

**DISCOUNTED CASH FLOW VALUATION OF ANANDA
DEVELOPMENT
PUBLIC COMPANY LIMITED**

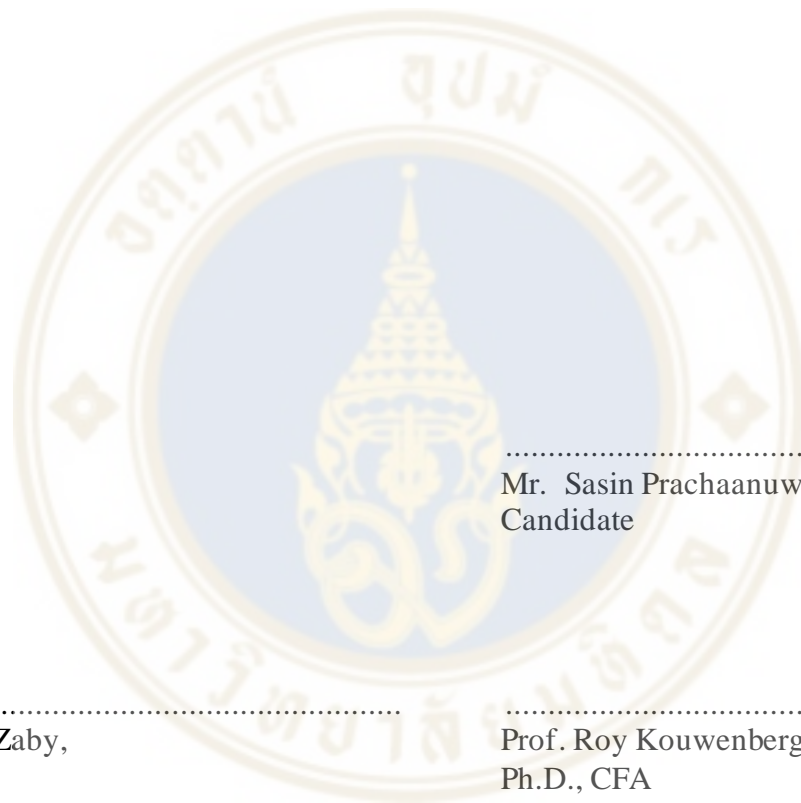


**A THEMATIC PAPER SUBMITTED IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR
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Thematic paper
entitled
**DISCOUNTED CASH FLOW VALUATION OF ANANDA
DEVELOPMENT PUBLIC COMPANY LIMITED**

was submitted to the College of Management, Mahidol University
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DISCOUNTED CASH FLOW VALUATION OF ANANDA DEVELOPMENT PUBLIC COMPANY LIMITED

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M.M. (CORPORATE FINANCE)

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ABSTRACT

This thematic paper applied the principle of discounted cash flow valuation approach to evaluate the intrinsic value of Ananda Development Public Company Limited (ANAN)'s share price.

Ananda Development Public Company Limited is one of the top real estate development companies in Thailand which focus on improving urban lifestyle. All of their projects will be in Bangkok and the surrounding area whether the condominium, housing, or townhouse projects. They classify the range of price per unit by using the different brand names for each project. Anyway, all of their projects will aim to create convenient and comfortable living. According to the DCF analysis, the total revenue of ANAN increases by 8.35% CAGR. It is quite high because we assume that revenue in 2020 and 2021 is already at the bottom, so in 2022 till 2025 could be a recovery period. And after 2025, we assume the revenue growth of the company will be 1.5% per year (Terminal growth), which is the lower range of the expected inflation rate.

The target stock price of Anan is 1.79 baht while the market price on 4 of August 2021 is 1.59 which makes ANAN stock has 12% upside. So based on target price from DCF valuation and relate to the scale of rating which Anan is in the group of "10% or greater upside". We can conclude that our recommendation for ANAN is "BUY"

KEY WORDS: ANAN/ Discounted cash flow Valuation/ Real Estate/ Valuation

44 pages

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CHAPTER I

INTRODUCTION

Ananda Development Public Company Limited is one of the top real estate development companies in Thailand which focus on improving urban lifestyle. All of their projects will be in Bangkok and the surrounding area whether the condominium, housing, or townhouse projects. They classify the range of price per unit by using the different brand names for each project such as "Ashton", "Ideo", "Venio" to capture different customer segments. Anyway, all of their projects will aim to create a convenient and comfortable living.

Anan's main source of revenue is a sale from real estate which is approximately 80-85% of total revenue. And the rest which is 15-20% of revenues mostly come from project management fee and commission fee that can generate income after the company already sell the real estate. So, almost all of their revenue depends on sales from real estate. Ananda's strategy is to joint venture with foreign investors. Their main partner is Mitsui Fodosan Co., Ltd which is a real estate development in Japan. They can help Ananda with leading technology about design and construction which create better efficiency and reduce the cost.

During the COVID-19 pandemic in 2020, Ananda's total revenue decreased by 32% compared with total revenue in 2019. However, their expense also decreased by 35% so their profit reduced only 20%. It seems like Ananda can make a profit during the COVID-19 pandemic, unfortunately, there was an extra big amount of loss coming from a discontinued project that made the company lose in 2020. Therefore, their EPS dropped from 0.09 in 2019 to -0.19 in 2020.

According to the DCF analysis, the total revenue of ANAN increases by 8.35% CAGR. It is quite high because we assume that revenue in 2020 and 2021 is already at the bottom, so in 2022 till 2025 could be a recovery period. And after 2025, we assume the revenue growth of the company will be 1.5% per year (Terminal growth), which is a conservative rate coming from the lower range of the expected inflation rate.

The target stock price of Anan is 1.79 baht while the market price on 4 of August 2021 is 1.59 which makes ANAN stock has 12% upside. So based on target price from DCF valuation and relate to the scale of rating which Anan is in the group of "10% or greater upside". We can conclude that our recommendation for ANAN is "BUY"



CHAPTER II

BUSINESS DESCRIPTION

2.1 Overview

Ananda was established in 1999 that mainly engaged in the real estate development business including condominium projects, housing projects, and townhouses in the Bangkok Metropolitan area. The company has developed condominium projects under the concept of convenient and comfortable living for residents so the majority of a project located at the mass transit stations enhance the lives of the owners even more conveniently as well as increase their standard of living. In terms of housing projects and townhouses projects, the focus is on the construction of uniqueness of architectural design to satisfied the need of each customer's segment.

Ananda was founded in 1999 by Chanond Rungkitya. Ananda starts ADO by made a joint venture with Pramerica Financial to develop landed housing projects around Suvarnabhumi Airport during the year 2006. In the following year, the company keeps expanding its capability to develop condominiums close to mass transit stations with Pramerica Financial. Later on, Ananda started acquiring the stake from Pramerica Financial during the year 2010. In 2012, an IPO was issued with raising funds of about 5.6 billion baht. After that, the Japanese developer Mitsui was added as a new joint venture partner that is the largest real estate developer in Japan. The objective of this joint venture is to become the leading developer of residential projects that are close to mass transit stations that satisfied all classes of customers as shown in Figure 2.1.

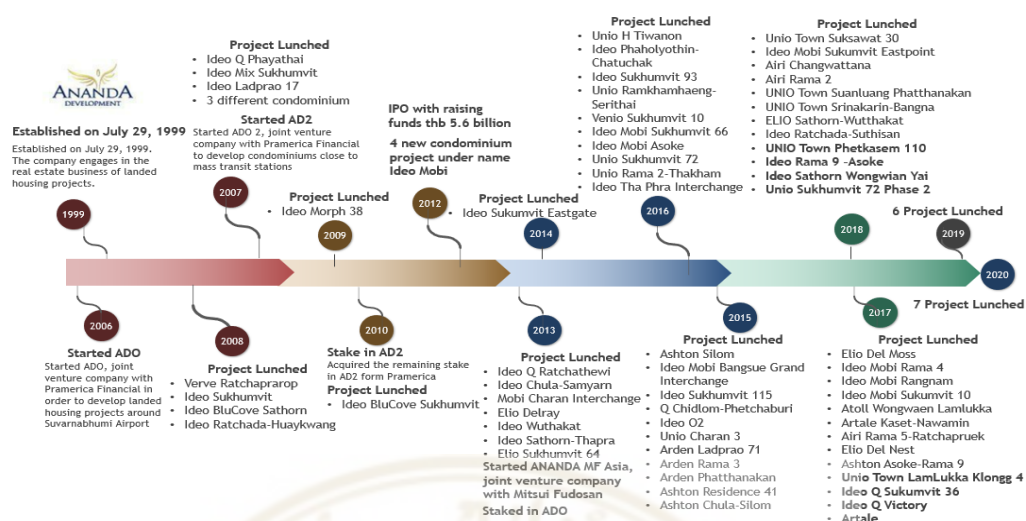


Figure 2.1 ANANDA History Timelines

Source: History | ANANDA DEVELOPMENT (ANAN)

The company has continued to develop condominium projects between 2015 and 2019, and started to lunch a new housing project even with numerous challenges in previous years. In the year 2019 alone, the company was faced with several difficulties as well as opportunities. Low GDP growth contributed to internal and external implications, including the Thai baht's appreciation relative to other currencies. During the recession of the global economy, the appreciated currency adversely influenced the country's exports. The Thai economy was, nevertheless, supported by tourism, steady consumer spending, and government disbursement. The company, therefore, also saw the possibilities of growing its business in the future. However, that was until the end of 2019 that the world faced the spread of the coronavirus.

Notwithstanding the COVID-19 outbreak, Ananda 4ecognized recurring income from two serviced apartments located in Rama 9 and Sukhumvit 8. These serviced apartments were developed in partnership with global partners, including Ascott Limited, which manages a number of luxurious properties worldwide. Consequently, Ananda had intended to diversify its revenue channels through the extension of its portfolios. The company 4ecognized the opportunity to grow its business, which would be the investment that would generate satisfactory revenue in the long term.

Ananda Products

The company's products can be categorized into 3 categories; real estate development business, other business related to real estate development, and lifestyle services. The information of each business segment are as follows:

Real Estate Development Business

There are three key businesses highlighted under this segment. The key businesses comprised (1) condominium projects, (2) landed housing projects, and (3) townhouse projects. Ananda is also focused on joint ventures with key partners in the development of real estate projects.

Condominium Projects

This key business focuses mostly on the development of condominium projects under the concept "Urban Living Solutions", in which the properties are located close to mass transit stations. The purpose of this concept is to serve the people living in Bangkok and traveling often and constantly using public transit systems. The company carries out research and development in conjunction with the analyses of existing consumer needs and lifestyles. Ananda categorized its condominium products depending on the distance from the stations of public transit. Presently, there are three condominium products, including (1) approximately 0-300 meters, (2) 301-600 meters, and (3) more than 600 meters.

Seven distinct condominium brands are developed by the company for different living purposes. Each brand is conceptualized on the target residents' interests, preferences, and purchasing power, which represent various target groups. From inexpensive mass projects through to premium developments for the elite, the spectrum of the company's portfolio spans thoroughly. As illustrated in the figure below.

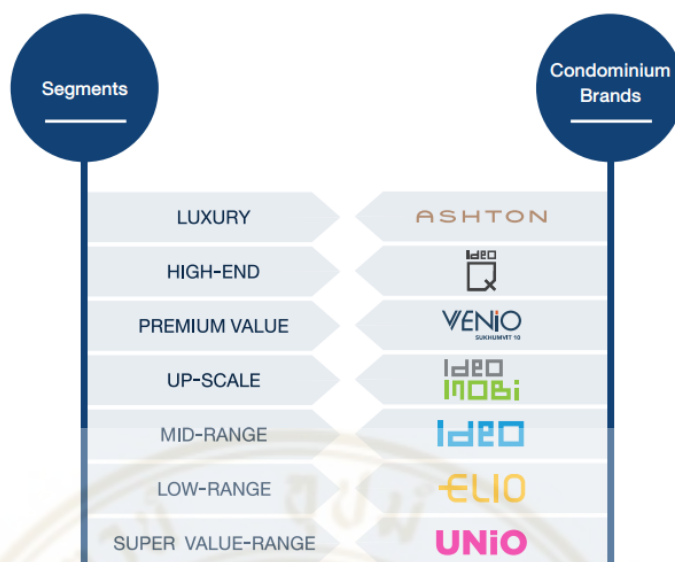


Figure 2.2 Ananda Segments and Condominium Brands

Source: History | ANANDA DEVELOPMENT (ANAN)

Landed Housing Projects and Townhouses

The company has a variety of low-rise projects to respond to customer demand of each group of customers. The price range of the projects is starting from 2.5 million Baht to 30 million Baht, under “Artale”, “Airi”, “Arden”, “Atoll”, “Urbanio”, and “Unio Town” brands.

In year 2013, a group of landed-housing projects was launched under “Atoll” brand, as the first group, focusing on relaxation with a large clubhouse and a full range of facilities for residents.

In 2015, the company launched “Arden” brand, a townhouse project located in a prime location in Bangkok. Moreover, a luxury landed-housing project under the new brand “Artale” and a landed-housing project under “Airi” brand have been developed. In the same year, Helix Co., Ltd., owned subsidiary of Ananda, developed a new townhouse project with a reasonable price under “Unio Town” brand, which has selling prices starting from approximately 2.5 million Baht.

In 2019, Ananda has launched a new townhouse brand, “Urbanio”. The first project was located in a great potential area, Vibhavadi-Chaengwattana, with a selling price starting from 5 million Baht. Therefore, those mentioning landed housing projects and townhouses targeted a different group of customers as the below pictures.



Figure 2.3 Ananda Landed Housing Projects and Townhouses

Source: History | ANANDA DEVELOPMENT (ANAN)

Other Businesses Related to Real Estate Development

The other revenues of Ananda's also come from the two sources of the other business related to real estate development including The Agent (Property Expert) Company Limited, a subsidiary of Ananda. To operate as a representative of property agent for the sale/purchase of residential condominium units in the secondary market along with procurement of lessees for the owner of residential condominium units. Besides, The Works Community Management Company Limited was established to operate condominium management services. The Works is committed to maintaining high service standards for its clients, delivering quality services, and allowing residents to be convenient and comfortable in order to maximize satisfaction and trust as shown in Figure 2.4.

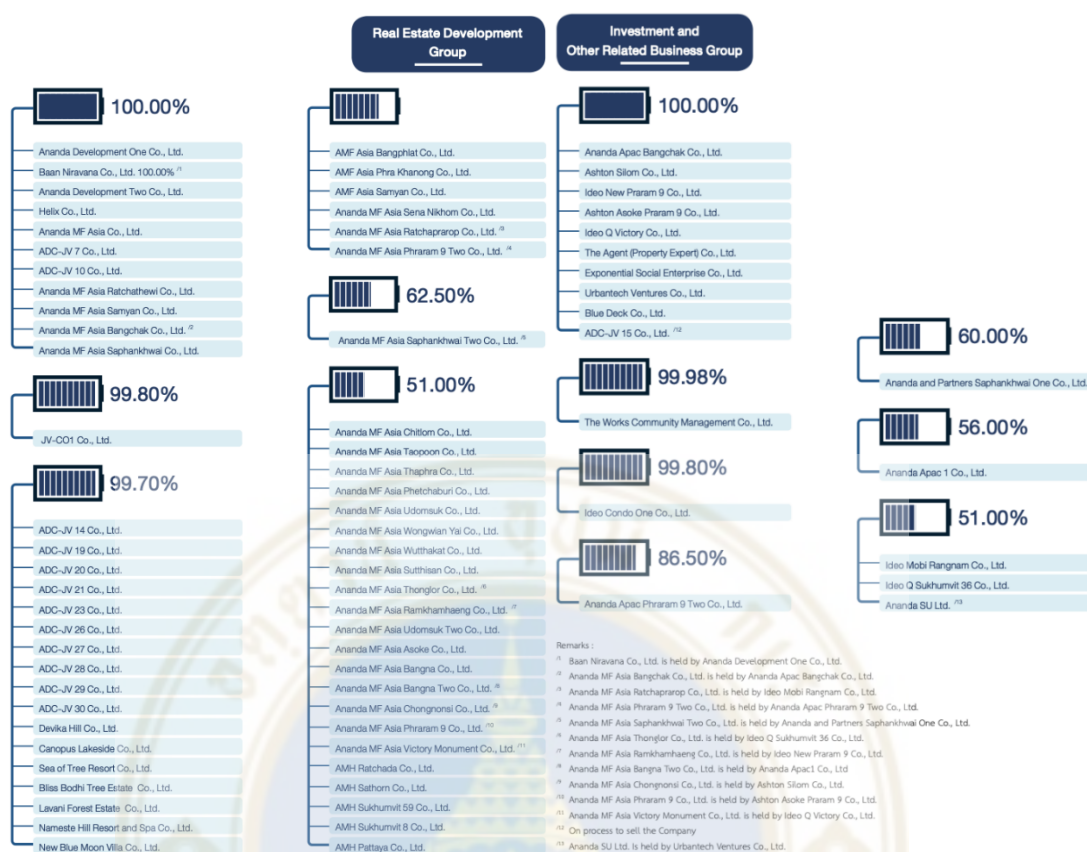


Figure 2.4 Ananda Business Structure

Source: Ananda Annual Report and Financial Statement 2020

2.2 Strategies

Ananda's main objective is to become the leading developer of condominium projects that are close to mass transit stations in Bangkok. The company also plans to maintain its net interest-bearing debt to equity ratio at 1 time in the long term. Throughout the time, with the full efforts of the company that continuously offer urban living solutions to their customer; it makes their business even more successful as several projects have been developed to align with their customer demands in the more sizeable markets. Nevertheless, to makes their operations more efficient and effective; the company has been applied several construction technologies such as BIM, and other leading technologies to improve their cost efficiency with all strategic partners.

The main target group of Ananda is “Generation C” based on people’s way of life including work and off work without classified by age. The potential in this target group is explained by its specific and clear career goals, as well as solid financial and career plans. The company sees a sustainable opportunity for this generation as it can make their business keep growing in the long run. Ananda has been classified people in GEN C into six following qualifications;

- (i) Convenience: thrive on making their lives more easily manageable.
- (ii) Control: being goal-oriented, know smart ways to make life easier.
- (iii) Casual: spare enough time for a life-enriching experience.
- (iv) Cash Smart: purchase things that have a better value in the future.
- (v) Connect: constantly connected to the virtual world both at work and off work.
- (vi) Creativity: love uniqueness and creativity. They spend time and energy innovating.

The company’s strategy is to invest in projects that are close to the mass transit stations and offering a variety of choices/brands that meet customer’s demands. For example, the Ashton, Ideo Q and Ideo with the distance of equal to or less than 300 meters from the mass transit station. For the Elio brand, its distance from the mass transit station is in a range of 301-600 meters, as well as Unio Brand which has a distance from the mass transit station of more than 600 meters as shown in Figure 2.5.



Figures 2.5 Ananda Strategies

Source: Ananda Annual Report and Financial Statement 2020

In the year 2019, the company launched residential condominium projects next to mass transit stations; Ideo Chula-Samyarn and Ideo Charan 70-Riverview achieved positive responses from the customer with sales over 70 percent lunch in November 2019. Therefore, Ananda's strategies and plan during the year 2019; from the annual report 2020 of Ananda's, the increase of overall revenues from sales of real estate about 7 percent from 55.9 percent to 62.9 percent which is a good signal for the company to continuously developed residential projects that would eventually increase in their profit margin.

Ananda prepared itself to manage uncontrollable factors that might happen during a global pandemic. Moreover, still looking for an opportunity to expand their businesses. The company continues to operate and manage its business under the Blue Ocean strategy to be the leading developer in the real estate sector.

2.3 Revenue Structure

Ananda's major revenue source is real estate development (51%). The company also derives revenue from rental and services (24%), revenue from land sourcing, and other income (25%) as shown in Table 2.1.

Table 2.1 Revenue Breakdown in THB and Percentage

Statement of Comprehensive Income	For the Year-Ended 31 December (Consolidate Financial Statement)									
	2020		2019		2018		2017		2016	
	Million Baht	%	Million Baht	%	Million Baht	%	Million Baht	%	Million Baht	%
Revenues										
Revenues from Sales of Real Estate	2,695.3	51.4%	4,847.4	62.9%	5,904.7	55.9%	8,931.9	69.0%	9,780.4	80.0%
Revenues from Project Management	1,237.7	23.6%	1,879.8	24.4%	2,079.7	19.7%	2,060.7	15.9%	1,242.8	10.2%
Service Income and Commission Income										
Other Income	1,310.2	25.0%	984.1	12.8%	2,570.4	24.4%	1,957.5	15.1%	1,206.6	9.9%
Total revenues	5,243.2	100%	7,711.3	100%	10,554.8	100%	12,950.2	100%	12,229.8	100%

Source: Ananda Annual Report and Financial Statement 2020

Referring to the above table, revenue from project management tends to increase every year due to the company started to has The Work Community Management as a subsidiary of the company in 2016 which mainly providing a better before-and-after service to customers so during that period it makes the company generate more revenues. In 2020, the overall total revenue of Ananda from many sources

has been slightly decreased due to due to recently the company has been developing many projects through its joint venture companies.

2.4 Management and Governance

Ananda's entire business management and operations are well constructed in line with the specific requirements to foster efficiency and sustainable growth, which ultimately lead to higher value for its stakeholders, including the partners, the employees, and other stakeholders. The particular requirements for good governance in Ananda's corporate governance acknowledge the importance and rights of all shareholders. Those involved in awareness of all shareholder's rules, and regulation disclosure, equal shareholder treatment, information and transparency disclosure, integrity in a constructive manner.

In addition, Ananda and its subsidiaries have operated their businesses through the promotion of the well-being of both internal and external organizations and environmental protection communities and societies. The company's responsibility covers the environment, society, and stakeholders, in accordance with environmental care, anti-corruption policies, fair employee treatment, and responsibility to consumers.

The company also developed a project called "Green Taskforce", under a partnership with Kasetsart University. This project is aimed at transforming every urban area into green space while inspiring all Ananda projects, both existing and future projects, to function as city gardens or lungs for the Bangkok people. This project will contribute to the increase of oxygen in the environment alongside the reduction of carbon dioxide and the reduction of PM2.5 pollution. This project also helps to enhance the efficiency of people's living and sustainable plant growth. Currently, Ananda's CG score from SET is 5 as shown in Figure 2.6.

ANAN ANANDA DEVELOPMENT PUBLIC COMPANY LIMITED
 Property & Construction/Property Development
 sSET
 CG Report: 

Data as of 08 Jul 2021

Figure 2.6 Ananda CG Score from SET

Source: SET

CHAPTER III

EXTERNAL ANALYSIS

3.1 Macroeconomic Analysis

3.1.1 The world and the country's GDP

On 27 July 2021, IMF has announced the expected global GDP to grow at 6% for 2021. (Figure 3.1) The forecast is still unchanged from April 2021. However, it looks like every country can make a positive GDP in 2021, Thailand is underperformed most of the countries in the world which IMF forecast Thailand's GDP to grow just 2.6%, (Figure 3.2) moreover Monetary Policy Committee in Thailand has forecast Thailand GDP to grow just 0.7% and if COVID-19 pandemic could not get better until the end of 2021, Thailand GDP in 2021 could be minus. Due to the COVID-19 pandemic, the demand for foreign customers almost goes down to zero.

Latest World Economic Outlook Update Growth Projections

(real GDP, annual percent change)	PROJECTIONS		
	2020	2021	2022
World Output	-3.2	6.0	4.9
Advanced Economies	-4.6	5.6	4.4
United States	-3.5	7.0	4.9
Euro Area	-6.5	4.6	4.3
Germany	-4.8	3.6	4.1
France	-8.0	5.8	4.2
Italy	-8.9	4.9	4.2
Spain	-10.8	6.2	5.8
Japan	-4.7	2.8	3.0
United Kingdom	-9.8	7.0	4.8
Canada	-5.3	6.3	4.5
Other Advanced Economies	-2.0	4.9	3.6
Emerging Market and Developing Economies	-2.1	6.3	5.2
Emerging and Developing Asia	-0.9	7.5	6.4
China	2.3	8.1	5.7
India	-7.3	9.5	8.5
ASEAN-5	-3.4	4.3	6.3
Emerging and Developing Europe	-2.0	4.9	3.6
Russia	-3.0	4.4	3.1
Latin America and the Caribbean	-7.0	5.8	3.2
Brazil	-4.1	5.3	1.9
Mexico	-8.3	6.3	4.2
Middle East and Central Asia	-2.6	4.0	3.7
Saudi Arabia	-4.1	2.4	4.8
Sub-Saharan Africa	-1.8	3.4	4.1
Nigeria	-1.8	2.5	2.6
South Africa	-7.0	4.0	2.2
<i>Memorandum</i>			
Emerging Market and Middle-Income Economies	-2.3	6.5	5.2
Low-Income Developing Countries	0.2	3.9	5.5

Figure 3.1 The world GDP

Source: IMF



Figure 3.2 Thailand GDP by IMF

Source: IMF

As a result of COVID-19, most of the businesses cannot expect to use the demand from foreign countries and the domestic demand also have a problem because all banks increase their lending strictness which is the main source of fund. Most of the businesses cannot operate normally due to government policies for preventing COVID-19. Many businesses have to close down permanently because of liquidity problems. The unemployment rate in Q1 2021 also increased to 1.96% from 1.83% in Q4 2020. The number of infected people still increase, what can actually help now could be an efficient vaccine which expects to come in Q4 2021.

Obviously, all of these factors have a negative impact to the real estate sector. The market is in a situation similar to a person with a broken leg, unable to continue walking. Buyers have to rely on loans from the banking sector while entrepreneurs also had to rely on loans from land purchase project development, but financial institutions almost never approved new loans, and for foreign customers who have the power of purchasing to buy real estate also cannot come to Thailand.

3.1.2 Interest rate and Inflation rate

Interest rate have a significant impact to economy as it relates to people saving and spending behaviors. Low-interest rate attracts people to spend money as it is not attractive to hold money in their account getting a small amount of interest and low-interest rate also makes the cost of lending money cheap. However, when the interest rate is too low or stays at low rate for long period of time, it can create inflation. And after the inflation occurs, the government will have to issue some monetary policies to control such as increase the interest rate and the currency will appreciate as a result of increasing interest rate. It is the kind of cycle that the Bank of Thailand and the government has to manage to control.

From Figure 3.3, it shows that the interest rate of Thailand is the lowest of 10 years period and then look at Figure 3.4, there is a signal that the inflation rate is going to be an uptrend as a result of the low-interest rate. And to prevent inflation, the government may need to increase the interest rate, but in COVID-19 situation that most of the businesses have faced a liquidity problem, the government cannot easily increase the interest rate otherwise it will heavily damage local business by increasing interest burden. Increasing interest rate also has a direct impact to real estate buyers as it is

necessary for them to lend a money from banks. So, this is a very difficult situation for the government and businesses.

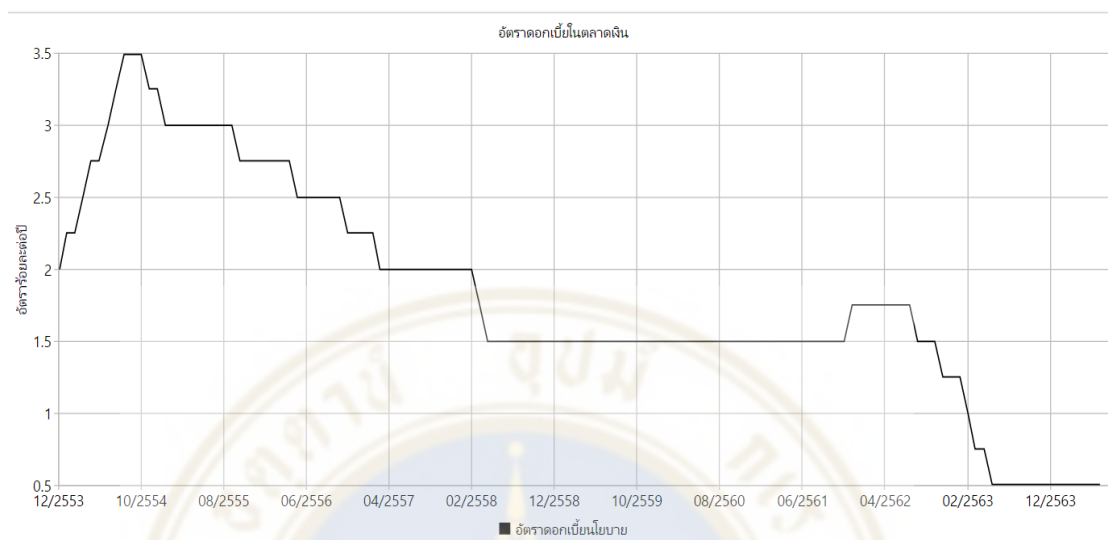


Figure 3.3 Interest rate of Thailand

Source: www.bot.or.th



Figure 3.4 Inflation rate of Thailand

Source: www.tradingeconomics.com

From management of discussion and analysis quarter 1 ending 31 March 2021, Ananda has adapted its operation to face the decreasing of demand in 2021 by reducing its administrative expenses by 6% and selling expenses by 44% compared with the same quarter in 2020 and because of this the company managed to make a profit of 70 million baht. Even in the situation that many businesses have a liquidity problem,

Ananda still manages to make its debt-to-equity ratio constant at 1.65 the same as quarter 1 in 2020. The company still has inventory on hand that can generate cash flow without using more money, so it seems like Ananda is still in a good shape and could manage to pass through this crisis.

3.2 Industry Analysis

In 2021, residential real estate business in Bangkok and its vicinities tends to be stable as a result of covid-19 pandemic. There are some factors that slow the recovery of this sector such as the high rate of household debt, it directly affects the power of purchasing and tightening of credit expansion of financial institution. Anyway, this market will have a better direction in 2022-2023 which is supported by;

- Thai economy is expected to grow at an average of 3-4% per year after this pandemic.
- The government's real estate stimulus policy.
- The demand for housing from foreign customers that come to invest or work in Thailand.

Sales of new projects during 2021-2023 tend to increase by an average 4.7%. Condominiums are expected to have the same proportion of new projects launched as low-rise houses. The proportion of low-rise homes will gradually increase to accommodate the growing demand for real living. It is expected that entrepreneurs tend to develop projects to meet different type of customers. Accordingly, in conditions of very low market interest rates and the government extending the period of measures to stimulate the real estate sector by reducing the transfer of ownership and mortgage fees for new-build homes for a price of not more than 3 million baht until the end of 2021, the postponement of the announcement of the new land and building tax rate to 2022, the reduction of the land and building tax rate to 10 percent which is a measure to reduce the burden of buyers and property developers is an important positive factor.

However, in 2021, there are still various risk factors that need to be monitored such as uncertainty of the COVID-19 pandemic situation, the delay in vaccine distribution, uncertainty in

Vaccine efficiency, delaying economic recovery, etc., which is a negative factor on the purchasing power of people's housing and on the housing market throughout the country.

To conclude, we think that the sale for real estate will gradually increase from a contraction of 36% in 2020 as high-end home buyers still have purchasing power. In addition, government measures have helped boost domestic purchasing. The transfer of ownership is expected to shrink by 1.5-2.0%, mainly due to transfers from Thai buyers because for foreigners, there are restrictions on international travel.

3.3 Competition Analysis

The porter's five forces analysis is used in competition analysis of Ananda shown in Figure 3.5

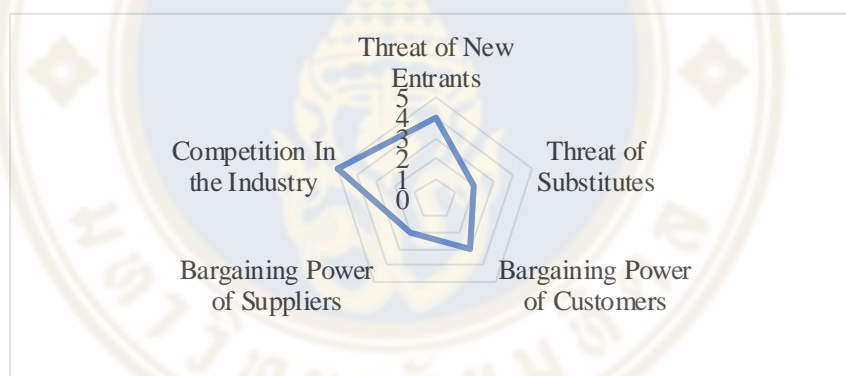


Figure 3.5 The Porter's 5 Force Analysis for Ananda

Threats of New Entrances: High

The threat of new entrants is high since there are no strong laws and regulations to enter into this segment with fewer requirements so it becomes easier to enter into this industry. Many real estate developers tried to access the same distribution channel to compete with Ananda. This is a serious threat that reduces the market share of the business. To reach more consumers and build customer loyalty, the company tried to differentiate themselves by offering a product uniqueness to suited all of their customer target. Ananda has a good economy of scale as the more the production of the

condominium project, the lower the fixed cost per unit. Recently, Ananda has launched seven projects and still planning for a more upcoming project.

Threats of Substitutes: Low

Ananda's core product is residential condominium projects that are specially located close to the mass transit network in Bangkok. Many real estate developers cannot compete with Ananda near this premium location. To be more specific, it is not easy to substitute a condominium that closes to a mass transit network due to many real estate competitors cannot offer such a great location. Ananda creates and offers a greater value to customers in many senses. For example, location; the value of those land slightly increases every year, and customers can speculate and gain advantages from it.

Bargaining Power of Customers: Medium

Recently, many real estate developers have been increased a lot compare to the past which means that the more the developers in this industry, the higher the customer bargaining power. The reasons are that customers have many choices to select the most satisfying condominium and houses that suit their needs based on their preference. For example, customer lifestyles, prices range of the projects, down payment, emotional status, quality, and location. If those mentioned are better-suited customers need then customers can have a really big impact to bargain with the company. Due to they find out that the competitors offer a better deal in comparison to Ananda's itself. Especially, when the switching cost is low, customers can easily switch to other brands.

Bargaining Power of Suppliers: Low

Ananda has been contributing a great relationship with its business partner as having their own construction company as their subsidiary, Helix which supplied Anand project approximately 30 percent of the total project. This business contribution with the construction company can lower the risk of volatility on the price of construction cost and lower the bargaining power of suppliers respectively.

Competition in the Industry: High

Rivalry in the existing real estate industry is high due to the nature of the business as the more the developed project, the more the revenue can be generated. When the new projects came out with an attractive promotion and price it can attract more customers which in the end leads to price-cutting. The condominium market is highly competitive as most of the top players have their superior locations nearby the city such as close to BTS and MRT. Despite that, Ananda also tried to differentiate themselves to run their business in Blue Ocean strategy to avoid unnecessary competition to stay competitive in the market. However, when the industry itself tends to have a high potential growth rate then it will directly affect the competition, and the price of land will suddenly be high and those mentioned can hurt the old players and the new players.

Ananda Competitors are listed below.

3.3.1 AP

AP Thailand Public Company Limited (AP) is involved in real estate development activities in Thailand and operate their business with its affiliated company. The core products of the company are single-ditched houses, townhouses, and condominiums. These can be categorized into three categories; Low-Rise, High-Rise, and others. Furthermore, AP Thailand also provides after-sales services, construction services, property management services, and brokerage services to its customers. In addition, the education and training services are also provided by the company itself.

3.3.2 LH

Land and Houses Public Company Limited (LH) was established in 1973. The company's core business is operated under two segments, (1) real estate business including development and sells single-detached houses, townhouses, and residential condominium projects, and (2) rental and service business engaged in the rental of shopping malls, hotels, and apartments. Apart from this, Land and Houses also provide project administration and management as well as advisory services of investment.

3.3.3 LPN

LPN Development Public Company Limited (LPN) is actively engaged in the development of residential and non-residential condominiums. The company develops real estate properties in cooperation with its subsidiaries. Additionally, the official community management services and residential condominiums were provided by LPN Development. For example, consultancy services, building engineering services, condominium units, and office space brokerage services, etc.

3.3.4 SIRI

Sansiri Public Company Limited (SIRI) was established in 1984. There are four segments of the company's core business, (1) property development, (2) building management, and project management and real estate brokerage, (3) hotel management, and (4) other. For the property development sector, the company emphasizes on develops land and housing projects along with residential condominium projects, and rents serviced apartments and office buildings. The other segment is engaged in the hotel and education businesses. In addition, the event management, restaurant club management, administration services, e-commerce, and retail businesses, and distributes standard branded products were provided by the company. Sansiri is also in cooperation with its subsidiaries.

3.3.5 SPALI

Supalai Public Company Limited (SPALI) is involved in the development of real estate projects for a living and commercial purposes in Thailand, the Philippines, and Australia. The company is mainly operating in the real estate business including the hotel business and management segment. Supalai owns and housing projects such as single-detached houses, duplex houses, townhouses, and condominiums. Furthermore, the company also engages in the development of hotels and resorts, rents office buildings, and provides real estate project management. Those services were offered under the Supalai brand.

3.3.6 ORI

Origin Property Public Company Limited (ORI) develops residential condominium units and sells houses and land, together with its subsidiary company. The company also provides a variety of interior decoration, asset management, property management, health, and real estate sales agency and related services. Moreover, Origin Property is also involved in F&B and electric power businesses.



CHAPTER IV

VALUATION

4.1 Financial Analysis

For this section, we analyzed Dupont ROE, the growth rate of the past five years, and the specific financial ratio of the industry. The major competitors of Ananda are LPN Development Public Company Limited (LPN) and AP Thailand Public Company Limited (AP). The size of LPN is similar to Ananda but the company size of AP is about four times larger than Ananda. However, the selected peers are based on similar products and markets.

The formula used to calculate the Dupont ROE is shown below. Table 4.1 shows the Dupont ROE of Ananda, LPN, and AP of the last five years. In 2018, the ROE of Ananda's increases a lot due to good operation efficiency and the highest net profit margin. This is because the overall profit suddenly increases from investment in joint ventures projects with partners, Mitsui Fudosan. Recently, the continuous decrease of transfer of joint venture projects had an impact on the net profit of the company from 2019 to 2020. Thus, the ROE of 2020 is turning negative due to a loss from discontinued operations, especially construction services. That has an impact on their net profit margin even though Ananda's try to minimize cost and improving the operation efficiency of its core business.

$$\text{ROE} = \text{Net Profit Margin} \times \text{AT} \times \text{EM}$$

where:

Net Profit Margin = Net Income / Sales

Asset Turnover (AT) = Sales/ Average Total Assets

Equity Multiplier (EM) = Average Total Assets / Average Shareholders' Equity

Table 4.1 Dupont Analysis of ROE

Dupont Analysis	2016	2017	2018	2019	2020	2020	2020
					ANAN	LPN	AP
Revenue (Million Baht)	12,230	12,879	10,522	9,203	4,887	7,450	29,986
Net Profit Margin	12.28%	10.31%	22.79%	9.27%	-0.96%	9.63%	14.09%
Asset Turnover	0.53	0.47	0.29	0.20	0.11	0.32	0.51
Equity Multiplier	2.35	2.39	2.52	2.77	2.84	1.89	2.11
Dupont ROE	15.41%	11.48%	16.91%	5.23%	-0.29%	5.75%	15.20%

When looks at the historical growth rate of a particular company, we can see the trend and this can be used in our valuation to predict the future growth rate of the company. The historical data from 2015 to 2019 are used in this valuation. The result from Table 4.2 shows that Ananda's expenses (+0.49%) are increasing faster than the revenues which can somehow reduce the net income of the company. On the contrary, AP has maintained their earnings very well while the peers are underperforming their historical growth rate.

Table 4.2 Growth Analysis of ANAN, LPN, and AP

	ANAN					CAGR (2015-2019)		
	2015	2016	2017	2018	2019	ANAN	LPN	AP
Total Revenues	11,025	12,230	12,879	10,522	9,203	-4.42%	-11.93%	1.82%
Total Expenses	8,748	10,203	10,622	10,035	8,920	0.49%	-11.12%	3.24%
Net Income	1,207	1,501	1,328	2,398	853	-8.31%	-15.00%	3.96%
EPS	0.36	0.42	0.34	0.65	0.09	-29.29%	-14.77%	3.98%

The covid-19 pandemic started at the end of the year 2019 and has a big impact on the early beginning of 2020 in Thailand. Thus, it is necessary to compare between the first quarter of 2020 and 2021 to be more useful in our analysis. To summarize from Table 4.3, incredibly that AP has a positive EPS and net income during the rough time. Unfortunately, Ananda's earnings dropped a lot compared to the same period of the previous year and some project has to stop in the middle of construction. This can conclude that the full effect of covid-19 is one of the company's concerns. However, Ananda and LPN tend to manage their expense very carefully during this time.

Table 4.3 Growth Analysis for the years 2020 and 2021

	ANAN			LPN			AP		
	Q1 2020	Q1 2021	Growth	Q1 2020	Q1 2021	Growth	Q1 2020	Q1 2021	Growth
Total Revenues	1,858	1,047	-43.67%	1,850	1,427	-22.87%	5,412	9,226	70.47%
Total Expenses	1,651	1,015	-38.54%	1,561	1,225	-21.56%	4,685	7,566	61.49%
Net Income	170	70	-58.62%	218	123	-43.70%	617.6	1,403	127.16%
EPS	0.02	-0.03	-300.00%	0.15	0.08	-43.35%	0.197	0.4459	126.35%

Moreover, the forecasted GDP of Thailand will drop about 7.78% by the National Economic and Social Development Council of Thailand (NESDC). The average range of Thailand's GDP and the real estate sector is 2.49%. The real estate sector will decline approximately 3.88% as shown in Table 4.4.

Table 4.4 GDP Real Estate Sector

	2015	2016	2017	2018	2019	2020	CAGR 5Y	2021F	Growth
Thailand GDP	13,743,480	14,590,337	15,488,664	16,368,705	16,898,086	15,698,286	2.70%	14,477,416	-7.78%
Real Estate Sector GDP	332,116	353,842	377,004	399,736	417,542	426,781	5.14%	410,224	-3.88%
% Real Estate Sector	2.42%	2.43%	2.43%	2.44%	2.47%	2.72%	Average	2.49%	

4.2 Discounted cash flow valuation

It is a valuation method that is used to estimate the value of the company. If the estimated value is lower than the market price, it indicates that the stock that you estimate might not be worth buying or it is over-value. Discounted cash flow discounts the future free cash flow by using discount rate or WACC to get the present value of the company.

Proforma statement

According to the company revenue strategy, Ananda invests a lot in the joint venture. However, they own joint ventures more than 98%, They do not include it in their revenue. They indicate it as a share of profit from joint venture at the end of their financial statement before getting the final profit. As a result, we cannot do the forecast only revenue in their financial statement, and then in their 56-1, there is information about their joint venture, the name, the type of business, and also their revenue. all of Ananda's joint ventures are all property projects, so We design to put that all revenue

combines with the revenue from real estate in their financial statement in order to estimate it as 1 group. So, to estimate sales, their revenue is classified into 2 groups which is a sale from real estate (including joint venture revenue in 56-1), and for the rest, it is grouped as other revenue. The proportion of these two is 87 and 13% respectively. We forecast sales from real estate by using the demand for property in Bangkok and the surrounding area. The reason why we use this is because all of the projects from Ananda more than 95% they are located in Bangkok and the surrounding area. We think it would be a more accurate comparison with demand for the whole country. For the other revenue, we forecast it relates to the proportion of sales from real estate because a big part of them coming from service fees that will come after the company sale the real estate and also found that the proportion between these two is quite stable at 12 to 13%.

The cost of goods sold, we also classify it into 2 groups which are the cost of goods sold for real estate and the others. For the cost of real estate, it has to be adjusted by increasing the cost from the joint venture. We take the reference from Anan's past performance before they start to have a joint venture strategy to see the cost structure between sale and cost of real estate and then you these proportion which is around 68% of revenue to forecast the cost. We cannot use their cost structure in their current financial statement because the cost is mixed between their operation and their joint venture, as we can see an outstanding difference in their cost structure before and after using joint venture strategy. So, for the cost of other revenue, we decide to use the average historical proportion from 2016 to 2020 to forecast which is 43.80%

Selling, general and administrative expenses (SG&A): since SG&A is a period cost which normally composes of fixed cost and a variable cost, so we tried to use linear regression to forecast, but we got a very low R^2 which is 0.4. So, in order to find a suitable method, we decided to calculate the historical proportion between SG&A and revenue to forecast SG&A in the future. And then used both methods to forecast SG&A and compare the result that which one makes more sense. As a result, we decide to use the historical proportion to forecast SG&A.

One extra thing is profit/loss from discontinued operation, it had never happened before the COVID19 situation, so we consider that it as an emergency case and estimate that it will not happen again after 2022.

To forecast financial costs, we use the effective interest cost that the firm paid to operate the business, which is calculated from the latest financial statement.

TAX rate, we use stationary rate at 20% as it is the latest corporate tax rate. Ananda had a very low tax rate in recent years (since 2018) which is around 3%, but we decide not to use it because it is quite unpredictable. It is indicated in their financial statement node about what reduce their tax and more than 90% come from Tax exempted income (expenses) and there is no more information about Tax exempted income (expenses). In this way, using 20% will be more conservative way which is preferable for us.

Table 4.5 Proforma statement

(MILLION BAHT)	YEAR	FORECAST							
		2018	2019	2020	2021F	2022F	2023F	2024F	2025F
SALES									
Real estate (Include Joint venture rev.)		28161.69	19131.40	17632.31	17118.99	18541.28	20373.05	21923.44	23591.81
Other revenue		4650.08	2863.86	2547.88	2225.47	2410.37	2648.50	2850.05	3066.94
TOTAL REVENUE		32811.77	21995.26	20180.19	19344.45	20951.65	23021.55	24773.48	26658.74
COGS (Real estate)		19635.81	13772.60	12898.56	11770.04	12747.93	14007.35	15073.31	16220.38
COGS (Other)		2862.07	1029.88	667.89	974.71	1055.69	1159.99	1248.27	1343.26
SG&A		7453.06	5437.02	4942.05	4935.56	5345.62	5873.74	6320.73	6801.74
TOTAL EXPENSE		29950.93	20239.50	18508.50	17680.31	19149.24	21041.08	22642.30	24365.38
EBIT		2860.84	1755.76	1671.69	1664.14	1802.40	1980.47	2131.18	2293.36
Financial cost		-368.31	-588.44	-623.90	-720.572	-720.572	-720.572	-720.572	-720.572
TAX		-95.01	42.03	-72.36	-22.385	-216.366	-251.979	-282.122	-314.558
Profit/Loss for the year from discontinued operations, net of income tax			-356.55	-1022.14	-511.069966				
NET PROFIT		2397.52	852.81	-46.71	410.11	865.46	1007.92	1128.49	1258.23
EPS		0.72	0.26	-0.01	0.12	0.26	0.30	0.34	0.38

DCF Valuation

We use discounted cash flow method (DCF) to estimate firm value. We forecast cash flow to the business in the next 5 years and then using a discount rate to evaluate present value. The discount rate is evaluated from the weighted average cost of capital formula (WACC)

$$WACC = w_d r_d (1 - \text{Tax}) + w_e r_e$$

where:

WACC = weighted average cost of capital

w_d = weight of debt

r_d = cost of debt

Tax = corporate tax

w_e = weight of equity

r_e = cost of equity

$r_e = r_f + \text{Beta} * \text{MRP}$

where:

r_e = cost of equity

r_f = risk-free (10-year government bond yield)

Beta = relative market risk

MRP = market risk premium

The weight of debt is taken from the first quarter balance sheet in the year 2021. We account for all interest-bearing debt such as Short-term loans from financial institutions and Long-term debentures. For the weight of equity, We multiply ANAN share price on 12 July 2021 which is 1.94 baht with the number of shares. The weighted between debt and equity are 79% and 21% respectively.

The cost of debt is calculated by finding effective cost from the last financial statement which is 2.97%

For the tax rate, we use a stationary rate at 20% which is the official rate for Thai corporate.

Cost of equity, we calculate it using this formula " $r_e = r_f + \text{Beta} * \text{MRP}$ ". r_f represents a risk-free rate which is a 10-year government bond yield. we take it from Thaibma.com on 12 July 2021 and the rate is 1.71%. For BETA, we take 5 years of historical price of the SET index and ANAN to calculate their daily return and then use it to calculate ANAN beta by using linear regression to get the equation which is $\text{ANAN} = 1.6976 * \text{SET} - 0.0026$. So, the beta is 1.6976. They are shown in **APPENDIX B**.

MRP, we did the research to find market risk premium from reliable source and found 2 rates from 2 sources. First is coming from "<http://www.market-risk-premia.com/th.html>" and the rate is 4.67%. The data was updated on June 2021. Another source, market risk premium was come from Professor Aswath Damodaran (http://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/ctryprem.html), which is 6.27% and the data was updated on January 8, 2021. We compared between these 2 rates and decided to use the second one. However, the data is not up to date as the first, we preferred to use the higher rate to be more conservative.

All this information to calculate WACC which is 4.48%. The calculation is shown in the **Table 4.6** below

Table 4.6 WACC Calculation

WACC	
RISK FREE	1.71%
MARKET RISK PREMIUM	6.27%
BETA	1.7
COST OF EQUITY	12.37%
Weight of equity	21%
COST OF DEBT	2.97%
Tax	20%
AFTER TAX COST OF DEBT	2.38%
Weight of debt	79%
WACC	4.48%

After we got WACC then we use this rate to calculate the present value from future cash flow.

$$DCF = \frac{CF_1}{(1+r)^1} + \frac{CF_2}{(1+r)^2} + \dots + \frac{CF_n}{(1+r)^n}$$

CF = Cash Flow
r = discount rate (WACC)

Figure 4.1 DCF formula

Source: <http://www.everythingaboutinvestment.com/2013/01/discounted-cash-flow.html>

Terminal value (TV), I estimate the terminal value from free cash flow.

$$TV = FCF(1+g)/(WACC-g)$$

where:

TV = Terminal value

FCF = Free cash flow

g = perpetual growth of free cash flow, we use conservative rate at 1.5%. It is in the range of expected inflation rate by Bank of Thailand (3% ± 1%), however from 2009 to 2021 Thailand house growth rate is 5.8%, The detail shown in **APPENDIX C**

WACC = Weight average cost of capital 4.48%

we got the discounted cash flow as shown in Table

Table Discounted cash flow

It has an extra list which is "Profit/Loss for the year from discontinued operations, net of income tax" since 2019 due to the COVID19 situation that forces them to stop some projects. From the table, the operating income starts from 1,664 million baht in 2021 to 2,293 million baht in 2025 which is 8.35% CAGR. Depreciation, we use the growth rate at 17.98% coming from the historical growth rate from 2016 to 2019 before the full year of COVID in 2020.

Table 4.7 Discounted cash flow

PERIOD	0	1	2	3	4	Terminal Value
(Million Baht)	2021F	2022F	2023F	2024F	2025F	
EBIT	1,664	1,802	1,980	2,131	2,293	
TAX	-22	-216	-252	-282	-315	
EBIT AFTER TAX	1,642	1,586	1,728	1,849	1,979	
Profit/Loss for the year from discontinued operations, net of income tax	-511.069966					
EBIT AFTER TAX and Profit/Loss for the year from discontinued operations, net of income tax	1,131	1,586	1,728	1,849	1,979	
DEPRECIATION	279	330	389	459	541	
WORKING CAPITAL CHANGE	1537	-390	-1479	-1426	-1375	
CAPEX	-70	-200	-200	-200	-200	
CASHFLOW TO THE FIRM	2,877	1,326	438	682	944	32,167
DISCOUNTED CASHFLOW	-	1,269	401	598	793	26,995
PV OF FIRM VALUE		30,055				
NET DEBT		24,097				
PV OF EQUITY VALUE		5,958				
No. OF SHARES (MN)		3333				
EST. SHARE VALUE		1.787569409				

For working capital, we use current asset exclude cash minus current liability. We use this method because apart from A/R and inventory, ANAN has many lists in its current asset that it is necessary for operation. The change of net working capital is minus in 2021 because in 2020, the company decreased its networking due to the COVID situation that force them to increase a lot of their liability. We forecast net working capital by forecasting current asset exclude cash and liability. For current asset exclude cash, we expect it to growth at the same rate as terminal growth rate. For current liability, since 2019 their proportion of current liability is very high compare to their past performance because the effect from covid pandemic. In the future we forecast that the company need to consistency reduce this proportion otherwise it would be too riskier for them and also not match with their policy that will have maximum 2 D/E ratio. Base on this assumption, their net working capital will increase and lower their cash flow.

The company's CAPEX is quite constant during the normal situation at 200 million, but just decrease it during COVID19. The terminal value of the firm is 32,167 million baht (perpetual growth 1.50%). The firm has a present value of 30,055 million baht and then deducted by net debt of 24,097 million baht, it will make the equity value of the company worth 5,958 million baht and divide by the number of shares (3,333 million shares), the estimated share value is 1.79 baht per share as of 4-August-2021.

This is higher compare to the latest share price as of 4 August 2021, which is 1.59 baht per share.

The scale for the Rating

We use this scale as a reference for our recommendation whether we should buy, sell or hold this stock. There are three scales of rating based on the difference between market share price and valuation price as shown in this Table below.

Table 4.8 Rating Rules

Rating Rules	
Buy	10% or Greater upside
Hold	Between 10% upside and 10% downside
Sell	10% or More downside

ANAN's valuation price is 1.79 which is 12% higher than the latest price on 4 August 2021 (1.59 baht per share). It is in the scale "10% or Greater upside" therefore based on the rating rules, our recommendation from DCF method is to "Buy".

Sensitivity analysis

Valuation price from DCF method has many key factors that can influence the price. Therefore, we create sensitivity analysis using key factors consist of cost of debt, cost of equity, WACC, terminal growth to see how sensitive the price is if these factors change by $\pm 5\%$, $\pm 10\%$, $\pm 20\%$ and $\pm 30\%$ and the result is in the **Table 4.10** below.

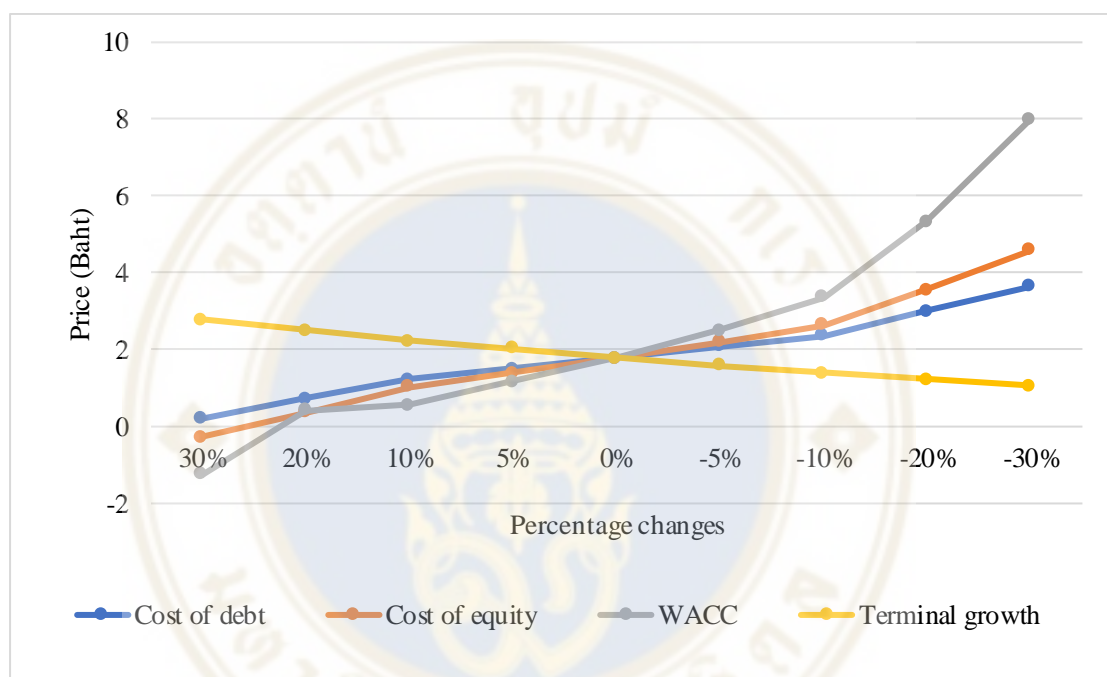
Table 4.9 Sensitivity analysis

Deviation	Cost of debt	Price (Baht)	Cost of equity	Price (Baht)	WACC	Price (Baht)	Terminal growth	Price (Baht)
30%	3.96%	0.21	16.50%	n/a	5.98%	n/a	1.82%	2.79%
20%	3.60%	0.72	15%	0.36	5.43%	0.41	1.74%	2.51
10%	3.27%	1.24	13.64%	1.04	4.94%	0.57	1.65%	2.23
5%	3.12%	1.51	12.99%	1.4	4.70%	1.16	1.58%	2.02
0%	2.97%	1.79	12.37%	1.79	4.48%	1.79	1.50%	1.79
-5%	2.82%	2.09	11.75%	2.2	4.26%	2.51	1.43%	1.6
-10%	2.68%	2.38	11.16%	2.64	4.04%	3.36	1.35%	1.39

Table 4.9 Sensitivity analysis (cont.)

Deviation	Cost of debt	Price (Baht)	Cost of equity	Price (Baht)	WACC	Price (Baht)	Terminal growth	Price (Baht)
-20%	2.41%	3.01	10.05%	3.57	3.64%	5.35	1.29%	1.24
-30%	2.17%	3.64	9.04%	4.58	3.27%	8	1.22%	1.07

I create a spider chart to make it easier to compare the sensitivity of price on different key factors.

**Figure 4.2 Spider chart**

From this chart, you can see that the price is most sensitive to WACC and it increase exponentially while key factors than can change the price at the constant rate is terminal growth. The least sensitive to stock price is cost of debt which has the lowest slope in the chart.

To conclude, as you can see that the price is most sensitive to WACC and the recommendation to buy, sell or hold can change only by changing WACC just 5%. However, we still recommend “Buy” based on our base case scenario, we also want investors to aware that it is very risky to invest in this stock as it has such a high sensitivity with WACC.

4.3 Valuation Recommendation

According to the DCF valuation, the forecast stock price as of 4-Aug-2021 is 1.79 baht per share while the market price on 4-Aug-2021 is 1.59 baht per share, so we can see that Anan stock price still has potential to increase more than 10%. However, since many factors can have impact on stock price, we would like to perform the scenario analysis of its EBIT for the worst case and the best case to see the possible range of stock price. The worst case and the best case are determined as follow:

- The best case: EBIT increases 25% from the base case
- The worst case: EBIT decreases 25% from the base case

The result is shown in **Table 4.10**

Table 4.10 Scenario Analysis

(Million Baht)	Base case	EBIT up 25% Best case	EBIT down 25% Worst case
EBIT 2021	1,664	2,080	1,248
EBIT 2022	1,802	2,252.5	1,351.5
EBIT 2023	1,980	2,475	1,485
EBIT 2024	2,131	2,663.75	1,598.25
EBIT 2025	2,293	2,866.25	1,719.75
Share Value (Baht per share)	1.79	6.16	n/a

It shows that if the best case happens or its EBIT goes up 25%, share value will be 6.16 baht while if the worst case happens, the company will go bankrupt and get negative share value. Why the result is like this, one of main reason is the proportion of the company's debt, it is quite high compare with the size of EBIT that the company can generate, so if anything goes wrong, the value of enterprise could easily go minus and result in negative share value. Anyway, share value in the stock market cannot be negative, it could only go down to zero for the worst case.

To summarize, we still recommend "BUY" as it has a big upside potential for base case and the best case while investors need to be aware of how sensitive it is and be prepare if something goes wrong.

CHAPTER V

INVESTMENT RISKS AND DOWNSIDE POSSIBILITIES

In this chapter, we will talk about risk factors that may occur and affect the Company's business operations are as follows

1. Risk arising from the pandemic situation of the COVID-19

The coronavirus disease 2019 pandemic situation is a sudden crisis that no other country in the world has anticipated and prepared the health system to deal with the situation. It greatly affects the economy and society to countries around the world including Thailand. It is a risk that affects the entire market (Systematic risk) which every business cannot avoid. The pandemic has forced executives and entrepreneurs to adapt quickly and make important decisions in a short time. This may affect the business in the long term in ways that we cannot predict. The pandemic situation of coronavirus disease 2019 is a major risk factor affecting core businesses and businesses under development according to the Company's strategic plans, such as serviced apartment business, etc. Company real estate and revenue of service business apartment drop both incomes from domestic customers and income from foreign customers. The main reason why domestic customers postpone or cancel the deal is because of the uncertainty of their job due to COVID-19 pandemic. As for foreign customers, international travel restrictions prevent customers from traveling.

To deal with this, the company has adjusted the business plan, marketing and sales strategy. Both marketing, sales, and transfer of ownership processes. Emphasis is placed on digital or online channels, such as organizing marketing activities and selling via online channels. including more social media channels to reach as many customers, both Thai and foreign customers as possible. Using virtual reality technology to enable customers to view the project or check out the suite without having to travel. and improving the process of transferring ownership for foreign customers. by a various

tool that the company has made is aimed to encourage customers to make the purchase decision and transfer the ownership as much as possible without traveling.

2. Financial risk

Financial risk is a significant risk to the company. The main risk factors are cash flow and

risk of cash flow for financing business operations which is mainly caused by the COVID-19. It caused the rate of real estate sales to decrease and affect the revenue and cash flow of the company. These affect the difficulty of raising funds, issue debentures, and also increase the financial cost.

The company manages this risk by maintaining financial discipline with the maximum debt to equity ratio at 2 times. Moreover, the company also changed its sales strategy by focusing on selling inventory, postpone investment in new projects and partner with strong financial institutes.

3. Compliance risk with applicable laws, rules, and regulations

There are many kinds of laws and regulations for this kind of business. The company can be easily sued by local people or else and can affect the financial situation and also brand image of the company.

To reduce this kind of risk, Ananda gives most priority to follow the rule and regulations since day 1 of planning any new projects. It is also including the upcoming law that has to be in consideration. And to avoid the problem with local residents, the company will avoid the sensitive area and in the construction process, they will have a team to often talk with local residents.

4. Risk from investing in new businesses

Investing in new businesses in which the company is not expertise such as IT business, invest in a countryside project. To invest in this kind of thing, it has a high chance that the result will not be as we have planned. But with the company strategy that want to have sustainable growth, so to invest in innovative technology is inevitable.

It needs to seek investment opportunities in new businesses, both in the expansion of investments in core businesses and other businesses. which is a high-risk business.

To deal with this risk, most of the time, the company will invest by the partner with the expertise company. In addition, during the investment period, the company will consistently check the project to be on track and also monitors any change in risk factors that can occur in order to fix it on time.



CHAPTER VI

CONCLUSION

In this paper, I applied discounted cash flow method to evaluate the intrinsic value of ANAN share price. By forecasting the future cash flow of the company and then discounted its value back to see the present enterprise value.

For the calculation, I estimated the cost of debt at 2.97% with the weight of 79% and the cost of equity at 12.37% with the weight of 21%. Using tax rate at 20% to calculate after tax cost of debt. WACC which calculated by this information is 4.48%. As a result, from DCF valuation method, the stock price target is 1.79 baht per share as of 4 August 2021 which is 12% upside compare with market price at 1.59 baht per share as of 4 August 2021.

In addition, I used sensitivity and scenario analysis to see the range of price that could happen. The output range of stock varies from -2.59 to 8, which shows that this stock is very sensitive to the key factor and has potential to get whether high profit or high loss.

To decide the recommendation, I used scale of rating to see that whether we should sell, buy or hold the stock base on target price and market price and it shows that the price is in the scale of “10% or Greater upside”, therefore my recommendation for ANAN is “BUY”



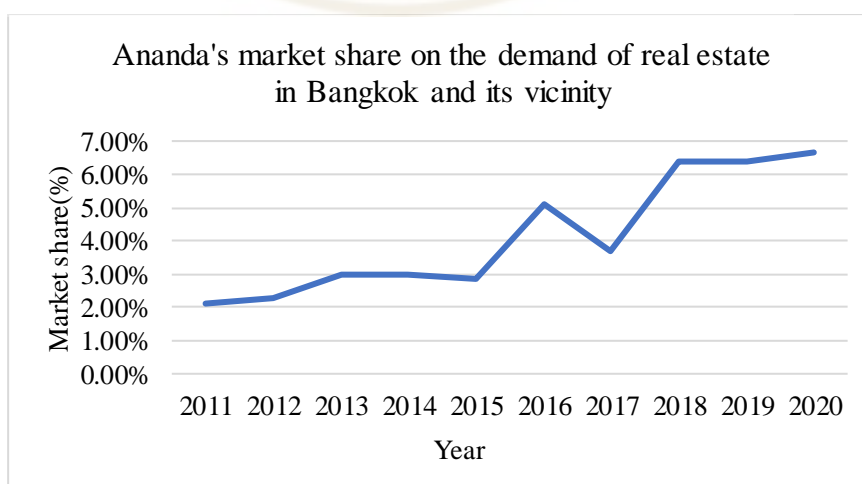
Appendix A: Real estate Sale forecasting

The real estate sale including the sale from joint ventures increase from 11,031 million baht in 2015 to 20,180 in 2020, with 12.84% CAGR.



Sale including the sale from joint ventures

Since all of sale relate on sale of real estate in Bangkok and its vicinity, therefore I use demand of real estate and its vicinity as a key factor for forecast Ananda's sale. I use relative growth method to forecast the demand of real estate and its vicinity and then use this result adding the growth rate to estimate sale of Ananda as the company increase their market share.



Ananda's market share on the demand of real estate in Bangkok and its vicinity

Appendix B: Beta

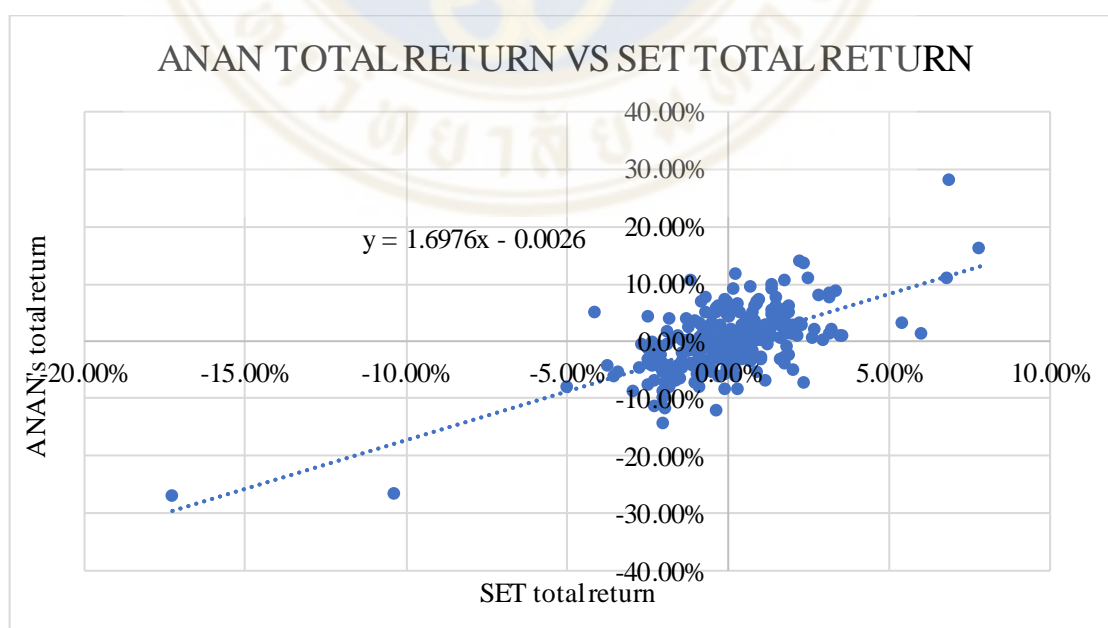
To estimate beta, I use Data Analysis in Excel, and scatter plot between ANAN total return and SET total return.

Beta estimation using Data Analysis in Excel

Regression Statistics	
Multiple R	0.648363597
R Square	0.420375354
Adjusted R Square	0.41828747
Standard Error	0.04330902
Observations	260

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	0.350967432	0.350967	187.1156	2.12598E-32
Residual	258	0.483923168	0.001876		
Total	259	0.8348906			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	0.002579212	0.002686251	-0.96015	0.337877	0.007868981	0.002710557	0.007868981	0.002710557
SET RETURN	1.697594807	0.124102058	13.67902	2.13E-32	1.453212862	1.941976751	1.453212862	1.941976751



Scatter plot

From analysis,

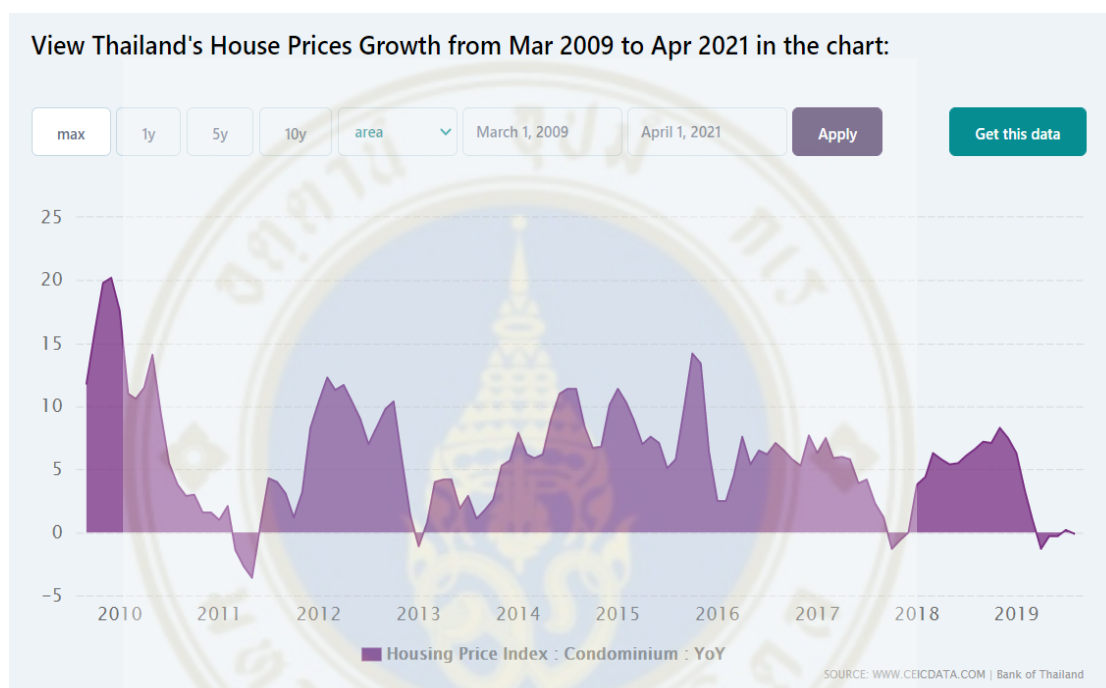
$$\text{ANAN total return} = 1.6976 * \text{SET total return} - 0.0026 \quad (r^2=0.42)$$

The r^2 is equal to 0.420 It can be concluded that the SET total return can explain 42% of the variation in ANAN stock returns, and from the equation, the beta is 1.7.



Appendix C: Perpetual growth rate

The concept to determine perpetual growth rate is to look at the probability, make it to be conservative to reduce the risk of downside. I choose from the range of expected rate of inflation which is 1 to 3%. However, the growth rate of Thailand's house price growth from 2009 to 2021 is 5.8% , I choose to use just 1.5% from the range of expected rate of inflation from Bank of Thailand.



Thailand's House price Growth

Source : <https://www.ceicdata.com/>

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