

**RELATIVE VALUATION OF
CHAROEN POKPHAND FOODS PUBLIC COMPANY LIMITED**



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**A THEMATIC PAPER SUBMITTED IN PARTIAL
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ABSTRACT

This thematic paper aims to valuate value of Charoen Pokphand Foods Public Company Limited by using Relative Valuation method.

Charoen Pokphand Foods Public Company Limited (CPF) operates in agro-industrial. CPF classify their business into 3 categories: food business, animal feed, and farming. CPF has continued expanded their business line to every level of agro-industry operation. They export to more than 30 countries and invest internationally in 17 countries.

Relative Valuation model is based on a concept that we can compare the target company with other peer companies in the same industry by using financial ratio. To get target price of CPF, 3 domestic and 3 international companies in same industries were selected to be the benchmarks. Pro-forma PL and pro-forma Balance Sheet were estimated by using growth rate at 2.65% to get pro-forma Book Value, estimated EPS and estimated EBITDA as inputs in the model. The result from this paper shows target price of 34.82 Baht. so I would recommend to 'Buy' due to the stable growth and several sources of revenue.

KEY WORDS: Charoen Pokphand Foods Public Company Limited / Agro-industrial / Relative valuation model

61 pages

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INVESTMENT SUMMARY

Charoen Pokphand Foods Public Company Limited operates in agro-industrial which comprises of food business, animal feed, and farming. Moreover, CPF has invested in distribution channels to reach more customers. For international market, CPF not only export to 30 countries, they also invest in 17 countries. In 2019, CPF had acquired 8 new direct and indirect subsidiaries in Thailand, U.S.A., Vietnam and Sri Lanka. The company focuses on merger and acquisition to fulfill the value chain, extend the market internationally and make more growth.

In 2019, the revenue is 544.88 Million Baht, decreases from 555.50 Million Baht in 2018. However, CPF still manage to make a net profit up to 24.10 Million Baht, increase 12.48% from last year

There are some risks and opportunities that can affected the business. The company should consider both Macroeconomic and Microeconomic factor as follow;

1. Effect of Corona Virus outbreak since the outbreak effect global economy strongly. Unemployment rate rise dramatically. It leads to lower purchasing power which effect directly to CPFs' revenue. On the other hand, many countries have decided to temporary lockdown. It means the company cannot provide products to the market as fast as they did, resulting in higher logistics cost.

2. Exchange rate is still fluctuated that the company should monitor closely because 67% of sales come from oversea. If THB is getting higher, product from Thailand will be more expensive compare to competitors. The derivative tools that CPF should use to manage risk are forward contract, option and SWAP.

3. Interest rate: Bank of Thailand had announced lowest interest rate in history. This can be opportunity for CPF that they can extend investment and pay less interest.

4. Drought: Drought is a natural disaster that impact directly to the farming business. It damages product and make animals grow up slower than usual.

I estimated target price by Relative Valuation method. Three financial ratios used in the model are P/BV, P/E and EV/EBITDA. I selected 3 domestic and 3 international companies in same industries to be benchmarks. Then I estimate pro-forma PL and pro-forma Balance Sheet by using growth rate at 2.65% Therefore, I get pro-forma Book Value, estimated EPS and estimated EBITDA as inputs in the model. As a result, the target is 34.82 so I would recommend to 'Buy'



CHAPTER I

BUSINESS ANALYSIS

1.1 Company profile

Charoen Pokphand Foods Public Company Limited established in 17 January 1978. At the beginning, the company focused only on feeding and farming business. Then in 1987, the company was listed on the Stock Exchange of Thailand as “CPF” and expanded their business line to shrimp farming, agro-industry and meat processing. Charoen Pokphand Foods Public Company Limited became a public company limited in 1994.

CPF set their vision as “Kitchen of the World” and to follow the vision, CPF has continued expanded their business line to every level of agro-industry operation. They export to more than 30 countries and invest internationally in 17 countries.

1.2 Vision

“Kitchen of the World” (Charoen Pokphand Foods Public Company Limited, 2020)

1.3 Mission

“CPF operates vertically integrated agro-industrial and food businesses, with its objectives to offer products of high quality in terms of nutritional value, taste, safety and traceability. CPF strives to operate businesses that are in strategic locations, focus on modern production process, conform with international standards, efficiently use natural resources, and operate in an environmental friendly manner, in order to compete in the front line of the food industry. CPF takes into account the interests of all stakeholders to ensure sustainable growth, while being able to continuously generate appropriate return to shareholders.” (Charoen Pokphand Foods Public Company Limited, 2020)

1.4 Board of Director

As of 1 October 2020, the chairman is Mr. Soopakij Chearavanont who is a son of Mr. Dhanin Chearavanont, a senior chairman of CP Group.

There are 15 directors in CPF's Board of Directors (Charoen Pokphand Foods Public Company Limited, 2020) which are:

- Mr. Rungson Sriworasat
- Professor Dr. Pongsak Angkasith
- Pol. Gen. Phatcharavat Wongsuwan
- Mrs. Vatchari Vimooktayon
- Mr. Vinai Vittavasgarnvej
- Mrs. Arunee Watcharananan
- Mr. Prasit Boondoungprasert
- Mr. Siripong Aroonratana
- Dr. Sujint Thammasart, D.V.M.
- Mr. Paisan Chirakitcharern

1.5 Shareholder

The shareholders of CPF can be divided in to 4 types.

Table 1.1 Shareholders Structure of CPF in 2020

Type	Holding (%)
1. Thai Individuals	11.10%
2. Foreign Individuals	0.02%
3. Thai Juristic Persons	59.52%
4. Foreign Juristic Persons	29.36%
Total	100.00%

Source: CPF, 2020 (updated of June 2, 2020)

First is Thai Juristic Persons who hold the most percentage of shares at 59.52% followed by Foreign Juristic Persons at 29.36% Thai Individuals at 11.10%

and Foreign Individuals at 0.02% respectively. Total issued and paid-up shares as at 2 June 2020 are 8,611,242,385 shares

Table 1.2 Top ten major shareholders in 2020

Name of Shareholders	No. of Shares	Shareholding (%)
1. Cpg Group	4,596,760,804	53.38%
2. Thai Nvdr Co., Ltd.	679,214,465	7.89%
3. Social Security Office	301,552,800	3.50%
4. Gic Private Limited	274,714,980	3.19%
5. State Street Europe Limited	215,201,705	2.50%
6. South East Asia Uk (Type C) Nominees Limited	141,334,752	1.64%
7. Vayupak Fund	58,278,900	0.68%
8. Mr. Prinya Tieworn	55,300,000	0.64%
9. Morgan Stanley & Co. International Plc	45,168,700	0.52%
10. State Street Bank And Trust Company	44,790,288	0.52%

Source: CPF, 2020 (updated of June 2, 2020)

The first major shareholders is CPG Group, a parent company which hold more than half of all shares at 53.38% follow by Thai NVDR Co., Ltd. at 7.89% and Social Security Office, a state agency, at 3.50%

1.6 Business Model

CPF classify their business into 3 categories.

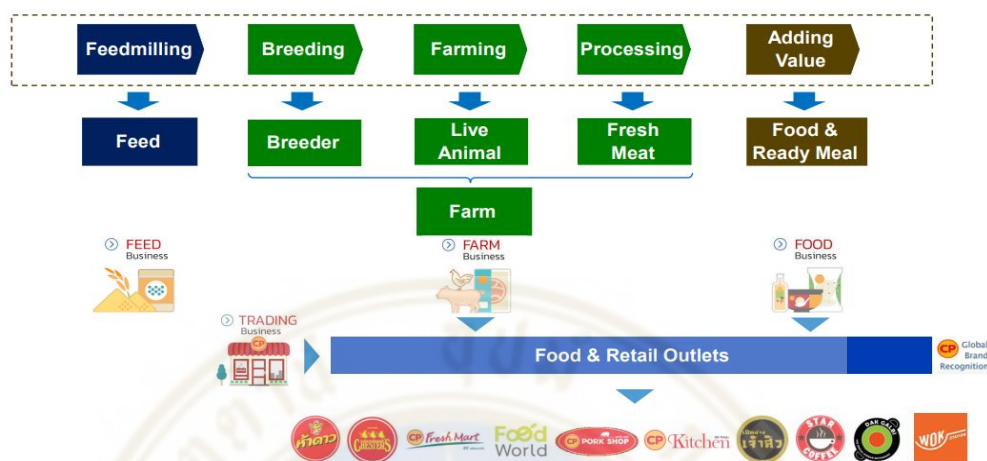


Figure 1.1 CPF business categories in 2020

Source: CPF, 2020

The first one is **Feed business**. The company does a lot of researches to improve their products and also develop animal feed distributes channel. The second one is **Farm business**. CPF develops animal breeding and farming. The operations involved in livestock and aquaculture. They also have primary processing of farming products (fresh meat). The last one is **Food business**. The company focuses on produce cooked and ready-meal products. In addition, the company invests in distribution channels to serve customers' need.

1.7 Business Operation Structure

The operations in Thailand cover all animal feeding, farming and food business for domestic distribution and export. CPF has associate and joint ventures with 30 companies both domestic and international.

CPF international investment operation by subsidiaries in 16 countries which are China, Vietnam, Taiwan, USA, India, Turkey, Russia, United Kingdom, Cambodia, the Philippines, Malaysia, Laos, Belgium, Sri Lanka, Poland and Brazil.

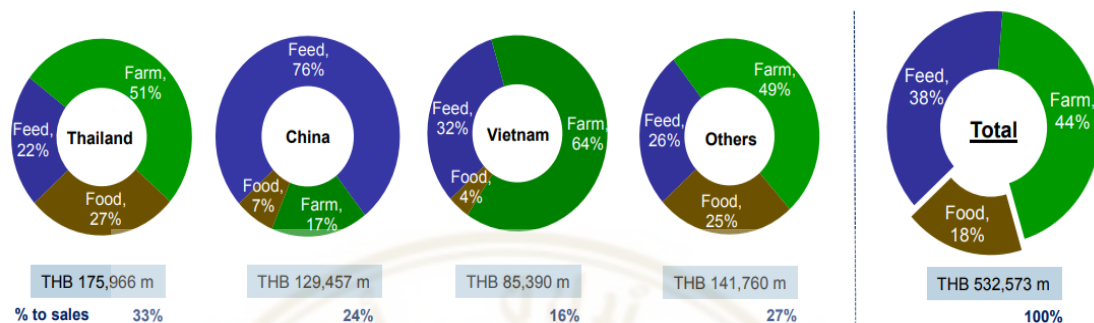


Figure 1.2 Sale revenue by countries

Source: CPF, 2020

Major markets outside Thailand are China and Vietnam as we can see from the figure2. In 2019, 33% of sale comes from Thailand, 24% of sale comes from China and 16% of sale comes from Vietnam. (Charoen Pokphand Foods Public Company Limited, 2020)

1.8 Growth Strategy

To make more growth, the company has done a lot of oversea merger and acquisition for years. The pros of this strategy are avoiding non-tariff export barriers and gaining more local customer base since they are already familiar with local brands. Moreover, CPF gain both know-how and asset from subsidiaries. From CPF president and chief executive officer, the goal of M&A is to fulfill the supply chain of value-added products include make more geographical business expansion. CPF president also add that they focus on producing domestically and selling domestically.(Toomgum, 2015) CPF has huge amount of capital for investment, so they can use this strategy to make the company grow faster.

In 2019, CPF had acquired 8 new direct and indirect subsidiaries. For example, a subsidiary of CPF named CPF Canada Holdings Corp. had merged with HyLife Investments Ltd. to integrated pig business in Canada. CPF also buy new issued of total capital stock of Dak Galbi, a famous Korea restaurant in Thailand. As a result, CPF's shares of Dak Galbi increase to 60% of total capital stock. (Charoen Pokphand Foods Public Company Limited, 2020)

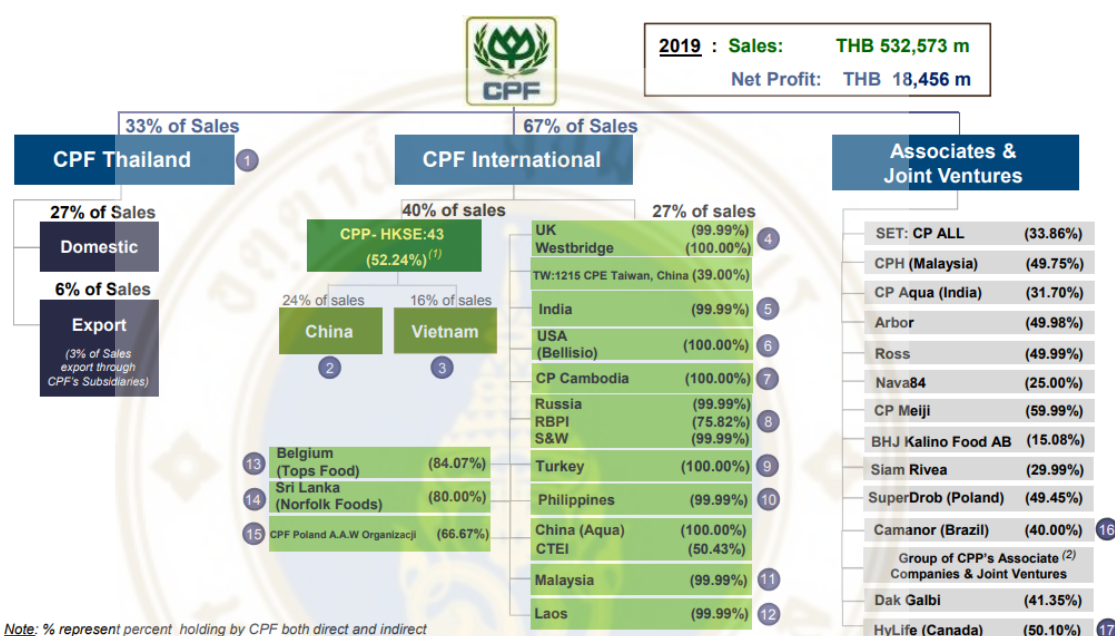


Figure 1.3 holding share of CPF

Source: CPF, 2020

1.9 Credit Rating and Credit Alert

As at 13 March 2020, CPF got A+ from Tris Rating Co., Ltd. This rating means the company has stable outlook. (Tris Rating, 2020) According to Tris Rating Co., Ltd., there are 5 reasons why CPF got A+.

First, CPF's profit met the satisfy target in 2019. Farm business has the best performance from those 3 categories because of the effect of African swine fever in neighbor countries. It makes price of exported pork meat and chicken meat highly increase.

Second, CPF has continued invest in expansion their business as well as acquire related business both oversea and local.

Third, CPF has improved in operation cash flow. Funds from operations (FFO) to debt ratio rose from 8.3% in 2018 to 9.8% in 2019. CPF has cash on hand and short-term securities 3.4 Billion Baht as at 2019 to support their liquidity.

Fourth, CPF is still the first leading company in agro-industrial and food businesses. The company has large production volume, for example, CPF produce 22% of chick meat compares to all domestic production volume as well as 18% of swine. As a result, they gain strength from economy of scale.

Fifth, CPF reduce risk from effect of plague and trade barriers by geographic diversification. The company diverse its operations in 17 countries and its revenue stream from Asia, Europe and United State. CPF also continue diverse their products to reduce risk from earnings volatility.

However, Tris Rating Co., Ltd. place Credit Alert as 'Negative' for CPF. The reason comes from high level of liability and it still expected to increase due to acquisition of Tesco Asia Group. Too high debt can leads to financial risk and downgrade the credit rating.

I would conclude that CPF still has good position in term of investors' view. However, investors have to monitor on the company's financial profile because external environment is still fluctuate so it could have either positive or negative on the company situation.

1.10 Dividend payout policy

CPF's dividend payout policy is two times per year and the total payouts each year have to be at least 30% of net income.

Table 1.3 Dividend

Year	Dividend Payment (THB per share)	Payment Date
2019		
Interim Payment	0.3	12-Sep-19
Annual Payment	0.4	30-Apr-20
Total Payment	0.7	
2018		
Interim Payment	0.35	7-Sep-18
Annual Payment	0.3	23-May-19
Total Payment	0.65	
2017		
Interim Payment	0.5	8-Sep-17
Annual Payment	0.25	23-May-18
Total Payment	0.75	
2016		
Interim Payment	0.5	8-Sep-16
Annual Payment	0.45	24-May-17
Total Payment	0.95	
2015		
Interim Payment	0.3	10-Sep-15
Annual Payment	0.45	19-May-16
Total Payment	0.75	
2014		
Interim Payment	0.3	12-Sep-14
Annual Payment	0.45	21-May-15
Total Payment	0.75	

Source: CPF, 2020

From historical data, we can see that CPF has high Dividend Payout Ratio throughout 6 years. The advantages of having high number of Dividend Payout Ratio is the company can attract more investors and increase stock price. However, CPF would have less retain earning to invest in next year.



CHAPTER II

MACROECONOMIC ANALYSIS

2.1 Important Factor in 2019: African swine fever outbreak

In 2019, the scourge of African swine fever (ASF) in south-east Asia killed a lot of swine. Swine farms in many countries around Thailand, for example Myanmar, Laos, Vietnam, Philippine and Cambodia had to eliminate their livestocks. Thai local farmers were panic and rushed to sell livestocks to avoid being infected. But for big farms that have better system to protect their livestocks, it became an opportunity to increase their sale since small farms in Thailand and in neighbor countries cannot export. However, ministry of agriculture and cooperatives had establish a task force to deal with this situation and Thailand had successfully prevent swine farming industry from ASF. (พระราชชาติศิริกิจ, 2019)

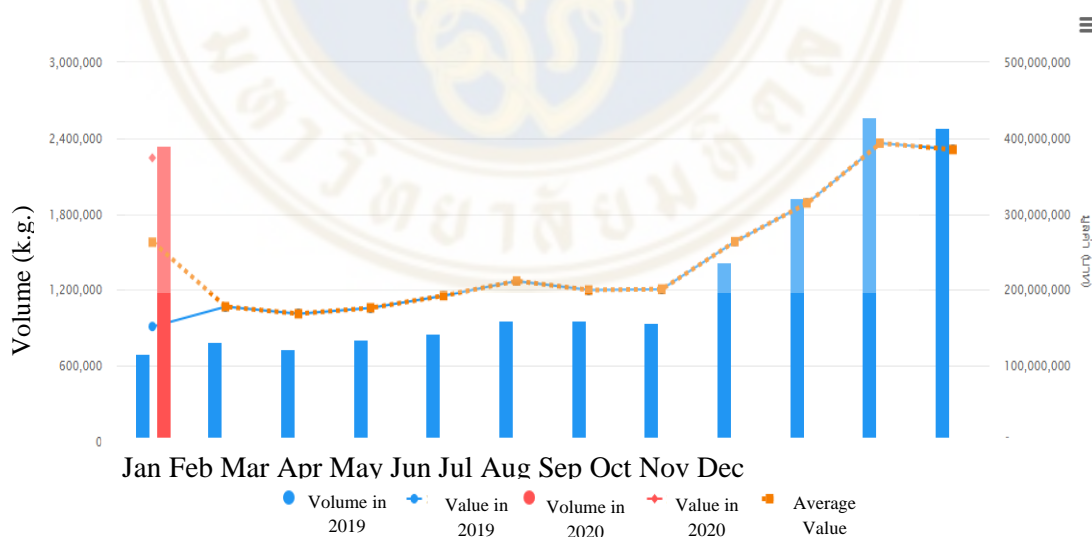


Figure 2.1 Pork meat export volume from 2019-2020

Source: Office of Agricultural Economics, 2020

In early 2020, pork meat price become dramatically increase due to the effect of ASF, especially in China and Vietnam. It is the result of shortage of pork supply in south-east Asia. Pork's export price to China is double higher the domestic price. (กรรณเทพ ชูรักกิจ, 2020)

On the other hand, the effect of ASF made demand in broiler increase as consumer wants chicken instead of pork. Because chicken still has lower price than pork. It leads to increasing in broiler price. (ประชาชาติธุรกิจ, 2019)

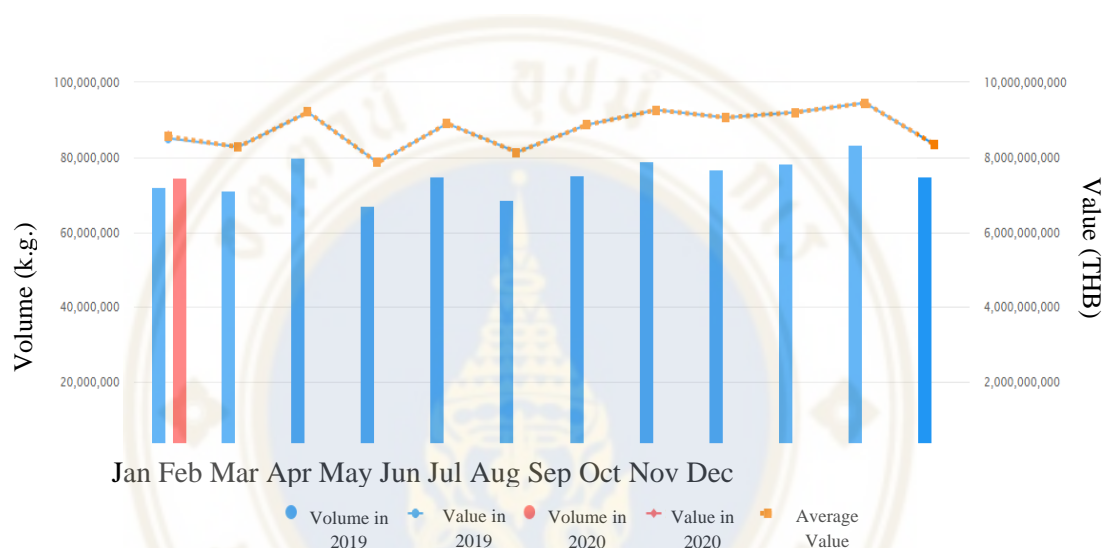


Figure 2.2 Chicken meat export volume from 2019-2020

Source: Office of Agricultural Economics, 2020

Another factor that affect chicken meat price is China's policy. China is the third-largest export market for chicken meat from Thailand after Europe and Japan. In 2019, there are seven chicken factories in Thailand certified by the General Administration of Customs of People's Republic of China (GACC) and can export chicken meat products to the country. As a result, chicken export value in first ten months of 2019 is 4,040 million Baht, increase from 2018 which is 1,769 million Baht.

There is expectation that more nine factories will be certified in 2020. (แนวหน้า, 2019) So the export volume to China should be more increase in the future.

In conclusion, CPF swines and broilers are not effect from African swine fever because CPF has better closed farming system. We can say that high agriculture-

technology is one of the strengths of a company so the situation turned out to be an opportunity for CPF to gain more profit from the international market.

2.2 Important Factor in 2020: Coronavirus effect and the drought

Thai economy in 2020 is expected to have a low growth rate due to the outbreak of Coronavirus and serious drought.

The outbreak of Coronavirus strongly impacts every industry. According to the Ministry of Commerce, the impact can be divided into 4 issues which are global economic slowdown, supply chain and logistic problem, export of agricultural and food products, tourist and domestic economic slowdown. (Bradsher, 2020) These issues can affect CPF directly.

In short-term, it's expected that logistic system for exporting to China might be disrupted since China locked down their country. However, in long-term the expert from Ministry of Commerce gave an opinion that there will be opportunity of highly increasing demand from China. (ฐานเศรษฐกิจ, 2020)

China economy slowdown is one of important factors to consider. As China is the biggest international market for CPF. China has been strongly damaged from the virus. All sectors include industrial production, retail sales and investment are dropped for 2-digit in first two months in 2020, compare to same period in 2019. (Bradsher, 2020) It means that China people's purchasing power also decrease. This could make CPF lose their sale revenue in China.

The drought which happened earlier than expected also reduces the agricultural products and revenue of related sectors. Moreover, many companies lay off their employees to cut back their cost. It makes revenue in the private sector even lower, resulting in less purchasing power.

In 2020, drought is expected to be strong and long lasting than the year before. Average water level in dam decrease 33.1 (YoY) in every domestic region. (Kasikorn Research Center, 2020) It effect to animal feed such as rice, cassava and cane, resulted in drop of products. The drought also drive cost of livestock to be higher, as farms have to reserve more water to feed animals and support the production process.

CPF has used wastewater treatment system to due with the drought. The company reuse water from treatment system. In 2020, CPF plan to reduce 25% of using outside water. Moreover, the company claim that they had developed new technology in shrimp farming and in 2018 they could reduce 70% of using outside water. (กรุงเทพธุรกิจ, 2020)

All in all, CPF cost of farming might not be affected form the drought because they have technology to reduce water needed in the system. But from consumers' view, the drought makes people have lower income so CPF revenue from domestic might decrease

2.3 Exchange rate and Interest rate



Figure 2.3 Exchange rate THB/USD

Source: Government Saving Bank, 2020

Another factor that affects the Thai economy is the exchange rate which highly appreciated last year at around 29 THB/USD. Although the exchange rate slightly depreciate in early 2020, the committee of monetary policy from Bank of Thailand gave an opinion that the exchange rate can be highly fluctuate. So entrepreneurs should

monitor closely. (ประชาชาติธุรกิจ, 2020) If the exchange rate appreciate again, it will make price of export products from Thailand getting more expensive compare to competitors and export volume might decrease. Moreover, CPF might be affected from transaction exposure so the company should use derivative tools which are forward contract, option and SWAP to manage risk from fluctuated exchange rate.

Inflation rate in 2020 tends to increase lower than the target inflation (1-3% ,reduce from 2.5 ± 1.5) due to low domestic demand. (Bank of Thailand, n.d.) The inflation rate is also related to interest rate because they move in the same direction. As a result, the Bank of Thailand make an announcement on 5 February 2020 to reduce the policy interest rate to 1.00% to encourage consumption and investment. However, due to the effect of Coronavirus that is more serious than expected, the Bank of Thailand reduced the policy interest rate again on 23 March 2020, from 1.00% to 0.75% which is the lowest in the history. (Bank of Thailand, 2020)

From CPF's view, the company has both opportunities and threats from all these economic factors. For the opportunities, CPF can extend investment and pay less interest. However, the threat from fluctuating exchange rate that might cause CPF to lose competitive advantage in the international market. Especially, when compare to Brazil, the main competitor in exporting chicken and pork meat.

2.4 Industry Analysis

In agriculture and food business, there is **low bargaining power of suppliers** because big companies in this industry are almost monopoly. Moreover, CPF has fully vertical integrated from upstream to downstream. Suppliers have to buy material from CPF and sell products back to them. So it is difficult for suppliers to bargain with the company.

There is **low threat from new comer** because agriculture and food business has high cost of entry. New comer has to invest in farming system, factory and distribution channel. Most players in the industry have their own shop to distribute products so it would be difficult for new entry to build the market share.

Customers have medium bargaining power as commodity goods have many players in the market and commodity goods are sensitive to price changing. So if the price changes, people can switch to other brand easily. However, CPF has horizontally integrated most products in same level. Therefore, people might switch from CPF brand to CPF's subsidiary brand instead.

There is **low substitute product** for this industry because food is basic needs for human and agriculture is upstream for food production. So it difficult to find other substitutes products.

For competition in same industry, it is depend on the location of doing business. In Thailand, there are **low competitors** because there are very few competitors that can compete with CPF. However, if we consider international market, for example China, U.S.A., Brazil or India, CPF would face **strong competitors** both internationally and locally. Brazil and U.S.A are expected to export pork meat at 20% and 11% consecutively more than last year. (Charoen Pokphand Foods Public Company Limited, 2020) So the competition would be more intense.

CHAPTER III

MULTIPLE BANDS

3.1 Trailing P/E Band

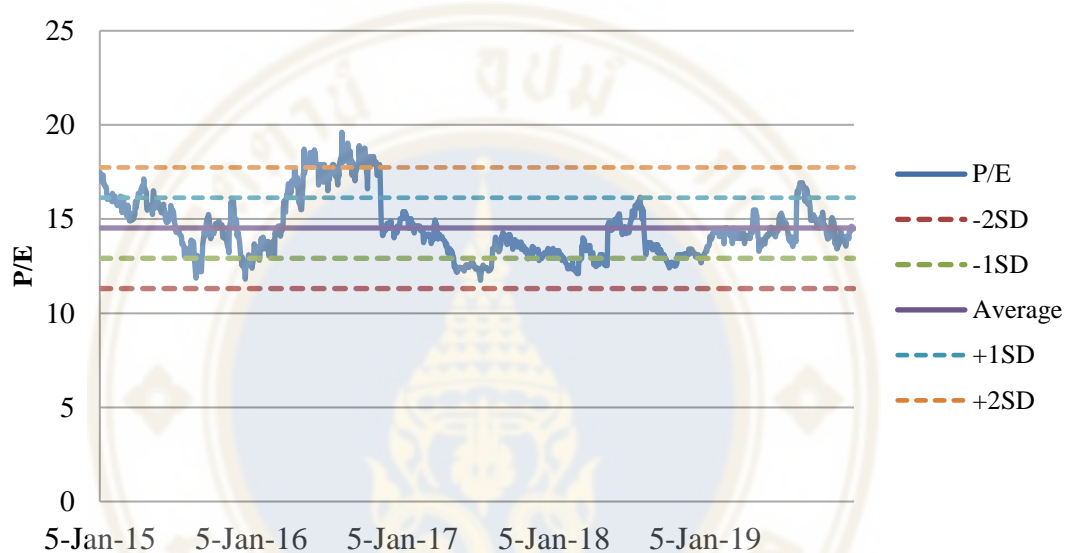


Figure 3.1 Trailing P/E Band

Source: Thomson Reuters, 2020

From trailing P/E band chart, P/E as of 30 December 2019 is 14.49, a few lower than 5-year P/E average which is 14.525. So relation to itself, CPF is at their average value.

3.2 Trailing P/BV Band



Figure 3.2 Trailing P/BV Band

Source: Thomson Reuters, 2020

From trailing P/BV band chart, P/BV as of 30 December 2019 is 1.348 while 5-year P/BV average is 1.390. The -1SD band and -2SD band are 1.1768 and 0.9634 consecutively. Therefore, CPF is undervalued.

3.3 Trailing EV/EBITDA Band

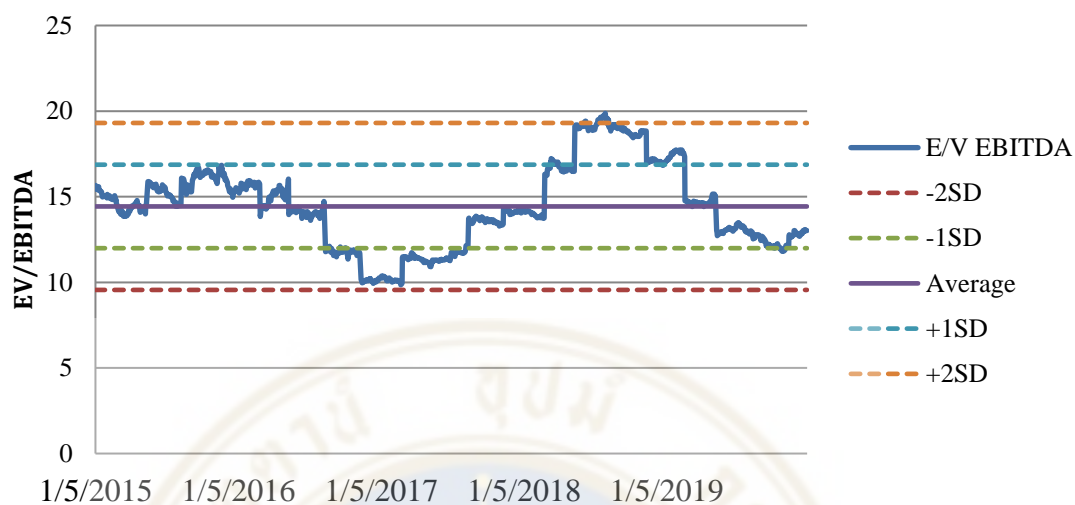


Figure 3.3 Trailing EV/EBITDA Band

Source: Thomson Reuters, 2020

From trailing EV/EBITDA band chart, EV/EBITDA as of 30 December 2019 is 13.0195. The 5-year EV/EBITDA average is 14.4312. The -1SD band and -2SD band are 11.993 and 9.5554 consecutively. In conclusion, CPF is undervalued.

CHAPTER IV

RELATIVE VALUATION

4.1 Relative Valuation Model

Relative valuation model is one of methods to find firm's Value. This model is based on a concept that we can compare the target company with other peer companies in the same industry by using financial ratio include P/E, P/BV and EV/EDITA. These financial ratios can reflect company's performance and it directly effect to the company's value. I use peer companies to find average industry's ratio. After that, I estimate target firm's earning per share, book value and EBITDA in the future. The last step, I calculate target price by using median industry's ratio.

So the important part of this method is we should have enough peer companies and we have to choose appropriate competitors to compare with.

If the target price is higher than market price, it means the firm is under value. On the contrary, if the target price is lower than market price, it means the firm is over value. So we can compare the target price that we get from Relative Valuation model with market price to make an investment decision.

4.2 Financial Ratio

There are 3 financial ratios used in Relative Valuation model as follow:

1. **Price to Earnings Ratio (P/E)** : The formula is

$$\frac{\text{Market Price per share}}{\text{Earnings per share}}$$

While Earing per share is

$$\frac{\text{Net profit}}{\text{Number of outstanding common share}}$$

The meaning of P/E ratio is *market price per share* compare to *earning per share*, or we can imply from the ratio that if we buy stock at P price, how many years we will get the brake even point.

P/E ratio can reflect expectation of the market or it “measure consumer demand on Main Street” (Swan, 2018) However, we cannot say that the higher P/E ratio is the better. The reason is if the P/E ratio is too high compare to industry’s average, it might because of the company is overvalue. On the other hand, if the company has too low P/E ratio than industry’s average, the company might be undervalued. Undervalued company can be worth to invest after well research.

2. Price to Book value Ratio (P/BV) : The formula is

$$\frac{\text{Market Price per share}}{\text{Book value per share}}$$

While Book value per share is

$$\frac{\text{Total Equity – Preferred Stock}}{\text{Number of outstanding common share}}$$

The meaning of P/BV is *market price per share* compare to *book value per share*. We can imply form the formula that the market price is more expensive or cheaper than equity.

Similar to P/E ratio, to determine if the P/BV is high or low, we should compare with the peer companies in the same industry group as well as average industry.

The P/BV ratios in each industry have different range. For example, in manufacturing industry, most firms’ stock trade at low P/BV ratios. The reason is manufacturing companies tend to have a lot of fix assets like buildings, equipment and factories. As a result, the book value is relatively high. Contrast to technology companies, stocks in this industry are typically trade at relatively high P/BV ratios. Because it is expected that disruption in technology can make technology company increase its earnings very quickly. (Swan, 2018)

It also necessary to compare the company's P/BV to its own past P/BV in order to get historical perspective.

The advantage of using P/BV ratio in valuation model is the ratio is quite stable, slowly change from year to year and we can use P/BV in case that earning per share is negative

3. Enterprise Value to EBITDA (EV/EBITDA) : The formula is

$$\frac{\text{Enterprise value}}{\text{EBITDA}}$$

Enterprise value (EV) is a measurement of the economic value of each firm. We can calculate Enterprise value by

$$\text{Enterprise value} = \text{Equity value} - \text{Debt} - \text{Cash}$$

And we can find Equity value by

$$\text{Equity value} = (\text{Total number of share outstanding}) \times (\text{market price per share})$$

Then we can find EBITDA from income statement which is Earning before Tax, Interest and Depreciation and Amortization. So we can say that EBITDA show how much revenue a company earns before deduct non-operating expenses.

EV/EBITDA ratio can be different across many industries. High-growth industries are usually having high EV/EBITDA and slow-growth industries are having low EV/EBITDA. So if we want to benchmark, we should compare with same industry as well as compare with the industry average. However, we also have to compare the current EV/EBITDA to previous EV/EBITDA ratios to see how improvement the company has made.

Con of using EV/EBITDA ratio is we can compare companies from difference countries because it cut-off the effects of individual countries' taxation policies. (Maverick, 2020)

4.3 Benchmark Corporations

I choose peer companies operated in same industry, have similar age and have similar revenue streams. As a result, I listed 3 domestic and 3 international competitors as follows:



1. **Thaisoft Group PCL**: founded in 1987 and listed in 2015, has revenue from frozen chicken products, process food, pork products and feed products.



2. **GFPT Public Company Limited**: founded in 1981 and listed in 1992, has revenue from cooked product, frozen chicken product, Yakitori product and ready-to-serve product.



3. Thai Union Group PCL: founded in 1988 and listed in 1994, has revenue from ambient seafood products, frozen and chilled seafood products, ready-to-serve products and pet feed products.



4. Marfrig Global Foods SA: a Brazil-based company has revenue from processing and distribution of beef, pork, lamb and poultry.



5. NH Foods Ltd.: a Japan-based company has revenue from fresh meat products, processed food, marine products and dairy products.



6. **Tyson Foods, Inc.:** the US-based company founded in 1935, has revenue from beef, pork and chicken products.



4.4 Benchmark Trailing P/E

Table 4.1 Benchmark Trailing P/E

Identifier	Company Name	Country	Currency	Market Capital (as at 28 Feb 20)	Closing price (as at 28 Feb 20)	Trailing P/E
TFG.BK	Thaifoods Group PCL	Thailand	THB	18,747,683,890.12	3.36	15.75
GFPT.BK	GFPT Public Company Limited	Thailand	THB	13,348,106,311.87	10.70	12.90
TU.BK	Thai Union Group PCL	Thailand	THB	72,639,929,462.21	19.10	16.37
MRFG3.SA	Marfrig Global Foods SA	Brazil	BRL	8,436,899,307.76	12.07	13.09
2282.T	NH Foods Ltd.	Japan	JPY	413,091,339,978.37	4,070.00	17.98
TSN	Tyson Foods, Inc.	US	USD	24,760,536,018.75	67.83	15.38
					Peer Average	15.25
					Peer Median	15.57

Source: Thomson Reuters, 2020

The Peer Average from 6 benchmark companies is 15.25, higher than 5-year average P/E of CPF which is 14.525. The peer median is 15.57

4.5 Benchmark Trailing P/BV

Table 4.2 Benchmark Trailing P/BV

Identifier	Company Name	Country	Currency	Market Capital (as at 28 Feb 20)	Closing price (as at 28 Feb 20)	Trailing P/BV
TFG.BK	Thaifoods Group PCL	Thailand	THB	18,747,683,890.12	3.36	2.38
GFPT.BK	GFPT Public Company Limited	Thailand	THB	13,348,106,311.87	10.70	1.14
TU.BK	Thai Union Group PCL	Thailand	THB	72,639,929,462.21	19.10	1.33
MRFG3.SA	Marfrig Global Foods SA	Brazil	BRL	8,436,899,307.76	12.07	11.29
2282.T	NH Foods Ltd.	Japan	JPY	413,091,339,978.37	4,070.00	1.02
TSN	Tyson Foods, Inc.	US	USD	24,760,536,018.75	67.83	2.21
					Peer Average	1.62
					Peer Median	1.33

Source: Thomson Reuters, 2020

First, I omit MRFG3.SA P/BV because the trailing P/BV is too high at 11.29 compare to other benchmarks. As a result, the Peer Average from 5 benchmark companies is 1.62 while CPF's 5-year average P/BV is 1.390. The peer median is 1.33

4.6 Benchmark Trailing EV/EBITDA

Table 4.3 Benchmark Trailing EV/EBITDA

Identifier	Company Name	Country	Currency	Market Capital (as at 28 Feb 20)	Closing price (as at 28 Feb 20)	Trailing EV/EBITDA A
TFG.BK	Thaifoods Group PCL	Thailand	THB	18,747,683,890.12	3.36	9.22
GFPT.BK	GFPT Public Company Limited	Thailand	THB	13,348,106,311.87	10.70	6.72
TU.BK	Thai Union Group PCL	Thailand	THB	72,639,929,462.21	19.10	15.43
MRFG3.SA	Marfrig Global Foods SA	Brazil	BRL	8,436,899,307.76	12.07	4.39
2282.T	NH Foods Ltd.	Japan	JPY	413,091,339,978.37	4,070.00	9.17
TSN	Tyson Foods, Inc.	US	USD	24,760,536,018.75	67.83	10.82
					Peer Average	11.16
					Peer Median	10.02

Source: Thomson Reuters, 2020

I also omit GFPT.BK and MRFG3.SA trailing EV/EBITDA because they are too low compare to other benchmarks. So the Peer Average from 4 benchmark companies is 11.16 while CPF's 5-year average EV/EBITDA is 14.4312. The peer median is 10.02

4.7 Estimate EPS, EBITDA and BV

To estimate EPS, EBITDA and BV, We have to forecast pro-forma income statement and pro-forma balance sheet.

From Cash flow Projections;

Return on capital	4.19%
Reinvestment rate	65.12%

So the growth rate is;

$$4.19\% \times 63.30\% = 2.73\%$$

From estimate pro-forma income statement and pro-forma balance sheet with growth rate at 2.73%

Earnings per Share = 2.79

EBITDA = 52,836,979.03

Book Value = 18.64

4.8 Target Prices

Calculate target price by P/E and P/BV

Table 4.4 Target Prices by P/E and P/BV

CPF	2020F	
EPS	2.79	
Book value	18.64	
EBITDA	52,836,979.03	
No. of shares	8,611,242	
Relative valuation		
Calculate by P/E	15.25 x 2.79	42.41
Calculate by P/BV	1.62 x 18.64	30.20

Calculate target price by EV/EBITDA

Table 4.5 Target Prices by EV/EBITDA

CPF	2020F	
EBITDA	52,836,979.03	
Peer multiple average	11.16	
Enterprise Value	589,660,685.93	
Net Debt	279,332,234.00	
Value of equity	310,328,451.93	
No. of shares	8,611,242	
Relative valuation		
Calculate by EV/EBITDA	310,328,451.93/8,611,242	36.04

From table 4 and 5, we got three target prices from Relative valuation. However, we have to make a decision of which is the most suitable target price of CPF. CPF has invested a lot in fix asset which are factories and research labs. As a result, CPF has high depreciation cost and we can see from profit and loss statement that CPF have to pay tax expense around 20% Benchmark companies have different size so they also have different level of debt. For these reasons, we think **the most suitable target price is EV/EBITDA** multiple that equal to 36.04 Baht

As the target price is higher than market price and CPF has potential to make more growth, so I would recommend to 'Buy'

4.9 Scenario analysis.

However, there are some threats and opportunities that can effect target price valuation. So I will analyses Best-case and Worst-case scenario.

Best-Case Scenario

I assume that Corona virus crisis in Asia is solved. Bank of Thailand maintains interest rate at 0.75% Economics activities in Thailand and China could continue operating. Private sectors get back to work and government announces policy that can increase consumption rate. If the situation turns out to be in this way, CPF's sale would increase more than we estimate in base-case. In case that CPF could

increase sale in both domestic and international, especially to China which has high demand. CPF expected that in 2020 they could grow around 5 - 8% So I will use median that equal to 6.5% as the new estimate growth rate.

Table 4.6 Best-case scenario Target Prices

Best-Case Scenario	
Growth	6.5%
EBITDA	54,949,424.75
EV	613,235,580.16
No. of shares	8,611,242
Equity value	333,903,346.16
New Target Price	38.78

The New Target Price Is 38.78

Worst-Case Scenario

On the other hand, if the Corona virus crisis still going on and government have to lock-down the city. Private sectors could not run their business. As a result, purchasing power and consumption rate decrease. Moreover, logistics problem could leads to reduction in export volume. So CPF's sale would fall both domestic and international. In this situation, growth rate can be negative, so new expected growth rate would be -6.5%

Table 4.7 Worst-case scenario Target Prices

Worst-Case Scenario	
Growth	-6.5%
EBITDA	50,999,673.81
EV	569,156,359.69
No. of shares	8,611,242.00

Table 4.7 Worst-case scenario Target Prices (cont.)

Worst-Case Scenario	
Equity value	289,824,125.69
New Target Price	33.66

The new target price is 33.66

Another factor that investors should consider is CPF's plan of share repurchasing. On 13 March 2020, the Board of Directors' Meeting the CPF has announced to repurchase around 400 million shares within budget of 10,000 Million Baht. It is equal to 4.65% of total shares. The repurchasing starts from 1 April 2020 to 30 September 2020. (กรุงเทพธุรกิจ, 2020)

In general, the propose of repurchasing is to make investors and shareholders have more confidence. It can be imply that in company's view, current market price is too low. This assumption is supported by CPF's market price in March. The lowest price is around 19.90 Baht. Moreover, circuit breaker was used two days n row. It shows investors' panic of effect of Covid-19 on stock price.

In term of accounting, the share repurchasing will reduce cash on the asset side as well as share capital on equity side. So it will effect on financial ratio that used in Relative Valuation Model because EPS, BV and EV will be increase from fewer number of shares. As a result, target price is expected to be higher.

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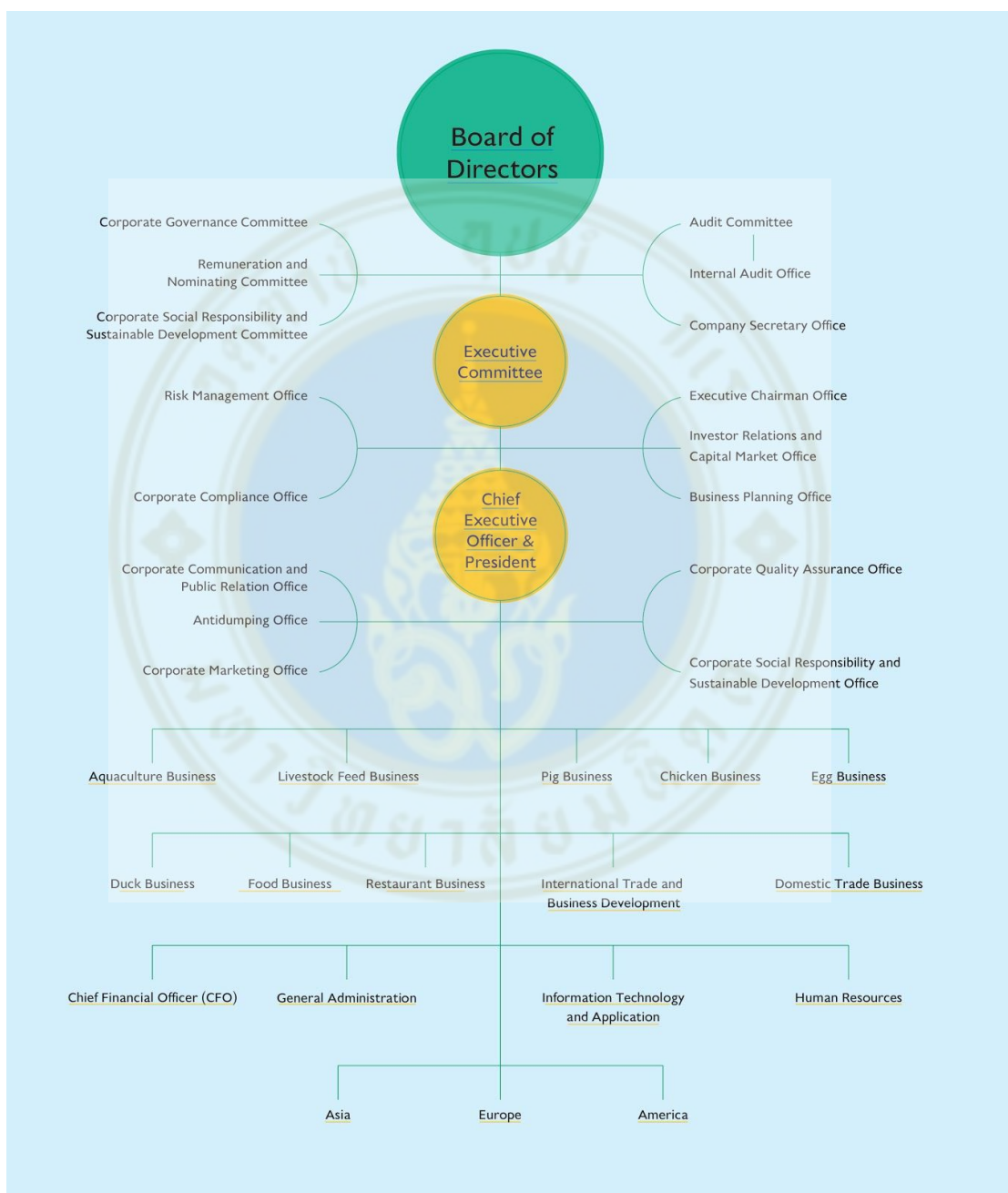
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APPENDICES

Appendix A – Board of Directors



Source: CPF, 2020

Appendix B – Balance Sheet (Current Assets)

(Unit: Thousand Baht)

Statements of financial position	Consolidated		Separate	
	financial statements		financial statements	
	31 December		31 December	
Assets	2019	2018	2019	2018
<i>Current assets</i>				
Cash and cash equivalents	32,094,078	31,478,037	1,065,677	4,405,856
Current investments	1,402,034	1,555,490	-	-
Accounts receivable - trade and others	33,117,512	40,749,353	2,508,090	3,050,636
Short-term loans to subsidiaries	-	-	43,075,000	60,622,000
Short-term loans to joint ventures	188,291	16,624	-	-
Inventories	60,986,587	59,631,804	2,667,329	3,660,905
Current biological assets	37,104,173	34,677,589	1,059,290	847,253
Advance payments for purchase of goods	5,891,200	8,120,183	-	-
Prepaid expenses	1,947,415	2,155,930	177,330	181,016
Accrued dividend income	165,024	201,159	2,689,695	3,228,208
Restricted deposits at financial institutions	862,700	1,134,452	-	-
Other current assets	4,887,041	5,822,133	60,216	32,115
Non-current assets classified as held for sale	-	-	1,084,291	-
Total current assets	178,646,055	185,542,754	54,386,918	76,027,989

Source: CPF, 2020

Appendix C – Balance Sheet (Non-current assets)

(Unit: Thousand Baht)

Statements of financial position	Consolidated			Separate		
	financial statements			financial statements		
	31 December			31 December		
Assets (Continued)	2019	2018	2019	2018		
<i>Non-current assets</i>						
Investments held as available for sale	3,880,234	4,261,522	-	-		
Investments in subsidiaries	-	-	191,465,717	151,976,480		
Investments in associates	105,893,324	96,125,533	334,809	334,809		
Investments in joint ventures	19,434,231	9,595,506	4,360,381	4,360,381		
Investments in related companies	1,444,334	1,504,511	150,291	150,291		
Investments in other companies	1,022	33,313	-	-		
Long-term loans to subsidiaries	-	-	600,000	15,673,186		
Long-term loans to associate	28,650	6,150	-	-		
Investment properties	1,647,276	1,850,902	354,663	354,663		
Property, plant and equipment	197,430,375	195,200,722	15,091,603	16,218,982		
Non-current biological assets	8,057,126	8,216,165	-	-		
Goodwill	87,761,837	95,428,170	-	-		
Other intangible assets	14,404,897	16,211,916	27,869	32,632		
Restricted deposits at						

(Unit: Thousand Baht)

Statements of financial position	Consolidated			Separate		
	financial statements			financial statements		
	31 December			31 December		
Assets (Continued)	2019	2018	2019	2018		
financial institutions	2,698	1,600	-	-		
Deferred tax assets	3,155,636	3,384,069	955,778	1,572,692		
Leasehold rights	8,520,350	8,301,979	-	-		
Other non-current assets	3,742,514	2,426,039	197,004	196,110		
Total non-current assets	455,404,504	442,548,097	213,538,115	190,870,226		
Total assets	634,050,559	628,090,851	267,925,033	266,898,215		

Appendix E – Balance Sheet (Liabilities and Shareholders' equity)

(Unit: Thousand Baht)

Statements of financial position	Consolidated			Separate		
	financial statements			financial statements		
	31 December			31 December		
Liabilities and shareholders' equity	2019		2018	2019		2018
<i>Current liabilities</i>						
Bank overdrafts and short-term borrowings						
from financial institutions	72,204,443		61,312,159	2,852,870		2,463
Bills of exchange	21,818,185		32,243,942	16,339,484		17,204,109
Accounts payable - trade and others	32,184,326		35,458,644	1,168,973		1,245,798
Short-term borrowing from						
subsidiary	-		-	6,500,000		-
Short-term borrowings from						

(Unit: Thousand Baht)

Statements of financial position	Consolidated			Separate		
	financial statements			financial statements		
	31 December			31 December		
Liabilities and shareholders' equity	2019	2018	2019	2018	2019	2018
joint ventures	657,200	660,716	-	-	-	-
Current portion of long-term borrowings	42,727,218	27,128,370	16,519,926	8,500,000		
Accrued expenses	13,001,271	11,555,211	150,132	200,756		
Income tax payable	1,501,248	1,256,492	-	-		
Other current liabilities	13,617,219	12,596,625	1,434,108	1,649,944		
Total current liabilities	197,711,110	182,212,159	44,965,493	28,803,070		
<i>Non-current liabilities</i>						
Long-term borrowings	196,494,651	208,948,336	79,207,982	95,378,585		
Deferred tax liabilities	7,881,843	9,087,554	-	-		
Provision for employee benefits	9,595,827	5,966,062	2,725,561	1,688,656		

(Unit: Thousand Baht)

Statements of financial position	Consolidated			Separate		
	financial statements			financial statements		
	31 December			31 December		
Liabilities and shareholders' equity	2019	2018	2019	2018		
Provisions and others	3,494,734	3,218,486	-	-		
Total non- current liabilities	217,467,05 5	227,220,438	81,933,543	97,067,241		
Total liabilities	415,178,16 5	409,432,597	126,899,03 6	125,870,311		

(Unit: Thousand Baht)

Statements of financial position	Consolidated				Separate			
	financial statements				financial statements			
	31 December				31 December			
Liabilities and shareholders' equity	2019		2018	2019		2018		
(Continued)								
Shareholders' equity								
Share capital								
Authorised share capital (ordinary shares, par value at Baht 1 per share	9,291,530		9,291,530	9,291,530		9,291,530		
Issued and paid-up share capital (ordinary shares, par value at Baht 1 per share)	8,611,242		8,611,242	8,611,242		8,611,242		
Treasury shares	(2,909,249)		(2,909,249)	-		-		
Share premium								

(Unit: Thousand Baht)

Statements of financial position	Consolidated			Separate		
	financial statements			financial statements		
	31 December			31 December		
Share premium on ordinary shares	57,298,909	57,298,909	56,408,882		56,408,882	
Other premium	3,470,021	3,470,021	3,470,021		3,470,021	
Surplus from change in shareholders' equity in subsidiaries and associates	4,072,786	3,500,083	-		-	
Surplus on common control transactions	(5,159)	(5,159)	490,423		490,423	
Retained earnings						
Appropriated Legal reserve	929,166	929,166	929,166		929,166	
Unappropriated	103,579,286	92,078,740	53,294,335		53,296,242	
Other components of shareholders' equity	(21,771,738)	(12,440,598)	2,821,928		2,821,928	

(Unit: Thousand Baht)

Statements of financial position	Consolidated			Separate		
	financial statements			financial statements		
	31 December			31 December		
Total	153,275,264		150,533,155	126,025,997		126,027,904
Subordinated perpetual debentures	15,000,000		15,000,000	15,000,000		15,000,000
Total shareholders' equity attributable to equity holders of the Company	168,275,264		165,533,155	141,025,997		141,027,904
Non- controlling interests	50,597,130		53,125,099	-		-
Total shareholders' equity	218,872,394		218,658,254	141,025,997		141,027,904
Total liabilities and shareholders' equity	634,050,559		628,090,851	267,925,033		266,898,215

Appendix F – Income Statement

(Unit: Thousand Baht)

	Consolidated			Separate		
	financial statements			financial statements		
	Year ended 31 December			Year ended 31 December		
	2019	2018		2019	2018	
<i>Income</i>						
Revenue from sale of goods	532,573,465	541,937,396		24,461,687		26,021,010
Interest income	1,037,971	918,378		4,412,896		4,386,778
Dividend income	123,975	92,722		11,526,573		10,650,656
Gains on changes in fair value of investment in joint venture	9,236	95,239		-		-
Gains on sale of investments	8,090,261	9,327,996		-		6,454,810
Other income	3,040,105	3,130,765		138,245		103,023
Total income	544,875,013	555,502,496		40,539,401		47,616,277
<i>Expenses</i>						
Cost of sale of goods	456,269,311	476,228,200		23,121,810		24,415,422
Gains on changes in fair value of biological assets	-3,235,453	-3,974,589		-		-

(Unit: Thousand Baht)

	Consolidated			Separate		
	financial statements			financial statements		
	Year ended 31 December			Year ended 31 December		
	2019		2018	2019		2018
Distribution costs	21,590,256		20,825,346	916,256		879,367
Administrative expenses	33,228,865		30,661,204	3,176,977		2,931,469
Loss on sale of investment	-		-	454,210		-
Impairment losses	2,576,670		562,183	204,000		-
Net foreign exchange losses	10,423		203,243	1,149,017		164,962
Finance costs	13,784,629		11,703,447	4,532,208		3,765,130
Total expenses	524,224,701		536,209,034	33,554,478		32,156,350
Share of profit of associates and joint ventures	8,893,402		8,343,121	-		-
Profit before income tax expense	29,543,714		27,636,583	6,984,923		15,459,927
Income tax expense	5,445,838		6,211,904	757,107		1,563,220
Profit for the year	24,097,876		21,424,679	6,227,816		13,896,707

(Unit: Thousand Baht)

	Consolidated				Separate			
	financial statements				financial statements			
	Year ended 31 December				Year ended 31 December			
	2019		2018		2019		2018	
Profit for the year attributable								
Equity holders of the Company	18,455,806	15,531,470		6,227,816	13,896,707			
Non-controlling interests	5,642,070	5,893,209		-	-			
Profit for the year	24,097,876	21,424,679		6,227,816	13,896,707			
Basic earnings per share (in Baht)	2.18	1.82		0.65	1.54			

Source: CPF, 2020

Appendix G – Proforma Statements of Income

(Unit: Thousand Baht)

	Consolidated Proforma	
	<i>Estimate</i>	<i>% change</i>
	<i>2020</i>	<i>2.73%</i>
<i>Income</i>		
Revenue from sale of goods	547,112,720.59	0.0273
Interest income	1,037,971	
Dividend income	123,975	
Gains on changes in fair value of investment in joint venture	9,236	
Gains on sale of investments	8,311,125.13	
Other income	3,040,105	
Total income	559,635,133	
<i>Expenses</i>		
Cost of sale of goods	468,725,463.19	<i>0.0273</i>
Gains on changes in fair value of biological assets	-3,235,453	
Distribution costs	22,179,669.99	<i>0.0273</i>
Administrative expenses	34,136,013.01	<i>0.0273</i>
Loss on sale of investment	0	
Impairment losses	2,576,670	
Net foreign exchange losses	10,423	
Finance costs	13,784,629.00	
Total expenses	538,177,415	
Share of profit of associates and joint ventures	8,618,262	
Profit before income tax expense	30,075,979	

(Unit: Thousand Baht)

	Consolidated Proforma	
	<i>Estimate</i>	<i>% change</i>
	<i>2020</i>	<i>2.73%</i>
Income tax expense	6,015,195.81	0.2
Profit for the year	24,060,783	
Profit for the year attributable to:		
Equity holders of the Company		
Non-controlling interests		
Profit for the year	24,060,783	
Basic earnings per share (in Baht)	2.79	

Appendix H – Proforma Statements of Income, Best Case and Worst Case

	<i>Best Case</i>		<i>Worst Case</i>	
	<i>Estimate</i>	<i>% change</i>	<i>Estimate</i>	<i>% change</i>
	2020	6.50%	2020	-6.50%
<i>Income</i>				
Revenue from sale of goods	582,675,047.43	0.065	511,550,393.76	-0.065
Interest income	1,037,971		1,037,971	
Dividend income	123,975		123,975	
Gains on changes in fair value of investment in joint venture	9,236		9,236	
Gains on sale of investments	8,851,348.26		7,770,901.99	
Other income	3,040,105		3,040,105	
Total income	595,737,683		523,532,583	
<i>Expenses</i>				
Cost of sale of goods	499,192,618.30	0.065	438,258,308.08	-0.065
Gains on changes in fair value of biological assets	-3,235,453		-3,235,453	
Distribution costs	23,621,348.54	0.065	20,737,991.44	-0.065
Administrative expenses	36,354,853.86	0.065	31,917,172.17	-0.065
Loss on sale of investment	0		0	
Impairment losses	2,576,670		2,576,670	
Net foreign exchange losses	10,423		10,423	
Finance costs	13,784,629.00		13,784,629.00	
Total expenses	572,305,090		504,049,741	
Share of profit of associates and joint ventures	8,755,832		8,755,832	
Profit before income tax	32,188,425		28,238,674	

	<i>Best Case</i>		<i>Worst Case</i>	
	<i>Estimate</i>	<i>% change</i>	<i>Estimate</i>	<i>% change</i>
	<i>2020</i>	<i>6.50%</i>	<i>2020</i>	<i>-6.50%</i>
expense				
Income tax expense	6,437,684.95	0.2	5,647,734.76	0.2
Profit for the year	25,750,740		22,590,939	
Profit for the year attributable to:				
Equity holders of the Company				
Non-controlling interests				
Profit for the year	25,750,740		22,590,939	
Basic earnings per share (in Baht)	2.99		2.62	

Appendix I – CPF's investment footprint



Source: CPF, 2020

Appendix J - Pork Meat Export Volume in 2019

Pork Meat Export Volume in 2019		
Month	Quantity (kgs.)	Value (Baht)
January	700,519	151,766,444
February	787,258	177,806,776
March	736,183	168,608,747
April	811,490	176,323,261
May	854,755	192,480,879
June	957,546	211,777,964
July	968,374	203,346,473
August	943,688	201,113,988
September	1,420,848	262,989,672
October	1,932,051	314,789,337
November	2,574,707	393,616,678
December	2,483,849	385,003,378
Total	15,171,268	2,839,623,597

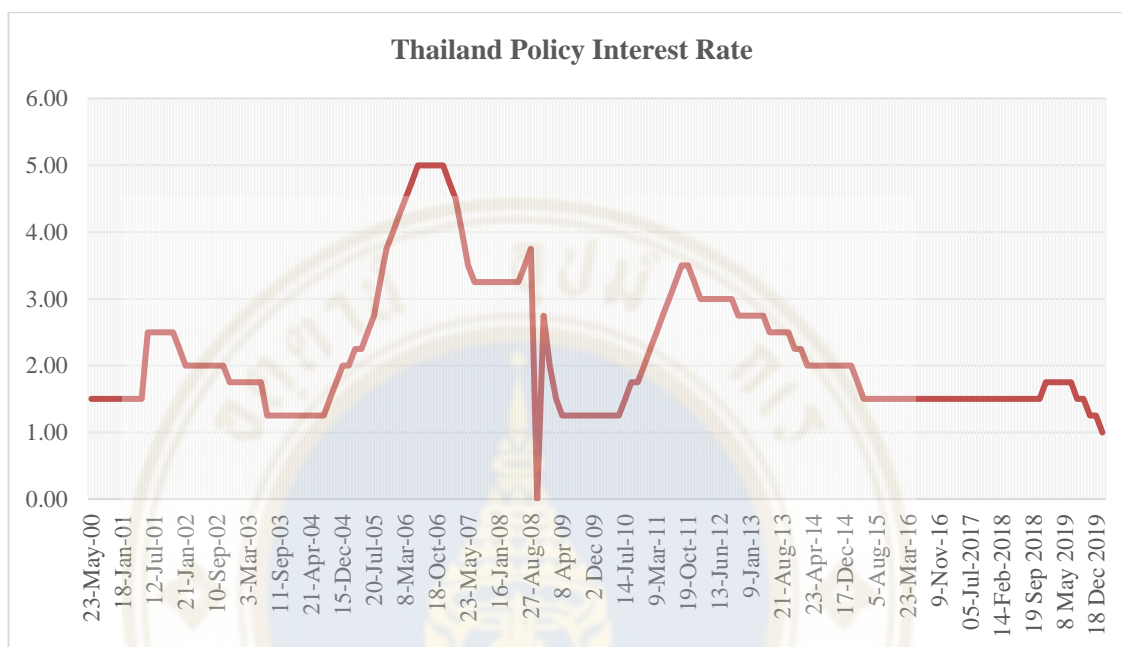
Source: Office of Agricultural Economics

Appendix K - Chicken Meat Export Volume in 2019

Chicken Meat Export Volume in 2019		
Month	Quantity (kgs.)	Value (Baht)
January	72,207,558	8,504,364,463
February	71,291,866	8,274,412,402
March	80,034,837	9,200,842,207
April	67,033,901	7,856,266,232
May	75,045,171	8,897,677,442
June	68,808,150	8,133,901,646
July	75,332,549	8,863,577,453
August	79,049,054	9,260,543,129
September	76,808,239	9,058,241,156
October	78,474,221	9,195,854,865
November	83,393,881	9,448,990,620
December	75,003,277	8,333,978,248
Total	902,482,704	105,028,649,863

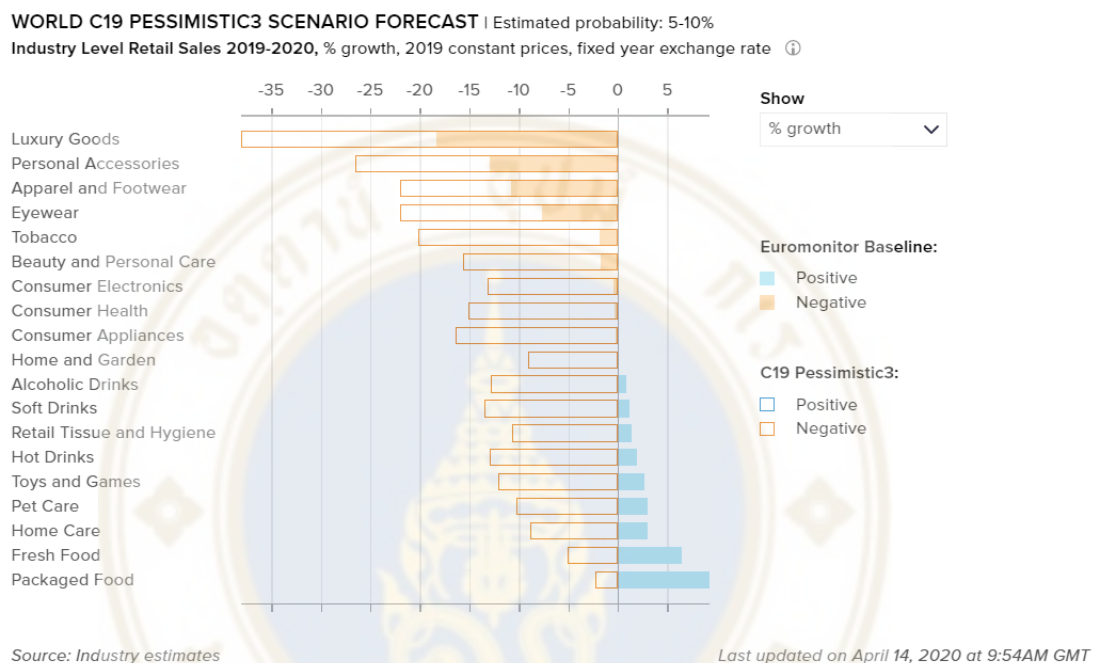
Source: Office of Agricultural Economics

Appendix L – Thailand policy interest rate



Source: Bank of Thailand

Appendix M – Industry sales scenario forecast on the impact of coronavirus



Source: Euromonitor, 2020