Other Expenses	51,549	-	-100.0%
Loss on Foreign Currency Exchange	51,549	-	-100.0%
Shares of Losses From Investments Accounted for Using the Equity Method	6,621	45,813	591.9%
<b>Total Expenses</b>	7,214,870	8,000,462	10.9%
<b>EBIT</b>	901,742	1,161,709	28.8%
Finance Costs	48,668	58,031	19.2%
Income Tax Expenses	96,832	140,603	45.2%
<b>Net Profit</b>	756,242	963,075	27.4%

Source: SETSMART

Regarding to 3Q20 of MEGA, the operating revenue was THB 3,381mn (increase by 18.7% YoY). Gross profit was THB 1,307mn (38.6% of operating revenue). SG&A expenses was THB 851mn (rise by 3.8% YoY). Net profit was THB 342mn (increase by 21.1% YoY).

**Table 3.2 3Q20 performance**

	<i>in thousand baht</i>		
	<b>3Q19</b>	<b>3Q20</b>	<b>Change</b>
<b>Operating revenue</b>	2,848,692	3,381,246	18.7%
Other Income	15,963	8,890	-44.3%
Gain on Foreign Currency Exchange	-	(634)	
Gain on Disposal of Investments	3,067	1,954	-36.3%
Other Incomes - Others	12,896	6,936	-46.2%
<b>Total Revenues</b>	<b>2,864,655</b>	<b>3,390,136</b>	<b>18.3%</b>
Cost of goods sold	1,691,495	2,083,534	23.2%
<b>Gross profit</b>	<b>1,173,160</b>	<b>1,306,602</b>	<b>11.4%</b>
<b>Selling and Administrative Expenses</b>	<b>819,426</b>	<b>850,923</b>	<b>3.8%</b>
Selling Expenses	500,725	544,952	8.8%
Administrative Expenses	318,701	305,971	-4.0%
Other Expenses	12,904	634	-95.1%
Loss on Foreign Currency Exchange	12,904	634	-95.1%
Shares of Losses From Investments Accounted for Using the Equity Method	2,162	41,206	1805.9%
<b>EBIT</b>	<b>338,668</b>	<b>413,839</b>	<b>22.2%</b>
Finance Costs	17,394	16,925	-2.7%
Income Tax Expenses	39,140	55,246	41.1%
<b>Net Profit</b>	<b>282,134</b>	<b>341,668</b>	<b>21.1%</b>

Source: SETSMART

It can be seen clearly from the table that the overall operating revenue was driven by Maxxcare business.

**Table 3.3 Revenue by business segment**

<b>Revenue* by Business Segment</b>							
<i>Figures in THBmn</i>	<b>3Q19</b>	<b>2Q20</b>	<b>3Q20</b>	<b>YoY Gr.</b>	<b>9M19</b>	<b>9M20</b>	<b>YoY Gr.</b>
Mega We Care™	1,364.9	1,286.2	1,464.2	7.3%	3,964.3	4,176.0	5.3%
Maxxcare™	1,428.3	1,278.1	1,855.2	29.9%	3,939.8	4,734.9	20.2%
OEM	55.5	69.0	61.9	11.6%	174.1	180.7	3.8%
<b>Total</b>	<b>2,848.7</b>	<b>2,633.3</b>	<b>3,381.2</b>	<b>18.7%</b>	<b>8,078.2</b>	<b>9,091.6</b>	<b>12.5%</b>

\*Revenue is net of inter segment charges &amp; eliminations relating to consolidation.

Source: Company's management discussion &amp; analysis Quarter 3/2020

## CHAPTER IV

### VALUATION

#### 4.1 Financial analysis

##### 4.1.1 Dupont's analysis

Due to the fact that Dupont's analysis is a tool to analyze fundamental performance of companies, so we use this method to analyze MEGA's performance in comparison to its key competitor, BKL. From the past 5 years, return on equity of MEGA gradually increases to 19.14% from 16.74% (2015), meaning that out of 100 baht of an equity investment, shareholders would get a return back in the form of net income by 19.14 baht. In terms of earning leverage (EL), it's a measurement of company's net income compared to its net operating profit after tax. MEGA had 94.57% earning leverage in 2019 which slightly declined by 3.94% from 2015. It means that its net income was only 94.57% of the net income that it would have had if it has no debt. For capital structure leverage (CSL), it compares average total assets to an average equity. MEGA had 169.24% capital structure leverage in 2019 which decreased by 3.17% from 2015. It means that the value of the firm's total assets is 169.24% that of the value of the firm's equity

In contrast, BKL's return on equity significantly dropped from 53.73% (2015) to 17.37% (2019) which mean out of 100 baht, the investors get the return back less than previous for 36.36 baht.

Overall, it seems that in 2019 MEGA was doing better than BKL based on Dupont's analysis due to an increase in ROA in the past five years. However, the net income declined because lower earnings leverage, but it was compensated by low debt accumulation due to a reduction on capital structure leverage that reflects lower risk.

**Table 4.1 Dupont's analysis of MEGA**

MEGA					
Dupont's Analysis	2015	2016	2017	2018	2019
ROE	16.74%	24.32%	22.43%	21.99%	19.14%
ROA	9.86%	10.47%	13.65%	13.52%	11.96%
EL	98.51%	97.65%	97.89%	97.36%	94.57%
CSL	172.41%	237.91%	167.88%	167.08%	169.24%

Source: SETSMART and team calculation

**Table 4.2 Dupont's analysis of BKL**

BKL					
Dupont's Analysis	2015	2016	2017	2018	2019
ROE	53.73%	48.85%	37.35%	36.24%	17.37%
ROA	25.93%	22.56%	16.12%	16.24%	7.36%
EL	98.20%	97.74%	97.96%	96.13%	96.19%
CSL	210.97%	221.52%	236.52%	232.17%	245.50%

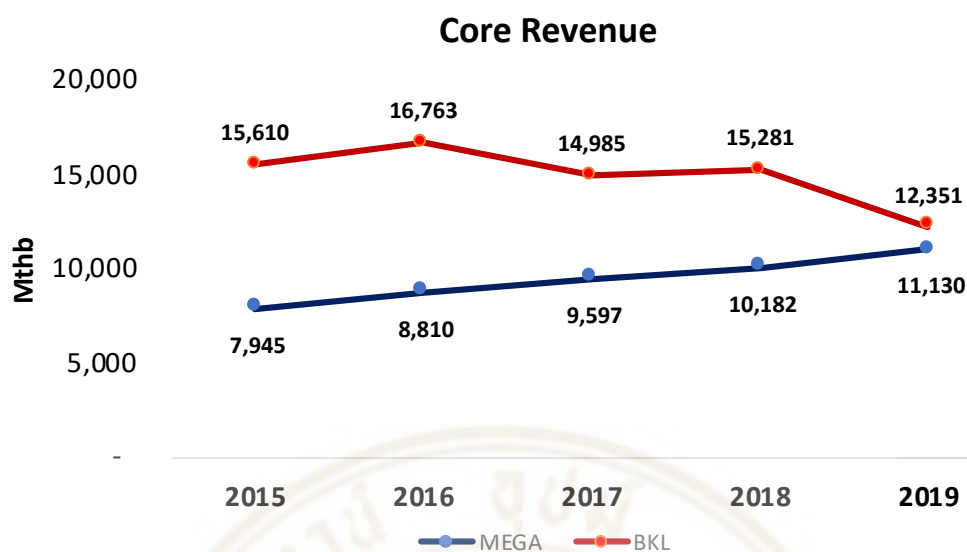
Source: Reuters and team calculation

#### 4.1.2 Growth analysis

This section compares the growth of revenue, cost of goods sold, net profit, EPS and free cash flow between MEGA and its key competitor BKL (Blackmores Limited).

MEGA revenue was in upward trend, CAGR from 2015 to 2019 is 8.79% while BKL was in a downward trend, CAGR -5.69%. In fiscal year 2019, MEGA revenue reach to the peak and almost in the same level as BKL who is in the vitamins and supplement market longer due to MEGA had expanded its business continuously in the developing countries. Further, the supplement market in Asia is growing more rapidly than the world market.

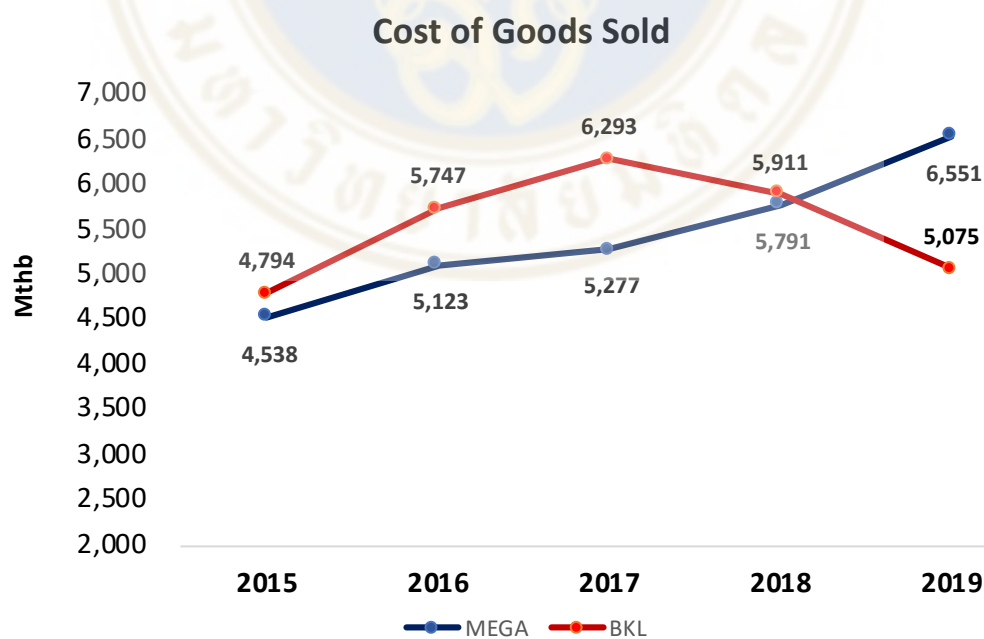




**Figure 4.1** Core revenue trend of MEGA and BKL

Source: SETSMART, Reuters and team calculation

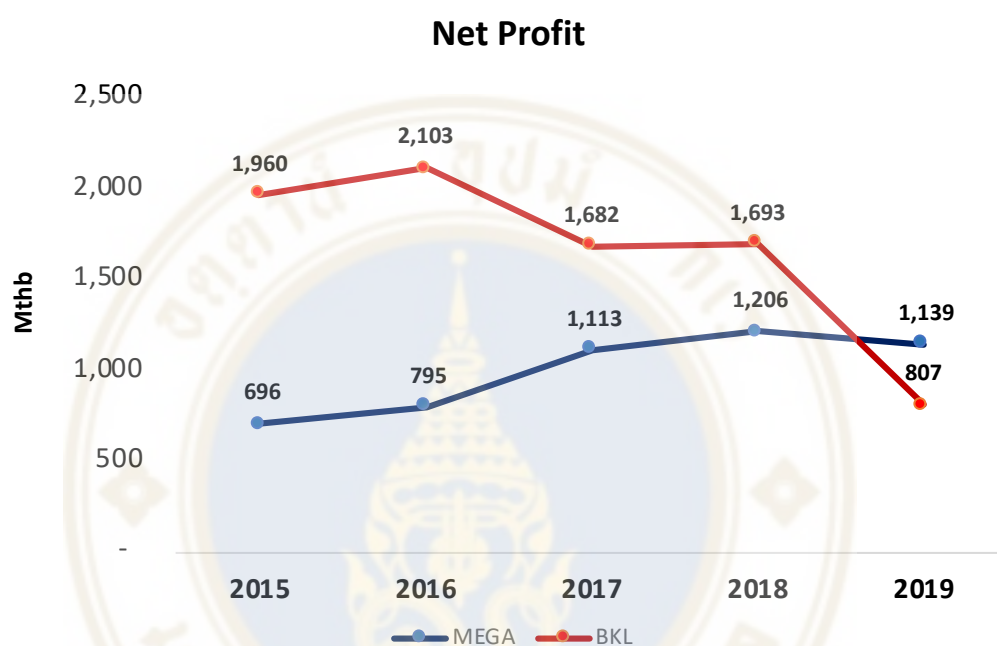
According to cost of goods sold chart, it seems that BKL able to manage the cost better than MEGA. However, MEGA able manage cost as good as previous by maintaining the cost approximately 54%-59% comparing to sales for all five years.



**Figure 4.2** Cost of goods sold trend of MEGA and BKL

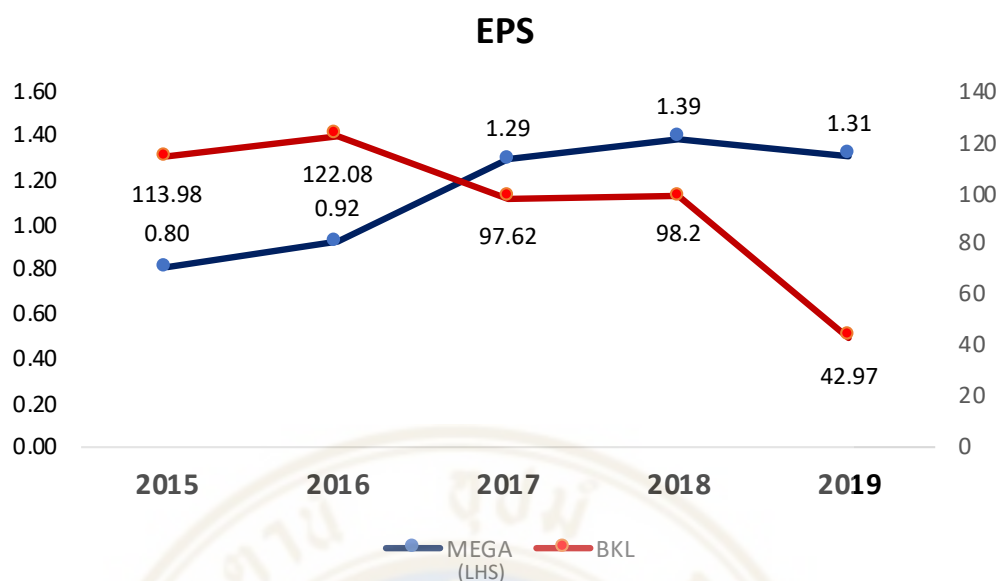
Source: SETSMART, Reuters and team calculation

In terms of net profit, MEGA has net income more than BKL in the latest year even when its sales were lower while net profit of BKL was sharply decline in 2019. MEGA strictly control 2 main costs which are cost of goods sold and SG&A as it can be seen in a last five years that these 2 costs were almost steady. Therefore, as the revenue went up, net profit went up as well.



**Figure 4.3 Net profit trend of MEGA and BKL**  
Source: SETSMART, Reuters and team calculation

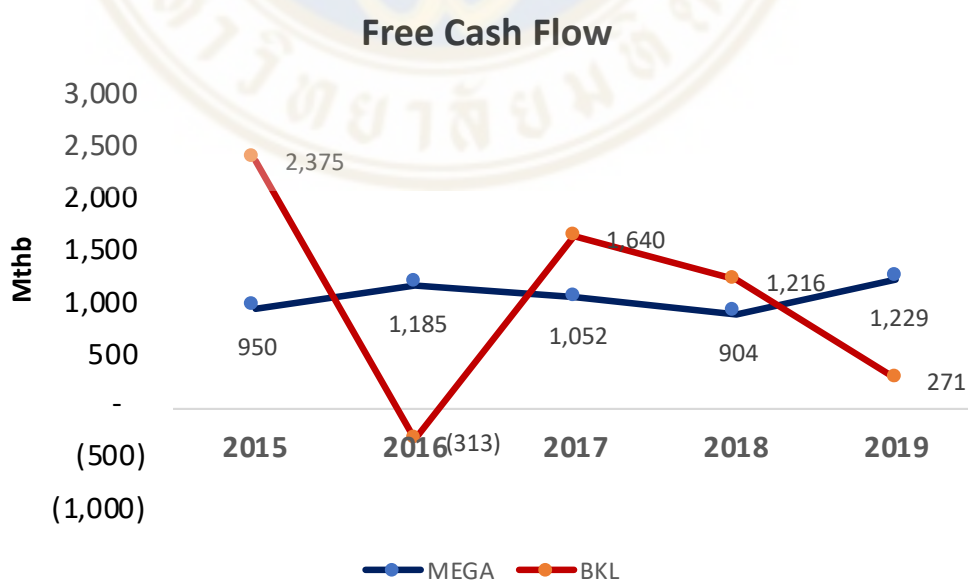
Earnings Per Share of MEGA increase steadily from 2015 with CAGR 12.89%. In contrast, BKL's earnings per shares decline from 2016 to 2018 and strongly drop in 2019, its CAGR was -21.64%.



**Figure 4.4 EPS trend of MEGA and BKL**

Source: SETSMART, Reuters and team calculation

It is apparent that free cash flow of BKL is very fluctuated while MEGA remain quite constant in the last 5 years and in the latest year MEGA free cash flow to firm was higher than BKL which means MEGA has higher cash on hand after its expenses.



**Figure 4.5 Free cash flow trend of MEGA and BKL**

Source: SETSMART, Reuters and team calculation

## 4.2 Discounted cash flow valuation

The Discounted Cash Flow valuation method gives the estimated share value of MEGA at THB35.11. To achieve the final estimated share value, it requires estimates and projections regarding FCFE, Terminal Growth Rate and WACC. The following sections explain how we achieved the result.

### 4.2.1 Revenue forecast

To start with the forecast of sale 2020F, we took 9M20 into account to forecast the whole year. The operation revenue is THB 9,091.64 mn in 9M20. We forecasted the revenue at Q4 to growth at 6.99% as the growth of supplement market in Myanmar in 2020 is 28% from multiplied the change in proportion of CAGR of market size over CAGR of nominal GDP in Myanmar 1.87 with Myanmar's nominal GDP growth 14.96%. The reason that we used the data from Myanmar only because as we already mentioned in the company's current situation in 2020 that the government of Myanmar and Vietnam allowed the subsidiaries of MEGA to distribute more pharmaceutical and consumer goods. Moreover, the proportion of revenue from Myanmar is the largest. Finally, we forecasted Q420 by using Q320 as a base revenue then assumed that it would grow at 6.99%, the forecasted revenue of 2020 is THB 12,709.22 mn.

**Table 4.3 Myanmar market size CAGR over nominal GDP CAGR**

<b>Myanmar (MThb)</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>CAGR</b>
<b>Market size</b>	2,195	2,414	2,680	10.48%
<b>Nominal GDP</b>	2,005,476	2,139,176	2,236,716	5.61%
<b>Market size CAGR/Nominal GDP CAGR</b>				1.87x

Source: Euromonitor and our prediction

**Table 4.4 Myanmar % market size growth**

<b>Myanmar</b>	<b>2020</b>
<b>Market size CAGR/Nominal GDP CAGR</b>	1.87x
<b>GDP growth</b>	14.96%
<b>Market size growth per annual</b>	28.0%
<b>Market size growth per quarter</b>	6.99%

Source: Euromonitor and our prediction

**Table 4.5 Revenue forecast 2020**

<b>MThb</b>	<b>2020</b>	<b>Change %</b>
<b>Q1</b>	3,077.10	
<b>Q2</b>	2,633.29	-14.42%
<b>Q3</b>	3,381.25	28.40%
<b>Q4(F)</b>	3,617.58	6.99%
	12,709.22	

Source: Euromonitor and our prediction

Revenue forecast between 2021 and 2025, we used the revenue forecast from 2020 as a base year, we simply used the proportion of sale from 2019 to split the total forecasted revenue of 2020 for South East Asia revenue, other countries revenue and OEM by 86.9%, 11.0%, 2.2%, respectively. However, we divided the revenue into 3 categories. The first category is South East Asia revenue. It includes South East Asia's revenue from Maxxcare and Mega We Care. The second category is other countries' revenue which is also from Maxxcare and Mega We Care business. We are focusing on Maxxcare and Mega We Care revenue as it has a big portion in total sales. The assumption that we used to estimate the sales was to find changes in proportion of CAGR of market size to CAGR of nominal GDP as Vitamins and Dietary supplement demand is raised by consumer income growth according to company reports. After we get that proportion, then we multiply it with YoY growth of GDP between 2021 to 2025 in order to get YoY growth of market size from 2021 to 2025. Eventually, the revenue between 2021 and 2025 were forecasted according to the market growth of each category.

The revenue of Maxxcare and Mega We Care businesses in South East Asia have the highest compound annual growth rate at 11.08%, the reason that this segment

grows considerably high due to it took Myanmar and Vietnam markets into consideration and these 2 markets are emerging economies which are now growing at a high rate. The revenue of Maxxcare and Mega We Care businesses in other countries came in second place in terms of growth, with CAGR predicted to be at 7.39%. However, OEM sales is depending on other factors, and also the proportion of this category is less significant, since it is only 2.15% of total sales. Therefore, we assume the constant revenue for this part. Overall operating revenue was forecasted to be growth at 10.50% from 2019 to 2025.

**Table 4.6 Growth of Vitamin and supplement industry**

Industry Size	2017	2018	2019	CAGR	2020F	2021F	2022F	2023F	2024F	2025F
<b>South East Asia (Mthb)</b>	171,601	186,395	204,497	9.17%	186,098	207,176	230,088	253,619	278,296	306,114
<b>%YoY</b>					-9.00%	11.33%	11.06%	10.23%	9.73%	10.00%
Cambodia	918	993	1,079							
Indonesia	48,348	49,383	54,176							
Malaysia	18,648	21,830	23,477							
Myanmar	2,195	2,414	2,680							
Philippines	17,163	17,281	18,758							
Singapore	11,797	12,561	12,981							
Thailand	55,960	63,655	71,370							
Vietnam	16,571	18,278	19,978							
<b>Other Countries (Mthb)</b>	96,992	101,569	102,588	2.84%	95,130	104,141	110,306	116,138	121,751	127,797
<b>%YoY</b>					-7.27%	9.47%	5.92%	5.29%	4.83%	4.97%
Australia	65,995	67,014	64,402							
Ukraine	7,299	8,850	11,653							
Peru	10,690	11,144	11,485							
Nigeria	2,742	3,026	3,329							
South Africa	10,265	11,535	11,719							

Source: Euromonitor and our prediction

**Table 4.7 Nominal GDP of South East Asia and other countries**

GDP	2017	2018	2019	CAGR	2020F	2021F	2022F	2023F	2024F	2025F
<b>South East Asia (Mthb)</b>	84,579,493	90,475,439	95,708,751	6.38%	89,718,017	96,787,256	104,233,661	111,649,334	119,206,774	127,496,271
<b>%YoY</b>					-6.26%	7.88%	7.69%	7.11%	6.77%	6.95%
Cambodia	676,012	745,073	812,695		799,494	862,012	943,037	1,031,838	1,128,971	1,229,790
Indonesia	30,977,086	31,785,471	34,131,764		31,514,226	33,676,104	36,462,581	39,213,214	42,057,160	45,206,378
Malaysia	9,731,335	10,940,030	11,122,867		10,115,396	11,266,935	12,292,333	13,316,725	14,231,408	15,243,655
Myanmar	2,005,476	2,139,176	2,236,716		2,571,372	2,774,186	3,001,080	3,244,226	3,515,862	3,808,921
Philippines	10,018,395	10,577,806	11,481,749		11,611,587	12,611,335	13,656,616	14,868,353	16,214,432	17,705,283
Singapore	10,426,659	11,370,247	11,358,933		10,073,653	10,757,969	11,333,615	11,814,886	12,261,373	12,760,768
Thailand	13,916,183	15,447,848	16,575,929		14,788,564	15,882,857	16,880,078	17,764,351	18,642,657	19,557,250
Vietnam	6,828,349	7,469,788	7,988,099		8,243,724	8,955,857	9,664,319	10,395,742	11,154,909	11,984,227
<b>Other Countries (Mthb)</b>	74,340,026	78,294,859	79,229,176	3.24%	72,675,717	80,508,023	85,929,624	91,098,512	96,107,831	101,537,905
<b>%YoY</b>					-8.27%	10.78%	6.73%	6.02%	5.50%	5.65%
Australia	42,263,262	43,319,803	42,286,772		40,356,113	45,677,898	48,213,699	51,068,939	53,630,967	56,310,972
Ukraine	3,421,805	3,992,508	4,692,159		4,608,320	5,016,006	5,582,824	6,090,366	6,679,153	7,304,625
Peru	6,532,276	6,871,638	7,037,259		5,967,564	6,335,999	6,819,858	7,250,039	7,688,237	8,138,655
Nigeria	11,477,518	12,884,045	14,496,226		12,808,887	13,283,262	13,876,678	14,452,275	14,985,582	15,586,108
South Africa	10,645,165	11,226,865	10,716,760		8,934,834	10,194,857	11,436,564	12,236,893	13,123,892	14,197,545

Source: Euromonitor

**Table 4.8 Market size CAGR to GDP CAGR**

<b>Market size CAGR to GDP CAGR</b>	
<b>South East Asia</b>	1.44
<b>Other Countries</b>	0.88

Source: Team calculation

**Table 4.9 Revenue forecasted by segment**

Business Segments (Mthb)	2019	Proportion	2020F	2021F	2022F	2023F	2024F	2025F	CAGR (2019-2025)
South East Asia Maxxcare & Mega We Care	9,668.70	86.9%	11,040.77	12,291.30	13,650.62	15,046.65	16,510.70	18,161.11	11.08%
Other Countries Maxxcare & Mega We Care	1,221.70	11.0%	1,395.07	1,527.22	1,617.62	1,703.15	1,785.46	1,874.13	7.39%
OEM	239.40	2.2%	273.37	230.00	230.00	230.00	230.00	230.00	-0.67%
<b>Total core revenue</b>	<b>11,129.80</b>	<b>100.0%</b>	<b>12,709.22</b>	<b>14,048.52</b>	<b>15,498.24</b>	<b>16,979.80</b>	<b>18,526.17</b>	<b>20,265.25</b>	<b>10.50%</b>
<b>%YoY revenue growth</b>	<b>9.3%</b>		<b>14.2%</b>	<b>10.5%</b>	<b>10.3%</b>	<b>9.6%</b>	<b>9.1%</b>	<b>9.4%</b>	

Source: Team forecast

#### 4.2.2 Terminal growth rate

The terminal growth rate at 5.16% is the rate that we assume MEGA's free cash flow would grow from 2025 onwards. Since sales of South East Asia contribute largest at 86.87% to the company's sales, so we included all countries in South East Asia that MEGA currently operates which consists of Cambodia, Indonesia, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam. The way that we used to find the CAGR of South East Asia was finding the CAGR of each country first then multiply it to the weight, in this case the weight is the proportion of GDP of each country in 2019 compared to South East Asia GDP then we have the nominal GDP compounding growth of South East Asia between 2015 to 2025 that is 5.4% and we used South Africa's nominal GDP compounding growth 3.9% representing the other country's nominal GDP. To get the terminal growth we used the sales proportion of MEGA to weight the nominal GDP of the two parts.

**Table 4.10 GDP of South East Asia**

GDP by country	Proportion in 2019	CAGR 2015-2019	CAGR 2020-2025	CAGR 2015-2025
<b>South East Asia</b>	100.0%	<b>6.4%</b>	<b>7.2%</b>	<b>5.4%</b>
Cambodia	0.8%	10.2%	9.0%	8.3%
Indonesia	35.7%	6.8%	7.5%	5.6%
Malaysia	11.6%	4.9%	8.5%	5.2%
Myanmar	2.3%	4.4%	8.2%	7.3%
Philippines	12.0%	5.3%	8.8%	6.6%
Singapore	11.9%	4.9%	4.8%	3.1%
Thailand	17.3%	7.9%	5.7%	4.8%
Vietnam	8.3%	7.9%	7.8%	7.3%

Source: Euromonitor and team calculation

In comparison to the nominal GDP growth in the future between 2020 to 2025, South East Asia will grow at significantly high rate at 7.2%, while South Africa will grow even higher rate at 9.70%. By weighting those to the MEGA's sale proportion, the growth would be 7.3%. Another rate that we used to compare was historical nominal GDP growth between 2015 to 2019, South East Asia growth was at 6.4% and South Africa growth was at 2.6%, then weight those with the proportion of sales, the GDP growth would be 5.85%. Therefore, we chose the nominal GDP between 2015-2025 at 5.16% which considers both historical and future rate to be the terminal growth to be conservative.

**Table 4.11 Terminal growth rate of MEGA**

	CAGR of GDP 2015-2025	Sales proportion
<b>South East Asia</b>	5.4%	86.87%
<b>South Africa</b>	3.9%	10.98%
<b>GDP growth</b>	<b>5.16%</b>	

Source : Euromonitor, IMF, and team calculation

### 4.2.3 Required return on equity

We were using CAPM model to estimate the required return on equity. Beta 5Y Monthly is 1.007 derived from Reuters, it was calculated by using change in close price value monthly at least 40 months or 5 years historical trading period and used a



least squares linear regression line estimated the 5Y Monthly beta in order to know the company's stock price volatility to market price volatility. Risk-Free rate of 10 years Thai government bond is 1.44%. The equity risk premium is 7.58%, acquired from Damodaran. Finally, we have the required return on equity of 9.07%.

**Table 4.12 CAPM model**

<b>BETA</b>	1.007
<b>RISK FREE</b>	1.44%
<b>EQUITY RISK PREMIUM</b>	7.58%
<b>RQD. RETURN ON EQUITY</b>	9.07%

#### 4.2.4 Cost of debt

We estimated the cost of debt by using recent borrowing year in order to know the types of default spreads that MEGA would be charged, and the effective interest was 7.05% in 2019. The way that we calculated it was using finance cost divided by average of interest bearing debt of current and previous years.

According to the revenue department of Thailand, the corporate tax rate is 20% which will be used to calculate the after tax cost of debt. As a result, the after tax cost of debt of the company is 5.6%.

**Table 4.13 Effective interest rate calculation**

Mthb	2015	2016	2017	2018	2019
<b>Finance costs</b>	12.54	22.24	25.80	33.98	65.15
<b>Interest Bearing Debt</b>	627.54	660.77	506.12	958.63	889.16
<b>Effective Interest Rate</b>		<b>3.45%</b>	<b>4.42%</b>	<b>4.64%</b>	<b>7.05%</b>

Source: Company report and team calculation

**Table 4.14 After tax cost of debt**

<b>COST OF DEBT</b>	7.05%
<b>Tax</b>	20%
<b>AFTER TAX COST OF DEBT</b>	5.64%

Source: Team calculation

#### 4.2.5 Weighted average cost of capital -WACC

In order to know WACC, we firstly estimated the weight of debt and weight of equity which are 3% and 97%, respectively. It can be seen clearly that MEGA is mostly financed by its own equity. According to annual report 2019, the number of shares is 872 million shares, and we assume the number of shares to be constant for the next 5 years. As of November 13, 2020, the share price is 34 Baht. Consequently, the equity value is 29,644 Million Baht.

WACC 8.97% is partly from after tax cost of debt 5.64% multiplied by weight of debt 3% and required return on equity 9.07% multiplied by weight of equity 97%.

**Table 4.15 Weight of debt and equity**

<b>Share Price</b>	34.00
<b>Number of Shares (Mn)</b>	872
<b>Equity Value (BtMn)</b>	29,644
<b>Interest Bearing Debt (BtMn)</b>	859.31
<b>Weight of Debt</b>	3%
<b>Weight of Equity</b>	97%

**Table 4.16 WACC estimation**

<b>COST OF DEBT</b>	7.05%
<b>Tax</b>	20%
<b>AFTER TAX COST OF DEBT</b>	5.64%
<b>RQD. RETURN ON EQUITY</b>	9.07%
<b>WACC</b>	<b><u>8.97%</u></b>

At the same time, we estimated the terminal value by forecasting the future cash flow to the firm then discounted it back to present value. The valuation date of this DCF is Dec 31<sup>st</sup>, 2020. The formula that we used to estimate the free cash flow is NOPAT + Depreciation – Working capital change – Capex. In this case we believe that MEGA would reach the steady growth after 5 years as it is when depreciation and

CAPEX is nearest to each other. So that MEGA's terminal value is THB 32,360 mn, after discounting back to 2020.

**Table 4.17 Free cash flow estimation of MEGA**

PERIOD		0	1	2	3	4	5	Terminal value
Unit: Mthb	2019	2020	2021	2022	2023	2024	2025	
EBIT	1,373	1,759	1,943	2,188	2,395	2,612	2,855	
TAX rate 20%								
EBIT (1-T)	1,098	1,407	1,554	1,750	1,916	2,089	2,284	
DEPRECIATION	162	180	195	235	269	287	286	
WORKING CAPITAL CHANGE	(41)	528	411	445	222	301	496	
CAPEX	529	431	408	400	330	300	270	
CASHFLOW TO THE FIRM	773	628	930	1,140	1,633	1,775	1,805	49,727
DISCOUNTED CASHFLOW		628	854	960	1,262	1,259	1,174	32,360

Source: Team prediction

#### 4.2.6 Valuation summary

Eventually, the outcome of estimated share value is 43.17 baht. Compared to the market price of 34 baht (As of Nov 13<sup>th</sup>, 2020), we come to the conclusion that MEGA has upside of 27.0%. We recommend to BUY this stock as the fair value is 43.17 with the attractive upside of 27%, and the growth prospects of the company are good.

**Table 4.18 Target price of MEGA**

	2020
PV of firm value	38,497
Interest Bearing debt	859
PV of equity value	37,638
No. of shares (MN)	872
Target price	43.17

#### 4.3 Sensitivity analysis

Based on the table below, we analyzed changes in three independent variables that affect the valuation price under the assumption of increasing each variable from -50% to +50% relative to the base value.

The cost of equity variable affects the target price the most, as it can be seen clearly that when cost of equity is changed by -50%, the target price change significantly to -285.67 baht (decrease 761.8%). On the other hand, changes in terminal growth affects to price the least by causing the change in value only -35.9% when terminal growth decreases by 50%.

**Table 4.19 Sensitivity analysis in a range of  $\pm 50\%$**

Sensitivity	Terminal Growth	Price	Change in value	WACC	Price	Change in value	Cost of Equity	Price	Change in value
-50%	2.58%	27.67	-35.9%	4.49%	-255.25	-691.3%	4.53%	-285.67	-761.8%
-40%	3.09%	29.66	-31.3%	5.38%	755.75	1650.7%	5.44%	583.98	1252.8%
-30%	3.61%	32.08	-25.7%	6.28%	149.43	246.2%	6.35%	143.01	231.3%
-20%	4.13%	35.02	-18.9%	7.18%	82.44	91.0%	7.26%	81.04	87.7%
-10%	4.64%	38.58	-10.6%	8.08%	56.70	31.3%	8.16%	56.52	30.9%
Base	5.16%	43.17	0.0%	8.97%	43.17	0.0%	9.07%	43.17	0.0%
10%	5.67%	49.15	13.9%	9.87%	34.73	-19.5%	9.98%	34.83	-19.3%
20%	6.19%	57.46	33.1%	10.77%	28.98	-32.9%	10.88%	29.19	-32.4%
30%	6.70%	69.30	60.5%	11.66%	24.87	-42.4%	11.79%	25.04	-42.0%
40%	7.22%	88.46	104.9%	12.56%	21.71	-49.7%	12.70%	21.89	-49.3%
50%	7.73%	122.84	184.6%	13.46%	19.24	-55.4%	13.60%	19.45	-54.9%

According to the table below, the implied WACC will be 9.97% in order to have current stock price at 34 baht, with the implied cost of equity of 10.10% which is relatively high. Moreover, when we assumed the terminal growth rate to fall to 3%, the implied cost of equity changes to 8.02%. In comparison, company's implied cost of equity is higher than the MSCI Thailand SMID Cap return in the past 10 years (7.07%). So, it can be concluded that the company is undervalued.

**Table 4.20 Implied WACC and cost of equity**

Terminal growth	5.16%	3%
Implied cost of equity	10.10%	8.02%
Implied WACC	9.97%	8.18%

#### 4.4 Valuation recommendation

We recommend to BUY the stock. From our DCF valuation, the stock is undervalued. Current market price (34 baht) is lower than the estimated intrinsic value (43.17 baht) with an upside of 27.0%.

## **CHAPTER V**

### **INVESTMENT RISKS**

#### **5.1 Price limitation in Vietnam (Source: Annual report)**

MEGA could not set the prices of pharmaceutical products in Vietnam as it is inspected and controlled under the authority of the government of Vietnam. MEGA must declare the prices, includes import price, wholesale price and retail price publicly and also have to ask the price approval to the Drug Administration of Vietnam or DAV before the distribution. Consequently, MEGA could not set the prices as it wishes due to the limitation of the traditional economic principles. Another risk from distributing products in this country is that laws and regulations regarding the price control may be different in the future and it may bring the negative impact to Maxxcare business.

#### **5.2 Real disposable income effects the growth of the company (Source: Annual report)**

An increase in consumer disposable income leads to a raise in demand for MEGA's products, as it has happened in the recent years. However, the company cannot be ensured that disposable income in the countries that MEGA operates in, would always increase. If a bad scenario occurs, MEGA's business may not grow as fast as expected.

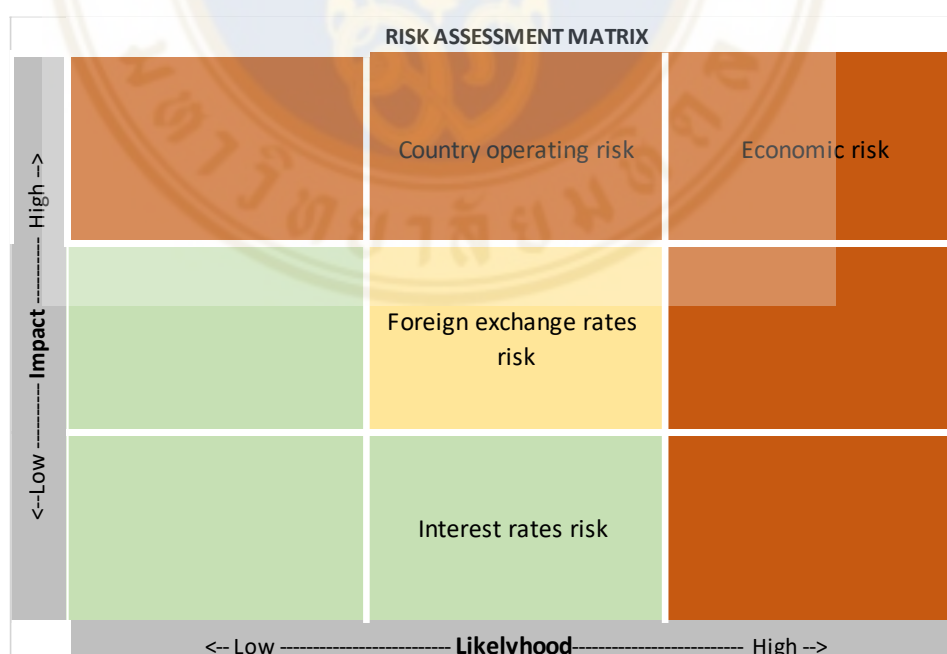
#### **5.3 Risk of foreign currency exchange rates (Source: Annual report)**

Due to the fact that MEGA operates in various countries, not only in

Thailand, there is a high proportion of sales in foreign currency. Nevertheless, the company always report financial statements and financial conditions in Thai Baht. The company has to bare the risk of changes in foreign currency exchange rates as it cannot be passed to customers by increasing the price of product suddenly, which poses a risk to the profit of the business.

#### 5.4 Interest rates fluctuations affect to company financial performance (Source: Annual report)

The outstanding loans of the company from financial institutions are depending on floating interest rates. Any rise in interest rate could increase borrowing costs which causes a larger interest burden. As a result, company's profit may decrease slightly.



**Figure 5.1 Risk assessment matrix of MEGA**

Source: Team evaluation

## **CHAPTER VI**

### **CONCLUSIONS**

#### **6.1 Investment recommendation**

We recommend investors to BUY this stock. Our target share price is 43.17 baht from the result of our discounted cash flow valuation. The upside is 27.0% from the current price of 34.00 baht as of Nov 22<sup>nd</sup>, 2020. (Table 1.3 Target price of MEGA)

##### **6.1.1 3Q20 MEGA had an impressive performance**

Recently, MEGA performed excellently, the operating revenue was THB 3,381mn, increased by 18.7% YoY, and 28.40% QoQ as a result of changing in business structure by targeting to sell more Maxxcare products in Myanmar and Vietnam. Even though the business restructuring may slightly decrease the gross profit, EBITDA and net profit remain unchanged because lower SG&A as reported in 9M20 by 4.9% YoY.

##### **6.1.2 MEGA continuously expands the business**

Recently, MEGA acquired PT Futamed Pharmaceuticals which is a manufacturing plant in Indonesia. This action will build the path for MEGA to sell new drugs and technologies in Indonesian market. Another important move was the acquisition of Sandoz, a global leader in generic and biosimilar medicines, in Ethiopia and Myanmar. In the future, the company plans to expand to the new markets, including Colombia, into its portfolio.

#### **6.2 Triggers for re-assessment**

##### **6.2.1 Sensitivity of WACC and terminal growth rate**

WACC is the estimated company's cost of capital. According to sensitivity of WACC in Chapter 4, it extremely affects the estimated target price. A higher WACC

implies investors tend to require higher returns on equity to compensate the risk that they have taken. Moreover, cost of debt of Mega may be change in the future based on floating interest rate that the financial institution will charge.

Terminal growth rate is the stable rate that we assume the company's free cash flow would grow from 2025 onwards. Change in this factor would also affect to the target price significantly. According to Mega discounted cash flow valuation, we used growth rate of nominal GDP from South East Asia and South Africa between 2015-2025 to be conservative. In the future, MEGA has potential to operate in more various country, this action may affect to the terminal growth rate based on the valuation date that we do.

### **6.2.2 Change in business model**

This year, MEGA has changed its business model by raising the proportion of distribution business or Maxxcare business. As such, the profit margin decreases because Maxxcare products has lower margin than Mega we care products but the management of Mega stated that it did not affect to the net profit. However, we cannot know that the business model of Mega will remain the same in the future or not. If it happens, the free cash flow may be differed, and it will lead to change in target price eventually.

### **6.3 Limitations**

The limitation of discounted cash flow valuation is the assumption that has been used as the company internal information is limited, so the input data was based on publicly available information only. First of all, DCF valuation is tremendously sensitive to the input assumption. Second, the free cash flow was projected only for 5 years in this case, so the years after that are unknown. Thirdly, terminal value is uncertain, and any changes in the perpetual growth rate after 2025 could lead to the different results, and it also can be change as time goes by. Last but not least, cost of equity or required return on equity, we assumed it from CAPM model, and we supposed that the outcome would apply to every investor regarding the return on equity rate that



they need. However, in reality, it might be different for each person as it depends on their personal situation and risk tolerance.



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