

**RELATIVE VALUATION OF MEGA LIFESCIENCES PUBLIC
COMPANY LIMITED**

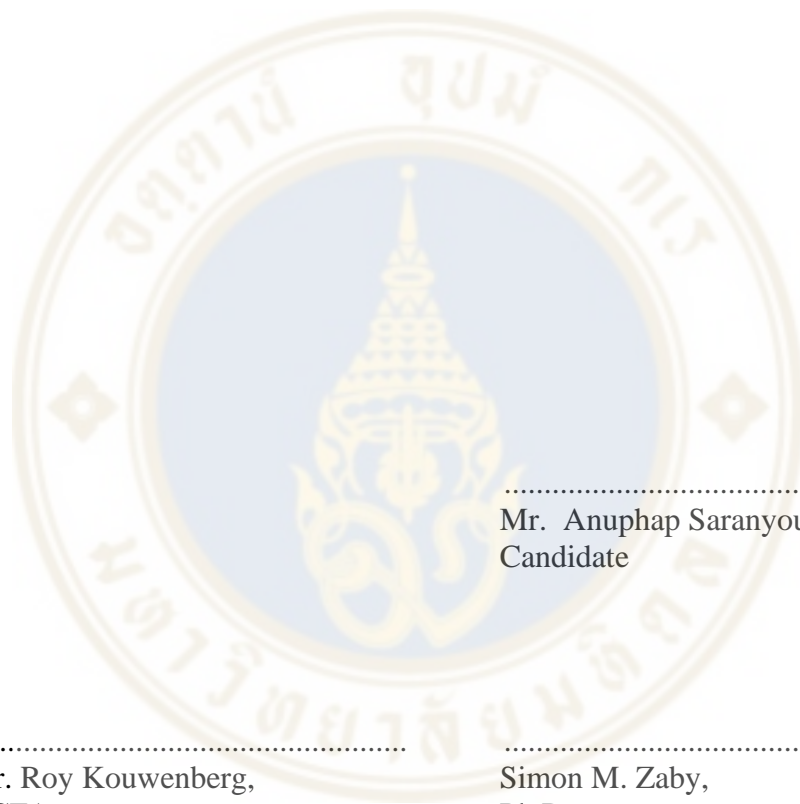


**A THEMATIC PAPER SUBMITTED IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR
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Thematic paper
entitled
**RELATIVE VALUATION OF MEGA LIFESCIENCES PUBLIC
COMPANY LIMITED**

was submitted to the College of Management, Mahidol University
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RELATIVE VALUATION OF MEGA LIFESCIENCES PUBLIC COMPANY LIMITED

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ABSTRACT

The purpose of this thematic paper is to evaluate the valuation of Mega Lifesciences Public Company Limited (MEGA), through the relative valuation method by comparing to the industry's peers in term of growth and profitability based on financial and valuation ratios, and by comparing to the historical past 5 years in relation to itself. In addition, top-down analysis is included in the paper for additional insight. As MEGA significantly operates and expands capacity in developing countries, especially in South East Asia, nominal GDP growth and disposal income of households in those countries is the factor that leads to an increase in demand for dietary supplement products.

The valuation method used 5 multiple ratios, trailing and forward P/E ratio, trailing and forward EV/EBITDA ratio, and trailing P/BV ratio, comparing to its peers and itself to determine the firm's value. Finally, the target price is estimated by using the average forward P/E of the peers, which is multiplies by estimated forward earning per share.

The target price of MEGA as of 31 December 2020 approximately equals 37.25 Baht per share with a 15.5% upside from the current price of 32.25 Baht per share. For this reason, the recommendation is to BUY the stock due to the company has high potential growth in developing markets and solid financial performance. In Addition, after the COVID-19 crisis, consumers would be highly conscious of their health by frequently consuming supplementary food to building a stronger immune system. Therefore, an expected increase in demand from consumers will support MEGA's products.

KEY WORDS: Relative Valuation/ MEGA/ Dietary Supplement Products/ Pharmaceutical Industry/ Multiple Band

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 Thailand, 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

Market Profile	
Closing price	THB 32.25
52-Week Price Range	THB 41.25
Share Outstanding	871.87 M
Market Cap.	28,117.79 M
Dividend Yield	2.14
TTM P/E	23.5
NTM P/E	22.22
TTM P/BV	4.8
ROE	19.14%
EPS	THB1.31
Dividend per share	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 the 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% and 10.3%, respectively.

Table 1.2 Earnings forecast of MEGA

Income Statement (Mthb)	2015	2016	2017	2018	2019	2020F	2021F	2022F	2023F	2024F	2025F
Revenue	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
Total revenue	8,097	8,842	9,640	10,306	11,179	12,754	14,094	15,543	17,025	18,571	20,310
COGS	4,538	5,123	5,277	5,791	6,551	7,653	8,456	9,326	10,215	11,143	12,186
% of revenue	57%	58%	55%	57%	59%	60%	60%	60%	60%	60%	60%
Gross Profit	3,558	3,719	4,363	4,515	4,628	5,102	5,637	6,217	6,810	7,428	8,124
Selling and Administrative Expenses	2,718	2,674	2,965	3,052	3,176	3,343	3,695	4,030	4,415	4,817	5,269
% of revenue	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
EBIT	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
Profit before income tax expense	828	933	1,299	1,409	1,299	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
Profit for the year	696	795	1,113	1,206	1,139	1,354	1,502	1,696	1,857	2,025	2,214

Source: Reuters and team calculation

1.3 Valuation and investment recommendation summary

According to the relative valuation analysis, we recommend buying the stock based on the target price of 37.25 (see Table 4.6 Target price in Chapter 4) in 2020F implied by the P/E target of 25.0x, with 15.50 % upside. Further, the company has a high sales growth rate in developing markets such as Myanmar, Vietnam and Cambodia. MEGA's P/E is lower than peers' average P/E ratio, while it has more outstanding financial performance than average peers based on as ROE, D/E and EPS growth rate.



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 ¹		Year ended December 31, 2018 ²		Year ended December 31, 2019	
	Amount	% of total ¹	Amount	% of total ¹	Amount	% of total ¹
(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) ²	179.1	1.9	188.9	1.8	198.9	1.8
Maxxcare™ distribution business³ (after addition of intersegment charges)²	4,044.5	42.5	4,631.0	44.9	5,414.0	48.4
Mega We Care™ branded products business	5,134.1	54.0	5,456.7	53.0	5,675.3	50.9
Intersegment revenue (charge) ²	(179.1)	(1.9)	(188.9)	(1.8)	(198.9)	(1.8)
Mega We Care™ branded products business (after deduction of intersegment charges)²	4,955.0	52.1	5,267.8	51.2	5,476.4	49.1
OEM business	466.5	4.9	282.9	2.7	239.4	2.1
Other income ⁴	47.2	0.5	124.3	1.2	49.4	0.4
Total	9,513.2	100.0	10,306.0	100.0	11,179.2	100.0

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 ⁵		Year ended December 31, 2018 ⁵		Year ended December 31, 2019	
	Amount	% of total ¹	Amount	% of total ¹	Amount	% of total ¹
(in millions of THB, except percentages)						
Maxxcare™ distribution business²						
• Southeast Asia ⁴	4,044.5	100.0	4,631.0	100.0	5,414.0	100.0
• Africa ⁴	-	-	-	-	-	-
• Others	-	-	-	-	-	-
Total	4,044.5	100.0	4,631.0	100.0	5,414.0	100.0
Mega We Care™ branded products business³						
• 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
Total	4,955.0	100.0	5,267.8	100.0	5,476.4	100.0
OEM business						
• 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
Total	466.5	100.0	282.9	100.0	239.4	100.0
Total revenue	9,466.0	100.0	10,181.7	100.0	11,129.8	100.0

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)

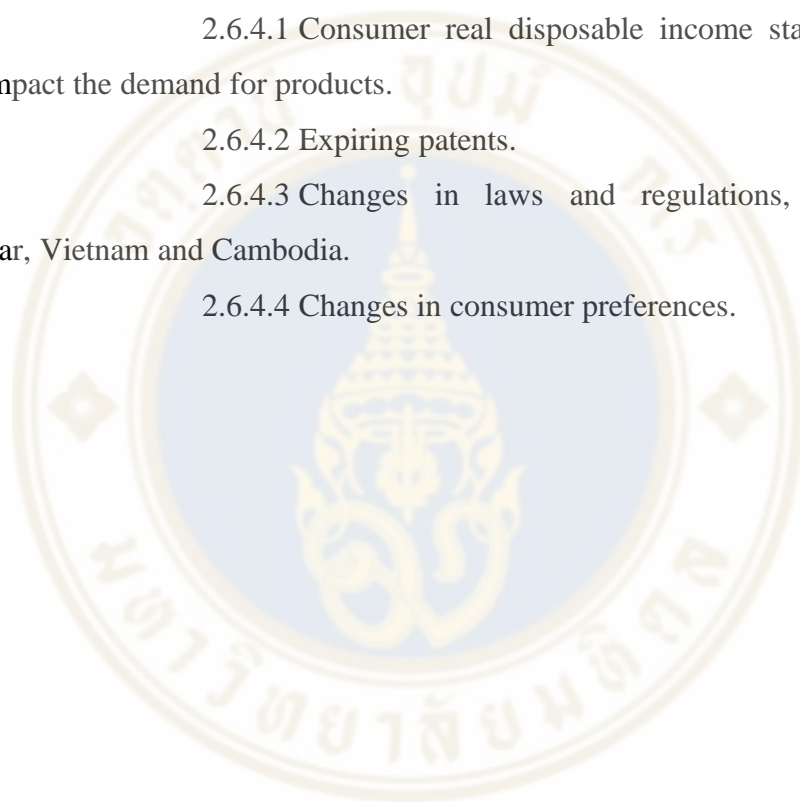
2.6.4 Threats

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.

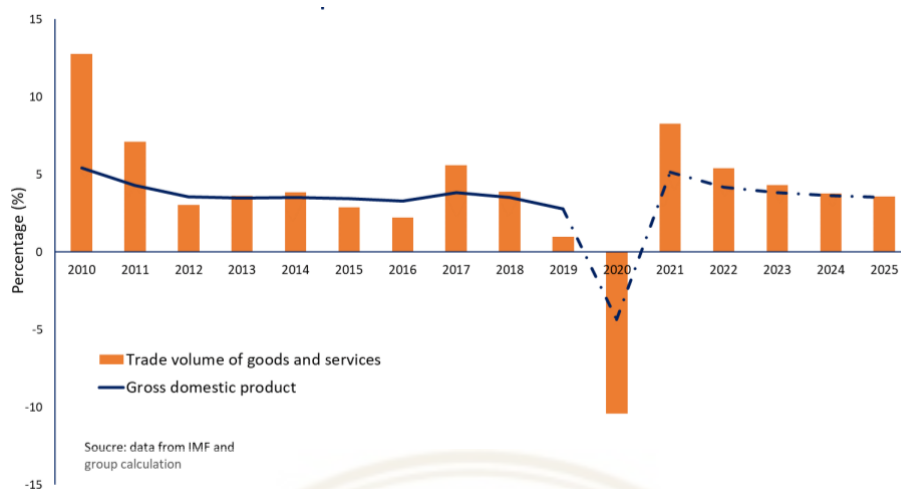


Figure 3.1 World gross domestic product

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.

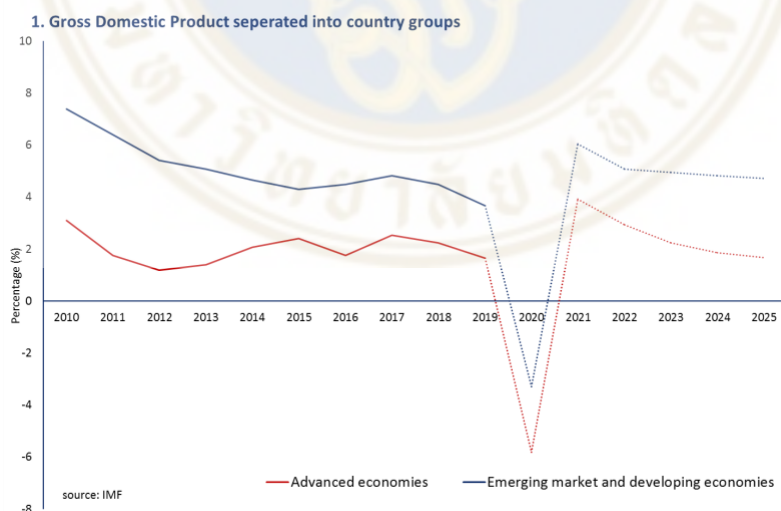


Figure 3.2 Gross domestic product separated into country groups

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)

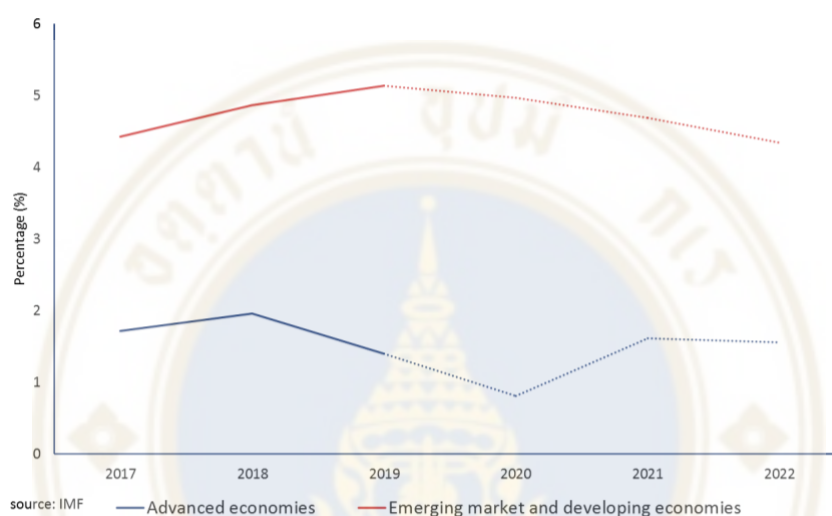


Figure 3.3 Global inflation (average consumer prices)

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.

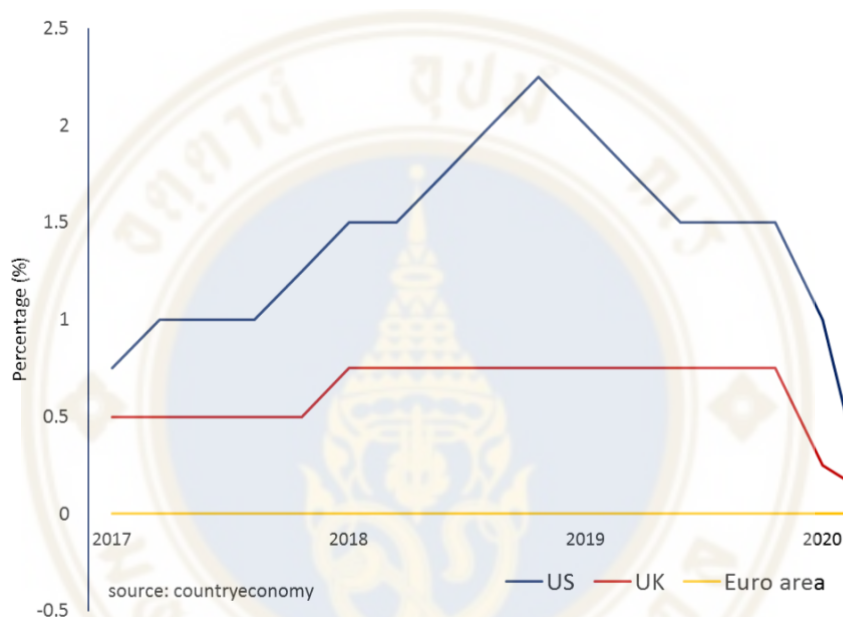


Figure 3.4 Advanced economies policy rate

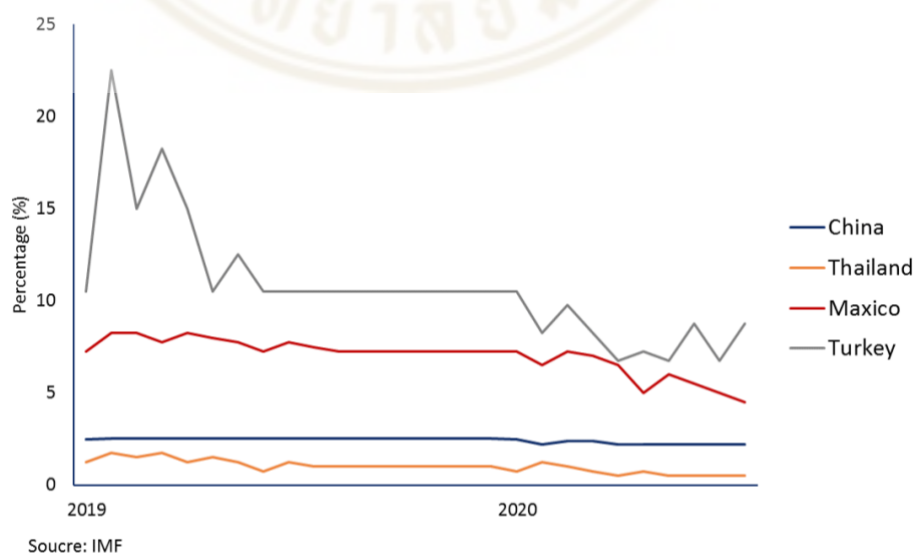


Figure 3.5 Emerging market economies policy rate

GDP per capita

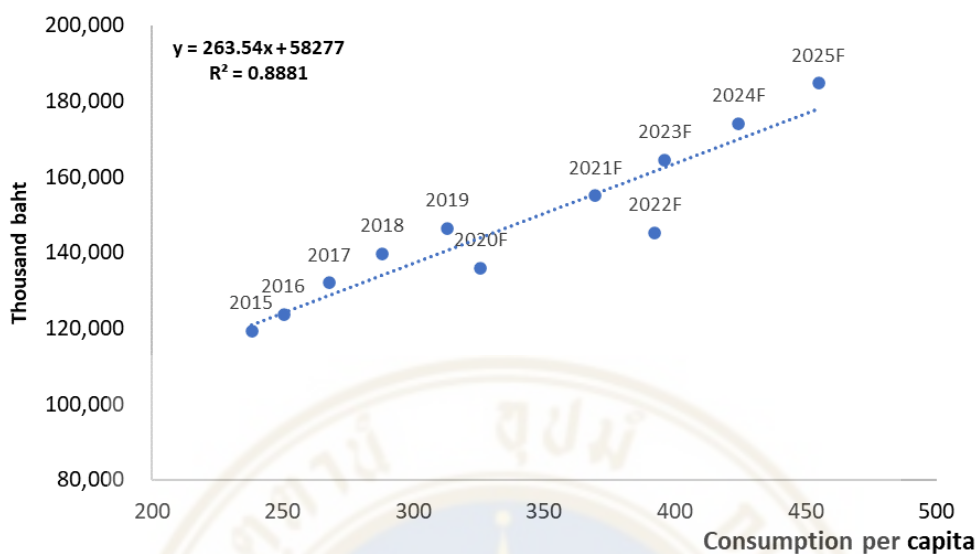


Figure 3.6 GDP per capita

Source: Euromonitor and team calculation

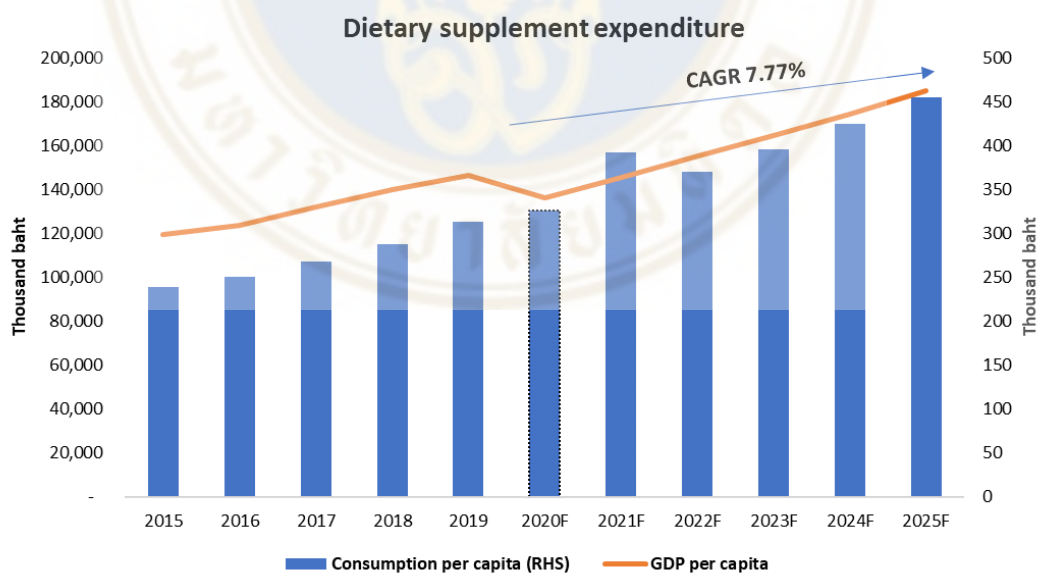


Figure 3.7 Dietary supplement expenditure

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.

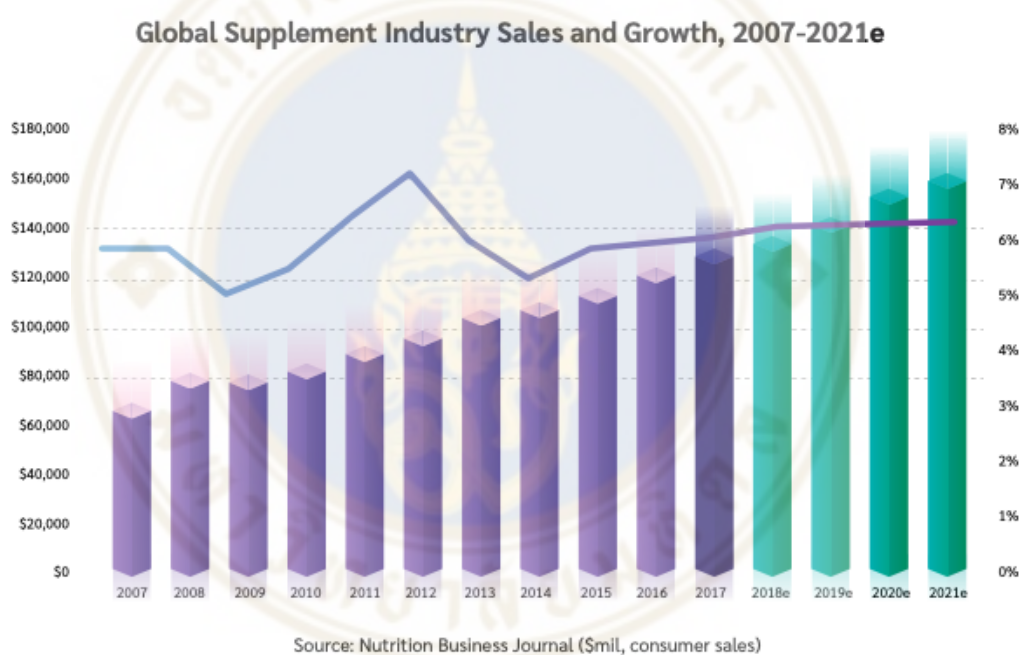
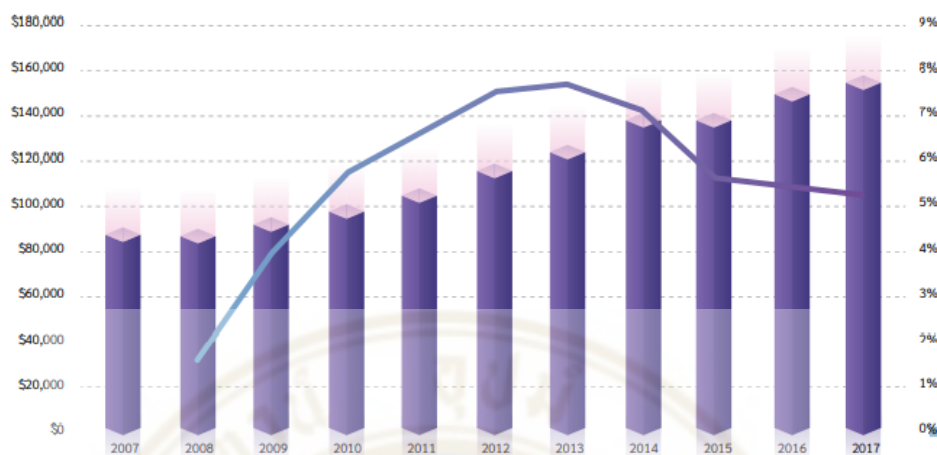


Figure 3.8 Global supplement industry sales and growth, 2007-2021

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



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

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

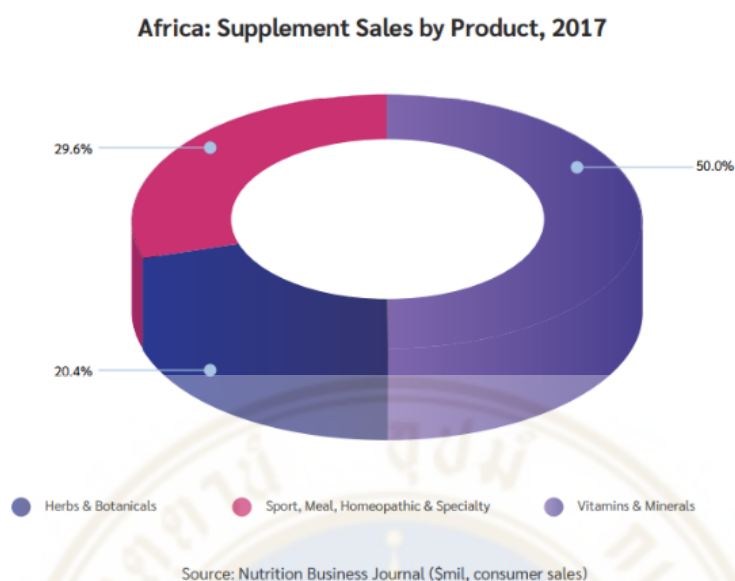


Figure 3.10 Supplement sales by product,2017

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.

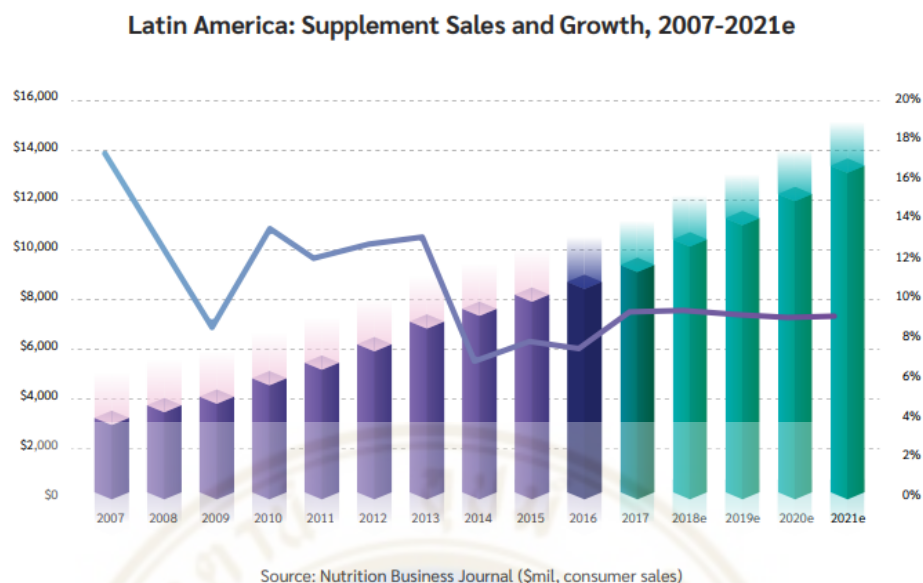


Figure 3.11 Latin American: Supplement sales and growth, 2007-2021

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.

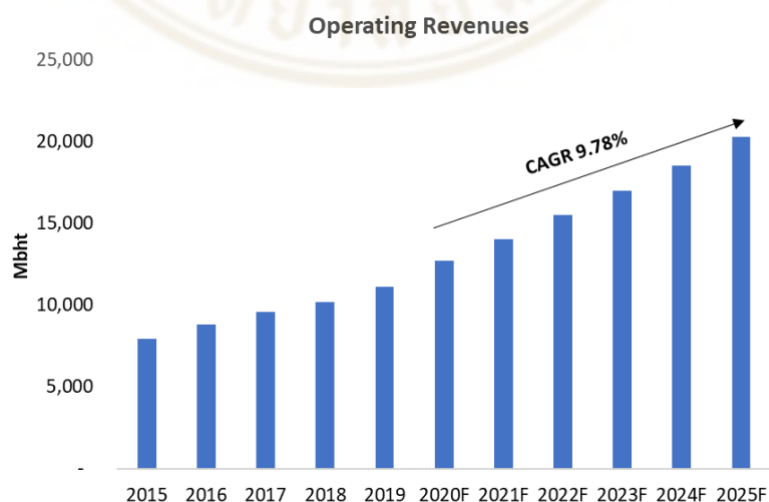


Figure 3.12 Operating revenues

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
Operating revenue	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%
Total Revenues	8,116,612	9,162,171	12.9%
Cost of goods sold	4,759,857	5,565,368	16.9%
Gross profit	3,356,755	3,596,803	7.2%
Selling and Administrative Expenses	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%
Total Expenses	7,214,870	8,000,462	10.9%
EBIT	901,742	1,161,709	28.8%
Finance Costs	48,668	58,031	19.2%
Income Tax Expenses	96,832	140,603	45.2%
Net Profit	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>		
	3Q19	3Q20	Change
Operating revenue	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%
Total Revenues	2,864,655	3,390,136	18.3%
Cost of goods sold	1,691,495	2,083,534	23.2%
Gross profit	1,173,160	1,306,602	11.4%
Selling and Administrative Expenses	819,426	850,923	3.8%
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%
EBIT	338,668	413,839	22.2%
Finance Costs	17,394	16,925	-2.7%
Income Tax Expenses	39,140	55,246	41.1%
Net Profit	282,134	341,668	21.1%

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

Revenue* by Business Segment							
<i>Figures in THBmn</i>	3Q19	2Q20	3Q20	YoY Gr.	9M19	9M20	YoY Gr.
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%
Total	2,848.7	2,633.3	3,381.2	18.7%	8,078.2	9,091.6	12.5%

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

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

CHAPTER IV VALUATION

4.1 Financial analysis

4.1.1 Dupont's analysis

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

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.

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).

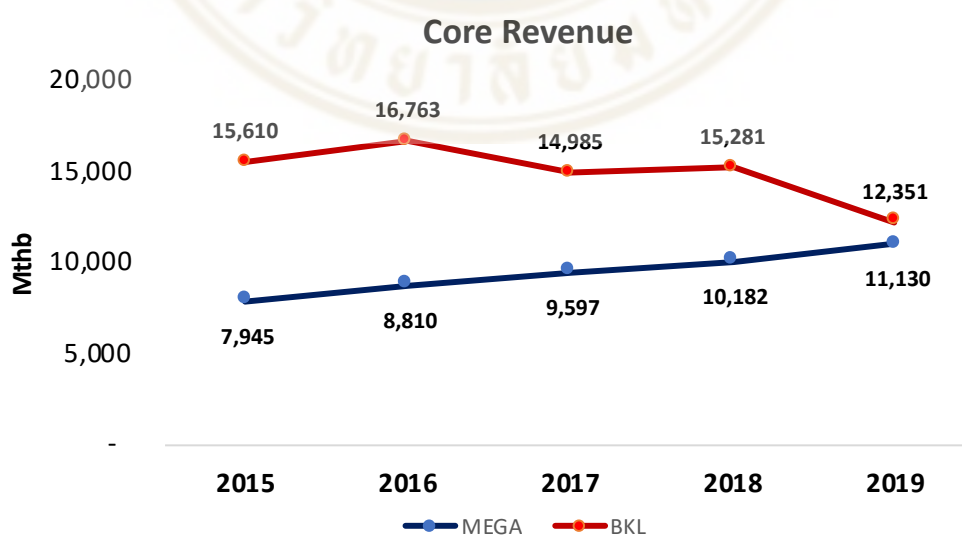


Figure 4.1 Core revenue trend of MEGA and BKL

Source: SETSMART, Reuters and team calculation

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.

business continuously in the developing countries, also supplement market in Asia is growing more rapid than the world market.



Figure 4.2 Cost of goods sold 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.

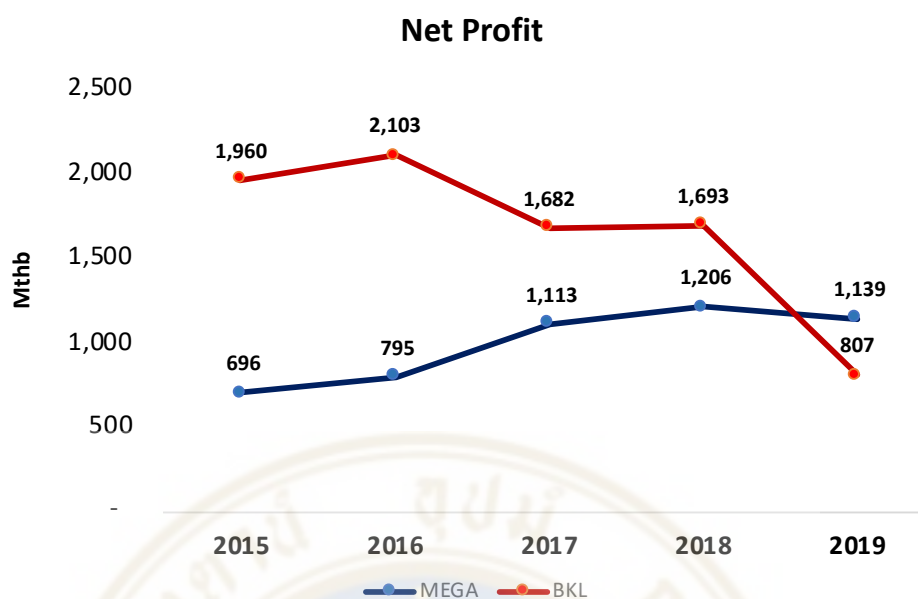


Figure 4.3 Net profit trend of MEGA and BKL

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.

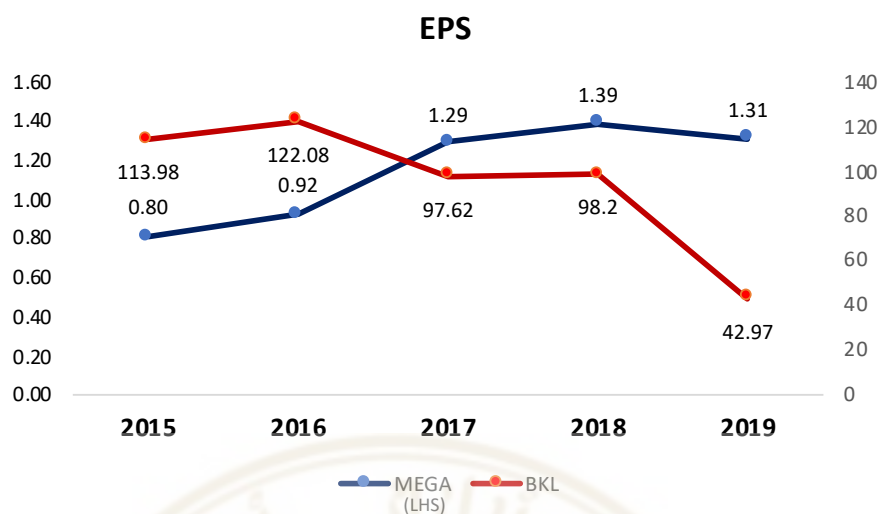


Figure 4.4 EPS trend of MEGA and BKL

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%.

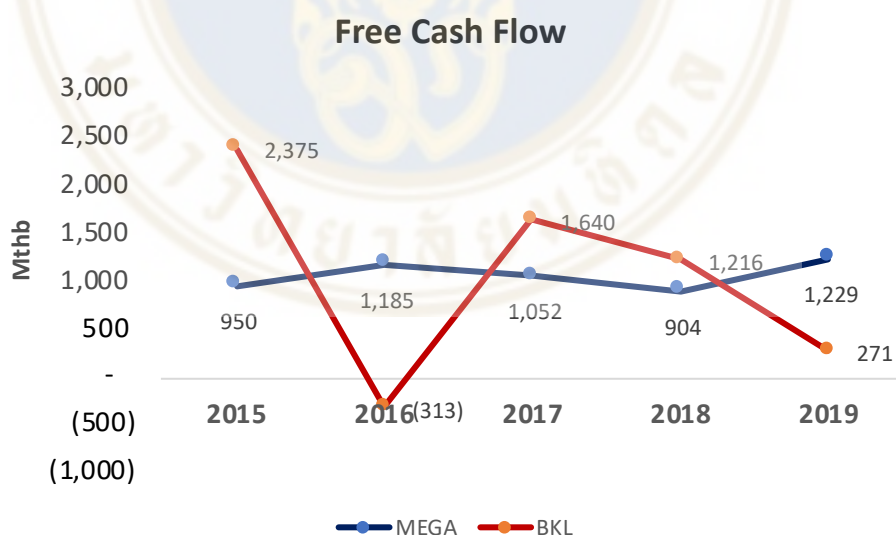


Figure 4.5 Free cash flow trend of MEGA and BKL

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.

4.2 Valuation: Relative valuation method

In this section we value the company using relative valuation methods by comparing to its peers and its own historical trading over past five years with the following multiples: Trailing P/E, P/BV, EV/EBITDA and Forward P/E, and Forward EV/EBITDA

4.2.1 Historical multiple bands

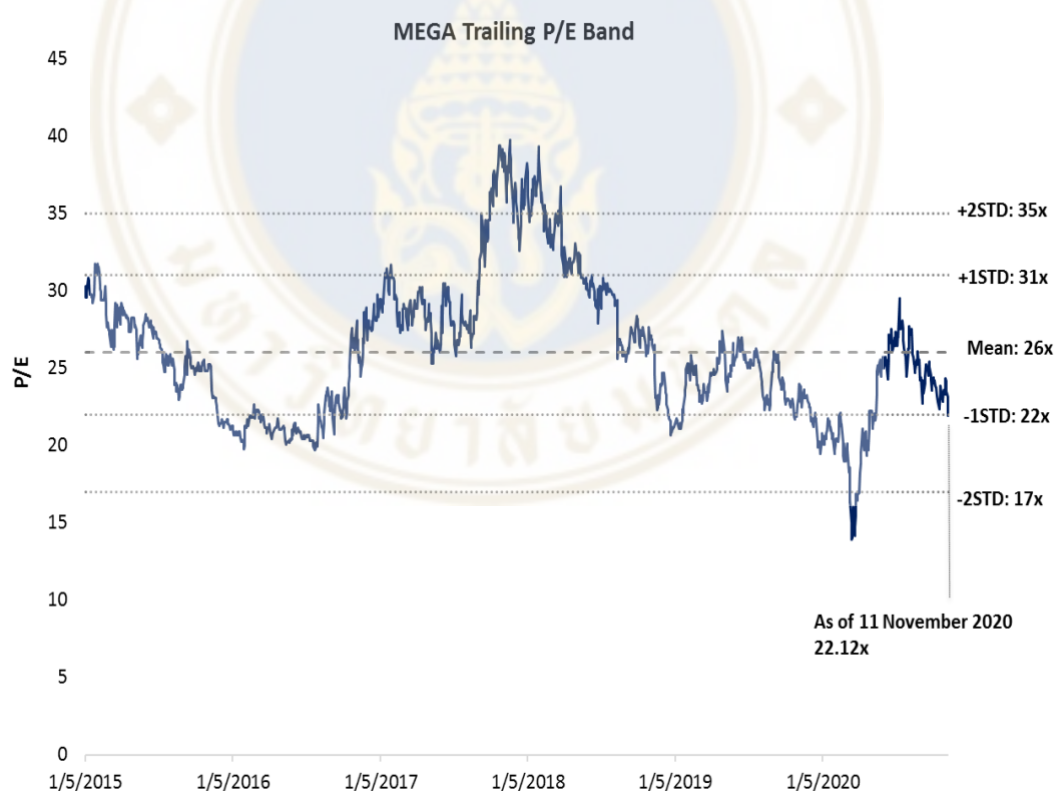


Figure 4.6 MEGA Trailing P/E band for past five years

Source: SETSMART and team calculation

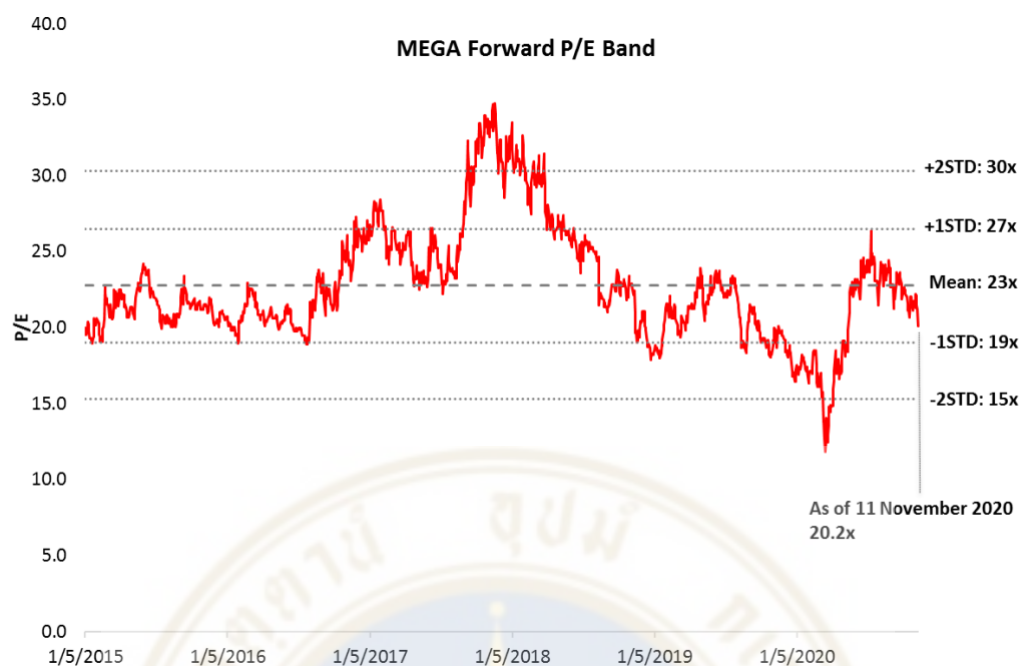


Figure 4.7 MEGA Forward P/E band for past five years

Source: SETSMART and team calculation

Trailing P/E multiple band in historical trading for past five year has an average PE at 26x. Overall, the company traded around the mean before it decreased below -1STD at PE 22x in 2016 to 2017 due to investors adjust their expectation on earning that declines in 2014 due to high expense on capacity expansion and business activities in Africa and Myanmar. Afterward it was trading above the mean at PE 35x (+2STD) in 2018. As of 11 November 2020, current PE is at 22.2x. The virus spread causes trading approximately at PE 22x (-1STD) returned from -2STD in the beginning of 2020 when the company was undervalued in relation to itself. Based on the forward P/E multiple band, as of 11 November 2020, it reaches to nearly around the mean at approximately forward PE 20.2x which is still below at the average forward PE at 23x.

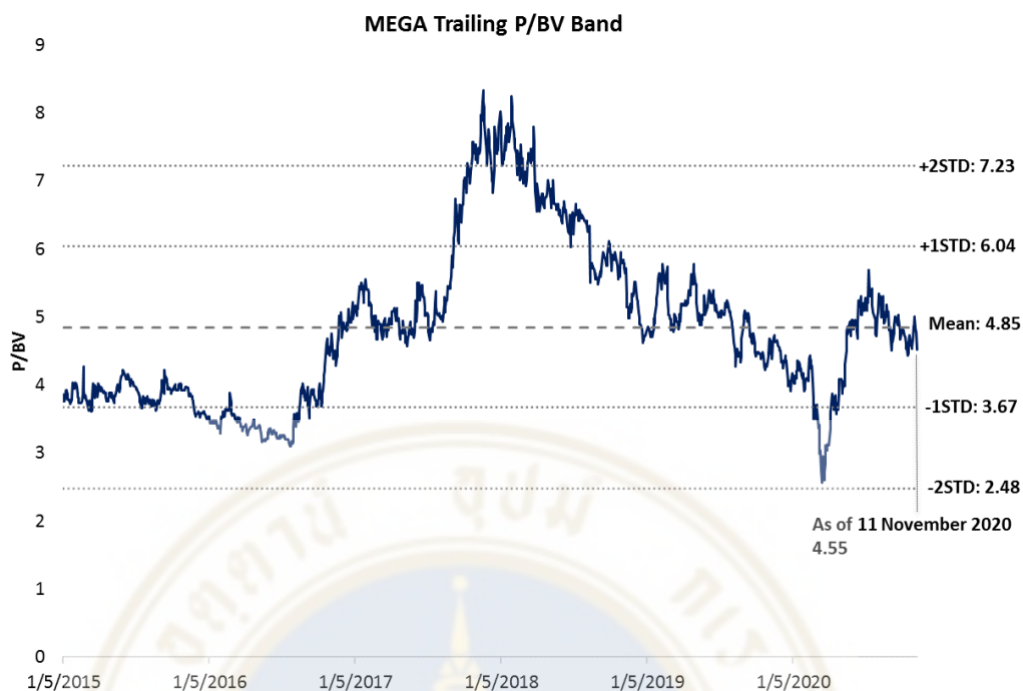


Figure 4.8 MEGA Trailing P/BV band for past five years

Source: Reuters and team calculation

Trailing P/BV multiple in relation to itself for past five years has an average at 4.85 with a downward trend from 2018 when it was traded at around 7.23 (+2STD). As of 11 November 2020, P/BV is trading slightly below the average at approximately 4.55. However, the difference of current P/BV compared to five years historical average is quite small, approximately trading at fair value.

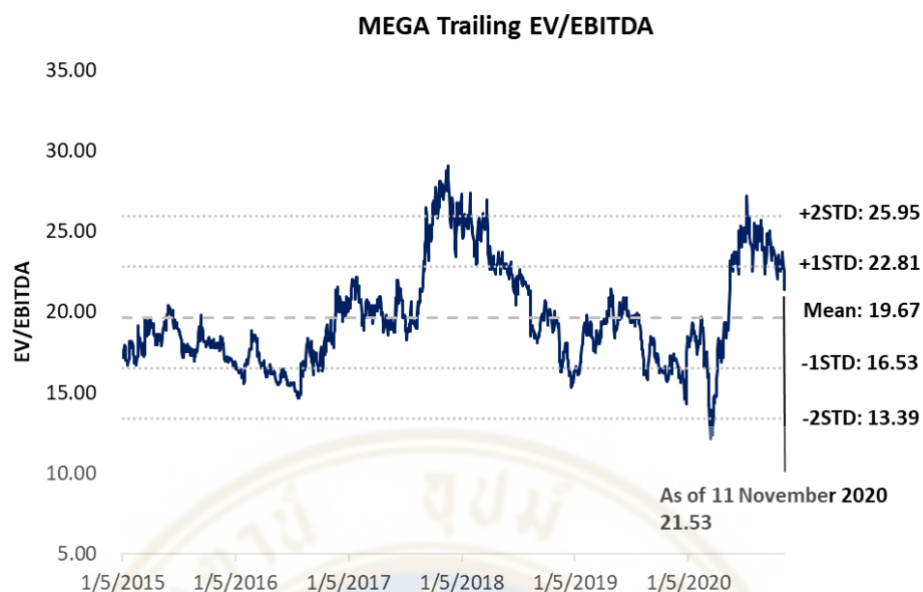


Figure 4.9 MEGA Trailing EV/EBITDA band for past five years

Source: Reuters and team calculation

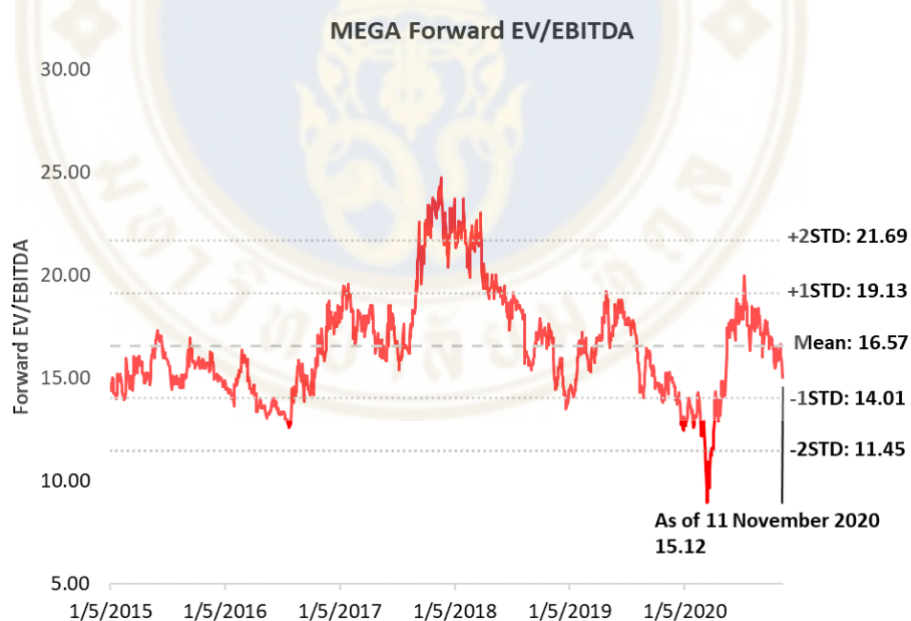


Figure 4.10 MEGA Forward EV/EBITDA band for past five years

Source: Reuters and team calculation

We compare EV/EBITDA to its historical past five years. EV/EBITDA is a ratio that compares a company's enterprise value to its earnings before interest, taxes,

depreciation and amortization or the ratio means that how many times EBITDA that the company have to pay to obtain the entire business.

According to exhibit 3, the average Trailing EV/EBITDA for past five years is 19.67, and the current value EV/EBITDA is 21.53 or close to +1STD. As the current value is higher than the historical average, in relation to itself the firm is overvalued. However, in terms of Forward EV/EBITDA, using the current EV divided by estimated EBITDA of 12 months forward, the ratio is below the historical average by a little at 15.12 compared to the average of 16.57. We conclude that the company value is trading close to fair value on average, based on forward EV/EBITDA.

4.2.2 Peer group multiples

In this section we compare MEGA to global peers which are in the same business and industry based on the latest data for all multiples. MEGA is undervalued compared to the peer average in terms of trailing and forward PE of 23.5x and 22.22x respectively which are lower than the average at 70.4x and 25.0x. In terms of trailing PBV, MEGA is overvalued relative to its peers at PBV 4.8 compared to the average of 3.8. On the other hand, MEGA is undervalued based on trailing EV/EBITDA of 16.72 compared to the average of 23.8, but forward EV/EBITDA is close to peers at 16.56 compared to average of 16.0.

Table 4.3 Integrated benchmark corporation and valuation ratios

Identifier	Company name	Market data			Valuation				
		Country	Price (THB)	Market Cap (M.THB)	LTM	NTM	LTM	LTM	NTM
					PE	PBV	EV/EBITDA		
MEGA.BK	Mega Lifesciences PCL	Thailand	32.25	28,117.79	23.5	22.22	4.8	16.72	16.56
BKL.AX	Blackmores Limited	Australia	1635.68	31,764.99	91.3	37.2	4.9	36.2	19.74
PFE.N	Pfizer Inc.	United State	1157.7	6,299,103.20	27.1	13.6	3.4	16.4	12.56
SUN.NS	Sun Pharmaceutical Industries Limited	India	205.67	494,237.15	92.8	24.2	3.0	18.8	15.65
Peer Average					70.4	25.0	3.8	23.8	16.0
Peer Median					91.3	24.2	3.4	18.8	15.7
Max					92.8	37.2	4.9	36.2	19.7
Min					27.1	13.6	3.0	16.4	12.6

Source: Reuters and team calculation

Table 4.4 Integrated benchmark corporation and financial ratios

Identifier	Company name	Market data			Financial data				
		Country	Price (THB)	Market Cap (M.THb)	ROE (%)	D/E (x)	Beta	Payout ratio (%)	EPS growth 5 years historical (%)
MEGA.BK	Mega Lifesciences PCL	Thailand	32.25	28,117.79	19.14	0.71	1.01	31.4	15.6
BKL.AX	Blackmores Limited	Australia	1635.68	31,764.99	5.91	0.83	0.56	0	-20.29
PFE.N	Pfizer Inc.	United State	1157.7	6,299,103.20	25.21	1.65	0.70	51.25	14.72
SUN.NS	Sun Pharmaceutical Industries Limited	India	205.67	494,237.15	8.69	0.42	0.57	19.11	-3.62
Peer Average					13.3	1.0	0.6	23.5	-3.1
Peer Median					8.7	0.8	0.6	19.1	-3.6
Max					25.2	1.7	0.7	51.3	14.7
Min					5.9	0.4	0.6	0.0	-20.3

Source: Reuters and team calculation

The table shows financial data, last fiscal year, among the peers to compare the factors that may lead to different multiples, including ROE, debt ratios, beta and historical EPS growth. In terms of ROE, MEGA has expressive ROE at 19.14% which is higher than an average of 13.3% as the firm expands capacity and invests mostly in developing markets such as Myanmar, Cambodia and Vietnam with high potential growth in dietary and supplement markets. For this reason, the EPS growth for past five year is quite high at 15.6% compared to the peer average of -3.1%. Further, MEGA's capital structure is mostly financed by equity with D/E ratio of 0.71, which means quite low leverage and default risk. However, MEGA has higher volatility as beta is 1.01 which is higher than peers. Dividend payout ratio is 31.4% compared to the average of 23.5%. In summary, in nearly all aspects MEGA has outperformed the peer average, both in terms of growth and profitability.

4.3 Sensitivity analysis

From the table with the sensitivity analysis below, we analyze EPS based on 2020F from various brokerages firms, with the ratios separated into three parts: Maximum EPS, Average EPS and Minimum EPS. Further, we also use forward P/E multiple to calculate possible target price range based on standard deviation of forward P/E historical band for the past five years.

From sensitivity analysis, target prices range in 2020F are estimated between 23.72 and 46.97 based on average forecasted EPS (1.55). In minimum target prices range are estimated between 22.95 and 45.45 at minimum forecasted EPS (1.5), and in maximum target prices range are estimated between 24.33 and 48.18 based on maximum forecasted EPS (1.59)

Table 4.5 Sensitivity analysis

EPS	Forward P/E					
	-2SD 15.3x	-1SD 19.0x	Mean 22.8x	+1SD 26.5x	+2SD 30.3x	
Maximum	1.59	24.33	30.21	36.25	42.14	48.18
Average	1.55	23.72	29.45	35.34	41.08	46.97
Minimum	1.5	22.95	28.50	34.20	39.75	45.45

Source: SETTRADE and group calculation

The target price based on the peer's average forward P/E of 25.0x is 37.25 in 2020F, and 40.75 in 2021F. In terms of target price based on the peer's average forward EV/EBITDA of 16.0x, the target price is 31.5. in 2020F, and 34.79 in 2021F

Table 4.6 Target price

Relative Valuation	2019A	2020F	2021F
EPS (thb)	1.31	1.49	1.63
EBITDA (mthb)	1564.00	1718.00	1896.00
EBITDA/Shares	1.79	1.97	2.17
Number of shares (m.)	871.87	871.87	871.87
Peer Average		Target price	
P/E 25.0x	32.75	37.25	40.75
EV/EBITDA 16.0x	28.70	31.53	34.79

Source: Thomson Reuters and group calculation

4.4 Valuation recommendation

According to estimated EPS and EBITDA, we recommend buying the stock based on forward P/E due to high earning growth rate in next 3 years, even though the current P/E is still higher than 2019 because of the virus effect. MEGA's P/E is lower than its peers average PE, which indicates that the stock is undervalued. In terms of prices, when multiplying forward PE and EPS, the price would increase from 2019 to 2021F based on high EPS growth. In addition, compared to its peers MEGA has outstanding financial performance, such as higher ROE, lower D/E and better EPS growth.

Table 4.7 Relative valuation summary

Relative Valuation Summary				
Relative Valuation	2019A	2020F	2021F	2022F
Trailing P/E (22.12x)	26	33.0	36.1	39.8
Forward P/E (20.2x)	26	30.1	32.9	36.4
P/BV	26			
Trailing EV/EBITDA (21.3x)	26	42.0	46.3	50.8
Forward EV/EBITDA (15.12x)	26	29.8	32.9	36.1
EPS (thb)	1.31	1.49	1.63	1.8
EBITDA (mthb)	1564	1,718	1,896	2,080
EBITDA/Shares	1.79	1.97	2.17	2.39
Number of shares (m.)	871.87	871.87	871.87	871.87

Source: Thomson Reuters and group calculation

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)

Raise in disposable income leads to raise in demand for MEGA's products and it has happened in the past recent year. 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 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 condition in Thai Baht.

The company has to bear 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.

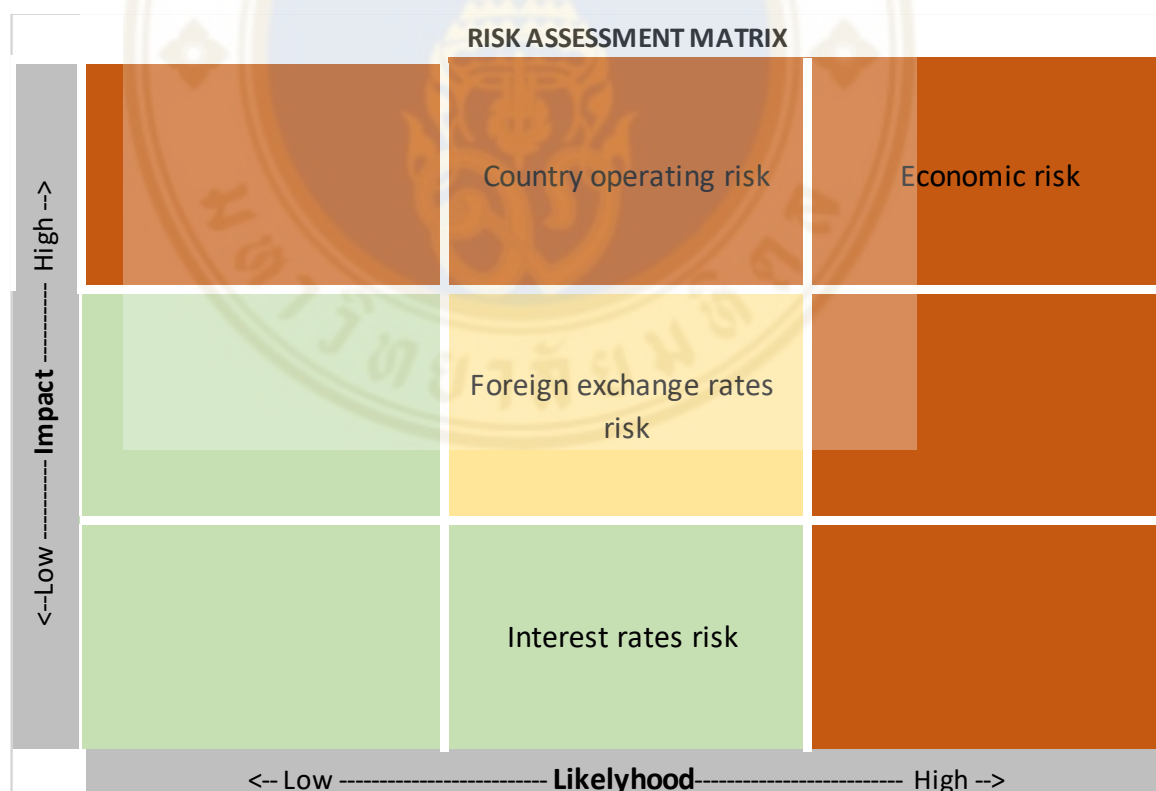


Figure 5.1 Risk assessment matrix of MEGA

Source: Team evaluation

CHAPTER VI

CONCLUSIONS

6.1 Investment recommendation

For the relative valuation, we base our conclusion on the P/E multiple as a measure to value the firm, due to the stable firm earnings growth in this sector that support P/E valuation. MEGA's current price is 32.25 compared to our target price 37.25 of 2020F with 15.5% upside (see Table 4.6 Target price in Chapter 4). Therefore, we recommend buying the firm due to its solid financial performance, in terms of high ROE, low leverage and high expected EPS growth.

From Damodaran (2020) he estimated the regression model for emerging market stocks to explain differences in P/E multiples: predicted PE = 13.28 + 80.06 gEPS + 8.24 Payout - 2.72 Beta (R² = 29.6%). We assume that the company will grow at the same rate as the five years historical EPS (see Table 4.4 Integrated benchmark corporation and financial ratios in chapter 4), therefore the predicted PE ratio for MEGA based on its return on equity of 19.14%, payout ratio of 31.4% and beta of 1.01, would be 25.6x. Because the current PE ratio for MEGA at the time of the analysis was 23.5, it was lower than the predicted PE ratio based on MEGA fundamentals. The result also suggests that the stock is undervalued relative to its peers.

6.2 Triggers for re-assessment

In this section we list the factors that could lead to a change in MEGA's multiple ratios, as follows.

6.2.1 Change in expected earnings

According to P/E ratio, it combines earning of the firm compared to its price, therefore when the market has high expectation on earning it would reflect P/E ratio that causes P/E ratio higher as increasing on demand for the firm to purchase the stock. On

the other hand, a decrease in P/E ratio may occur when future earnings growth is lower than initial expectation, or return on equity is lower than expected.

6.2.2 Change in return on equity

Return on equity is a measure of profit efficiency as a function of the amount of capital invested by stockholders. It widely uses as a tool to compare with P/BV ratio due to a higher book value per share has relatively corresponds high return on equity and also the firms with high growth rate tend to have high P/BV ratio.

6.2.3 Change in business structure

Mega has changed its business model by raising the proportion of distribution business or Maxxcare business. Therefore, 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 earning may be differed and it will lead to change in target price eventually.

6.2.4 Entrance of new competitor

Using relative valuation is based on a comparison to peers. If a new competitor enters into the market, it could affect the sales growth of MEGA negatively due to increased competitive pressure. If it is a key competitor with the same business structure and listed in the stock market, the new competitor could affect the average multiple ratios of the industry as well.

6.3 Limitations

6.3.1 Difficulty in comparing companies

It is difficult to find the right company for the peer comparison set due to the differences in the underlying business, especially qualitative data such as superior product that the company sells, or economy of scales which causes high growth rate and ROE, making the companies that have an outstanding performance within an industry

trade at higher multiple. Moreover, the method requires expertise on the operating and financial specifics of each peer that cause differences in the valuation of the firms.

6.3.2 Dependence on correctly valued peers

The use of multiples only provides information about relative values, not absolute values such as discounted cash flow valuations. If the peer group as a whole is incorrectly valued, for instance it could happen during a bubble stock market, then the result based on relative multiples will similarly be miss-valued.



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