

**RELATIVE VALUATION OF ANANDA DEVELOPMENT
PUBLIC COMPANY LIMITED (ANAN)**



**A THEMATIC PAPER SUBMITTED IN PARTIAL
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PUBLIC COMPANY LIMITED (ANAN)**

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ABSTRACT

This thematic paper studies the Relative Valuation Methods by selecting one representative company as Ananda Development Public Company Limited (ANAN). The Relative Valuation Methods such as P/E Multiple Method indicates the average forward P/E of peer competitors that have the same business structure as Ananda then multiplying with the forecasted next twelve months earnings to calculate the price per share of Ananda. The concept of Relative Valuation is based on the principle that the industry value depends on its related peer competitors' ability to generate cash flow back to their companies. Therefore, it relies more on the industry overview of that particular sector. The result of applying Relative valuation of Ananda Development Public Company Limited with supported information such as macro-economic perspective, industry, competition, and investment analysis. It indicates that value of Ananda Development is undervalued when compares to its current price as of 29 December 2017. As a result, it is recommended to BUY the share sales.

KEY WORDS: Valuation/ Relative Valuation/ P/E Multiple/ EV/EBITDA/ PBV/ Property Development

62 pages

CONTENTS

	Page
ACKNOWLEDGEMENTS	ii
ABSTRACT	iii
LIST OF TABLES	viii
LIST OF FIGURES	ix
CHAPTER I VALUATION	1
1.1 Highlights	1
1.2 Business Description	2
1.2.1 Joint Venture	2
1.2.2 Subsidiary	3
1.2.3 The Agent [Property Expert] Co., Ltd. [“The Agent”]	4
1.2.4 The Works Community Management Co., Ltd. (“The Works”)	4
1.2.5 Other Businesses	5
1.2.6 Bludeck Sports Club	5
1.2.7 Condominium Products of Ananda	5
1.2.8 The company aims to provide “urban living solutions”	6
1.2.9 For the Ashton brand	6
1.2.10 For the Ideo brand	6
1.2.11 For the Elio brand	6
1.2.12 For the Unio brand	7
1.2.13 Real Estate Housing Products	8
1.2.14 Other Landed Housing Projects	8
1.2.15 Revenue Breakdown	9
1.2.16 Despite the mourning period of the late King Bhumibol	10

CONTENTS (cont.)

	Page
1.3 Macro-Economic Analysis	11
1.3.1 The Growth of population in Bangkok and Greater Bangkok	11
1.3.2 The Growth of daily passengers on BTS and Approvals of new mass transit lines	12
1.3.3 General Election in 2018	12
1.3.4 Thailand Prime Lending Rate	13
1.3.5 The GDP of Thailand keeps on rising	13
1.3.6 Household debt to GDP	14
1.3.7 The consumer confidence level is making its way back to the top	14
1.3.8 Mass-Transit Network Expansion	15
1.4 Industry Analysis	16
1.5 Competition Analysis	17
1.6 Investment Summary	19
1.6.1 Launching more projects will boost up revenue	19
1.6.2 The largest market share in the market.	19
1.6.3 More sales will be recognized in Q4.	20
1.6.4 The Growth of population in Bangkok and Greater Bangkok	20
1.6.5 General election in 2018	20
1.7 Valuation	20
1.7.1 Relative Valuation	21
1.7.2 P/E Method	21
1.7.3 EV/EBITDA	22
1.7.4 PBV	23
1.7.5 Weighting each method equally	23

CONTENTS (cont.)

	Page
1.8 Financial Analysis	24
1.8.1 Gross Profit Margin	24
1.8.2 Net Profit Margin	24
1.8.3 Return on Assets	25
1.8.4 Return on Equity	26
1.8.5 Cash Conversion Cycle	27
1.8.6 Current Ratio	28
1.9 Investment Risks and Downside Possibilities	30
1.9.1 Unexpected political issues	30
1.9.2 Delayed of BTS station openings	31
1.9.3 Operational Risk	31
1.10 Appendices	33
1.10.1 Appendix A: Shareholding Structure	33
1.10.2 Appendix B: SWOT Analysis	35
1.10.3 Appendix C: Porter's Five Forces	38
1.10.4 Appendix D: Sensitivity Analysis	40
1.10.5 Appendix E: Scenario Analysis	42
1.10.6 Appendix F: Risk Matrix	42
1.10.7 Appendix G: Historical Income Statement and Projections	43
1.10.8 Appendix H: Common Size Income Statement and Trend	44
1.10.9 Appendix I: Historical Balance Sheet and Projections	45
1.10.10 Appendix J: Common Size Balance Sheet and Trend	48
1.10.11 Appendix K: Historical Cash Flow	51
1.10.12 Appendix L: Common Size Cash Flow and Trend	53
1.10.13 Appendix M: COGS, Inventory Regression	55

CONTENTS (cont.)

	Page
1.10.14 Appendix N: Corporate Governance and Corporate Social Responsibility	56
1.10.15 Appendix O: COGS, Inventory Regression	57
1.10.16 Appendix P: Current projects of ANAN	58
REFERENCES	60
BIOGRAPHY	62



LIST OF TABLES

Table	Page
1.1 Revenue Breakdown in %	9
1.2 Revenue Breakdown in THB	10
1.3 Relative Valuation	21
1.4 P/E Method	22
1.5 EV/EBITDA Method	22
1.6 PBV	23
1.7 Weighting Each Method Equally	23
1.8 Return on Assets	26
1.9 Return on Equity	26
1.10 Sensitivity Analysis on Growth Rates	40
1.11 Sensitivity Analysis on Selling Expenses	41
1.12 Sensitivity Analysis on Minimum Wages	41
1.13 Scenario Analysis	42
1.14 Risk Matrix	42
1.15 Historical Income Statement and Projections	43
1.16 Common Size Income Statement and Trend	44
1.17 Historical Balance Sheet and Projections	45
1.18 Common Size Balance Sheet and Trend	48
1.19 Historical Cash Flow	51
1.20 QH Balance Sheet Including Projections	53
1.21 Corporate Governance and Corporate Social Responsibility	56

LIST OF FIGURES

Figure	Page
1.1 Condominium Products & Brands	7
1.2 Real Estate Housing Products	8
1.3 Other Landed Housing Projects	9
1.4 Thailand Prime Lending Rate	13
1.5 TH GDP Annual Growth Rate (Percent)	14
1.6 Household Debt to GDP	14
1.7 Thailand Consumer Confidence	15
1.8 Mass-Transit Network Expansion	16
1.9 Thailand Foreign Direct Investment	17
1.10 Market Cap (BTN)	18
1.11 Condominium Market Share 2017	18
1.12 Gross Profit Margin	24
1.13 Net Profit Margin	25
1.14 Return on Assets	25
1.15 Return on Equity	27
1.16 Cash Conversion Cycle (days)	27
1.17 Current Ratio (times)	28
1.18 Quick Ratio (times)	29
1.19 Debt to Equity (times)	29
1.20 Interest Coverage Ratio (times)	30
1.21 Shareholding Structure	33
1.22 SWOT Analysis	35
1.23 Porter's five forces	38
1.24 Sensitivity Analysis	41
1.25 COGS, Inventory Regression	55
1.26 Rise of the Upper and Middle Class	57
1.27 Current Projects of ANAN	58

CHAPTER I

VALUATION

1.1 Highlights

Delay of recognition of sales in Q3/2017 will be recognized in Q4/2017: From the quarterly report of ANAN Q3/2017, there seems to be a delayed of transfer units that is the reason why the revenue in Q3 is lower than the forecasted number, still those sales will be recognized in the upcoming quarter which appears to be the highest earning of all time for ANAN.

Presales will outperform the expectation: Even though, the target presales of ANAN has been upgraded 2 times this year to 32.5bn, still the actual presale of this year will be able to achieve that without breaking a sweat due to the increase of take up rate that exceeded 40%. To conclude, the actual presale of ANAN will outperform the target by about 5% at the end of Q4/2017.

Business plan of 2018 and positive economy outlook: ANAN expects the revenue from the JV Share to be 14bn, plus 9.7bn from the sales of real estate. They expect a growth in revenue of 39% additional to that, the economy outlook in 2018 looks much better since there will be a general election in the 2nd half of next year. The confidence from consumers will be restored and they should be able to achieve their target without any issue.

Ananda has the largest backlog of all eight major property developers in Thailand as end of June 2017 at THB 50bn. This is an indicator for stable long-term growth and we estimate that is will secure 91% of the revenue in 2017F and up to 80% in 2018F. Ananda's revenue will be the highest among its peers supported by the large backlog.

1.2 Business Description

The company was founded in 1999 by Chanond Ruangkritya, the main business is the development of condominium projects located near railway mass transit stations in Bangkok and its peripheral areas such as Ashton, IDEO, and houses in the area outside of city area. The Company also develops landed housing. In addition, the Company also operates other businesses through its subsidiaries, including a sports club named Bludeck, an agent in selling its condominium units, management services for condominiums and landed housing projects, the race tracks of Bira International Circuit and the go-kart race tracks.

History of Ananda started back in 1999 where the company was founded by Ruangkritya's family, the company engages in the real estate business of landed housing projects. Later on, Ananda made a joint venture with Pramerica Financial in order to develop landed housing project around Suvarnabhumi Airport in 2006. Then in 2007, they expanded their capability to develop condominiums close to mass transit stations with Pramerica Financial. Ananda and Pramerica Financial as joint venture continued their path of developing condominiums around mass transit station to 2010 then Ananda started acquiring the remaining stake from Pramerica Financial. In 2012, Ananda issued IPO for the first time with raising funds of THB 5.6 billion. In the following year, Ananda found their new joint venture partner which is Mitsui Fudosan, the largest real estate developer in Japan, the goal of their joint venture is to pursue their path further on becoming the number one real estate company for the mass transit stations that provides a wide range of product for customers from any class of the society, the price range starts from 0.8 million Baht all the way to more than 10 million Baht. Recently in 2017, Ananda started to launch their new project for the detached-housing project which name "Artale" that the price for one unit starts from 30 million Baht.

1.2.1 Joint Venture

Ananda made a joint venture with Mitsui Fudosan in 2013, the largest real estate developer in Japan, to be the leading condominium developer along the mass-transit railway in Thailand. Ananda and Mitsui Fudosan saw that the mass-transit network in Thailand will expand exponentially in the future, which mean to them that there are opportunity for both of them to grow even further to capture the demand of customers

and the changing of lifestyle of urban citizens. In order for them to manage each project efficiency, they make subsidiaries for each project that they work together and even though Ananda holds more than 51% of shares and voting rights in those subsidiaries, still the company management's team decided that the company has no control over those subsidiaries due to the joint venture agreements state that "The agreement specifies that key matters as defined in the agreement must be approved by at least one member appointed by each venture in writing". Consequentially, Ananda decided that they have no control over these subsidiaries, that the investments are investments in joint venture, and these subsidiaries are not to be included in the consolidated finance statements, according to the annual report of Ananda 2016. Those subsidiaries are as followings;

- Ananda MF Asia Co., Ltd.
- Ananda MF Asia Ratchathewi Co., Ltd.
- Ananda MF Asia Asoke Co., Ltd.
- Ananda MF Asia Samyan Co., Ltd.
- Ananda MF Asia Chitlom Co., Ltd.
- Ananda MF Asia Bangna Co., Ltd.
- Ananda MF Asia Chongnonsi Co., Ltd.
- Ananda MF Asia Taopoon Co., Ltd.
- Ananda MF Asia Thaphra Co., Ltd.
- Ananda MF Asia Petchaburi Co., Ltd.
- Ananda MF Asia Bangchak Co., Ltd.
- Ananda MF Asia Udomsuk Co., Ltd.
- Ananda MF Asia Saphankhwai Co., Ltd.
- Ananda MF Asia Phraram 9 Co., Ltd.
- Ananda MF Asia Victory Monument Co., Ltd.

1.2.2 Subsidiary

Ananda also have their own construction company named "Helix" which is expected to be responsible for one-third of Ananda's projects in the future. Helix has been appointed as the main constructor to provide real estate construction services for Similan Reef, Maldives Beach, Bali Beach, and Java Bay landed housing projects,

also with IDEO Wutthakat condominium project, . In 2016, Helix has been appointed to be the contractor of Unio Sukhumvit 72 and Union-Thakham for Ananda projects, and the main constructor of housing projects such as Nirvana at Work Ramintra and other 3 project in total of 4 projects from non-Ananda projects). To conclude, Helix recognized the revenue approximately 2,609 million THB from these 6 projects. As of now, Helix has been recognized as the integrated developer company that operates both construction and property development businesses in “Value Segment” with target price within 70,000 THB /sqm for condominium and 3 million THB/unit for townhouse. In 2018, Helix plans to go public by registering the company to SET according to plan of revenue realization of 8,000 million THB and 10,000 million THB in 2018 and 2020 respectively.

1.2.3 The Agent [Property Expert] Co., Ltd. [“The Agent”]

The Agent, a subsidiary which is a property agent for the sale/purchase of residential condominium units in the secondary market and for procurement of lessees for the owners of residential condominium units.

The Agent’s services is not limited to residential condominium projects within the company’s real estate portfolio, its goal is to be the leading provider of real estate agency services specializing in properties near mass transit stations. Accordingly, The Agent aims to be a market maker which promotes secondary sales to maintain the investment value of the company’s residential condominium projects. Through these activities the company also gains market intelligence.

1.2.4 The Works Community Management Co., Ltd. (“The Works”)

The Works offers management services for residential condominium projects. According to the title transfer of the units in a residential condominium project, The Works offers a year of complimentary management, or until the residential condominium’s juristic persons entity is formed. This arrangement gives the company an opportunity to promote Ideo and Elio brands and maintain high standards in the provision of services to the company’s customers upon completion of residential condominium projects. The company intends that the high quality of services provided will encourage residents to continue to engage with the company and improve the company’s reputation and brand.

In addition, The Works has a relationship with The Agent. We have observed that owners intending to sell their properties in the secondary market often choose to approach the condominium manager for initial advice on the resale process. The Works intends in the long run to offer facility management to residential condominium projects not under the company's portfolio.

1.2.5 Other Businesses

Bira Circuit One Company Limited ("Bira Circuit One Company"), Bira Kart Company Limited ("Bira Kart Company") and Bira RT Kart Company Limited ("Bira RT Kart Company")

The company invested in Bira Circuit One Company and Bira Kart Company in 2009 and operated a motor racing circuit and a go-kart race track named Bira International Circuit, located in Chonburi Province, approximately 20 km away from Pattaya City. In addition, the company invested in Bira RT Kart Company, offering the sale of motor vehicle parts and components to support the motor racing and go-kart racing business operations of Bira Circuit One Company and Bira Kart Company.

1.2.6 Bludeck Sports Club

The company owns and operates Bludeck, a sports club located at Soi Kingkaew 19, Samutprakarn Province, through the company's subsidiary, Blue Deck Co., Ltd. ("Bludeck") Company Limited. Bludeck offers services such as the rental of sports facilities, yoga classes and aerobics classes. Furthermore, Bludeck operates an Italian restaurant named Bacco. The company offers Bludeck's products and services as ancillary services within the company's residential condominium projects. Such lifestyle services will add value to our brand and the company's customers.

1.2.7 Condominium Products of Ananda

The company's real estate development business focuses on developing residential condominium projects close to mass transit stations. The majority of the company's residential condominium projects are located next to or within 300 meters of the station. These are being marketed under the "Ideo" brand. In addition, the company develops residential condominium projects under the "Elio" brand, which are located

between 301 to 600 meters from the station. Furthermore, the company introduced residential condominium projects under the “Unio” brand, which are located over 600 meters from the station. The company’s first residential condominium project, Ideo Ladprao 17, was launched in 2007, and the company has since launched 42 additional projects as of December 2016.

1.2.8 The company aims to provide “urban living solutions”

To Bangkok residents who we believe will increasingly utilize mass transit systems to commute between their residence, workplace and places where they enjoy recreational activities.

1.2.9 For the Ashton brand

The company’s target group of customers that aim to live a luxurious lifestyle that has all the facilities to make their lives much more facilitating, mainly focused on highly educated, high-income households, entrepreneurs that are willing to afford to live a luxurious lifestyle without compromises or interruption from their neighbors. For this brand of project, Ananda uses the best quality of materials to deal with the sound of each room and minimizes the number of rooms on each floor to be minimum as possible, and they offer the best facilities as possible to their residents here at Ashton.

1.2.10 For the Ideo brand

The company’s target group of customers, the “Gen C” group, which is a segment comprising mainly educated, middle-income households and professionals who require easy access to their place of work, entertainment, dining, shopping and living, focuses on “convenience”, the ability to control “cost and time”, “casual lifestyle” and the smart use of “cash”.

1.2.11 For the Elio brand

The company’s target group of customers enjoy “Living Easy”, and focus on lifestyle concepts which allow for self-expression (“Easy You”), socializing (“Easy Socialize”), efficient management of space (“Easy Space”), convenient location (“Easy

Location”) and connectivity to mass rapid transit stations (“Easy Connection”) and ease of making payments (“Easy Payment”).

1.2.12 For the Unio brand

The company’s target group of customers enjoys super value range condo (“Style not about the money”) and focus on lifestyle concepts which allow for unique living (“Unique living for dynamic life”).

Categories	Brand
Luxury	ASHTON
High-end	
Premium value	
Up-scale	 
Mid-range	  
Low-range	
Super value - range	

Figure 1.1 Condominium Products & Brands

In 2016, the company has further launched more Unio projects, Unio Sukhumvit 72 located on Soi Sukhumvit 72, 600 meters from Bearing BTS Station with 984 units and starting price at 950,000 Baht and Unio Rama 2-Thakham located opposite Central Rama2 with 724 units and starting price at 950,000 Baht after the company successfully launched the “Unio” value condominium brand for the first time, with 8 floors located in Charansanitwong Soi 3, 900 meters from Bangsue-Thrapha and Hualumphong-Bangkae. Interchange Station. The company launched the first project with 1,936 units. This adds to our strong brands and diversified residential condominium portfolios with selling prices ranging from 950,000 Baht to 15 million Baht.

1.2.13 Real Estate Housing Products

The landed housing projects operated by Ananda Development One and Baan Nirvana are beach-resort style landed housing projects located in low density suburban areas in the vicinity of Suvarnabhumi Airport. The names of landed housing projects are also based on popular beach resorts in Maldives, Hawaii and Bali. Ananda Development One's landed housing projects were relaunched under the overall brand "Atoll" in 2013. Each project contains a clubhouse with amenities for its residents' enjoyment. The majority of landed housing projects are priced at the mid-level at approximately Baht 2.5 million to 5.0 million per landed house. Details of each project under "Atoll"

In 2015, the company has developed a new housing brand launching for the first time under "Arden". The first three projects are located on Rama 3, Patanakarn 20 and Ladprao 71. Arden Ladprao 71 has 67 units with a starting price of 7.5 million Baht. Arden Rama 3 has 68 units with a starting price of 12.5 million Baht. Arden Patanakarn 20 has 159 units Baht with a starting price of 7.5 million Baht.

Including the "Arden and "Atoll" housing brands, the company can offer a variety of residential housing units to customers with selling prices starting from 2.5 Baht to 12.5 million Baht.

Categories	Brand
High - end	ARDEN by Ananda
Mid - scale	Atoll

Figure 1.2 Real Estate Housing Products

1.2.14 Other Landed Housing Projects

The company's landed housing projects include the land development for houses, the construction of the houses and the subsequent sale of the land and houses. These projects are under the names "Ananda" and "Sirinda" and include Ananda Sport Life, Sirinda Pranali and Sirinda Prana projects. All of these landed housing projects are located in the vicinity of golf courses and are gated communities with gardens.

Project	Location	Nature of Project	Site Area
1 Ananda Sport Life	99 Moo 16, Bangpleeyai, Bangplee District, Samutprakarn Province	Detached houses/ land development/ house construction	68-0-78.7 rai
2 Sirinda Prana	88 Moo 17, Bangpleeyai, Bangplee District, Samutprakarn Province	Land development/ house construction	8-0-36 rai
3 Sirinda Pranali	199 Moo 12, Rajathewa, Bangplee District, Samutprakarn Province	Detached houses/ land development/ house construction	7-0-39.6 rai

Figure 1.3 Other Landed Housing Projects

1.2.15 Revenue Breakdown

The Company's main source of revenue is derived from sales of real estate development, which accounts for approximately 80% of Ananda revenue. Recently, the company also diversify their portfolio of real estate product to other projects such as detached-house and townhouse, which just started to launch in 2017. The Company also derives revenue from other businesses, including revenue from the sale of food and beverages and interest income which accounts in the other income.

Table 1.1 Revenue Breakdown in %

Revenue Breakdown	2015	2016
Revenues From Sales Of Real Estate	87%	80%
Revenues From Project Management Services	6%	7%
Revenues From Construction Contracts	0%	4%
Revenues From Commission Income	2%	3%
Revenues From Service Income	1%	1%
Revenues From Sales Of Food And Beverages	0%	0%
Other Income	3%	4%
Ananda Revenue	100%	100%

Table 1.2 Revenue Breakdown in THB

Revenue Breakdown	2015	2016
Revenues From Sales Of Real Estate	9,598	9,780
Revenues From Project Management Services	696	853
Revenues From Construction Contracts	45	539
Revenues From Commission Income	265	390
Revenues From Service Income	107	142
Revenues From Sales Of Food And Beverages	29	25
Other Income	285	500
Ananda Revenue	11,025	12,230

According to the revenue breakdown above, it indicates that within the period of one year, the revenue from construction contracts increased from 0% of Ananda's revenue to 4% of Ananda's revenue, due to the fact that the subsidiary "Helix" in 2015, they only had one construction project for UNIO from Ananda. But in 2016, they had 6 construction contracts and 6 condominium projects from Ananda, accumulating with estimated value of 2,609 mil.Baht, the revenue from construction contracts is expected to be higher in the near future as Ananda indicates that Helix will be responsible for about one-third of Ananda projects in the years to come. Another factor that increased over the year is the project management services, the subsidiary "The Work Community Management" was able to pull more customers into the system by providing better before and after sales service. Lastly, the last component that rises up over the year is commission income, which the subsidiary "The Agent" managed to perform better than before due to the fact that they provide service as the brokerage business by providing investment solution and full services of consultancy at every stage of buying, renting, and selling.

1.2.16 Despite the mourning period of the late King Bhumibol

In 2016, for the last quarter of the year due to the news regarding to the late king Bhumibol, the whole country entered the mourning period that shows a significant decrease in demand. Still, the management team of Ananda managed to pull off higher sales and transferred units resulting in the total value of 15.9 Billion Baht that is an

increase of approximately 58%. Ananda has also been recognized by the stock exchange of Thailand (SET) by being awarded as the best investor relation of 2016, this also shows the strong commitment towards corporate governance and transparency.

1.2.16.1 Harvest time

Since its IPO in 2013, ANAN calls the current times as “Harvest time”. It is the time that all the fruit seeds that they planted in 2013 started to fully grow and they now can get the benefits out of it. In 2013, Ananda made a joint venture with Mitsui Fudosan, the largest real estate developer in Japan. The first project they initiated together was IDEO Q Chula, followed by 3 more projects in 2014, 5 more in 2015 and 6 more in 2016. That is 15 projects in total with the total value of 70 Billion Baht.

1.2.16.2 Recent news

In 2016, the growth of unit transferred increased by 65%, which results in the total value of 15.9 Billion Baht. For instance, IDEO Chula successfully transferred 1442 units out of 1598 units within just 3 months. Another crucial target that Ananda aims to achieve is to expand its commitment to innovation that will be transform in the company to reduce the excess expense of expanding new headquarters and to growth more revenue at the same time. In 2016, Ananda also collaborated with Hubba to host Hackathon and Line to launch Line finance providing more innovative ways of smart use of cash. Ananda also collaborated with Samsung, Cisco, and Fujitsu to create smartest office in Asia by deploying technologies such as Samsung smart cloud printing and Cisco Smart Space. Since, they are the first company to implement these technologies to their new office located in the FYI building, which makes their office be the smartest office in Asia. Additional to that, Ananda also has the right to sell these innovative products to the market that also makes them the price setter, since there is no one in the market has ever implement these kinds of things before.

1.3 Macro-Economic Analysis

1.3.1 The Growth of population in Bangkok and Greater Bangkok

Findings from the report titled “States of the World's Cities 2012/2013” by UN Habitat about the growth of Thai population located in Bangkok and Greater Bangkok,

indicate that in 2000 the number of population was 6.3 million people. In 2010, it was 7 million people, and by 2025 there will be 8.5 million people living in Bangkok and Greater Bangkok. Since, there will be more people living in Bangkok area, there will be more demand of urban living condominiums that will support the claimed growth rate which the CEO of Ananda expected in the years to come.

1.3.2 The Growth of daily passengers on BTS and Approvals of new mass transit lines

Moreover, another research also states about the growth in number of daily passengers on Bangkok's mass transit system (BTS) from approximately 162,000 passengers in 2000 on weekdays to more than 1 million passengers in 2014. As the attitude of Thais change towards the city lives, Thai citizens now intend to move out of their parent house and buy a condominium before getting married. In addition, due to the expansion of public transportation that facilitates passengers even more to the point that some people believe that they do not need a car in their lives to live in Bangkok. Furthermore, in 2016 The Cabinet of Royal Thai Government approved new mass transit lines with the distance in total of 112km with the investment value of 232 billion Baht. In total of including the existing transit line, it will 319 km in distance and 240 stations by year 2024. Due to this expansion of mass transit railways as Ananda's mission is to be the number one in mass transit living solution, means that Ananda will expand along with the construction of this mass transit railway project to be able to provide living solution to foreseeable demands.

1.3.3 General Election in 2018

According to the Thai Government that has already announced recently that there will be a general election next year, after that announcement SET Index kept going up days after days from 1560 basis point to 1730 basis point. As the stock market always reflect the current circumstance of the country, it can be stated that the confidence of investors has been restored from that announcement. Then it can also be said for the purchasing power within the country will also be increasing as well as Thailand is now moving forwards to the brighter future.

1.3.4 Thailand Prime Lending Rate

It is the interest rate that charged by banks to their most secure, and most creditworthy customers on short-term loans. The prime lending rate from the bank is at 7% in October 2017 and it is expected to be 6.9% by the end of this quarter. Referring to the research from Trading Economics global macro models and analysts' expectations indicate that in the long-term period the prime lending rate is projected to be around 6.5% in 2020.



Figure 1.4 Thailand Prime Lending Rate

1.3.5 The GDP of Thailand keeps on rising

According to the monetary report from the Bank of Thailand indicates that the GDP will grow from 3.2% in 2016 to 3.5% in 2017 still as of now the current GDP growth has already exceeded the estimation that they made reaching 3.8%, they also predicted that the GDP growth rate will remain in the same proportion of 3.8% for 2018 as well. From the positive trend of economy outlook and the approaching of the general election, we assume that the purchasing power will be even more stronger comparing to the past few years.

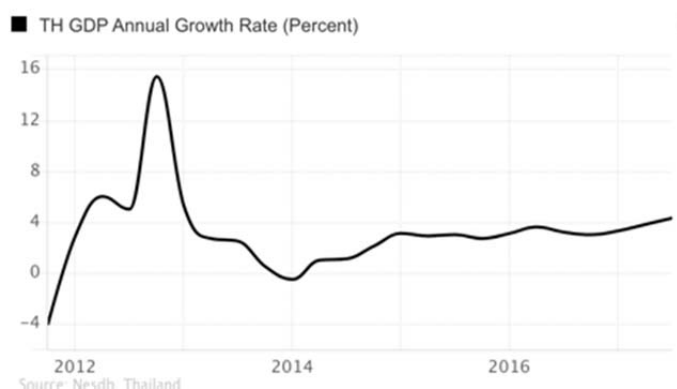


Figure 1.5 TH GDP Annual Growth Rate (Percent)

1.3.6 Household debt to GDP

Thailand household debt is now accounted for 69.2% of GDP in the first quarter of 2017, it reached the all-time high in the fourth of 2015 at 71.6% of GDP. Due to the fact that the household debt is currently accounted for a huge amount of GDP, this also means that the attitude of Thai people tends to have debt towards property products.

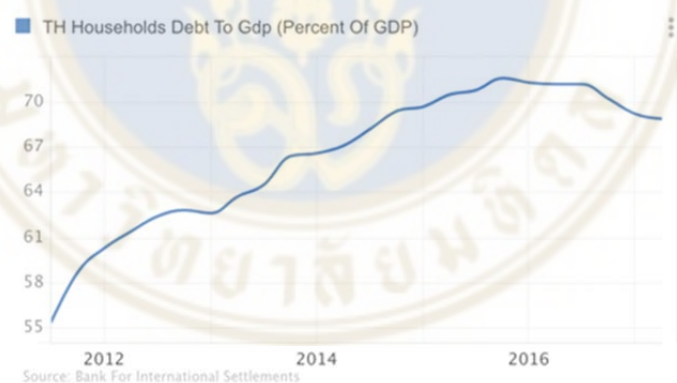


Figure 1.6 Household Debt to GDP

1.3.7 The consumer confidence level is making its way back to the top

According to the University of the Thai Chamber of Commerce's consumer confidence is now making a comeback at 75.00 point as measured in September 2017. The consumer confidence index of Thailand used to be at its peak of 112.4 point in December 2003 then it started to decline into the range of 70 point over years. The CCI is based on households' plans for major purchases and economic situation both currently

and expectation of the immediate future. As the general election is closing up, we expect the confidence level of consumer to be even much better.



Figure 1.7 Thailand Consumer Confidence

1.3.8 Mass-Transit Network Expansion

As the Thai Government approved the project to the expand mass transit railways throughout the capital to improve the standard of living for the people in the capital, and since Ananda mainly focus on expanding their business of condominiums sector along with the number of stations of BTS and MRT. So we can conclude that as far as the expansion of mass transit railways go, Ananda's business will expand even further as well. Currently, the existing station of mass-transit railways is 83 stations which another 138 stations are still under the process of construction that expected to be opening for the public use in 2024. Due to this expansion of BTS stations as Ananda's mission is to become the leading company to provide urban living solution along mass-transit railways. According to their mission, we have such a high expectation for Ananda to expand rapidly along with the number of mass-transit stations in the years to come.

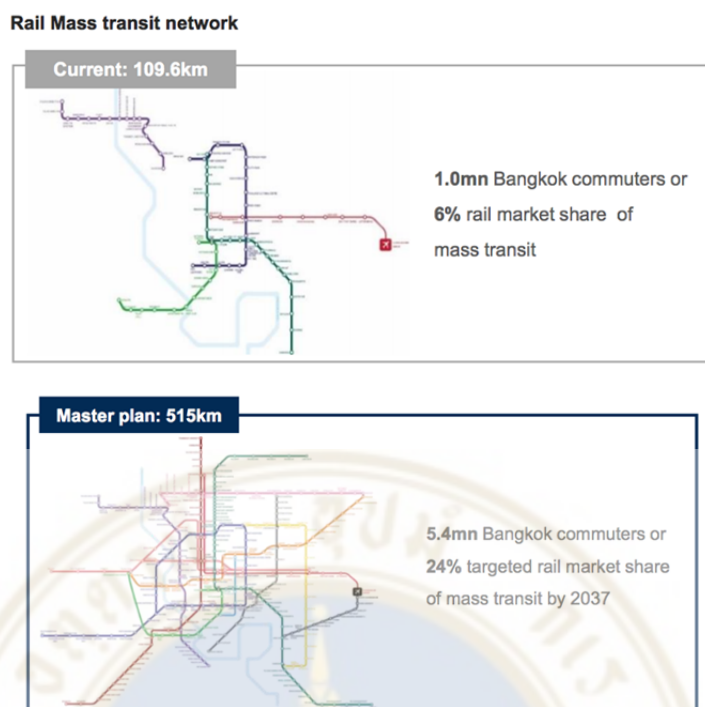


Figure 1.8 Mass-Transit Network Expansion

1.4 Industry Analysis

A macro-economic perspective: Foundations of growth

1. Rising middle class is a key factor for sustainable growth in the residential real estate sector acting as powerful economic source. The upper middle class emergence helps to explain why the sector has not decelerated alongside Thailand's GDP. During the period of 2017 – 2020 the number of people within the upper middle class is expected to grow from 9 to 11 million according to the Boston Consulting Group. (Appendix N)

2. Upcoming elections and further integration into ASEAN will boost foreign direct investment. Although the FDI inflows fell in 2016, applications tripled in value year-on-year in the first 10 months of 2016 indicating that FDI will pick up again especially after an elected government is in place in 2018. Thai buyers who currently represent 85% of transactions for new properties are becoming more selective due to cautious domestic bank lending, creating a favorable environment for overseas investors.



Figure 1.9 Thailand Foreign Direct Investment

3. The high mortgage rate rejection is set to decline. The tightening lending rules make it difficult for buyers to qualify for mortgages. On the bright side, those restrictions make it less likely for a real estate bubble to form, adding stability to the real estate market. The rejection rate however is expected to decline in 2017/2018 due to the end of repayments of the first-car buyer scheme. This will improve loans going forward.

4. The demand for prime land sites continues to be high, the prices of prime central business district land is continuing to increase as downtown condominiums are still popular and new record prices are expected in 2017 according to CBRE research.

5. Property developer's confidence remains strong, having a positive outlook for new projects. This is reflected in housing developer's sentiment index on revenue which rose to 53.4 in the third quarter of 2017 from 45.4. Due to a sluggish economy, developers shift towards the more upper-end segment has paid off by meeting the growing demand and aiming at the high purchasing power of that segment.

1.5 Competition Analysis

The Thai property development market is dominated by a few very large companies. The barriers for new entry are very high and the Bangkok remains the core interest area of investors since investment is focused there. Insufficient infrastructure and high land prices keep rentals going up in centralized areas but in the coming 2-3 years secondary locations will present an opportunity for developers to increase market share followed by the increased government spending into infrastructure. Ananda's main

direct competitors are Sansiri, AP, Supalai and LPN. The market shares of 2017 are shown in exhibit 1.

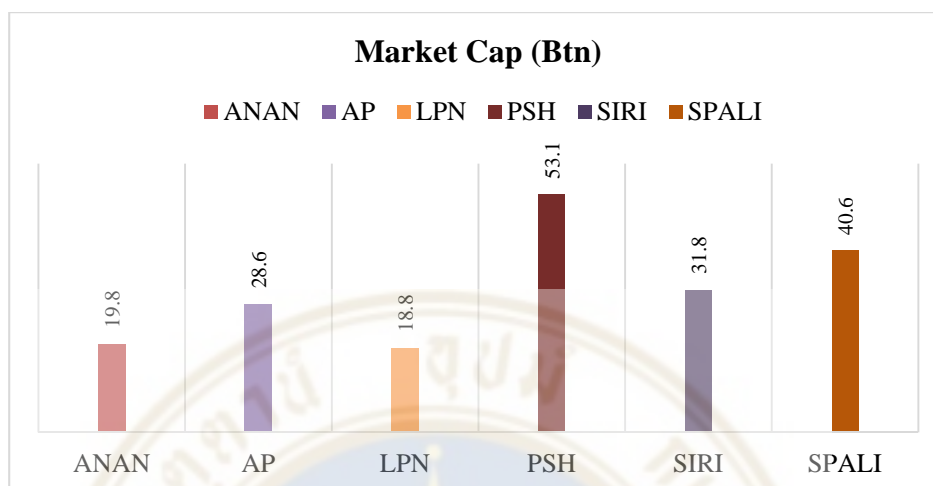


Figure 1.10 Market Cap (BTN)



Figure 1.11 Condominium Market Share 2017

Ananda is a first mover in innovation in terms of strategic land acquisition along mass transit stations. The acquisition teams' expertise allowed Ananda to achieve an IRR of 35% on projects near the BTS due to high presale numbers which is the highest in the whole industry. Ananda also focuses on modern marketing channels and is very active on social media targeting increasingly Gen C and effectively communicating the attractiveness of their extensive portfolio of condominiums along the BTS.

Ananda has the largest backlog of all eight major property developers in Thailand as end of June 2017 at THB 50bn. This is an indicator for stable long-term growth and we estimate that it will secure 91% of the revenue in 2017F and up to 80%

in 2018F. Ananda's revenue will be the highest among its peers supported by the large backlog. It is supported by the joint venture of Ananda and Mitsui Fudosan Asia (Thailand) to develop two condominium projects namely Elia Sena Nikhom and Ideo Rangnam with values of respectively 2.5bn THB and 2.3bn THB.

Outstanding Presale performance among peers as of June 2017 Ananada has the second highest presales in the industry of 15.5bn THB (+88% YoY) catching up fast to Pruksa which totaled its presales to 25bn THB in the first half of 2017.

Ananda tied for 1st place as most trusted condominium developer in Thailand. According to a survey of Chulalongkorn University Brand Center, Land & Houses and Pruksa are the most trusted developer for single detached houses, Sansiri is the most trusted builder of townhouses. Ananda is the most trusted developer in the condominium segment with a score of 81%.

1.6 Investment Summary

1.6.1 Launching more projects will boost up revenue.

As the mission of ANAN which is to be the leading company to provide the living solution along mass-transit railways. Most of ANAN's condominiums projects in the past would only have the total value not exceeding 3 billion THB, but by joining a joint venture with Mitsui Fudosan, ANAN now can diversify risk of each condominium project, and ANAN can expand rapidly despite the fact that they aim to keep the NET IBDE ratio at the maximum of 1 times.

1.6.2 The largest market share in the market.

ANAN is now the leading of condominium developer along the mass-transit railways, ANAN has the most market-share of condominiums in the market that account for more 25% of the total market share. In addition, due to the expansion of mass-transit railway from the Cabinet of Royal Thai Government states that by 2024, there will be 240 stations which is about 3 times of the existing station as of now at 83 stations. ANAN needs to launch more projects in the years to come in order to keep up with the expansion

of mass-transit railways and to maintain their position of being the leading company within this field.

1.6.3 More sales will be recognized in Q4.

ANAN expects this Q4/2017 to be the peak year due to the delayed of transfer backlog in Q3/2017 will be recognized in Q4/2017. ANAN also has three more completed condos (Bt3.3bn, 71%) and three JV condos (Bt 6.6. bn, 56.5% sold) to be transferred.

1.6.4 The Growth of population in Bangkok and Greater Bangkok

As a result, from the report titled “States of the World's Cities 2012/2013” by UN Habitat about the growth of Thai population located in Bangkok and Greater Bangkok, indicates that in 2000 the number of population was 6.3 million people. In 2010, it was 7 million people, and by 2025 there will be 8.5 million people living in Bangkok and Greater Bangkok. Since, there will be more people living in Bangkok area, so there will be more demand of urban living condominiums that will support the claimed of exponential growth rate that the CEO of Ananda expected in the years to come.

1.6.5 General election in 2018

According to the Thai Government that has already announced recently that there will be a general election in the 2nd half of next year, after that announcement SET Index kept going up days after days from 1560 basis point to 1730 basis point. As the stock market reflects the current circumstance of the country, it can be stated that the confidence of investors have been restored from that announcement. Then it can also be said for the purchasing power within the country will also be increasing as well as Thailand is now moving away from the political uncertainty.

1.7 Valuation

Two valuation methods to value ANAN – FCFE and Relative Valuation

Using the discounted cash flow to firm method seems to be the most suitable to value ANAN, due to the fact that this method involves a lot of information about the revenue future plan that announced by the company itself and all those aspects from

the pro-forma statement that required abundant of assumption to be made in order to do the forecast.

1.7.1 Relative Valuation

On the other hand, for the relative valuation, due to the nature of the real estate business that tends to have low P/E because when the company runs out of projects to sell in that year the earning will drop significantly, this also occurs vice versa that if the company has a lot of projects then the earning will be exponentially high. There are three methods that can be used to do relative valuation which are P/E, EV/EBITDA, and PBV.

Table 1.3 Relative Valuation

Relative Valuation						
Peers						
	ROE	D/E	EV/EBITDA NTM	P/E NTM	P/BV	
LPN	0.087	0.347	10.96	11	1.6	
AP	0.159	0.759	11.95	8.12	1.41	
SPALI	0.222	0.924	7.31	8.12	1.55	
PSH	0.159	0.562	8.82	8.16	1.46	
SIRI	0.133	1.274	16.67	9.02	1.1	
ANAN	0.118	1.02	15.3	9.05	1.73	
AVERAGE (except ANAN)			11.142	8.884	1.424	

1.7.2 P/E Method

Firstly, PE multiple, to do this method correctly we need to get a list of peer competitors that must have the same business, similar capital structure and similar ROE. Then get the PE of the next twelve months from Reuter for each individual firm then take average of those PE and multiply with EPS of the next twelve months of ANAN. For the EPS (NTM) that means EPS in the next twelve months which consists of Q4/2017 + Q1/2018 + Q2/2018 + Q3/2018. As we calculate annually EPS in our pro-forma, we need to look back into the historical data to find the weight of the three quarter of EPS to Q4, because Q4 is the period that the firm recognized major part of their revenue. Once we get the weight of EPS then we can multiply that number with the annual EPS to get the actual EPS of Q1+Q2+Q3. To sum up, we got EPS (NTM) at 0.61 to be used in this calculation. After getting all the number to be used in the calculation, we take the average PE of peers (NTM) multiply with EPS (NTM) that calculated from our pro-forma statement to get the share price of \$5.46 THB.

Table 1.4 P/E Method

PE Method	2014	2015	2016	2017	2018
EPS	0.39	0.36	0.42	0.53	0.57
EPS First Three Quarter	0.2	0.09	0.15	0.13	0.21
% of EPS	51.2%	25.0%	35.7%		
AVG 3 years			37.3%		
EPS Q4/2017				0.40	
EPS First Three Quarter/2018					0.21
EPS NTM				0.61	
Target Price				5.46	

1.7.3 EV/EBITDA

Another method is to use EV/EBITDA, similarly to the PE method, we take the average of EV/EBITDA of peers then multiply with EBITDA of ANAN in the next twelve months which includes Q4/2017, Q1/2018, Q2/2018 and Q3/2018. First of all, the weight of EBITDA from the three quarter have to be found first in order for us to estimate the EBITDA of 2018, to do this we look back into the historical data to get the weight of each year then we take the average of all those weight to get 54.2% of EBITA for the three quarters. Now we got all the EBITDA of the next twelve months. Then we multiply EBITDA (NTM) with the average of EV/EBITDA from peers to get the EV. Then we plus cash and equivalent of ANAN and minus debt of 2017 to get the firm value. The last step is to divide firm value by number of share, then we come to our conclusion that we get the target share price of \$7.1 THB.

Table 1.5 EV/EBITDA Method

EV/EBITDA Method	2014	2015	2016	2017	2018
EBITDA	1,885.55	1,870.86	2,237.29	2,669.58	2,804.94
EBITDA First Three Quar	1,032.60	912.70	1,320.10	1,378.80	
% of EBITDA (Annually)	54.8%	48.8%	59.0%		
AVG 3 years			54.2%		
EBITDA Q4/2017				1,290.78	
EBITDA First Three Quarter/2018					1,519.84
EBITDA NTM				2,810.62	
AVG EV/EBITDA NTM (Peers)				11.142	
EV				31,315.93	
Firm Value				23,667.84	
Outstanding Shares				3,333.00	
Target Price				7.10	

1.7.4 PBV

The last method is using PBV, first of all we take the price to book value of each peer, unlike other two method aforementioned, this method we do not need to use forward value, so we get the trailing PBV of peers from Reuter then take average out of it, which we got the result of 1.424x. After that we multiply with the actual BV of Q3/2017 of ANAN which accounted for 11,686 mtb with the average PBV of peers, then after we got the result then divide that result by the number of share. To conclude, we got the target share price of \$5 THB. For this method using price to book value.

Table 1.6 PBV

PBV Method	2017
Book Value of Equity Q3/2017	11,686.00
PBV Peers	1.424
Total Value	16,640.86
Outstanding Shares	3,333.00
Target Price	5.0

1.7.5 Weighting each method equally

Since, we got 3 results from the 3 methods from using relative valuation, it is better to be conservative to weight them equally to get the target price from the combination of these methods. To sum up, firstly we got the target price using PE method of \$5.46 THB then we got another target price using EV/EBITDA method of \$7.10 THB and the last method that we got target price from PBV at \$5.00 THB. As a result, if we take the average of the three methods, the target price of the three methods combined would be at \$5.85THB

Table 1.7 Weighting Each Method Equally

Relative Valuation Weighting Equally	Target Price
PE Method	5.46
EV/EBITDA Method	7.10
PBV Method	5.0
Average	5.85

1.8 Financial Analysis

1.8.1 Gross Profit Margin

ANAN's Gross Profit Margin seems to be more fluctuated comparing to the Gross Profit Margin of AP in the 5 years historical data. The main factor for the dip of GPM is how the company manages the cost of goods sold, which leads to the sources that come from labor cost, material cost, cost of construction and the cost of land. From the figure below, it indicates that for the management efficiency AP is able to maintain the certain percentage of the GPM over the past 5 years to be in the same range.

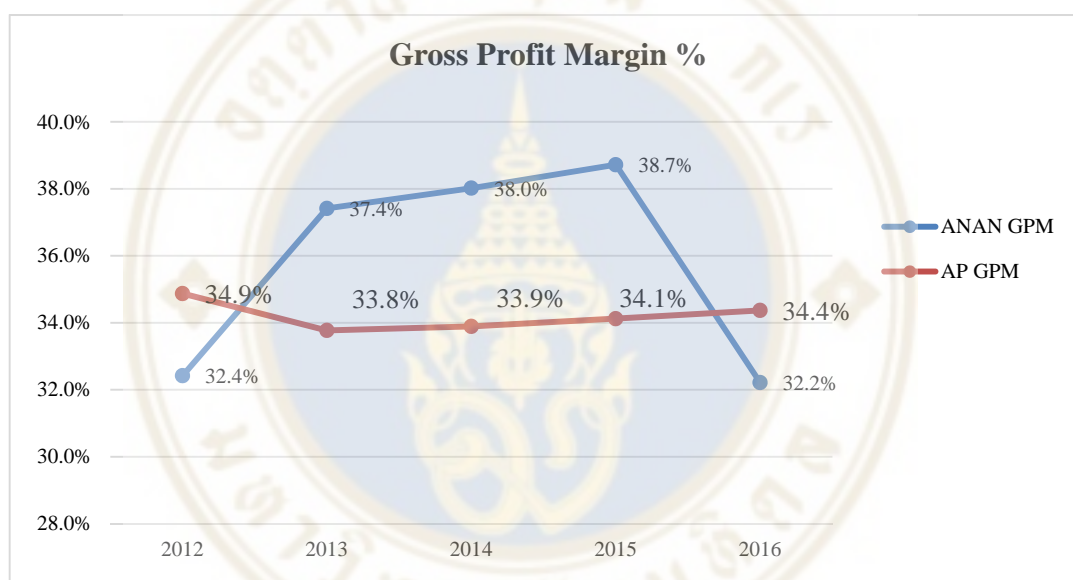


Figure 1.12 Gross Profit Margin

1.8.2 Net Profit Margin

ANAN and AP are really similar with less than 1% over the past two years. In 2012, ANAN got a negative earning that is why the Net Profit Margin is negative. In 2013, ANAN starting to make a comeback on how they manage their earning and started the joint venture with Mitsui Fudosan within that year as well. As time goes by, ANAN is able to manage their cost much more efficient and started to acquire more market share in the condominium industry to the year 2016.

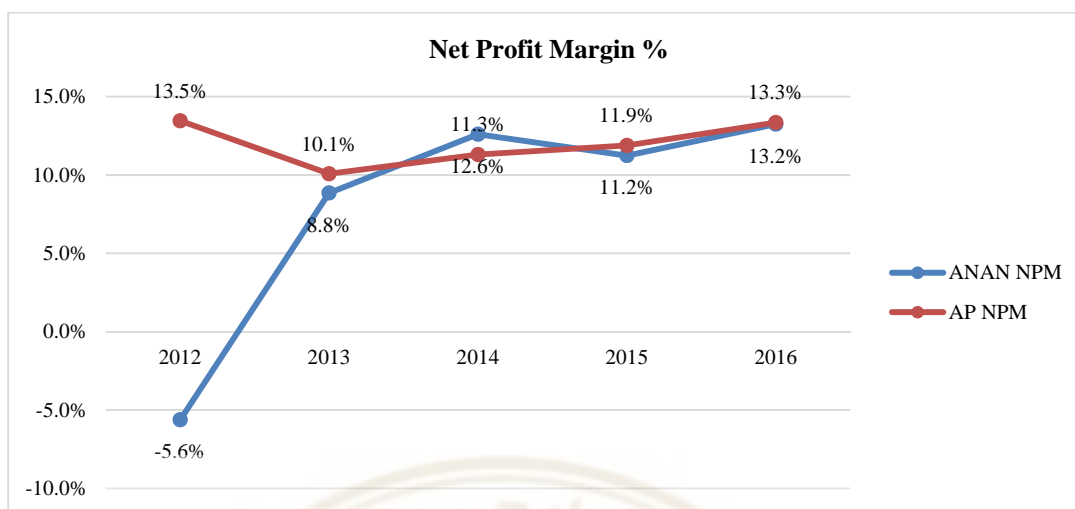


Figure 1.13 Net Profit Margin

1.8.3 Return on Assets

ANAN has been higher than AP over the past four years, the reason behinds this could be the ability to sales the assets is not that sufficient for AP. But in the Q3/2017 report, ANAN stated that their presale ability is the best of the industry.

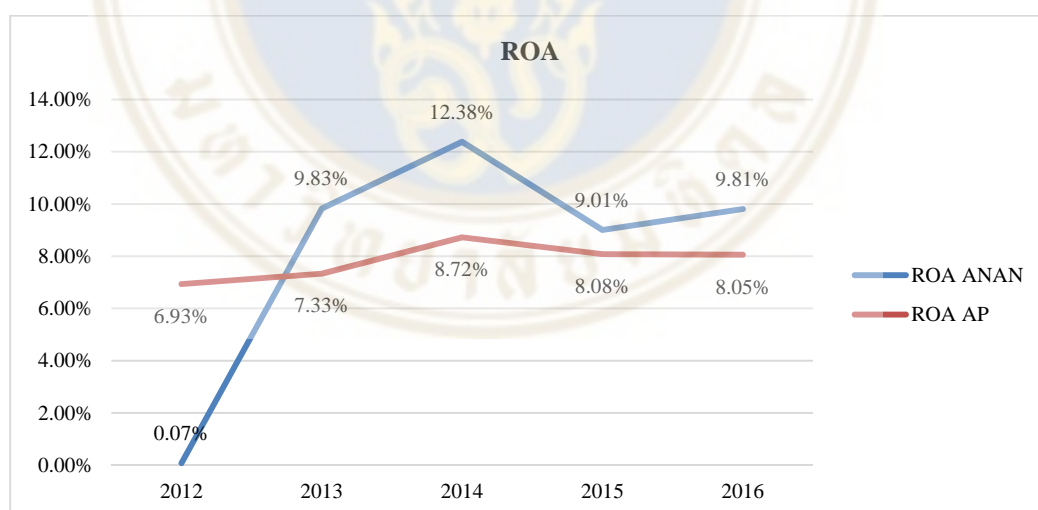


Figure 1.14 Return on Assets

Table 1.8 Return on Assets

	2012	2013	2014	2015	2016
NOPAT	19.84	923.78	1,528.48	1,460.29	1,836.28
Average TA 2 Periods	9,148.22	10,912.71	14,785.07	18,779.41	22,918.22
ROA	0.22%	8.47%	10.34%	7.78%	8.01%
Profit Margin(PM)	0.39%	10.07%	14.80%	13.60%	16.19%
TC	0.67	1.00	1.00	1.00	1.00
Tax Management	0.49	1.16	1.20	1.16	1.22
TATO	0.56	0.84	0.70	0.57	0.49
ROA ANAN	0.07%	9.83%	12.38%	9.01%	9.81%
	AP				
NOPAT	2,542.18	2,305.85	2,959.12	2,903.04	2,891.50
Average TA 2 Periods	28,727.31	31,860.92	34,986.59	35,855.28	36,968.48
ROA	8.85%	7.24%	8.46%	8.10%	7.82%
Profit Margin(PM)	14.7%	11.5%	12.8%	13.1%	14.3%
TC	0.67	1	1	1	1
Tax Management	1.18	1.01	1.03	1.00	1.03
TATO	0.60	0.63	0.66	0.62	0.55
ROA AP	6.93%	7.33%	8.72%	8.08%	8.05%

1.8.4 Return on Equity

Similarly to ROA, ANAN's ROE has been higher than AP for the past four years.

Table 1.9 Return on Equity

ANAN	2012	2013	2014	2015	2016
ROA	0.07%	9.83%	12.38%	9.01%	9.81%
EL	-14.49	0.88	0.85	0.83	0.82
CSL	0.01	2.02	2.31	2.40	2.35
ROE ANAN	-0.01%	17.45%	24.37%	17.87%	18.87%
AP	2012	2013	2014	2015	2016
ROA	6.93%	7.33%	8.72%	8.08%	8.05%
EL	0.92	0.87	0.88	0.90	0.93
CSL	2.48	2.40	2.34	2.14	1.99
ROE AP	15.75%	15.38%	18.07%	15.63%	15.01%

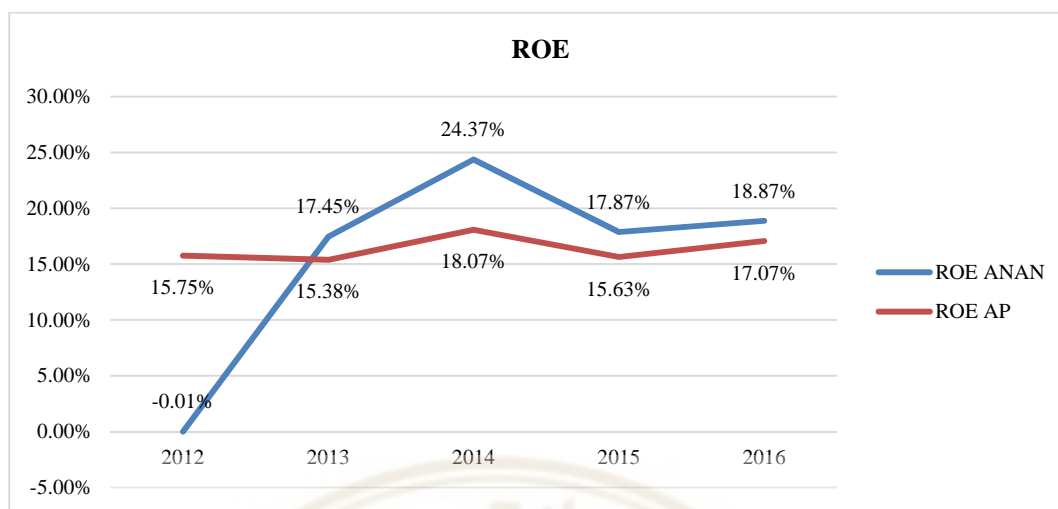


Figure 1.15 Return on Equity

1.8.5 Cash Conversion Cycle

Cash Conversion Cycle (days): ANAN really outperformed AP by a huge amount of CCC, which indicates that from the day of launching projects to the day of fully transferred that received the money back in full capital is much faster than AP. The reason is that as 90% of the real estate of revenue of ANAN is associated with condominium projects of mass-transit-railways, so the ability of customers for this segment is different comparing to the housing projects segment.

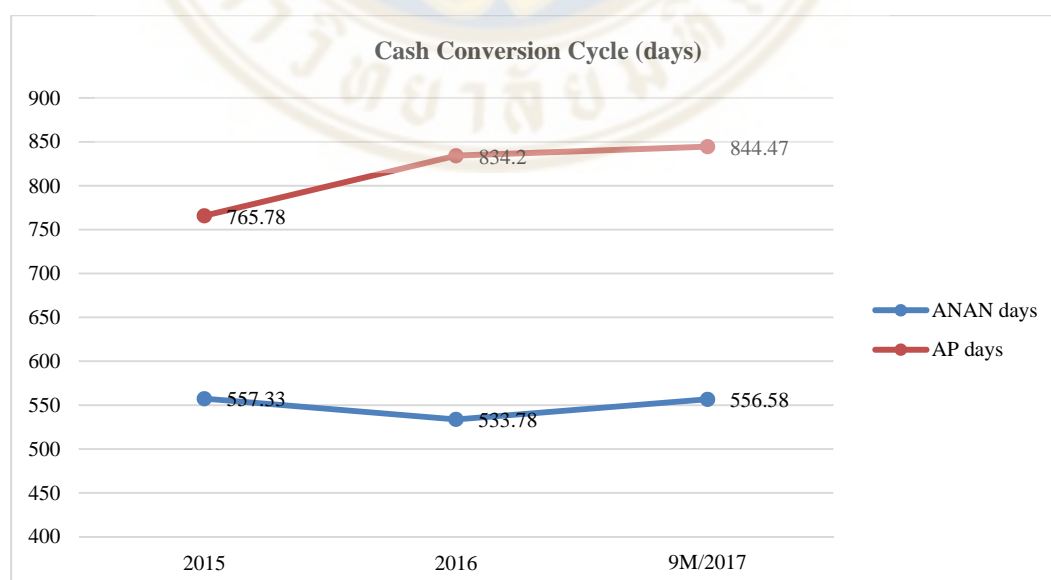


Figure 1.16 Cash Conversion Cycle (days)

1.8.6 Current Ratio

ANAN's Current Ratio is much worse than AP due to the fact that current ratio derived from the assumption of current assets divided by current liabilities, so if the company liquidate all their current assets to pay off for the short-term loan but for this real estate business this liquidity ratio is not proper to be used because for this industry, the work in progress, land cost, and construction fee are sum up in the inventories that is why it is really difficult to liquidate all these assets.

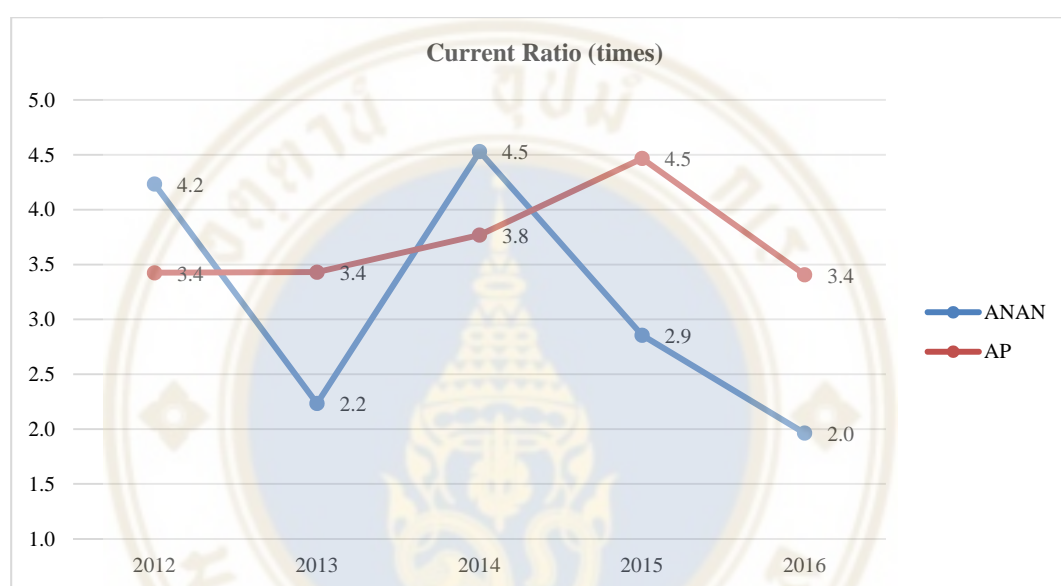


Figure 1.17 Current Ratio (times)

1.8.6.1 Quick Ratio: ANAN's Quick ratio is much better than AP due to the fact that for this ratio; inventories plays no role in this method. The assumption of quick ratio derived from (Cash + Marketable Securities + A/R) divided by current liabilities. So, by taking inventories out of the equation, it indicates that ANAN has more ability to pay off their short-term liabilities if it comes to the time that they have to liquidate their current assets except inventories to pay off for the short-term liabilities

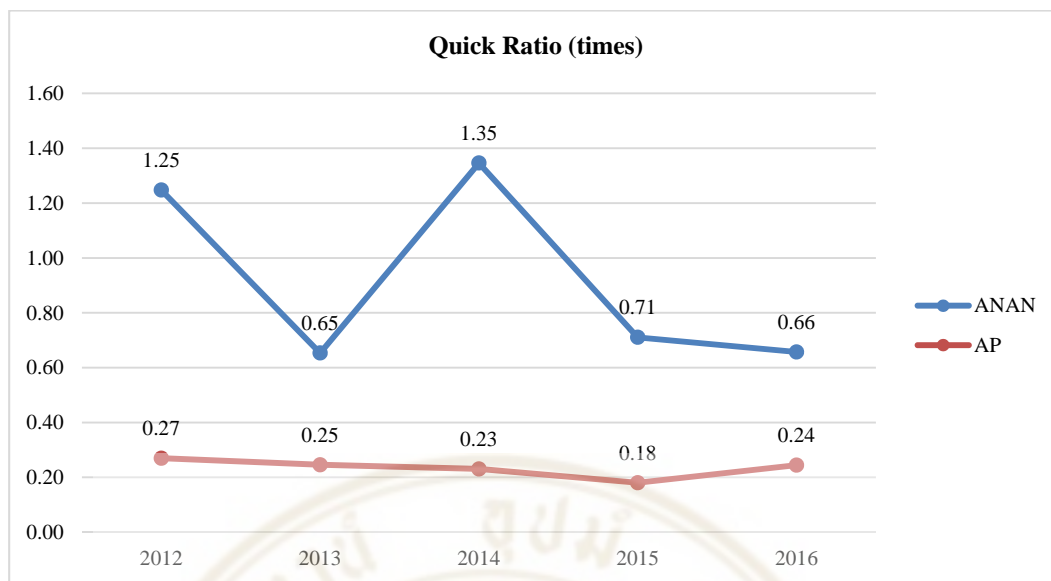


Figure 1.18 Quick Ratio (times)

1.8.6.2 Debt to Equity Ratio: ANAN has more debt to equity ratio than AP after they aimed to become the leading condominium developer in Thailand to provide the living solution along the mass-transit railways. ANAN decided to take more risk on this ratio by taking more debt in order for them to expand faster.

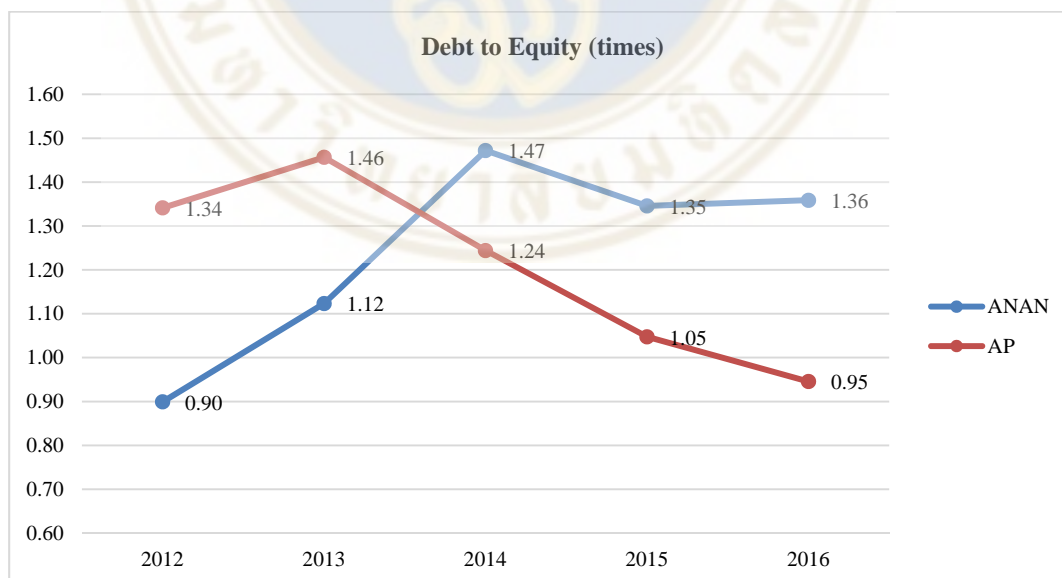


Figure 1.19 Debt to Equity (times)

1.8.6.3 Interest Coverage Ratio is the ability for the company to pay off the interest expense on their outstanding debt, there is doubt for this ratio that ANAN should be lower than AP, because ANAN is willing to take more debt on the D/E ratio above. Interest Coverage Ratio is derived from earnings before interest and taxes (EBIT) divided by the interest expense of the outstanding debt of that year.

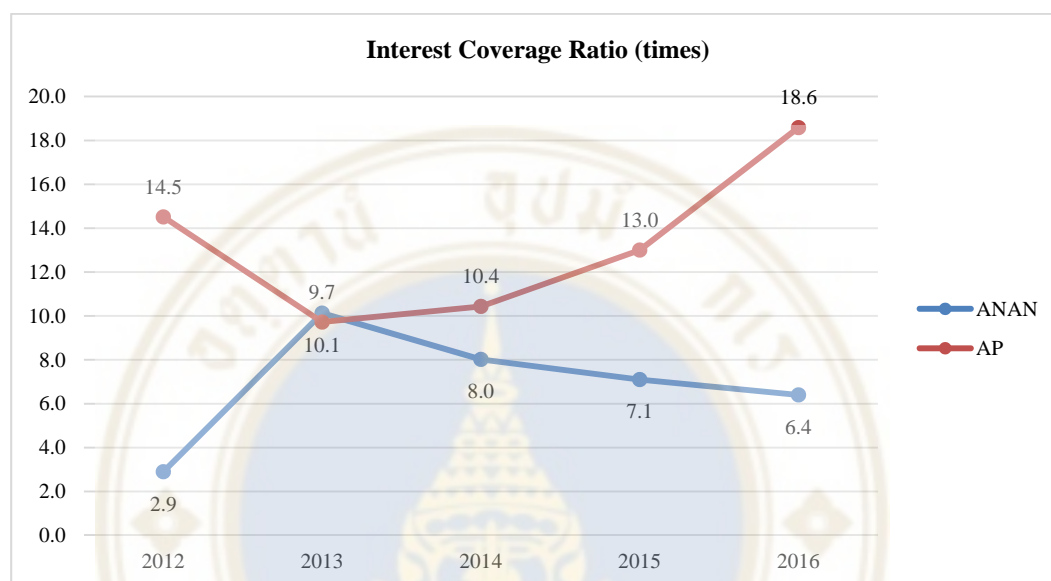


Figure 1.20 Interest Coverage Ratio (times)

1.9 Investment Risks and Downside Possibilities

1.9.1 Unexpected political issues

Thailand has always been one of the countries that uncertainty of political issues have huge negative impacts over the past decades, as far as we know that there will be a general election in the 2nd half of next year. Still, there is no clue that if there will be a protest right away after the election is done, but if there is a protest again then we will expect that the impact will be substantial to the overall market. The purchasing power will decrease, foreign investors will liquidate their holdings, interest rate will fluctuate, and the GDP will drop.

1.9.2 Delayed of BTS station openings

After all, constructing almost 3 times the number of existing BTS stations within 3 years seems to be unfeasible for the BTS group to achieve their goals. Since, looking back into their history there seems to be a delayed in construction progress which delayed for another quarter or two depends on the working capability that BTS assigned to each station. As 90% of the revenue from real estate of ANAN is associated with condominiums as ANAN launches projects along the mass-transit railways, and will be able to launch even more projects in the future, but due to the delayed of station opening, this factor might slow down and interrupt with ANAN's future plans that they set to achieve.

1.9.3 Operational Risk

1.9.3.1 Bond due in 2018: ANAN issued this ANAN185A corporate bond in 2015 with the total amount of 2 billion baht which will be due in May 2018. Since this is such a huge amount of money, ANAN needs to be ready to pay off the capital from this bond. In fact, ANAN might issue another corporate bond to cover this, since the company now is in the expansion phase, it is not worth it to pay in full amount as of now otherwise they might lose the opportunity to expand even further.

1.9.3.2 Material Cost: Due to the fact that there will be a rapidly growth of condominiums expansion along the mass-transit railways, the demand of construction materials will be high which could also lead to the higher price of material cost. Even though, ANAN has a protocol to deal with this issue by having a long-term contract with SHINRAI to develop pricing benchmarks for quality supplies and services, it is still unknown that if their supplier could be able to deliver enough material with acceptable price in the near future.

1.9.3.3 Labor Cost: Labor cost really plays a big role in real estate developing because in order to complete a project, there is tremendous workforce hours required to complete. Effectively, if the minimum wages increase, it will affect the cost of construction significantly, which will result in lower net income of ANAN.

1.9.3.4 Delayed projects due to shortage of constructors: As the real estate industry keeps on developing, this leads to the shortage of constructors despite the fact that Ananda has their own construction company "Helix", still 2/3 of

the projects still need to be taken care of by external constructors. This leads to the issue of expansion, since ANAN needs to expand rapidly in the years to come to satisfy the demand of consumers along the mass-transit railways, will they be able to complete their projects in the time manner that they expected, that is still questionable.

1.9.3.5 Unsold Inventories: This is the problem for every real estate company that each firm has to be concerned whether their projects will be able to sell or not, but Ananda has a great property agency of their own to manage this risk. even though the rate of cancellation, transfer rate, and mortgage rejection rate increase comparing the year before The management team did not worry about that due to the fact that these are still in the same rate as when they went for the IPO in 2012.



1.10 Appendices

1.10.1 Appendix A: Shareholding Structure

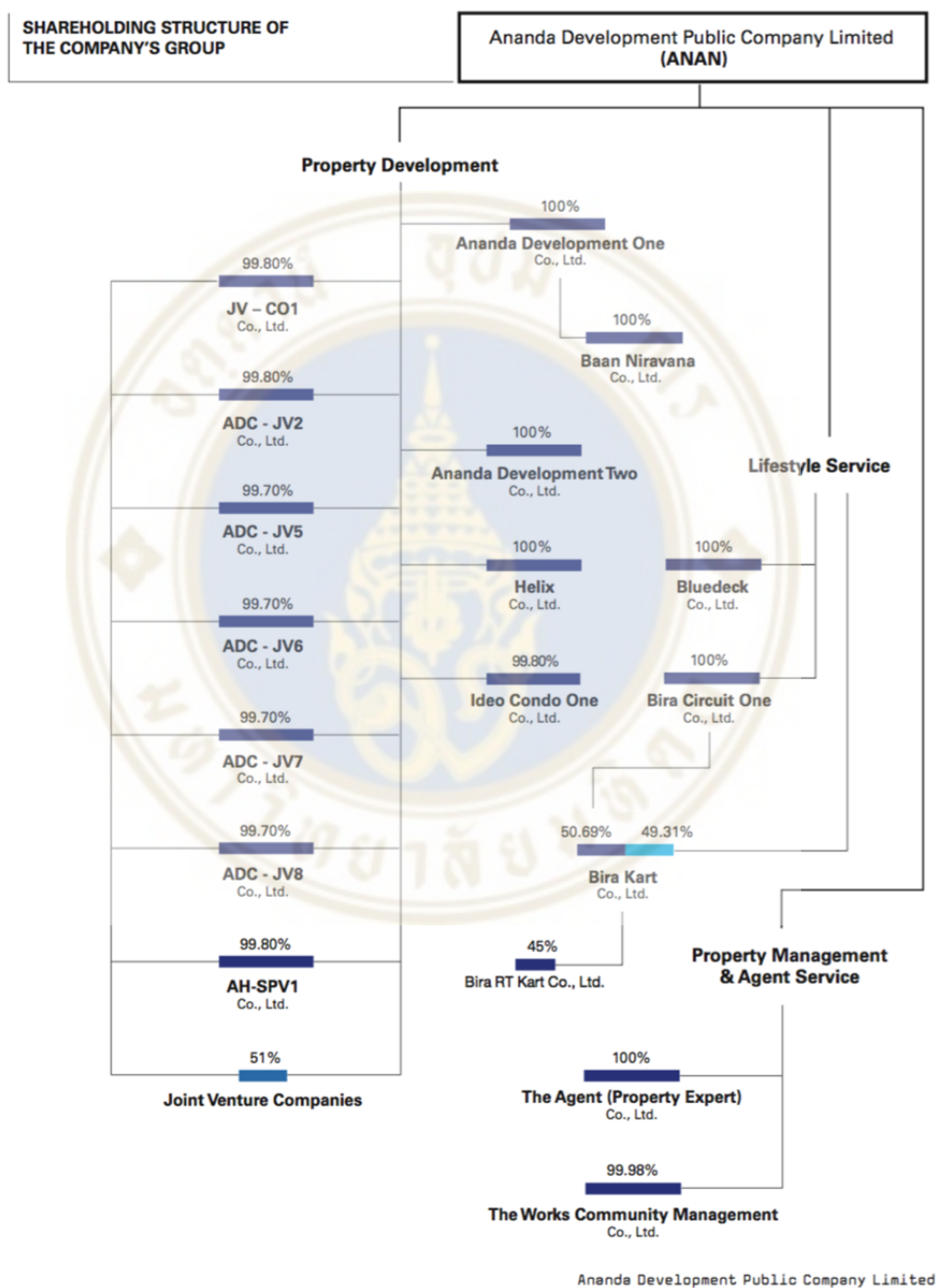
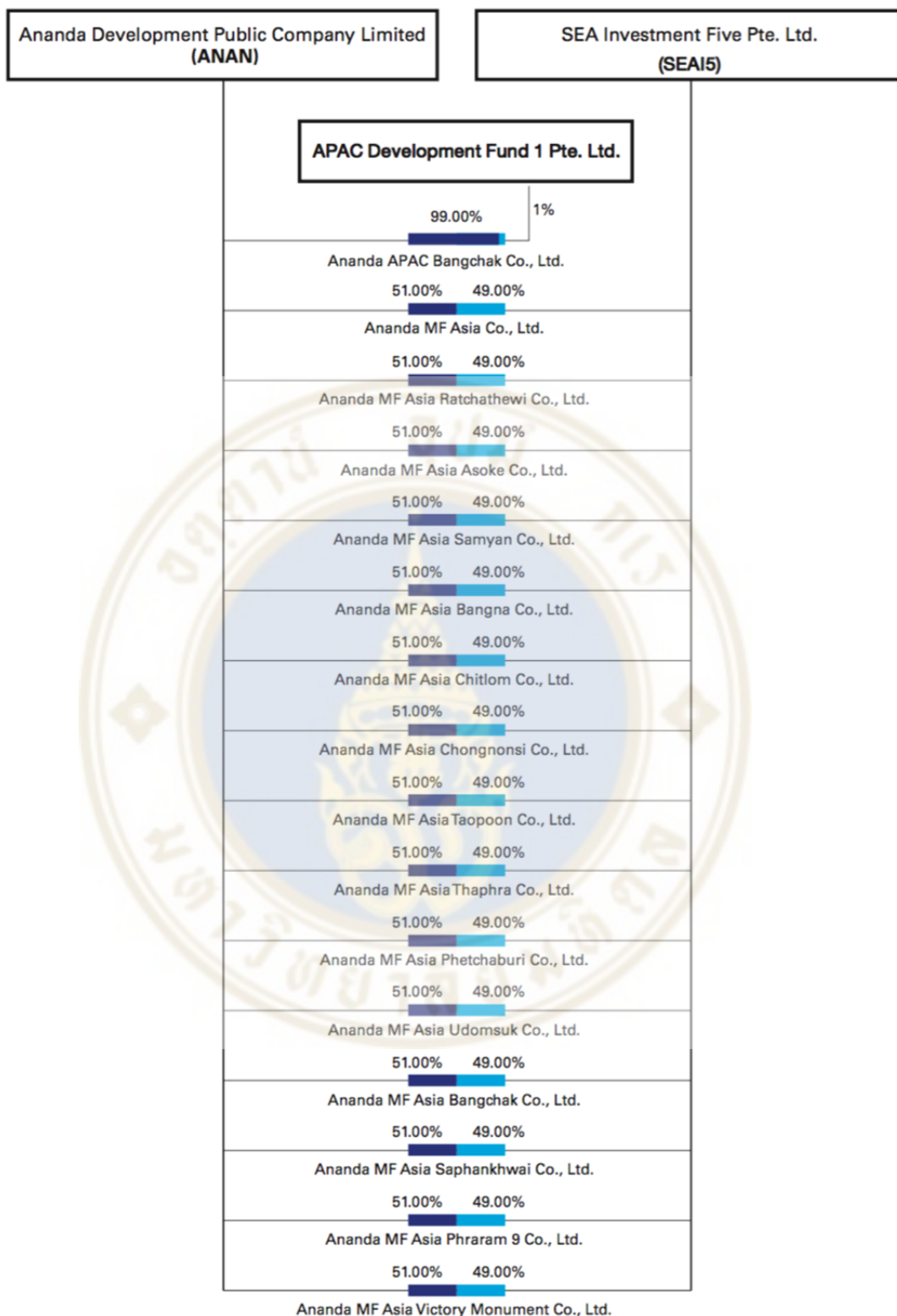


Figure 1.21 Shareholding Structure



Annual Report 2016

Figure 1.21 Shareholding Structure (cont.)

1.10.2 Appendix B: SWOT Analysis

SWOT Analysis

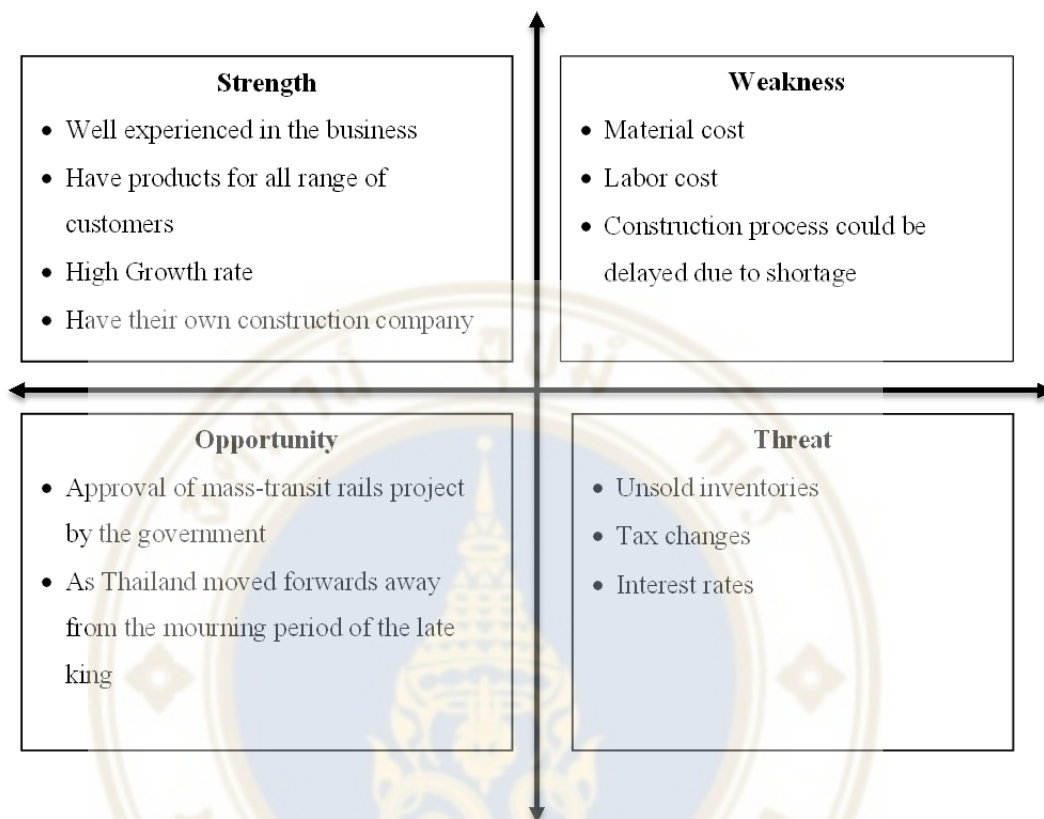


Figure 1.22 SWOT Analysis

1.10.2.1 Strengths

- Well experienced in this business field: Ananda is one of the leading real estate developers especially when it comes to the residential condominiums nearby the mass-transit stations. Since, the joint-venture with Mistui-Fudosan, the largest real estate develop in Japan, they have been expanding rapidly along with the expectation of high growth rate in the years to come.

- Having products throughout the whole range of customers: Ananda has all the products when it comes to condominiums, starting from the price of less than a million Baht all the way up to 15 million Baht, by having this whole range of products will attract customers in different classes that all aiming to have a property to live nearby mass-transit station in order to facilitate their commuting passage.

- **High Growth rate:** As Ananda projected that in the years to come most of their projects will be finished and the number of backlogs will decrease over time due to their efficiency of management. Moreover, as the Thai government has already approved the construction of increasing the travel distance of the mass-transit railways, there are still more rooms for Ananda to expand in the near future.

- **Having their own construction company:** Truly, this is one crucial fact that could be a game-changer for Ananda, because due to the shortage of constructors and in order to control the cost effectively, it is necessary for Ananda to implement this phase so that they can manage and assure that their projects will be finished accordingly to the scheduled time period. Soon, Helix will be responsible for 1/3 of Ananda real estate projects, they can also take external projects from other companies too. This can also be considered as risk diversification from the main business prospectively.

1.10.2.2 Weaknesses

- **Material Cost:** Ananda has got to face this issue same as other companies but due to their partnership among suppliers with (SHINRAI), they manage to develop pricing benchmarks to secure long-term contracts for quality supplies and services

- **Labor Cost:** Labor cost really plays a big role in real estate developing because in order to complete a project, there is tremendous workforce hours required to complete. Effectively, if the minimum wages increase, it will affect the cost of construction significantly.

- **Delayed projects due to shortage of constructors:** As the real estate industry keeps on developing, this leads to the shortage of constructors despite the fact that Ananda has their own construction company "Helix", still 2/3 of the projects still need to be taken care of by external constructors.

1.10.2.3 Opportunities

Approval of Mass-Transit Railways by the Thai Government:
As the Thai Government approved the project to the expand mass transit railways throughout the capital to improve the standard of living for the people in the capital, and since Ananda mainly focus on expanding their business of condominiums sector along with the number of stations of BTS and MRT. So we can conclude that as far as

the expansion of mass transit railways go, Ananda's business will expand even further as well.

- As the mourning period of the late king is out of the picture. We expect more buying power to come from customers than the last year Q4, even though Q4/2016 was a truly a bad time still the management team of Ananda could manage to pull off the sting to achieve their target sales of 2016. By this mean, we expect no less than the target sales to be achieve for this Q4. Moreover, due to delayed of transfer of products in Q3 that they seems to be struggle to achieve the actual forecast that they made, those delayed transfer unit will be recognized in this Q4/2017.

1.10.2.4 Threats

- Unsold Inventories: This is the problem for every real estate company that each firm has to be concerned whether their projects will be able to sell or not, but Ananda has a great property agency of their own to manage this risk. even though the rate of cancellation, transfer rate, and mortgage rejection rate increase comparing the year before The management team did not worry about that due to the fact that these are still in the same rate as when they went for the IPO in 2012.

- Tax changes: If the residential area tax increases, it will lead to the decrease of the demand of condominiums because those customers who buy condominiums for rent or to sell with expectation of future growth capital return, this target group of customers will have to think twice due to the fact that they now have to pay for the tax of residential property.

- Interest rate: Another main factor that can reduce the confidence level of consumers is the interest rate. If the interest in the unforeseeable future fluctuates a lot then the power of consumers will decrease because of the excess interest rate that they have to pay. Still this is unlikely to happen, most of the time that the interest rate increases so high is due to the recession.

1.10.3 Appendix C: Porter's Five Forces

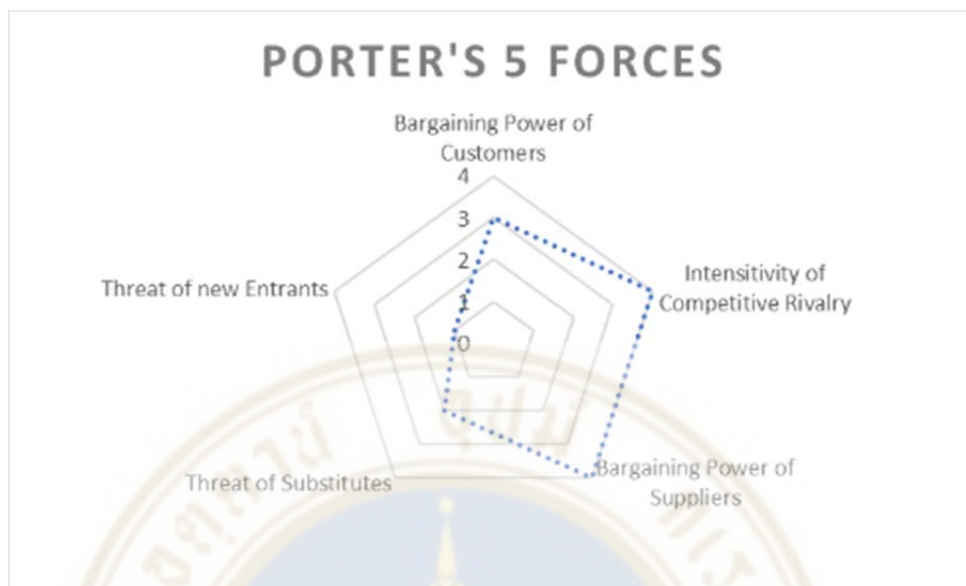


Figure 1.23 Porter's five forces

1.10.3.1 Threat of new entrants is low

- Cost of entry is very high due to huge capital requirements to build a large condominium project.
- Need specialist knowledge (Architects, Engineers etc.)
- Economies of scale are difficult to achieve due to limited land available inside cities like Bangkok.
- Product differentiation is possible if the company targets certain customers by designing their products in a certain way but often drastically reduces margins (high development cost).

1.10.3.2 Rivalry among existing firms is high

- Relative size and sheer number of competitors: Most of the firms that have premium locations around the city i.e. those near BTS and MRT are likely to be big, mature firms, while the more undesirable locations are usually owned by smaller companies. Those owned by the smaller players are mostly in cheaper locations around the city. They are also likely to not have good roads and other amenities near them. The condominium market is highly competitive with several major players fighting for market share.

- Industry growth rate: The industry has been growing at a faster pace in the past 5 years. This is thanks to a strong economy, the strong stock market and relative calm in the country's politics. Therefore, this led to increasing demand and increasing selling prices, which adds to the bottom line of the firms in the industry.

- Exit barriers are high since the inventories which mostly consist of construction work in progress are very illiquid and it would take a long time to just sell the business.

- Additionally the firm has obligations to customers years ahead which legally complicates exit barriers.

1.10.3.3 Bargaining power of buyers is medium

- At the moment, there are more mid-range condominiums than buyers in Bangkok, on the other hand, the demand for luxury units is still high, especially by foreigners. In the long-term, bargaining power of the customer will fluctuate but always be at least medium.

- Number of buyers relative to sellers: There is a high number of sellers in the industry, and this matches a high number of buyers. We can say the high demand is cancelled out by the high supply, therefore it isn't quite easy to find a niche.

- Most customers who are tenants do not buy more than one unit per purchase due to the cost of the product. Financial buyers often want deals that include discounts on larger purchases.

1.10.3.4 Bargaining power of suppliers is high

- There are many developers in Bangkok, but not many suppliers who can deliver the raw materials in such larger quantities and specific quality standards.

- One of the most important things in the industry to be profitable is to source supplies at low cost which becomes more and more difficult since prices have risen.

- The work force is a supplier too and due to the construction boom, workforce is becoming more and more expensive.

1.10.3.5 Threat of substitute products is low

- Relative price of substitute: Living outside Bangkok means abandoning the many amenities and services that can only be offered in the city. It means additional transportation costs and waste of more time stuck in the traffic.

- Relative quality of substitute: We do not believe that apartments outside Bangkok are on par with those offered in the city. We believe that since most rich professionals and business people are most likely to reside in the city than in the countryside, then this suggests that most of the quality work will be confined to Bangkok.

1.10.4 Appendix D: Sensitivity Analysis

Table 1.10 Sensitivity Analysis on Growth Rates

		High Growth						
WACC	\$8.25	7.00%	8.00%	9.00%	10.00%	11.00%	12.00%	13.00%
	6.57%	9.47	10.01	10.56	11.11	11.67	12.24	12.81
	7.07%	8.51	9.01	9.51	10.02	10.53	11.05	11.57
	7.57%	7.69	8.15	8.61	9.08	9.54	10.02	10.49
	8.07%	6.98	7.40	7.82	8.25	8.68	9.12	9.56
	8.57%	6.35	6.74	7.13	7.53	7.93	8.33	8.74
	9.07%	5.79	6.15	6.52	6.89	7.26	7.63	8.01
	9.57%	5.29	5.63	5.97	6.32	6.66	7.01	7.37

		Transition Growth						
WACC	\$8.25	4.50%	5%	5.50%	6%	6.50%	7%	7.50%
	6.57%	10.72	10.85	10.98	11.11	11.25	11.38	11.51
	7.07%	9.66	9.78	9.90	10.02	10.14	10.26	10.38
	7.57%	8.75	8.86	8.97	9.08	9.18	9.29	9.40
	8.07%	7.95	8.05	8.15	8.25	8.35	8.45	8.55
	8.57%	7.25	7.34	7.43	7.53	7.62	7.71	7.80
	9.07%	6.63	6.72	6.80	6.89	6.97	7.06	7.14
	9.57%	6.08	6.16	6.24	6.32	6.39	6.47	6.55

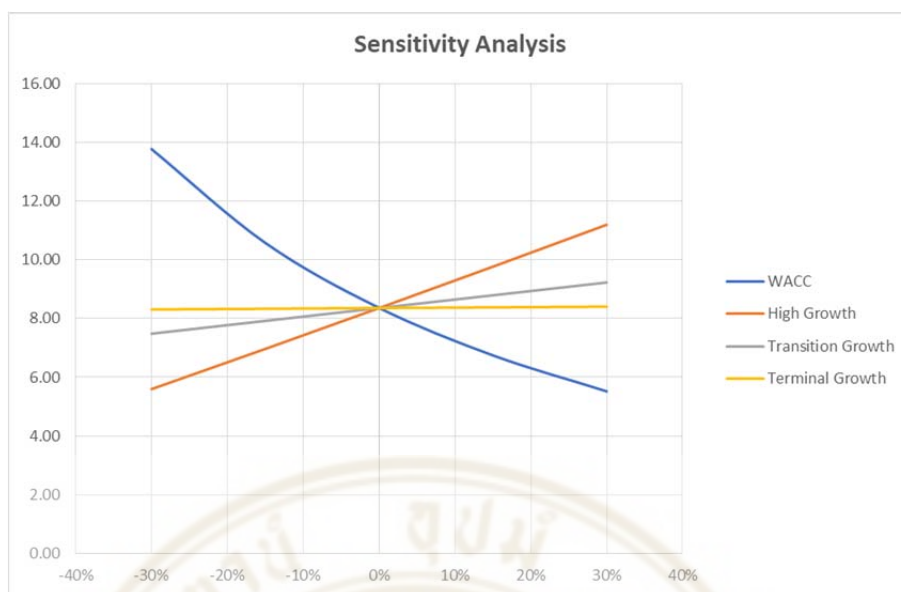


Figure 1.24 Sensitivity Analysis

Table 1.11 Sensitivity Analysis on Selling Expenses

	Selling Expenses							
Admin Expenses	\$8.25	8.19%	8.69%	9.19%	9.7%	10.19%	10.69%	11.19%
	8.70%	10.78	10.35	9.93	9.51	9.09	8.67	8.25
	9.20%	10.35	9.93	9.51	9.09	8.67	8.25	7.82
	9.70%	9.93	9.51	9.09	8.67	8.25	7.82	7.40
	10.2%	9.51	9.09	8.67	8.25	7.82	7.40	6.98
	10.70%	9.09	8.67	8.25	7.82	7.40	6.98	6.56
	11.20%	8.67	8.25	7.82	7.40	6.98	6.56	6.14
	11.70%	8.25	7.82	7.40	6.98	6.56	6.14	5.71

Table 1.12 Sensitivity Analysis on Minimum Wages

	Minimum Wage							
COGS	\$8.25	-8.00%	-3.00%	2.00%	7.00%	12.00%	17.00%	22.00%
	59.28%	9.58	9.48	9.37	9.27	9.16	9.06	8.95
	59.78%	9.24	9.14	9.03	8.93	8.82	8.72	8.61
	60.28%	8.90	8.80	8.69	8.59	8.48	8.38	8.27
	60.78%	8.56	8.46	8.35	8.25	8.14	8.04	7.93
	61.28%	8.22	8.11	8.01	7.90	7.80	7.69	7.59
	61.78%	7.88	7.77	7.67	7.56	7.46	7.35	7.25
	62.28%	7.54	7.43	7.33	7.22	7.12	7.01	6.91

1.10.5 Appendix E: Scenario Analysis

Table 1.13 Scenario Analysis

		Price				Price	
%Deviation fr		WACC	THB 8.25	%Deviation fr		Transition Gro	THB 8.25
-30%	5.6%	13.65		-30%	4.2%	7.88	
-15%	6.9%	10.46		-15%	5.1%	8.06	
0%	8.1%	8.25		0%	6.0%	8.25	
15%	9.3%	6.64		15%	6.9%	8.43	
30%	10.5%	5.41		30%	7.8%	8.61	
		Price				Price	
%Deviation fr		High Growth	THB 8.25	%Deviation fr		Terminal Gro	THB 8.25
-30%	7.0%	6.97		-30%	1.4%	8.20	
-15%	8.5%	7.60		-15%	1.7%	8.22	
0%	10.0%	8.25		0%	2.0%	8.25	
15%	11.5%	8.90		15%	2.3%	8.27	
30%	13.0%	9.55		30%	2.6%	8.29	

1.10.6 Appendix F: Risk Matrix

Table 1.14 Risk Matrix

		SEVERITY			
		ACCEPTABLE	TOLERABLE	UNDESIRABLE	INTOLERABLE
LIKELIHOOD	IMPROBABLE RISK IS UNLIKELY TO OCCUR	LOW Industry consolidation	MEDIUM Rental rate increase	MEDIUM Economic downturn & political issues	HIGH High Competition
	POSSIBLE RISK WILL LIKELY OCCUR	LOW	MEDIUM Housing Price Increase	HIGH Land Price Increase	EXTREME BTS line delay effect on High Growth
	PROBABLE RISK WILL OCCUR	MEDIUM Minimum wage increase	HIGH Mortgage rejection rate	HIGH	EXTREME

1.10.7 Appendix G: Historical Income Statement and Projections

Table 1.15 Historical Income Statement and Projections

Units in (Million Baht)

Pro Forma (Units in Million THB)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Income Statement Forecast										
Revenues				8%	-8%	64%	18%	10%	10%	6%
REVENUES FROM SALES OF REAL ESTATE	9,678	9,598	9,780	10,546.00	9,710.00	15,924.00	18,733.00	20,606.30	22,666.93	24,026.95
REVENUES FROM PROJECT MANAGEMENT SERVICES	265	696	853	695.15	661.03	1,064.28	1,255.47	1,381.01	1,519.11	1,610.26
REVENUES FROM CONSTRUCTION CONTRACTS	5	45	539	571.90	543.83	875.58	1,032.86	1,136.15	1,249.76	1,324.75
REVENUES FROM COMMISSION INCOME	257	265	390	353.13	335.80	540.64	637.76	701.54	771.69	818.00
REVENUES FROM SERVICE INCOME	93	107	142	132.60	126.09	203.01	239.48	263.43	289.77	307.16
REVENUES FROM SALES OF FOOD AND BEVERAGES	30	29	25	33.23	31.60	50.87	60.01	66.01	72.61	76.97
OTHER INCOME	252	285	500	397.59	378.08	608.72	718.07	789.87	868.86	920.99
Ananda Revenue	10,580	11,025	12,230	12,730	11,786	19,267	22,677	24,944	27,439	29,085
SHARES OF PROFITS FROM INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD	-293	-477	115	236.59	543.35	584.18	740.64	814.71	896.18	949.95
TOTAL REVENUES	10,287	10,549	12,345	12,966	12,330	19,851	23,417	25,759	28,335	30,035
Expenses										
COST OF SALES OF REAL ESTATE	6,118	6,002	6,473	6,747.04	6,212.19	10,187.73	11,984.85	13,183.34	14,501.67	15,371.77
COST OF PROJECT MANAGEMENT SERVICES	96	315	412	300.46	285.72	460.01	542.65	596.91	656.60	696.00
COST OF CONSTRUCTION SERVICE	5	41	493	520.63	495.08	797.09	940.27	1,034.30	1,137.73	1,206.00
COST OF COMMISSION INCOME	111	135	193	169.13	160.83	258.94	305.45	336.00	369.60	391.77
COST OF SERVICES	61	89	106	99.04	94.18	151.63	178.86	196.75	216.43	229.41
COST OF SALES OF FOOD AND BEVERAGES	11	12	10	13.25	12.60	20.28	23.92	26.32	28.95	30.69
SELLING EXPENSES	1,048	1,151	1,016	1,233.60	1,142.20	1,867.14	2,197.55	2,417.31	2,659.04	2,818.58
ADMINISTRATIVE EXPENSES	1,012	1,151	1,500	1,298.72	1,202.49	1,965.70	2,313.55	2,544.91	2,799.40	2,967.36
TOTAL EXPENSES	8,464	8,748	10,203	10,382	9,605	15,709	18,487	20,336	22,369	23,712
EBIT	1,823	1,801	2,143	2,584.33	2,724.50	4,142.76	4,930.17	5,423.18	5,965.50	6,323.43
FINANCE COSTS	227.31	253.64	334.84	372.75	340.19	259.83	492.79	553.99	564.26	575.02
EBT	1,595.95	1,547.45	1,808.74	2,211.57	2,384.31	3,882.93	4,437.37	4,869.19	5,401.24	5,748.42
INCOME TAX EXPENSES	294.41	340.81	306.30	442.31	476.86	776.59	887.47	973.84	1,080.25	1,149.68
NET PROFIT (LOSS)	1,301.53	1,206.64	1,501.44	1,769.26	1,907.45	3,106.35	3,549.90	3,895.35	4,320.99	4,598.73

1.10.8 Appendix H: Common Size Income Statement and Trend

Table 1.16 Common Size Income Statement and Trend

(Unit: THB)	AP	ANANDA				
	2016	2016	2015	2014	2013	2012
Income Statement						
REVENUES FROM SALE OF GOODS AND RENDERING OF SERVICES	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
OTHER INCOME	1.0%	7.8%	2.7%	2.4%	0.6%	0.7%
INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD	1.8%	1.0%	-	-	0.0%	0.2%
TOTAL REVENUES	102.8%	108.9%	102.7%	102.4%	100.6%	100.9%
COST OF SALE OF GOODS AND RENDERING OF SERVICES	65.6%	67.8%	61.3%	62.0%	62.6%	67.6%
SELLING AND ADMINISTRATIVE EXPENSES	19.8%	22.2%	20.2%	19.9%	23.3%	25.3%
OTHER EXPENSES	0.0%	-	-	0.0%	1.3%	6.9%
ACCOUNTED FOR USING THE EQUITY METHOD	0.0%	-	4.4%	2.8%	1.0%	-
TOTAL EXPENSES	85.5%	90.0%	85.9%	84.8%	88.2%	99.7%
EBIT	14.5%	18.9%	16.8%	17.6%	12.4%	1.1%
FINANCE COSTS	0.9%	3.0%	2.4%	2.2%	1.2%	0.4%
OTHER ITEMS	0.0%	-	-	-	-	5.6%
INCOME TAX EXPENSES	3.1%	2.7%	3.2%	2.9%	2.3%	0.7%
NET PROFIT (LOSS)	10.6%	13.2%	11.2%	12.6%	8.8%	-5.6%

(Unit: THB)		2016	2015	2014	2013	2012
Income Statement						
	COGR					
REVENUES FROM SALE OF GOODS AND RENDERING OF SERVICES	17.3%	222.2%	210.5%	202.4%	179.8%	100.0%
OTHER INCOME	90.5%	2510.1%	804.2%	710.4%	153.8%	100.0%
SHARES OF PROFITS FROM INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD	69.1%	1383.0%	-	-	1.2%	100.0%
TOTAL REVENUES	19.1%	239.9%	214.2%	205.6%	179.3%	100.0%
COST OF SALE OF GOODS AND RENDERING OF SERVICES	17.4%	222.9%	190.9%	185.6%	166.5%	100.0%
SELLING AND ADMINISTRATIVE EXPENSES	14.3%	194.9%	167.8%	159.5%	165.5%	100.0%
OTHER EXPENSES	-	-	-	0.9%	34.2%	100.0%
SHARES OF LOSSES FROM INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD	-	-	507.2%	311.6%	100.0%	-
TOTAL EXPENSES	14.9%	200.5%	181.2%	172.1%	159.0%	100.0%
EBIT	106.3%	3736.2%	3140.7%	3178.7%	1982.2%	100.0%
FINANCE COSTS	76.1%	1693.3%	1282.7%	1149.5%	567.6%	100.0%
OTHER ITEMS	-100.0%	-	-	-	-	100.0%
INCOME TAX EXPENSES	52.2%	816.7%	908.7%	785.0%	567.7%	100.0%
NET PROFIT (LOSS)	39.2%	522.3%	419.8%	452.7%	282.3%	100.0%

1.10.9 Appendix I: Historical Balance Sheet and Projections

Table 1.17 Historical Balance Sheet and Projections

Units in (Million Baht)

		2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Balance Sheets											
CASH AND CASH EQUIVALENTS	11.89%	2,477.26	2,573.39	2,182.74	3,054.57	2,882.09	4,171.60	4,754.96	5,143.90	5,571.74	5,854.11
SHORT-TERM INVESTMENTS	Constant	-	-	500.06	500.06	500.06	500.06	500.06	500.06	500.06	500.06
TRADE ACCOUNTS AND OTHER RECEIVABLE	11.28%	27.58	121.92	369.08	201.51	191.62	308.51	363.93	400.32	440.35	466.77
UNBILLED RECEIVABLES	0.45%	-	20.11	230.57	115.99	109.44	158.40	180.56	195.32	211.57	222.29
ADVANCES AND SHORT-TERM LOANS	2.17%	-	-	1,647.64	556.19	524.78	759.58	865.80	936.62	1,014.52	1,065.94
CURRENT PORTION OF LONG-TERM LOANS	2.40%	-	319.02	979.74	452.27	420.42	658.55	766.28	838.10	917.11	969.25
INVENTORIES	186%	10,012.47	12,126.57	12,473.77	12,558.58	11,563.04	18,962.90	22,307.97	24,538.77	26,992.64	28,612.20
OTHER CURRENT ASSETS	5.44%	1,726.97	981.58	361.83	1,398.09	1,319.15	1,909.36	2,176.37	2,354.39	2,550.21	2,679.45
TOTAL CURRENT ASSETS		14,244.29	16,142.59	18,745.44	18,837.26	17,510.59	27,428.98	31,915.92	34,907.49	38,198.21	40,370.08
CASH RESTRICTED OR PLEDGED	1.45%	408.34	167.61	288.45	372.10	351.09	508.17	579.23	626.61	678.73	713.12
INVESTMENT IN ASSOCIATES	Constant	781.16	2,025.70	3,329.06	3,329.06	3,329.06	3,329.06	3,329.06	3,329.06	3,329.06	3,329.06
JOINT VENTURES AND/OR JOINTLY-CONTROL ENTITIES, EQUITY METHOD											
INVESTMENT PROPERTIES - NET	1.12%	173.71	260.73	267.57	286.43	270.26	391.17	445.88	482.35	522.46	548.94
NET OF CURRENT PORTION OF LONG-TERM LOANS	25.20%	765.89	1,122.16	1,505.43	1,726.34	1,695.13	1,928.48	2,034.05	2,104.43	2,181.86	2,232.95
PROPERTY, PLANT AND EQUIPMENTS - NET	2.98%	490.72	516.81	902.50	766.73	723.43	1,047.11	1,193.54	1,291.17	1,398.56	1,469.43
INTANGIBLE ASSETS - NET	3.32%	101.83	154.63	185.68	227.40	223.29	254.02	267.93	277.20	287.40	294.13
DEFERRED TAX ASSETS	0.40%	104.67	50.71	84.36	102.14	96.37	139.49	158.99	172.00	186.30	195.75
OTHER NON-CURRENT ASSETS	0.16%	17.68	29.59	57.42	40.62	38.33	55.47	63.23	68.40	74.09	77.85
TOTAL NON-CURRENT ASSETS		2,844.01	4,327.94	6,620.47	6,850.81	6,726.95	7,652.99	8,071.91	8,351.22	8,658.46	8,861.24
TOTAL ASSETS		17,088.29	20,470.53	25,365.91	25,688.07	24,237.54	35,081.96	39,987.84	43,258.71	46,856.67	49,231.32

Table 1.17 Historical Balance Sheet and Projections (cont.)

Balance Sheets	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
LIABILITIES										
BANK OVERDRAFTS AND SHORT-TERM BORROWINGS FROM FINANCIAL INSTITUTIONS	-	-	854.02	259.80	198.43	376.35	423.09	430.93	439.14	417.59
TRADE ACCOUNTS AND OTHER PAYABLE	1,063.91	1,067.01	1,382.88	1,066.89	814.65	2,746.56	2,393.99	2,407.14	2,647.85	2,653.44
UNBILLED CONSTRUCTION COST FROM SUPPLIER	11.32	26.41	45.93	30.27	26.19	44.87	51.68	54.96	58.50	59.43
OTHER SHORT-TERM ACCOUNT PAYABLES - NET	-	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LONG-TERM BORROWINGS FROM FINANCIAL INSTITUTIONS	-	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LONG-TERM BORROWINGS FROM OTHER PARTIES	-	298.81	149.92	159.72	121.99	231.38	260.11	264.93	269.98	256.73
FINANCE LEASE LIABILITIES	11.98	22.86	15.86	18.78	14.34	27.21	30.58	31.15	31.75	30.19
DEBENTURES AND DEBT CERTIFICATES	650.00	2,390.56	4,994.65	2,715.93	2,074.37	3,934.28	4,422.88	4,504.87	4,590.73	4,365.43
CURRENT PORTION OF DEFERRED INCOME	-	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CURRENT PORTION OF ADVANCES RECEIVED FROM CUSTOMERS	814.20	1,221.30	1,468.77	1,916.74	2,026.61	1,872.52	3,064.67	3,606.35	3,966.99	4,363.69
SHORT-TERM PROVISIONS	96.03	173.90	238.65	201.42	190.05	275.08	313.55	339.19	367.41	386.03
OTHER CURRENT LIABILITIES	497.10	452.03	396.21	571.92	539.62	781.06	890.29	963.11	1,043.21	1,096.08
CORPORATE INCOME TAX PAYABLE	179.74	160.02	99.47	184.28	173.88	251.67	286.87	310.33	336.14	353.18
AMOUNT OF RETENTION ON CONSTRUCTION CONTRACTS	250.67	231.12	217.53	298.27	281.43	407.35	464.31	502.29	544.07	571.64
OTHER CURRENT LIABILITIES - OTHERS	66.68	60.89	79.21	89.36	84.32	122.04	139.11	150.49	163.00	171.26
TOTAL CURRENT LIABILITIES	3,145	5,653	9,547	6,941.48	6,006.26	10,289.29	11,850.83	12,602.64	13,415.56	13,628.61
LONG-TERM BORROWINGS FROM FINANCIAL INSTITUTIONS	-	-	-	0	0	0	0	0	0	0
LONG-TERM BORROWINGS FROM OTHER PARTIES	594	7	947	550	420	797	896	913	930	884
FINANCE LEASE LIABILITIES	22	30	13	25	19	36	40	41	42	40
DEBENTURES AND DEBT CERTIFICATES	6,370	5,986	3,991	6,279	4,796	9,095	10,225	10,415	10,613	10,092

Table 1.17 Historical Balance Sheet and Projections (cont.)

Balance Sheets	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
NET OF CURRENT PORTION OF OTHER ACCOUNT PAYABLES	-	-	-	0	0	0	0	0	0	0
OTHER PARTIES	-	-	-	0	0	0	0	0	0	0
LONG-TERM PROVISIONS	-	-	32	32	32	32	32	32	32	32
NET OF CURRENT PORTION OF POST EMPLOYEE BENEFIT OBLIGATIONS	37	50	64	61	58	83	95	103	111	117
DEFERRED TAX LIABILITIES	8	8	7	9	7	13	14	15	15	14
OTHER NON-CURRENT LIABILITIES	-	10	10	8	6	12	14	14	14	13
OTHER NON-CURRENT LIABILITIES - OTHERS	-	-	-	0	0	0	0	0	0	0
TOTAL NON-CURRENT LIABILITIES	7,031	6,090	5,065	6,964	5,338	10,068	11,316	11,531	11,757	11,193
TOTAL LIABILITIES	10,175	11,743	14,612	13,905.51	11,343.83	20,357.78	23,167.04	24,134.03	25,172.73	24,821.47
Equity										
AUTHORIZED SHARE CAPITAL ISSUED AND FULLY PAID-UP	333	333	333	333	333	333	333	333	333	333
SHARE CAPITAL	333	333	333	333	333	333	333	333	333	333
PREMIUM (DISCOUNT) ON SHARE CAPITAL	5,210	5,169	5,159	5,159	5,159	5,159	5,159	5,159	5,159	5,159
Retained Earnings (Deficit)										
RETAINED EARNINGS - APPROPRIATED	33	33	33	33	33	33	33	33	33	33
RETAINED EARNINGS (DEFICIT) - UNAPPROPRIATED	1,332	2,188	3,225	4,252.98	5,364.11	7,194.59	9,291.20	11,595.08	14,154.35	16,880.26
OTHER COMPONENTS OF EQUITY	4	1,004	2,003	2,003	2,003	2,003	2,003	2,003	2,003	2,003
TOTAL EQUITY	6,913	8,727	10,754	11,783	12,894	14,724	16,821	19,125	21,684	24,410

Table 1.18 Common Size Balance Sheet and Trend (cont.)

	AP	ANAN				
	2016	2016	2015	2014	2013	2012
LIABILITIES AND SHAREHOLDER'S EQUITY						
BANK OVERDRAFTS AND SHORT-TERM BORROWINGS	5,3%	3.4%	-	-	-	-
TRADE ACCOUNTS AND OTHER PAYABLE	2.4%	5.5%	5.2%	6.2%	7.9%	3.7%
UNBILLED CONSTRUCTION COST FROM SUPPLIER	-	0.2%	0.1%	0.1%	0.1%	0.0%
OTHER SHORT-TERM ACCOUNT PAYABLES - NET	-	-	-	-	22.8%	5.4%
CURRENT PORTION OF LONG-TERM LIABILITIES	11.8%	20.3%	13.2%	3.9%	0.5%	0.5%
CURRENT PORTION OF DEFERRED INCOME	-	-	-	-	0.1%	-
CURRENT PORTION OF ADVANCES RECEIVED FROM CUSTOMERS	1.4%	5.8%	6.0%	4.8%	6.5%	8.5%
SHORT-TERM PROVISIONS	-	0.9%	0.8%	0.6%	-	-
OTHER CURRENT LIABILITIES	4.8%	1.6%	2.2%	2.9%	2.2%	3.5%
TOTAL CURRENT LIABILITIES	25.7%	37.6%	27.6%	18.4%	40.2%	21.6%
NET OF CURRENT PORTION OF LONG-TERM LIABILITIES	22.0%	19.5%	29.4%	40.9%	12.4%	22.6%
NET OF CURRENT PORTION OF OTHER ACCOUNT PAYABLES		-	-	-	-	2.7%
LONG-TERM PROVISIONS		0.1%	-	-	-	-
NET OF CURRENT PORTION OF POST EMPLOYEE BENEFIT OBLIGATIONS	0.3%	0.3%	0.2%	0.2%	0.2%	0.2%
DEFERRED TAX LIABILITIES		0.0%	0.0%	0.0%	0.1%	0.3%
OTHER NON-CURRENT LIABILITIES	0.7%	0.0%	0.0%	-	-	-
TOTAL NON-CURRENT LIABILITIES	22.9%	20.0%	29.8%	41.1%	12.7%	25.8%
TOTAL LIABILITIES	48.6%	57.6%	57.4%	59.5%	52.9%	47.3%
	2016	2016	2015	2014	2013	2012
Equity	AP	ANAN				
ISSUED AND FULLY PAID-UP SHARE CAPITAL	8.3%	1.3%	1.6%	2.0%	2.7%	3.6%
PREMIUM (DISCOUNT) ON SHARE CAPITAL	0.2%	20.3%	25.3%	30.5%	41.7%	55.8%
RETAINED EARNINGS (DEFICIT)	42.8%	12.8%	10.8%	8.0%	2.7%	-6.8%
OTHER COMPONENTS OF EQUITY		7.9%	4.9%	0.0%	0.0%	0.1%
TOTAL EQUITY	51.4%	42.4%	42.6%	40.5%	47.1%	52.7%

Table 1.18 Common Size Balance Sheet and Trend (cont.)

	CAGR	2016	2015	2014	2013	2012
ASSETS						
CASH AND CASH EQUIVALENTS	1.2%	106.0%	125.0%	120.3%	112.2%	100.0%
SHORT-TERM INVESTMENTS	38.0%	500.1%	-	-	-	100.0%
TRADE ACCOUNTS AND OTHER RECEIVABLE	77.2%	1747.3%	577.2%	130.6%	1663.2%	100.0%
UNBILLED RECEIVABLES	1046.6%	1146.6%	100.0%	-	-	-
ADVANCES AND SHORT-TERM LOANS	0.0%	100.0%	-	-	-	-
CURRENT PORTION OF LONG-TERM LOANS	207.1%	307.1%	100.0%	-	-	-
INVENTORIES	15.7%	207.3%	201.5%	166.4%	131.7%	100.0%
OTHER CURRENT ASSETS	1.6%	108.4%	294.0%	517.3%	184.7%	100.0%
TOTAL CURRENT ASSETS	17.1%	219.7%	189.2%	167.0%	131.3%	100.0%
CASH RESTRICTED OR PLEDGED	27.0%	330.3%	191.9%	467.5%	10.7%	100.0%
INVESTMENT IN ASSOCIATES JOINT VENTURES AND/OR JOINTLY-CONTROL ENTITIES, EQUITY METHOD	748.7%	4403525.1%	2679494.0%	1033285.1%	459255.5%	100.0%
INVESTMENT PROPERTIES - NET	19.7%	245.8%	239.5%	159.6%	137.9%	100.0%
NET OF CURRENT PORTION OF LONG-TERM LOANS	107.1%	1840.5%	1371.9%	936.4%	100.0%	-
PROPERTY, PLANT AND EQUIPMENTS - NET	16.5%	214.4%	122.8%	116.6%	121.1%	100.0%
INTANGIBLE ASSETS - NET	3.7%	119.9%	99.9%	65.8%	38.3%	100.0%
DEFERRED TAX ASSETS	6.6%	129.1%	77.6%	160.2%	100.0%	-
OTHER NON-CURRENT ASSETS	7.1%	141.1%	72.7%	43.4%	140.7%	100.0%
TOTAL NON-CURRENT ASSETS	52.1%	814.7%	532.6%	350.0%	157.5%	100.0%
TOTAL ASSETS	22.1%	271.5%	219.1%	182.9%	133.6%	100.0%
	CAGR	2016	2015	2014	2013	2012
LIABILITIES AND SHAREHOLDER'S EQUITY						
BANK OVERDRAFTS AND SHORT-TERM BORROWINGS	-	100.0%	-	-	-	-
TRADE ACCOUNTS AND OTHER PAYABLE	31.7%	396.5%	306.0%	305.1%	283.6%	100.0%
UNBILLED CONSTRUCTION COST FROM SUPPLIER	157.7%	11373.8%	6541.0%	2802.4%	3671.2%	100.0%
OTHER SHORT-TERM ACCOUNT PAYABLES - NET	469.6%	-	-	-	569.6%	100.0%
CURRENT PORTION OF LONG-TERM LIABILITIES	159.1%	11678.4%	6138.0%	1498.1%	127.7%	100.0%
CURRENT PORTION OF DEFERRED INCOME	0.0%	-	-	-	100.0%	-
CURRENT PORTION OF ADVANCES RECEIVED FROM CUSTOMERS	13.1%	185.3%	154.1%	102.7%	102.4%	100.0%
SHORT-TERM PROVISIONS	57.6%	248.5%	181.1%	100.0%	-	-
OTHER CURRENT LIABILITIES	3.8%	120.4%	137.3%	151.0%	85.2%	100.0%
TOTAL CURRENT LIABILITIES	36.5%	473.8%	280.5%	156.1%	249.0%	100.0%
NET OF CURRENT PORTION OF LONG-TERM LIABILITIES	18.6%	234.9%	285.7%	331.4%	73.6%	100.0%
NET OF CURRENT PORTION OF OTHER ACCOUNT PAYABLES	-	-	-	-	-	100.0%
LONG-TERM PROVISIONS	-	100.0%	-	-	-	-
NET OF CURRENT PORTION OF POST EMPLOYEE BENEFIT OBLIGATIONS	23.6%	288.3%	225.8%	166.3%	117.9%	100.0%
DEFERRED TAX LIABILITIES	-24.4%	24.6%	26.2%	27.8%	28.8%	100.0%
OTHER NON-CURRENT LIABILITIES	0.0%	100.0%	100.0%	-	-	-
TOTAL NON-CURRENT LIABILITIES	16.0%	210.2%	252.8%	291.9%	65.9%	100.0%
TOTAL LIABILITIES	27.0%	330.3%	265.4%	230.0%	149.3%	100.0%
	CAGR	2016	2015	2014	2013	2012
Equity						
AUTHORIZED SHARE CAPITAL	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%
ISSUED AND FULLY PAID-UP SHARE CAPITAL	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%
PREMIUM (DISCOUNT) ON SHARE CAPITAL	-0.2%	99.0%	99.2%	100.0%	100.0%	100.0%
RETAINED EARNINGS (DEFICIT)	-238.8%	-515.5%	-351.4%	-216.1%	-52.4%	100.0%
OTHER COMPONENTS OF EQUITY	201.5%	24919.0%	12482.2%	47.9%	48.6%	100.0%
EQUITY ATTRIBUTABLE TO EQUITY HOLDERS OF PARENT	16.9%	218.6%	177.4%	140.5%	119.5%	100.0%
TOTAL EQUITY	16.9%	218.6%	177.4%	140.5%	119.5%	100.0%

1.10.11 Appendix K: Historical Cash Flow

Table 1.19 Historical Cash Flow

	2016	2015	2014	2013	2012
OPERATING ACTIVITIES					
PROFIT (LOSS) BEFORE FINANCIAL COSTS AND/OR INCOME TAX EXPENSES	1,807,737.36	1,547,451.27	1,595,580.83	1,024,474.15	-249,945.68
DEPRECIATION AND AMORTISATION	94,718.34	69,762.41	62,294.94	185,844.07	444,279.59
BAD DEBT AND DOUBTFUL ACCOUNTS (REVERSAL)	271.66	-846.19	6,398.56	8,871.20	1,553.25
LOSS ON DIMINUTION IN VALUE OF INVENTORIES (REVERSAL)	18,092.72	-	-	-	-
SHARE OF (PROFIT) LOSS FROM INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD	-115,415.40	476,644.39	292,851.81	93,878.45	-8,345.22
IMPAIRMENT LOSS OF IDENTIFIABLE INTANGIBLE ASSETS (REVERSAL)	-	-	10,237.10	-	-
IMPAIRMENT LOSS OF OTHER ASSETS (REVERSAL)	20,486.84	8,121.52	-	-	-
(GAIN) LOSS ON SALES OF INVESTMENTS IN SUBSIDIARIES AND ASSOCIATES	-1,251.21	-1,620.60	-184.59	-	-
(GAIN) LOSS ON DISPOSAL OF FIXED ASSETS	15,113.59	2,516.73	6,451.83	8,224.72	134.78
(GAIN) LOSS ON DISPOSAL OF OTHER ASSETS	-	-	-109,572.95	-	-
(GAIN) LOSS ON FAIR VALUE ADJUSTMENTS OF INVESTMENTS	-64.68	-	-	-	-
FINANCE COSTS	314,232.94	213,274.39	186,773.36	81,630.58	247,040.11
OTHER RECONCILIATION ITEMS	7,379,060.08	6,483,087.34	6,442,393.19	5,649,320.37	3,432,274.98
CASH FLOWS FROM (USED IN) OPERATIONS BEFORE CHANGES IN OPERATING ASSETS AND LIABILITIES	9,532,982.24	8,798,391.27	8,493,224.09	7,052,243.53	3,866,991.82
(INCREASE) DECREASE IN OPERATING ASSETS	-7,350,947.85	-7,914,546.66	-9,843,264.77	-8,027,207.78	-1,824,883.83
INCREASE (DECREASE) IN OPERATING LIABILITIES	299,109.44	472,753.54	106,443.71	651,997.75	128,949.54
CASH GENERATED FROM OPERATIONS	2,481,143.83	1,356,598.15	-1,243,596.97	-322,966.50	2,171,057.54
INCOME TAX PAID	-406,687.85	-204,996.77	-195,335.92	-215,369.78	-441,394.93
NET CASH PROVIDED BY (USED IN) OPERATING ACTIVITIES	2,074,455.98	1,151,601.38	-1,438,932.89	-538,336.28	1,729,662.61

Table 1.19 Historical Cash Flow (cont.)

	2016	2015	2014	2013	2012
INVESTING ACTIVITIES					
(INCREASE) DECREASE IN SHORT-TERM INVESTMENTS	-500,000.00	-	-	177,977.25	230,888.76
(INCREASE) DECREASE IN LONG-TERM INVESTMENTS	-	-	-	-	-134,622.47
(INCREASE) DECREASE IN INVESTMENT IN SUBSIDIARIES AND ASSOCIATES	-1,253,182.71	-1,735,385.62	-740,934.29	-441,000.00	-
(INCREASE) DECREASE IN ADVANCES AND SHORT-TERM LOANS - RELATED PARTIES	-1,624,740.00	-	478,376.61	-	-
(INCREASE) DECREASE IN LONG-TERM LOANS - RELATED PARTIES	-962,155.00	-612,000.00	-666,300.00	-80,850.00	-
(INCREASE) DECREASE IN PROPERTY, PLANT AND EQUIPMENTS	-493,134.20	-101,832.61	-88,611.16	-128,987.05	-65,414.12
(INCREASE) DECREASE IN RESTRICTED DEPOSITS AT FINANCIAL INSTITUTIONS	-120,848.02	240,737.18	-398,980.29	-	-
DIVIDENDS RECEIVED	254,999.94	-	-	-	-
INTEREST RECEIVED	52,725.77	11,194.07	14,284.95	24,157.57	5,653.42
OTHER ITEMS	-	-	-250,000.00	-500,000.00	-
NET CASH PROVIDED BY (USED IN) INVESTING ACTIVITIES	-4,646,334.21	-2,197,286.98	-1,652,164.19	-948,702.23	36,505.59
FINANCING ACTIVITIES					
INCREASE (DECREASE) IN SHORT-TERM BORROWINGS FROM FINANCIAL INSTITUTIONS	855,550.00	-	495,000.00	-	-18,138.90
INCREASE (DECREASE) IN LONG-TERM BORROWINGS FROM FINANCIAL INSTITUTIONS	-	-	-	-594,056.77	-4,117,586.25
INCREASE (DECREASE) IN OTHER LOAN FROM FINANCIAL INSTITUTIONS	-	-	-	-	-443,842.50
INCREASE (DECREASE) IN SHORT-TERM BORROWINGS FROM OTHER PARTIES	-	-	-	2,605,000.00	-
INCREASE (DECREASE) IN LONG-TERM BORROWINGS FROM OTHER PARTIES	795,300.00	-292,937.00	-980,009.11	-	-
INCREASE (DECREASE) IN FINANCE LEASE CONTRACT LIABILITIES	-22,822.65	-18,714.13	-12,022.52	-16,454.51	-1,576.88
INCREASE (DECREASE) IN DEBT INSTRUMENTS	1,605,000.00	2,350,000.00	4,440,000.00	-	-
PROCEEDS FROM ISSUANCE OF SHARE CAPITAL	-	-	-	-	5,389,274.61
DIVIDEND PAID	-493,055.79	-351,445.06	-266,622.86	-	-
INTEREST PAID	-521,353.44	-483,802.52	-353,841.95	-222,753.35	-428,947.52
OTHER ITEMS	-37,388.73	-61,285.32	-62,956.56	-34,411.70	-149,003.72
NET CASH PROVIDED BY (USED IN) FINANCING ACTIVITIES	2,181,229.40	1,141,815.96	3,259,547.00	1,737,323.68	230,178.84
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENT	-390,648.82	96,130.36	168,449.92	250,285.18	1,996,347.03
CASH AND CASH EQUIVALENTS, BEGINNING BALANCE	2,573,392.34	2,477,261.98	2,308,812.06	2,058,526.88	62,179.85
CASH AND CASH EQUIVALENTS, ENDING BALANCE	2,182,743.52	2,573,392.34	2,477,261.98	2,308,812.06	2,058,526.88

1.10.12 Appendix L: Common Size Cash Flow and Trend

Table 1.20 QH Balance Sheet Including Projections

		2016	2015	2014	2013	2012
Revenue		12,345,191.40	11,025,352.82	10,579,998.81	9,227,629.76	5,146,616.49
OPERATING ACTIVITIES	CAGR					
PROFIT (LOSS) BEFORE FINANCIAL COSTS AND/OR INCOME TAX EXPENSES	7.2%	14.6%	14.0%	15.1%	11.1%	-4.9%
DEPRECIATION AND AMORTISATION	-38.4%	0.8%	0.6%	0.6%	2.0%	8.6%
BAD DEBT AND DOUBTFUL ACCOUNTS (REVERSAL)	-40.8%	0.0%	0.0%	0.1%	0.1%	0.0%
LOSS ON DIMINUTION IN VALUE OF INVENTORIES (REVERSAL)	0.0%	0.1%	-	-	-	-
SHARE OF (PROFIT) LOSS FROM INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD	42.0%	-0.9%	4.3%	2.8%	1.0%	-0.2%
IMPAIRMENT LOSS OF IDENTIFIABLE INTANGIBLE ASSETS (REVERSAL)	0.0%	-	-	0%	-	-
IMPAIRMENT LOSS OF OTHER ASSETS (REVERSAL)	50.1%	0.2%	0.1%	-	-	-
(GAIN) LOSS ON SALES OF INVESTMENTS IN SUBSIDIARIES AND ASSOCIATES	79.8%	0.0%	0.0%	0.0%	-	-
(GAIN) LOSS ON DISPOSAL OF FIXED ASSETS	115.8%	0.1%	0.0%	0.1%	0.1%	0.0%
(GAIN) LOSS ON DISPOSAL OF OTHER ASSETS	0.0%	-	-	-1.0%	-	-
(GAIN) LOSS ON FAIR VALUE ADJUSTMENTS OF INVESTMENTS	0.0%	0.0%	-	-	-	-
FINANCE COSTS	-11.9%	2.5%	1.9%	1.8%	0.9%	4.8%
OTHER RECONCILIATION ITEMS	-2.2%	59.8%	58.8%	60.9%	61.2%	66.7%
CASH FLOWS FROM (USED IN) OPERATIONS BEFORE CHANGES IN OPERATING ASSETS AND LIABILITIES	0.5%	77.2%	79.8%	80.3%	76.4%	75.1%
(INCREASE) DECREASE IN OPERATING ASSETS	10.9%	-59.5%	-71.8%	-93.0%	-87.0%	-35.5%
INCREASE (DECREASE) IN OPERATING LIABILITIES	-0.7%	2.4%	4.3%	1.0%	7.1%	2.5%
CASH GENERATED FROM OPERATIONS	-13.8%	20.1%	12.3%	-11.8%	-3.5%	42.2%
INCOME TAX PAID	-17.4%	-3.3%	-1.9%	-1.8%	-2.3%	-8.6%
NET CASH PROVIDED BY (USED IN) OPERATING ACTIVITIES	-12.9%	16.8%	10.4%	-13.6%	-5.8%	33.6%

Table 1.20 QH Balance Sheet Including Projections (cont.)

		2016	2015	2014	2013	2012
INVESTING ACTIVITIES						
(INCREASE) DECREASE IN SHORT-TERM INVESTMENTS	-198.0%	-4.1%	-	-	1.9%	4.5%
(INCREASE) DECREASE IN LONG-TERM INVESTMENTS	0.0%	-	-	-	-	-2.6%
(INCREASE) DECREASE IN INVESTMENT IN SUBSIDIARIES AND ASSOCIATES	20.7%	-0.10	-0.16	-0.07	-0.05	-
(INCREASE) DECREASE IN ADVANCES AND SHORT-TERM LOANS - RELATED PARTIES	-242.8%	-13.2%	-	4.5%	-	-
(INCREASE) DECREASE IN LONG-TERM LOANS - RELATED PARTIES	-72.7%	-7.8%	-5.6%	-6.3%	-0.9%	-
(INCREASE) DECREASE IN PROPERTY, PLANT AND EQUIPMENTS	-25.7%	-4.0%	-0.9%	-0.8%	-1.4%	-1.3%
(INCREASE) DECREASE IN RESTRICTED DEPOSITS AT FINANCIAL INSTITUTIONS	36.2%	-1.0%	2.2%	-3.8%	-	-
DIVIDENDS RECEIVED	0.0%	0.02	-	-	-	-
INTEREST RECEIVED	31.2%	0.4%	0.1%	0.1%	0.3%	0.1%
OTHER ITEMS	0.0%	-	-	-2.4%	-5.4%	-
NET CASH PROVIDED BY (USED IN) INVESTING ACTIVITIES	-321.3%	-37.6%	-19.9%	-15.6%	-10.3%	0.7%
FINANCING ACTIVITIES						
INCREASE (DECREASE) IN SHORT-TERM BORROWINGS FROM FINANCIAL INSTITUTIONS	14.0%	6.9%	-	4.7%	-	-0.4%
INCREASE (DECREASE) IN LONG-TERM BORROWINGS FROM FINANCIAL INSTITUTIONS	0	-	-	-	-6.4%	-80.0%
INCREASE (DECREASE) IN OTHER LOAN FROM FINANCIAL INSTITUTIONS	0	-	-	-	-	-8.6%
INCREASE (DECREASE) IN SHORT-TERM BORROWINGS FROM OTHER PARTIES	0	-	-	-	28.2%	-
INCREASE (DECREASE) IN LONG-TERM BORROWINGS FROM OTHER PARTIES	348%	6.4%	-2.7%	-9.3%	-	-
INCREASE (DECREASE) IN FINANCE LEASE CONTRACT LIABILITIES	43.3%	-0.2%	-0.2%	-0.1%	-0.2%	0.0%
INCREASE (DECREASE) IN DEBT INSTRUMENTS	-32.3%	13.0%	21.3%	42.0%	-	-
PROCEEDS FROM ISSUANCE OF SHARE CAPITAL	0	-	-	-	-	105%
DIVIDEND PAID	-16.6%	-4.0%	-3.2%	-2.5%	-	-
INTEREST PAID	12.7%	-4.2%	-4.4%	-3.3%	-2.4%	-8.3%
OTHER ITEMS	36.3%	-0.3%	-0.6%	-0.6%	-0.4%	-2.9%
NET CASH PROVIDED BY (USED IN) FINANCING ACTIVITIES	31.6%	17.7%	10.4%	30.8%	18.8%	4.5%
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENT	-160.6%	-0.03	0.01	0.02	0.03	0.39
CASH AND CASH EQUIVALENTS, BEGINNING BALANCE	76.8%	20.8%	22.5%	21.8%	22.3%	1.2%
CASH AND CASH EQUIVALENTS, ENDING BALANCE	-15.1%	17.7%	23.3%	23.4%	25.0%	40.0%

1.10.13 Appendix M: COGS, Inventory Regression

Model 4: OLS, using observations 2012-2016 (T = 5)

Dependent variable: Inventories

	coefficient	std. error	t-ratio	p-value
COGS	1.82134	0.113879	15.99	8.94e-05 ***
Mean dependent var	9711039	S.D. dependent var	2756412	
Sum squared resid	7.73e+12	S.E. of regression	1389943	
R-squared	0.984603	Adjusted R-squared	0.984603	
F(1, 4)	255.7970	P-value(F)	0.000089	
Log-likelihood	-77.26070	Akaike criterion	156.5214	
Schwarz criterion	156.1308	Hannan-Quinn	155.4732	
rho	-0.553677	Durbin-Watson	2.476901	

Model estimation range: 2012 - 2016

Standard error of the regression = 1.38994e+006

	Inventories	fitted	residual
2012	6.01744e+006	8.10882e+006	-2.09138e+006
2013	7.92494e+006	6.28104e+006	1.64390e+006
2014	1.00125e+007	1.04563e+007	-443812.
2015	1.21266e+007	1.16595e+007	467062.
2016	1.24738e+007	1.19876e+007	486181.

Forecast evaluation statistics

Mean Error	12390
Mean Squared Error	1.5456e+012
Root Mean Squared Error	1.2432e+006
Mean Absolute Error	1.0265e+006
Mean Percentage Error	-2.1391
Mean Absolute Percentage Error	13.536
Theil's U	0.61549

Figure 1.25 COGS, Inventory Regression

1.10.14 Appendix N: Corporate Governance and Corporate Social Responsibility

Corporate Governance Rating of ANAN

Organization for Principle of Corporate Governance – Thai Institution of Directors Association (IODA)



The Criteria for rating CG is as following;

Table 1.21 Corporate Governance and Corporate Social Responsibility

Criteria
Shareholder's Rights (20%)
Equitable Treatment of Shareholders (15%)
Role of Shareholders (20%)
Disclosure and Transparency (20%)
Board Responsibilities (25%)
Total (100%)

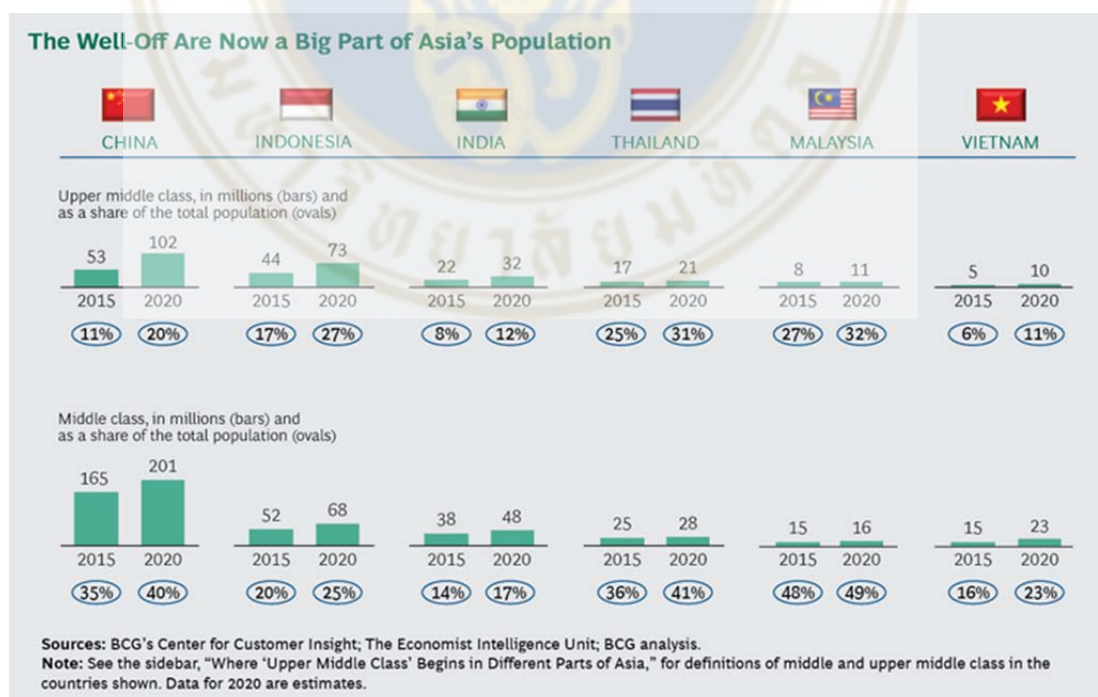
Market Capitalization	Recognition Levels				Total
	Excellent	Very Good	Good	Lower Levels	
SET50	27	13	7	1	48
SET100	46	29	17	6	98
10,000 million baht or above	57	57	37	15	166
3,000 – 9,999 million baht	13	67	48	34	162
1,000 – 2,999 million baht	6	53	69	59	187
Less than 1,000 million baht	4	18	26	38	86
TOTAL	80	195	180	146	601

Table 1.21 Corporate Governance and Corporate Social Responsibility (cont.)

Score Range	Number of Logos	Description
90 – 100		Excellent
80 – 89		Very Good
70 – 79		Good
60 – 69		Satisfactory
50 – 59		Pass
Less than 50	No Logo Given	-

Note: ANAN was classified as “Very Good” by Thai Institution of Directors Association in 2016

1.10.15 Appendix O: COGS, Inventory Regression

**Figure 1.26 Rise of the Upper and Middle Class**

1.10.16 Appendix P: Current projects of ANAN

Current Projects As Of September 2017

Project	Launched	Type	Value (M Baht)	%Net Sold	Backlog (M Baht)	Unsold Inventory (M Baht)	%Transfer
ADO: Atoll (Housing)	Feb-13	Housing	6,229	64.3%	38	2,226	63.3%
AD14: Ideo Sathorn – Tha Phra	Jul-13	Condo	3,548	100.0%	-	-	100.0%
AD15: Ideo Mobi Charan-Interchange	Oct-13	Condo	3,735	100.0%	-	-	100.0%
AD17: Ashton Asoke (JV)	Sep-14	Condo	6,705	97.9%	6,564	142	-
AD17: Ideo Q Siam-Ratchathewi (JV)	Sep-14	Condo	3,822	83.2%	3,181	641	24.9%
AD16: Ideo Mobi Wongsawang-Interchange	Sep-14	Condo	1,775	37.9%	50	1,102	35.1%
AD16: Ideo Mobi Sukhumvit Eastgate	Sep-14	Condo	2,522	88.0%	112	302	83.6%
AD18: Ashton Chula-Silom (JV)	Mar-15	Condo	8,709	78.5%	6,835	1,874	-
AD17: Ashton Residence 41	Mar-15	Condo	2,119	44.8%	693	1,170	12.1%
AD16: Unio Charan 3	Jun-15	Condo	2,120	85.7%	83	304	81.8%
AD16: Arden 3 projects	Jun-15	Housing	2,877	71.4%	93	823	68.1%
AD17: Ideo Sukhumvit 115	Aug-15	Condo	2,777	73.5%	222	735	65.5%
AD17: Q Chidlom (JV)	Aug-15	Condo	3,030	64.9%	1,966	1,064	-
AD18: Ideo O2 (JV)	Aug-15	Condo	5,096	61.0%	3,108	1,987	-
AD17: Ideo Mobi Bangsue Grand Interchange (JV)	Nov-15	Condo	2,536	43.2%	516	1,440	22.9%
AD18: Ashton Silom (JV)	Nov-15	Condo	6,116	66.4%	4,061	2,055	-
Sub total (2013-2015 Launched)			63,729		26,642	15,803	
AD17: Ideo Tha Phra Interchange (JV)	Feb-16	Condo	2,791	44.7%	1,248	1,543	-
AD17: Unio Sukhumvit 72	Jul-16	Condo	1,517	80.8%	1,225	292	-
AD17: Unio Rama2-Thakhom	Jul-16	Condo	983	67.9%	667	316	-

Updated: Sept 30, 2017



Note: JV = Joint Venture with Mitsui Fudosan

Current Projects As Of September 2017 (Cont.)

Project	Launched	Type	Value (M Baht)	% Net Sold	Backlog (M Baht)	Unsold Inventory (M Baht)	%Transfer
AD17: Venio Sukhumvit 10	Sep-16	Condo	862	90.3%	779	84	-
AD18: Ideo Mobi Asoke (JV)	Sep-16	Condo	3,288	77.8%	2,558	729	-
AD18: Ideo Sukhumvit 93 (JV)	Oct-16	Condo	6,224	87.3%	5,435	789	-
AD18: Ideo Phaholyothin-Chatuchak (JV)	Oct-16	Condo	2,553	67.8%	1,732	821	-
AD18: Ideo Sukhumvit 66 (JV)	Oct-16	Condo	2,423	42.3%	1,026	1,398	-
Sub total (2016 Launched)			20,641		14,669	5,972	
AD18: Unio Ramkhamhaeng-Serithai	Mar-17	Condo	939	21.4%	201	738	-
AD18: Unio H Tiwanon	Mar-17	Condo	941	19.4%	183	758	-
AD17: Artale Phattanakarn-Thonglor	Mar-17	Housing	1,643	22.5%	282	1,273	5.4%
AD19: Ideo Q Victory (JV)	Jun-17	Condo	3,208	98.2%	3,150	59	-
AD20: Ashton Asoke-Rama 9 (JV)	Jun-17	Condo	6,428	57.2%	3,674	2,754	-
AD19: Ideo Q Sukhumvit 36 (JV)	Jun-17	Condo	4,289	41.6%	1,784	2,505	-
AD19: Ideo New Rama 9 (JV)	Jun-17	Condo	2,967	57.8%	1,714	1,253	-
AD19: Elio Del Nest (JV)	Jun-17	Condo	5,050	18.8%	949	4,102	-
AD17: Unio Town Lumlukka Klong 4	Jun-17	Housing	952	14.2%	113	817	2.3%
AD17: Atri Rama 5-Ratchaphruk ¹	Jul-17	Housing	792	8.2%	65	728	-
AD17: Artale Kaset-Nawamin ²	Aug-17	Housing	1,658	4.9%	81	1,577	-
AD17: Atoll Wongwaen-Lumlukka ³	Sep-17	Housing	802	6.0%	48	754	-
AD19: Ideo Mobi Sukhumvit 40 ⁴	Sep-17	Condo	2,057	27.1%	558	1,499	-
AD19: Ideo Mobi Rangnam ⁵ (JV)	Sep-17	Condo	2,377	10.9%	259	2,118	-
Sub total (2017 Launched)			34,105		13,060	20,935	
Grand total			118,475		54,371	42,709	

Updated: Sept 30, 2017



Note: JV = Joint Venture with Mitsui Fudosan

- ¹ = Released 14% of total units
- ² = Released 10% of total units
- ³ = Released 10% of total units
- ⁴ = Released 50% of total units
- ⁵ = Released 20% of total units

Figure 1.27 Current Projects of ANAN

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REFERENCES

- ANAN (2017). *Result Analyst Presentation Q3 2017 Including Background*. Retrieved from <https://www.ananda.co.th/en/ir/presentations/presentations>
- AP (Thailand) PCL. (2017). *FY 2016 Analyst Presentation*. Retrieve from <http://ap.listedcompany.com/>.
- Aswath Damodaran. (2017). *Country Default Spreads and Risk Premiums*. Retrieve from http://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/ctryprem.html.
- Bank of Thailand. (2017). *Business Outlook Report Q2 2017*. Retrieve from <https://www.bot.or.th/Thai/MonetaryPolicy/EconomicConditions/Pages/BLP.aspx>.
- Bank of Thailand. (2017). *Commercial Banks Performance Report Q1 2017*. Retrieve from <https://www.bot.or.th/Thai/PressandSpeeches/Press/News2560/n2260t.pdf>, May 15, 2017.
- Bank of Thailand. (2017). *Evaluation of Condominium Oversupply in Bangkok and Vicinity*. Retrieve from https://www.bot.or.th/Thai/ResearchAndPublications/DocLib_/Article_27Sep2017.pdf.
- Bank of Thailand. (2017). *Performance of the Thai Banking System in the Third Quarter of 2017*. Retrieve from https://www.bot.or.th/English/FinancialInstitutions/Publications/FIProformance_Press/n5860e.pdf, November 10, 2017.
- Bank of Thailand. (2017). *Property Indicators*. Retrieve from <https://www.bot.or.th/English/Statistics/EconomicAndFinancial/EconomicIndices/Pages/StatPropertyIndicators.aspx>.
- Bank of Thailand. (2017). *Thailand's Macro Economic Indicators 1*. Retrieve from <https://www.bot.or.th/English/Statistics/EconomicAndFinancial/Pages/StatMacroEconomicIndicators.aspx>.
- BTS Group Holdings PCL. (2017). *1Q 2017/2018 Earnings Presentation*. Retrieve from <http://bts.listedcompany.com/>.
- Colliers International. (2017). *Bangkok Condominium 2Q 2017 Market Report*. Retrieve from www.colliers.com.

- Government Savings Bank. (2017). *Real Estate Industry Monitor*. Retrieve from Government Savings Bank's Economy Business and Grassroots Economy Research Center, March 2017.
- Housing Business Association. (2017). *Housing BIZ Real Estate, "the Main Indicator for 2017 Economy"*. Retrieve from www.housingbiz.org, July-September 2017.
- Ministry of Transport. (2017). *Transport Infrastructure Investment Action Plan 2017 towards Sustainable Transport*. Retrieve from http://www.mot.go.th/file_upload/2559/2016.12.12_MOT_Action_Plan_2560ENG.pdf.
- Office of the National Economic and Social Development Board. (2017). *Thai Economic Performance in Q3 and Outlook for 2017-2018*. Retrieve from <http://www.nesdb.go.th>, November 20, 2017.
- Reuter. (n.d.). *ANAN Company Information and Analyst Reports*. November 16, 2017.
- Sansiri PCL. (2017). *Annual Reports and Analyst Meeting Presentation*. Retrieve from <https://www.sansiri.com/eng/financial-presentation>.
- SCB Economic Intelligence Center. (2017). *Economic Outlook in 2017*. Retrieve from www.scbeic.com.
- SetSmart. (n.d.). *Company Information, Share Price, and Financial Data*. Retrieve from <http://www.setsmart.com>.
- Thai Institute of Directors. (2016). *Corporate Governance Report of Thai Listed Companies 2016*. Retrieve from <http://www.thai-iod.com/en/publications.asp?type=4>.
- The Thai Bond Market Association. (n.d.). *Government Bond Yield Curve*. Retrieve from <http://www.thaibma.or.th/EN/Market/YieldCurve/Government.aspx>, November 16, 2017.