

DISCOUNTED CASH FLOW VALUATION OF SANSIRI

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TANATIP BOUROS

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

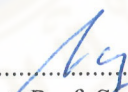
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DISCOUNTED CASH FLOW VALUATION OF SANSIRI

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M.M. (CORPORATE FINANCE)

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ABSTRACT

This thematic paper aims to evaluate the stock price of Sansiri Public Company Limited (SIRI) by using the Discounted Cash Flow valuation method (DCF) to identify the company intrinsic value based on the thorough assumptions used in the valuation, which include the company's past and future operation performance, the industry growth, the risk factors, and the cost of equity. The economic recovery after the COVID-19 pandemic would stimulate households to purchase houses and condominium for both living and investing, which creates higher demand for property development companies such as Sansiri. The DCF valuation method indicates the estimated target price by the end of 2023 of SIRI is THB 2.26 per share, while the latest close price on 24 April 2023 was THB 1.85 per share, which has the 22.16% upside. As a result, the recommendation for SIRI is "BUY". The valuation should be reevaluated periodically as the risks and market situations might change over the time.

KEY WORDS: Discounted Cash Flow (DCF) / Valuation / Free Cash Flow to Firm (FCFF) / SIRI / Property Development

76 pages

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CHAPTER I

HIGHLIGHT

Sansiri Public Company Limited (“Sansiri” or “SIRI” or “The company”) is the leading property development company in Thailand. The company has been operating three businesses, which are property development, property services, and investment. The main revenue is from the property development, which accounts for 89% of the total revenue. The Market Capitalization of SIRI is THB 28.86 billion. The average trading volume over the last 12 months is 205.85 million shares.

The recovery in the real estate industry would positively benefit to Sansiri, as the main revenue of Sansiri is from house and condominium, which accounted for 89% of total revenue. Moreover, the company recently launched both new house and condominium projects in 2023, which consist of 52 projects, 30 projects for houses and 22 projects for condominiums, worth THB 75 billion. The increase in consumer spending at the beginning of 2023 indicates that the higher confidence level and higher purchasing power would contribute to Sansiri as the leading real estate developer in Thailand. Moreover, the expansion of the city would benefit the company as well due to the mega projects on public transportation from the government. As a preparation, the company has been acquiring land in the suburban areas for developing house projects in the future. The value of the land and that such projects would be increased while the cost of acquiring was relatively low. Therefore, this would be a bright outlook for Sansiri after facing the COVID-19 pandemic recently.

The investment recommendation, according to the assumptions used in the financial modelling, the cost of equity is 7.88%, which is from 2.48% of Risk Free, 3.07% of Market Risk Premium, and 1.76 of Beta. The cost of debt is 3.70%, and corporate tax rate is 20%. Then, the WACC would equal to 4.37%. The terminal growth rate is 2% based on the adjusted nominal GDP growth rate in Thailand. These assumptions result in the estimated share price at THB 2.26 accordingly. The recent IAA Consensus has issued the recommendation to BUY from 11 Analysts, to HOLD

from 2 Analysts, and to SELL from none. The estimated prices from IAA Consensus are ranged between THB 1.60 and THB 2.32. The 52 weeks high is THB 1.98 per share and the 52 weeks low is THB 0.97 per share.

According to the above assumptions, the DCF valuation method indicates the estimated target price in 2023 of SIRI is THB 2.26 per share, while the latest close price on 24 April 2023 was THB 1.85 per share, which has the 22.16% upside. As a result, the recommendation for SIRI is **“BUY”**.



CHAPTER II

COMPANY OVERVIEW

Sansiri Public Company Limited (“Sansiri”) (“The Company”) has been operating over 39 years since 1984 by having a business propose as the real estate developer. In the beginning, the company was established as the holding company by the Chutrakul family and focused on the building development such as condominium and office building for rent and sales. In 1996, the company had listed on the Stock Exchange of Thailand (“SET”) and fully complied with the regulations and rules from Securities and Exchange Commission (“SEC”). Sansiri kept expanding the business widely in the real estate sector, which was not limited to the renting and selling by providing building management services. In 1999, the company acquired the permission to build the high-rise building in Bangkok and expanded its business to the house segment. In 2002, the company still expanded its business by directly and indirectly investing in hotel, apartment, and commercial building located in the Central Business District through several acquisitions. In 2022, there are over 271 projects across the country and oversea including several real estate segments such as house, townhome, condominium, commercial building, hotel, and office building. The commitment of Sansiri is not only focus on the clients, but also the community and society. The company has set up the partnership with the United Nations International Children’s Emergency Fund (“UNICEF”) to improve children’s well-being over the long term with the company initiatives and interact with the business partner. Currently, Sansiri is considered as the Thailand’s top real estate developer of high-end homes, townhouses, and condominium.

Vision

“To be a leading Thai property developer, providing complete products and services reachable by everyone, with sustainable benefits to all the stakeholders”
(Sansiri, 2022)

Mission

“To create quality residential products that cover every segment, provide integra, enhance living solution for our customers, understand and balance the needs of all the stakeholders (4 pillars: customer, society, staff, and shareholder), and apply sustainability philosophy in our products, services, and work processes” (Sansiri, 2022)

Milestones

Over the past 30 years, the company has been expanding and contributing the best residential to both Thai and foreign residents. The company aims to raise the standard of living for our residents while also giving back to society by building well-designed and well-made homes. Currently, there are more than 71,928 units throughout 271 projects that Sansiri has been serving to the property market.

In the previous decade, Sansiri has been expanding through the acquisition and joint venture to the various types of business such as property technology (“PropTech”), financial technology (“FinTech”), and some traditional property development companies. Some of the key milestones are follow as below.

Table 2.1 Key Milestones

Years	Key Milestones
1996	- Sansiri Public Company Limited was listed on Stock Exchange of Thailand (SET)
2003	- Sansiri Launched the construction of 11 condominiums, 6 detached house projects, and 2 townhouse projects. - The pre-sales volume for the year went up to 9.1 billion baht
2006	- The pre-sales volume for the year crossed the 10-billion-baht threshold for the first time by having 16 billion baht
2012	- Sansiri expanded to up-country to cover all regions of Thailand, including Chiang Mai, Phuket, Hua Hin, Khon Kaen, Pattaya, and Khao Yai

Source: Sansiri Annual Report 2022

Table 2.1 Key Milestones (cont.)

Years	Key Milestones
2018	<ul style="list-style-type: none"> - Setting up Joint Venture with Tokyu Corporation from Japan with registered capital of 50 million baht to access the property market in Japan - Setting up a new fully owned subsidiary in Singapore under the name “Sansiri International Pte. Ltd. to operate and invest oversee.
2020	<ul style="list-style-type: none"> - Relocating the company’s head office to Siri Campus building on Vadhana district. - Acquisition of PKL Development Co., Ltd., U City Public Company Limited, and Propfit Co., Ltd.
2021	<ul style="list-style-type: none"> - Setting up a 50:50 joint venture company, BFTZ Bangpakong Co., Ltd. with Prospect Development Company Limited, a subsidiary of M.K. Real Estate Development Public Company Limited to develop the land, infrastructure, and facilities for sales. - Expanding the Company’s investment business by investing in the finance and securities business operated by XSpring Capital Public Company Limited

Source: Sansiri Annual Report 2022

2.1 Company’s Group Structure

The main businesses of the company consisted of 3 main business lines, which are property development, property services, and investment business. These 3 main businesses are fully owned 100% by Sansiri. The group structure of Sansiri Public Company Limited is as follows as of 30 September 2022 (Sansiri, 2022)

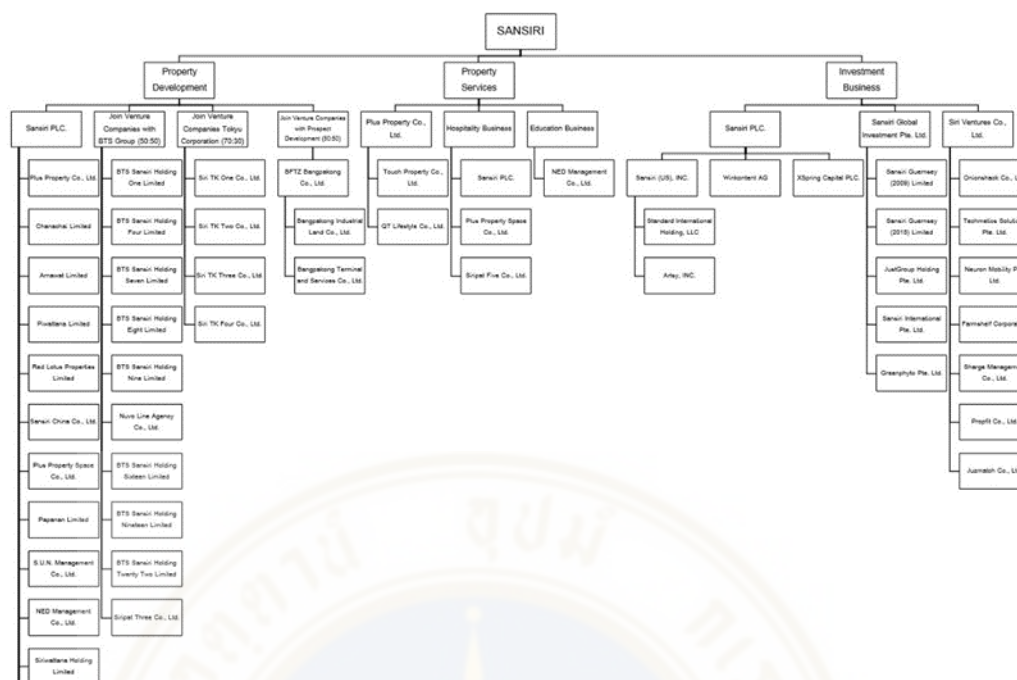


Figure 2.1 Group Structure

Source: Sansiri Annual Report 2022

Board of Directors

As of January 14, 2023, the SIRS's board of directors consists of 12 directors, by having 7 directors served as the managing director, and having 5 directors serving as independent directors. The auditing committees consists of 4 directors that are independent directors. In this Board of directors' structure, it appears that the company has been fully complied with the SEC regulation by having one – third of independent directors in the Board, and having the independent directors as members of the audit committees.

Table 2.2 Board of Directors

No.	Board of Directors Name	Position		
		Managing Director	Independent Director	Audit Committee
1.	Mr. APICHART CHUTRAKUL	✓		
2.	Mr. SRETTA THAVISIN	✓		
3.	Mr. JESADAVAT PRIEJRIVAT		✓	✓
4.	Mr. WANCHAK BURANASIRI	✓		
5.	Mr. THONGCHAI JIRA-ALONGKORN	✓		
6.	Mr. VICHAYA CHATIKAVANIJ	✓		
7.	Mr. UTHAI UTHAISANGSUK	✓		
8.	Mr. SUPAKORN VEJAJIVA	✓		
9.	Mr. PORNTAT AMATAVIVADHANA		✓	
10.	Mr. SUPANIT CHAIYAWAT		✓	✓
11.	Mr. KITTICHAIRAKTAKANIT		✓	✓
12.	Mr. WEERANANT CHUENSUWAN		✓	✓

Source: Sansiri Annual Report 2022

Shareholders

As of January 14, 2023, the SIRI's current shares outstanding is 15,397,751,291 shares with the restriction of foreign limit by 39.00%. According to the recent book closing date on March 16, 2022, the proportion of the minor shareholders (Free float) is 71.55% of the available trading shares. As can be seen below, the top 10 shareholders, which consists both institutions and individuals, such as the Union Bank of Switzerland ("UBS Group"), who has the 9.56% of shares. It also includes the founder and CEO as the major shareholders, Mr. Apichart Chutrakul and Mr. Srettha Thavisin, respectively.

Table 2.3 Shareholders

Ran k	Shareholders	Number of Shares	% Shares
1.	UBS AG SINGAPORE BRANCH	1,422,424,080	9.56%
2.	VIRIYAH INSURANCE PUBLIC COMPANY LIMITED	963,267,873	6.47%
3.	THAI NVDR COMPANY LIMITED	713,870,821	4.80%
4.	MR. SRETTA THAVISIN	661,002,734	4.44%
5.	MR. WANCHAK BURANASIRI	555,469,201	3.73%
6.	SOUTH EAST ASIA UK (TYPE C) NOMINEES LIMITED	432,001,690	2.90%
7.	MR. APICHART CHUTRAKUL	306,900,000	2.06%
8.	MR. PIPAT TIATAWAT	300,000,000	2.02%
9.	MR. HIRONOBU NISHII	151,000,009	1.01%
10.	MISS PHAKCHANAN TIATAWAT	150,000,000	1.01%

Source: SET

2.2 Business Lines (Products)

Sansiri Group has been operating three businesses, which are (1) Property Development (2) Property Services and (3) Investment. The detailed descriptions for each business are shown below.

2.2.1 Property Development

Property Development for sale

To meet the demands of each customer segment, the company offers a variety of property development products such as single-detached houses, semi-detached houses, houses, townhomes, shop houses, home offices, and condominiums under various brands and price ranges. Products in various price ranges meet Sansiri's quality standards. In 2021, the Company shifted its focus to the lower-priced segment in response to lower purchasing power caused by the economic slowdown and COVID-19 outbreak. In 2021, the Company developed condominium projects targeting young generations with affordable pricing through two new brands: 'THE MUVE,' which targets first jobbers in easy-to-commute locations, and 'condo me,' which targets customers with a budget of less than 1.2 million Baht or those switching from lease to

own property near work locations. The Company's new price segment, 'condo me,' has received positive feedback. Furthermore, the Company expanded its projects to high-potential provinces, such as 1517 Nimman in Chiangmai, which received positive responses (Sansiri, 2022).

To provide customers with a complete living experience, the company incorporates innovations and technology into its residential property projects. Cooliving Design technology lowers indoor temperatures while conserving energy. In order to reduce pollution, an EV charger is also installed to support electric vehicles. Sandee robots can also deliver packages within condominium developments (Sansiri, 2022).

The economic slowdown caused by the COVID-19 pandemic in 2021 had a negative impact on general purchasing power and the property development sector. The company launched 14 new projects totaling 6,900 million Baht. The government implemented several stimulus measures for the real estate sector, which have an impact on the overall economy and employment rate, such as lowering property transfer fees from 2.00% to 0.01% and mortgage fees from 1.00% to 0.01% for residential sales transactions of less than 3 million Baht, as well as relaxing the LTV requirement for housing loans. These measures had a positive impact on the real estate sector from late 2021 to 2022 and will continue to do so in 2023 (Sansiri, 2022).

Property Development for Rent

The Company receives recurring income from rental properties, such as a leasehold commercial building in Silom called 'Sun Square Silom' and a leasehold residential building called 'Baan Sansiri'. Furthermore, Sansiri owns 'Habito Mall,' a community retail center on Sukhumvit 77 Road's T77 area. Sansiri's core business, property development for sale, is enhanced by Habito Mall, which gathers a variety of retail shops and restaurants for an expansive network of trendy lifestyle (Sansiri, 2022).

Sansiri announced a collaboration with Prospect Development Company Limited in 2021, establishing a joint venture called 'BFTZ Bangpakong Company Limited' to develop land and operate businesses in warehouses and factories for rent in order to generate recurring income for the company (Sansiri, 2022).

2.2.2 Property Services

Property Services

Plus Property Company Limited ('Plus'Property)'s Services business enhances Sansiri's core business – property development for sale – not only by ensuring customer satisfaction with fully-integrated services, but also expanding its sources of recurring income and allowing it to capitalize on its database to optimize its property development projects and more effectively satisfy consumer expectations. The Property Services division offers three primary services. (1) Brokerage Service and Sales Management (2) Property Management; both Property Management for residential projects and Facility Management for commercial buildings. Plus manages over 304 residential and commercial projects worth a total 15.91 million square meters as of 31 December 2021 (details as of 31 December 2021). And (3) Consultancy services for real estate which consist of the consulting services of project feasibility studies, marketing research and analysis, and financial feasibility analysis, as well as the building inspection service provided by Touch Property Company Limited (Sansiri, 2022).

Furthermore, to improve service quality, the Company incorporates property management innovations such as LIV-24, a security and infrastructure management technology for elevator and electrical systems that provides residents with greater convenience, speed, accuracy, and 24-hour troubleshooting. As of December 31, 2021, there are 60 projects with this innovation, including 55 residential and 5 commercial projects, with plans to add to other projects in the future (Sansiri, 2022).

Educational Business

Sansiri has run a school called 'Satit Pattana School' to generate recurring income, create opportunities to expand business, and create synergy with several of Sansiri's nearby property projects for sale (Sansiri, 2022).

Hotel Business

The Peri Hotel and The Standard Hotel are two hotel brands owned by the company. There are currently three hotels in operation: the 46-key The Peri Hotel Hua Hin in Hua Hin, Prachaupkhirikhan; the 56-key The Peri Hotel Khao Yai in Pakchong, Nakornrachasima; and the newly opened The Standard Hua Hin. The Standard Hua Hin, a five-star hotel, opened in December 2021 in Hua Hin, Prachaupkhirikhan, with 199

rooms targeting guests with a different lifestyle than ‘The Peri Hotel’ brand (Sansiri, 2022).

Other Business

Sansiri’s other businesses currently include lifestyle concierge services for both individuals and corporations, as well as event management and full wedding planning services in Thailand and around the world through QT Lifestyle Limited (Sansiri, 2022).

Investment

The Company develops a strategy to invest in businesses that will complement its existing operations and/or potentially be adjacent to the Company’s operations. Sansiri currently has three anchor investments: XSpring Capital PCL. (Financial Services Company), The Standard (Hotel Management Company), and JustCo (Co-working Space), all of which are considered adjacent businesses and could potentially generate new revenue streams for Sansiri in the future. In addition to the aforementioned investment, the Company has also made investments in living and lifestyle-related companies such as Aspen Digital Inc. (Assets-backed Securities Token of Hotel Resort in USA), Monocle (global affairs and lifestyle magazine), and Artsy (Arts Services Platform) (Sansiri, 2022).

Sansiri is recognized as one of Thailand’s first property developers to take the lead to invest in property-related technology; as a result, the Company established a corporate venture arm known as ‘Siri Ventures,’ with the primary goal of investing in high-potential startups that can synergize with Sansiri’s businesses. Furthermore, the company has invested in three venture capital funds in the United States, China, and France (Sansiri, 2022).

Revenue Structure

Sansiri’s consolidated revenue structure is consisted of 3 products and services’ categories by having (1) Property Development (2) Property Services and (3) Other revenues. The company’s revenue structure for the last 3 years is as follow (Sansiri, 2022).

Table 2.4 Revenue Structure

Product / Services	Operated by	2019		2020		2021	
		Million Baht	%	Million Baht	%	Million Baht	%
1. Property Development							
<u>For Sale</u>							
Single-detached house	SIRI, AW, PW, CC, RED, NED, PPS, PPN	10,967	42.41%	14,392	41.47%	12,746	43.12%
Townhome	SIRI, PLUS, PW, PPN, AW, CC	2,499	9.66%	2,838	8.18%	2,277	7.70%
Mix Product	SIRI	292	1.13%	1,199	3.45%	2,633	8.91%
Condominium	SIRI, RED, AW, PW, PPN, NED, TOUCH, PPS, SG	5,368	20.76%	12,130	34.95%	8,514	28.80%
<u>For rent</u>							
Project for rent	SIRI, SUN, AW, PW, RED, PPN, NED, CC	37	0.14%	67	0.19%	103	0.35%
Leasehold rights written off	SUN, CC	53	0.20%	52	0.15%	53	0.18%

Source: Sansiri Annual Report 2022

Table 2.4 Revenue Structure (cont.)

Product / Services	Operated by	2019		2020		2021	
		Million Baht	%	Million Baht	%	Million Baht	%
2. Property Services							
Revenue from business management	SIRI, PW, PLUS, QT, TOUCH	4,601	17.79%	2,751	7.93%	1,687	5.71%
Revenue from hotel management	SUS	145	0.56%	139	0.40%	315	1.07%
Revenue from sales of construction materials	SIRI	44	0.17%	53	0.15%	52	0.18%
Revenue from other services	SIRI, AW, NED, PPS, SPS	303	1.17%	212	0.61%	262	0.89%
3. Other Revenues							
Revenue from common property charges		198	0.77%	229	0.66%	292	0.99%
Revenue from forfeiture of down payment and changed contract fee		32	0.12%	326	0.94%	108	0.37%
Gain on sale of land		508	1.96%	11	0.03%	-	0.00%
Gain on sale of investment in subsidiary		423	1.64%	93	0.27%	-	0.00%
Other income		389	1.50%	215	0.62%	516	1.75%
Total Revenue		25,859	100.00%	34,707	100.00%	29,558	100.00%
% Increase (Decrease) in Revenue		-3.40%		34.22%		-14.84%	

Source: Sansiri Annual Report 2022

2.3 Strategies

Sansiri has been focusing to be the leading property developer in Thailand and providing a comprehensive range of product across the sub-segment in the real estate industry with high quality and innovative product. The product differentiation would be the main characteristic of Sansiri, which provides the high-end residential area including high-end to super luxury homes and condominium to respond the market and trend of today living lifestyle. Moreover, the company also adopted the acquisition strategy to invest in related business to increase the value of the company in the future including investment in real estate property technology (“PropTech”), financial technology (“FinTech”) and securities services for both traditional and digital assets, the hotel management, community mall development, industrial property development and other high potential businesses. These investments will strengthen Sansiri financial position and the business operations. Additionally, the company has been emphasizing on the environment social and governance (“ESG”) to improve the company’s property development and revenue growth sustainably (Sansiri, 2022).

The recent key success factors for Sansiri’s business growth are as follows

- Focus on developing products and services that provide integrated living solutions and cover every segment by expanding to more affordable price levels to provide housing units that are reachable by everyone
 - Focus on real current demand such as the low-rise condominium
 - Emphasize the importance of launching small projects that provide flexibility and agility in managing inventory and liquidity
 - Promote the concept of sustainability through the 'Sansiri Green Mission,' which has been integrated into product design, services, and work processes.

2.4 Corporate Governance

2.4.1 Conflict of Interest Prevention

As the listed companies have to comply with the SEC’s regulation, conflict of interest is the significant regulation that highly emphasized by the SEC. The company

has the transparent policy to eliminate the conflict of interest by having a procedure to deal with, for example, when there is the connected transaction between the company and the internal stakeholders such as the managing director or the shareholders. The company would follow the procedure to declare and inform to the necessity of the transaction. The details such as the volume, amount, name, time, reasons, and options would be declared to the shareholders in order to approve for the transaction. The transaction would be highly due diligent before approving by the shareholders in accordance with the rules of the Stock Exchange of Thailand (“SET”) and the Securities and Exchange Commission (“SEC”). Examples related to the conflict of interest are as the following (Sansiri, 2022).

- All members of the Board of Directors, executives, and staff are prohibited from conducting business that is indirect competition with the company.
- Engaging in any related transaction involving themselves or other natural or legal persons that may present a conflict of interest to the Company.
- Providing an extra treatment to some specific stakeholders.

The Board of Directors is responsible to ensure and protect the benefits of all shareholders, especially for the individual public investors, who might have not had the business or finance background to receive the similar treatment to other shareholders by reviewing and approving the rules and guidelines for the disclosure of related transactions that established by the law and regulators. Moreover, all the activities that would impact the shareholders must be approved by the Board of Directors such as the internal financial performance, the financial reporting from external auditor, the internal audit report, and any other change on the management team. The Board of Directors would not only ensure that the company has acted in a good manner, but also provide the recommendation and guideline to company as well as already mentioned in **CHAPTER II COMPANY OVERVIEW TABLE 2.2 BOARD OF DIRECTORS** that one-third of the Board of Director are independent directors, who are not beneficial by the company financial performance (Sansiri, 2022).

2.4.2 Supervising the Use of Inside Information

In order to monitor and control the inside information, the company will establish policies, principles, and guidelines in the Corporate Governance and Code of Ethics Handbook, which will be monitored and controlled by the Board of Directors. These policies would help the company and the stakeholders to protect the use of insider information and transactions on the company's shares. These would ensure a fair treatment to all shareholders from unethical stock trading transactions for their own benefit or the benefit of others. Examples related to the control of inside information are as the following (Sansiri, 2022).

- Directors, executives, and all other workers are required to abide by the Company's policy regarding the protection and use of inside information. This includes not using any critical or confidential knowledge for their own or other people's gain.
- Directors, executives, and staff members of the company are permitted to hold and report securities. However, in order to avoid conflicts of interest, the Board of Directors, Management, employee, and department heads, are not permitted to sell or buy the company's securities during the month before the release of the financial statements or the disclosure of inside information to the public.

“The Company confirms that the Management and Directors, who are required to disclose their stock holdings in accordance with Securities and Exchange Commission regulations, have agreed to notify the Company of any change in their shareholding within three working days of any transaction. Upon being appointed to their office, they take on this duty” (Sansiri, 2022).

CHAPTER III

MACROECONOMIC, INDUSTRY, AND COMPETITION ANALYSIS

3.1 Macroeconomic Analysis

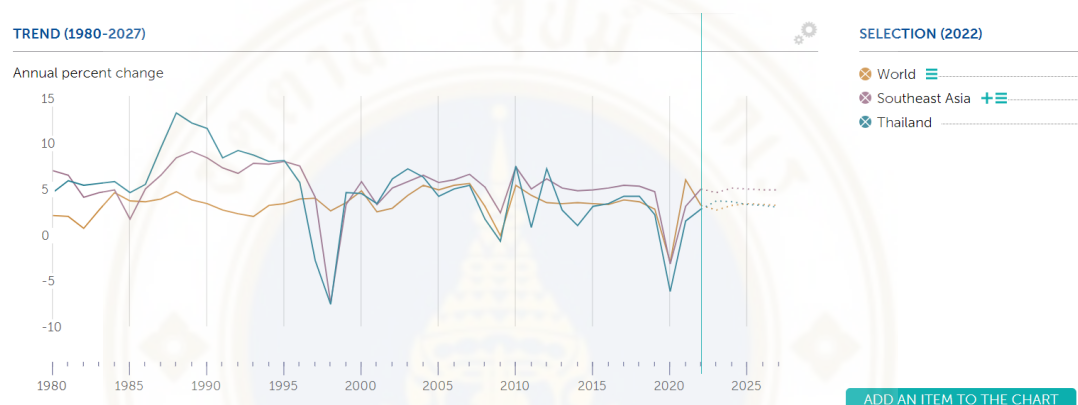


Figure 3.1 Global, SEA, and Thailand GDP Growth

Source: International Monetary Fund (IMF)

As can be seen in the **Figure 3.1** the annual global GDP growth has been in the range of 2% - 4% over the last 40 years, however, there were 2 crises that led the annual global GDP to be negative, which were in 2009 and 2020, when the Subprime crisis and Corona Virus (COVID-19) Pandemic respectively occurred. These 2 crises led the annual global GDP to be negative at -0.1% and -3% in 2009 and 2020. Recently, in 2021, the annual global GDP growth recovered to 6% due to the higher confidence level in the post-COVID period. However, in 2022, the Russia-Ukraine Crisis peaked, which rose the world energy price. As a result, the cost of business operation had increased significantly, which led the worldwide companies to carry higher cost and lower their profit. In terms of the expected global GDP in 2023 and 2024, the research from IMF indicated that the annual global GDP growth would be stable in the range of 3% - 3.5% (IMF, 2023).

In terms of the Southeast Asia (“SEA”) GDP Growth, the annual GDP growth has been in the range of 5% - 8% over the 40 years, which indicated the higher potential than the annual global GDP growth. However, the SEA’s GDP growth dropped dramatically during 1997 – 1998, when the Tom Yum Kung crisis occurred among the Asian countries, which led the annual SEA’s GDP growth to be -7.5% and, then, recovered back to the range of 3% - 7%. The annual SEA’s GDP growth was not highly impacted by the Subprime crisis in 2009, but it was highly impacted by the COVID-19 in 2020, which lower the GDP to -3.2%. Then, the GDP was continuously recovered in 2021 and 2022 to 5%, which was higher than the annual global GDP growth. In terms of the expected SEA’s GDP in 2023 and 2024, the research from IMF indicated that the annual SEA’s GDP growth would be stable in the range of 4% - 5% (IMF, 2023).

In terms of annual Thai GDP growth, the GDP growth went highest in 1988 at 13.3%, which was beyond the annual global and SEA’s GDP growth. However, Thai GDP was highly impacted by the Tom Yum Kung crisis during 1997 – 1998, which lower Thai GDP growth to the lowest at -7.6%, lower than the SEA’s GDP growth. After recovering in 2000, the Thai GDP growth was fluctuated in the range between 3% - 7% before turning negative at -0.7% in 2009 by the consequences from the Subprime crisis. The Thai GDP growth continued recover and fluctuated between 1% - 7% before turning negative at -6.2% in 2020 by the COVID-19 pandemic. Recently, the GDP recovered to 1.5% and 2.8% in 2021 and 2022 respectively. In terms of the expected Thailand’s GDP in 2023 and 2024, the research from IMF indicated that the annual Thailand’s GDP growth would be stable in the range of 3% - 4% (IMF, 2023).

Sansiri would benefit from the recovering of Thailand’s GDP growth due to the recent and expected fund flow in Thailand would be higher from the recent released GDP record. The significant impacts would be the higher confidence level in Thailand’s economy, which would encourage domestic and foreign investors (individuals, institutions, and corporates) to invest more. The government spending is also an important factor for the GDP, as can be seen in **Figure 3.2** below, even though the recent spending decreased in 2021, but the overall spending has been increasing over the time. Thus, it would turn up to the higher peak as the economic is currently recovering. This indicates that the government are investing in the infrastructure improvement in Thailand such as the railway system, 4-lanes road, and also including the development

of the Eastern Economic Corridor (“EEC”), which would benefit the company as the leading real estate development company. The company would be able to increase its funding through either equity or debt issues to expand its business geographically across the country.



Figure 3.2 Thailand's Government Spending

Source: Trading Economics, The National Economic and Social Development Board (NESDB)

3.2 Thailand's Inflation rate

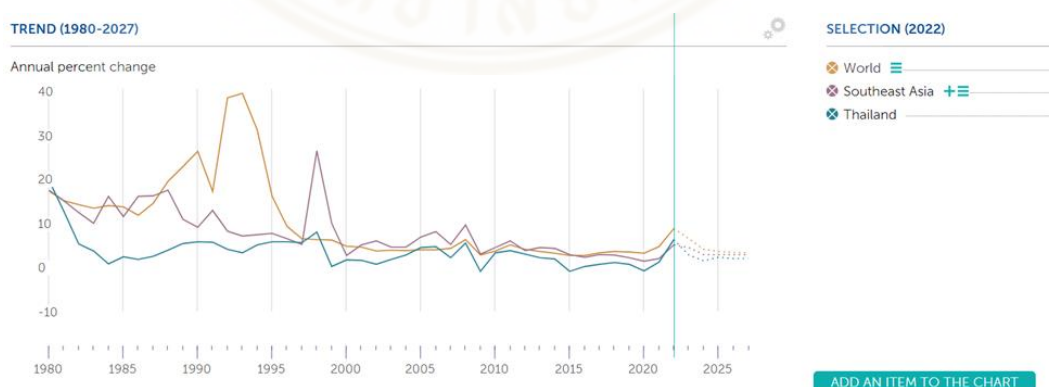


Figure 3.3 Thailand's Inflation rate

Source: International Monetary Fund (IMF)

According to the **Figure 3.3** above, the global inflation during 1990 – 1993 was the highest point at 39.4% as the booming of the economic resulted from the Post-World War II. However, the global inflation recovered and declined to the range between 2% - 4% after 2000. Recently, in 2019, the global inflation was at 3.5% before the impacts of COVID-19 and Energy crisis in 2019 – 2022. Currently, the global inflation increased to 8.8%, which has been the highest record since 1996. According to Euromonitor International (Maxim & Lan, 2023), the economic researchers, the global inflation is expected to decrease from 8.8% in 2022 to 6.8% in 2023 due to the energy and food price pressures. Additionally, in 2024, the global inflation is expected to continuously decline to 4.1%.

In terms of the inflation in the Southeast Asia, the inflation rate was in the range between 6% - 15% before the Tom Yum Kung crisis during 1997 – 1998, which led the inflation rate hiked to 26.4% as the economic recession occurred at that time. However, the inflation declined to 2.7% in 2000. In 2008, The subprime crisis also impacted the inflation among the Southeast Asian countries by slightly pushing the inflation in SEA to 9.6% before declining to the range between 2% - 4% from 2009 - 2021. Recently, the SEA's inflation increased to 5.1% due to the post-COVID-19 that accelerated the consumer's spending including the energy crisis, which led the energy and food price increased significantly. According to the IMF, the expected inflation for 2023 and 2024 would decline to 4.5% and 2.9% respectively.

In terms of inflation in Thailand, the inflation rate in 1984 was 0.8% before increasing to 8% in 1998 during the Tom Yum Kung crisis. However, the inflation was declined to 0.2% in 1999 before remaining in the range between 1% - 5% from 2000 - 2021. Recently, after the COVID-19 recovery, the consumer spending in Thailand increased by 10% from 2021 to 2022 as can be seen in **Figure 3.4** below including the energy crisis from the Russia-Ukraine, as can be seen in **Figure 3.5**, the crude oil price went up 71% from USD 69 per Barrel in 2021 to USD 118 per Barrel in 2022 drove the inflation rate from 1.2% in 2021 to 6.3% in 2022 beyond the average inflation rate among the Southeast Asian countries at 5.1%. In 2023, the Thailand's Board of Investment ("BOI") expected the inflation to decrease to 2.5%, which will reflect the interest rate policy in **3.3 Thailand's Interest rate**. (BOI, 2022)

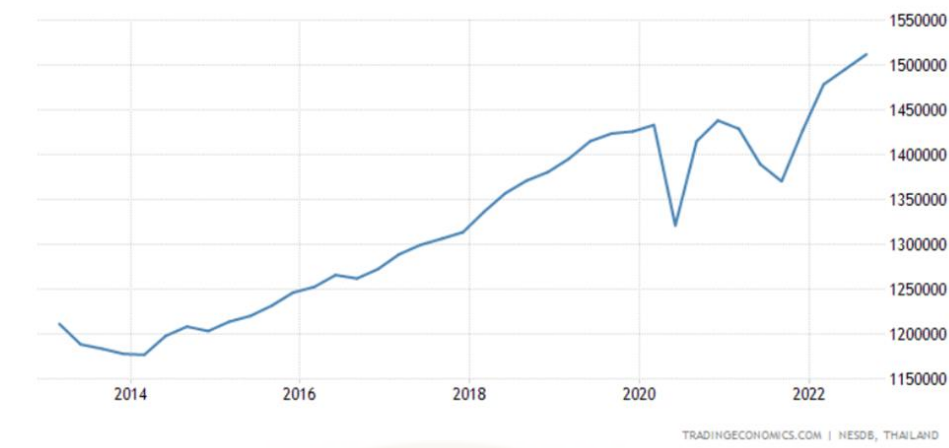


Figure 3.4 Thailand's Consumer Spending

Source: Trading Economics, The National Economic and Social Development Board (NESDB)

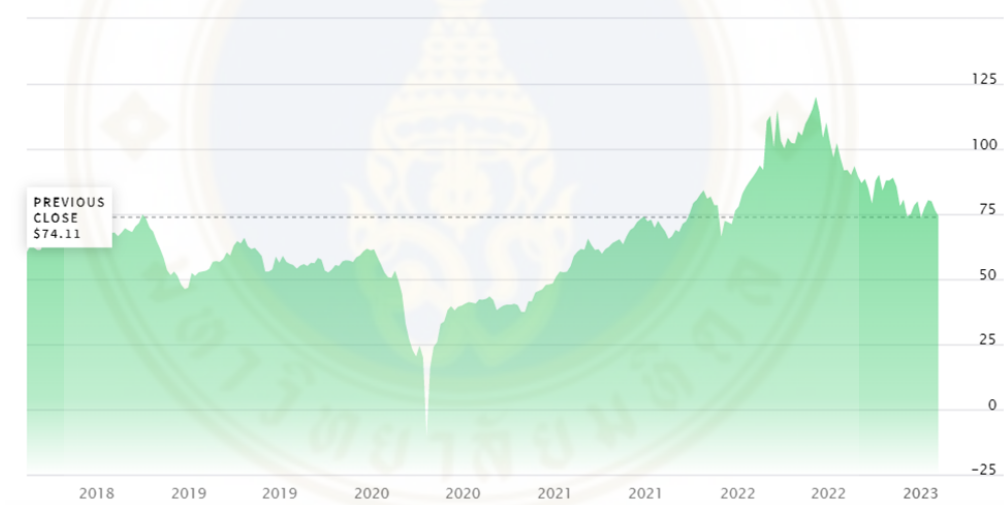


Figure 3.5 World Crude Oil Price

Source: NASDAQ

In terms of the company, during the increase in inflation rate, especially from the increase in the world crude oil price, Sansiri, as the real estate developer, would be impacted by carrying a higher cost of goods sold as the cost of raw materials will be increased including the increase in price of foods, which will stimulate the manpower required higher wages. Additionally, not only the raw materials and the wages, but also

the utilities, rent, and salary would have been increased and the company's cash would be also devalued as the inflation rises.

3.3 Thailand's Interest rate



Figure 3.6 Thailand's Interest rate

Source: Trading Economics, Bank of Thailand (BOT)

Before the COVID-19, the interest rate in Thailand was between 1.5% to 2.5% as the policy rate controlled by the Bank of Thailand (“BOT”), which focused to stimulate the economy after the Subprime crisis since 2008. However, as can be seen in **Figure 3.4** above, the consumer spending was dropped dramatically in 2021 due to the COVID-19 pandemic led the government to close the country and began lock down many provinces in Thailand. Consequently, the fallen of the consumer spending impacted the economic as a whole. Both private and public sectors could not generate the revenue and partially began to generate loss. Moreover, the value of the foreign direct investment in Thailand dropped and turned negative in 2021 as can be seen in **Figure 3.7** below. These factors triggered the BOT to seeks for the solutions. As can be seen in **Figure 3.6** above, the policy rate decreased by 125 basis point from 1.75% to 0.50% in 2020 and 2021 respectively to stimulate the economy during the COVID-19. However, in the late 2022, the COVID-19 situation seemed better. The economic was

recovered quickly, which created excessive demands and led the inflation rise to 6.3% in **Figure 3.3** above. Therefore, the BOT needed to adjust the interest rate to reflect the current economic and slowed down Thailand's economic by increasing the rate to 1.5% on January 25, 2023 (BOT, 2023)



Figure 3.7 Thailand's Foreign Direct Investment

Source: Trading Economics, Bank of Thailand (BOT)

As the interest rate increases, Sansiri would have higher risk exposure to the liquidity and debt due to the company is highly leveraged by having 70% of debt and 30% of equity. After the BOT announced the policy on the increasing in interest rate, the company's cost of borrowing would be higher as the Minimum Loan rate ("MLR") would be simultaneously increased by the commercial banks. Thus, it will increase the company's Weighted Average Cost of Capital ("WACC"). Moreover, not only the new loans, but the floating interest rate on the outstanding loans would increase as well. However, the company has an excellent credit rating as BBB+ from TRIS rating. Therefore, there would be the adjustment to the final MLR for Sansiri.

3.4 Thailand's Exchange rate



Figure 3.8 Thailand's Exchange rate

Source: Trading Economics, US Dollar Thai Baht (USDTHB)

As can be seen in **Figure 3.8** above, it indicates the exchange rate of USDTHB from 2019 to 2023. During the pre-COVID the USDTHB was in the range between THB 31 – THB 33. However, the exchange rate began to fluctuate from 2020 to 2022 influenced by the demand during the COVID-19 pandemic, which led the THB to depreciate against the USD during the country lockdown. As can be seen, in 2021, Thailand ensured to control the COVID-19 and cancelled the country lockdown, and then the THB began to appreciate against USD. Moreover, as aforementioned in **3.2 Thailand's Inflation rate**, the Thailand's inflation rate in 2022 rose to 6.3%, which was a main factor that drove the USDTHB from THB 32 to THB 38 per USD 1. In other words, the Thai Baht highly depreciated against the US Dollar. However, in order to control the value of Thai Baht, the BOT has increased the interest rate to strengthen the Thai Baht in nearly 2023. Recently, even though the interest rate was adjusted to be 1.50%, but the Thai Baht turns depreciation, which could be from other factors that cause the exchange rate fluctuates such as terms of trade, political stability, and etc.

In terms of Sansiri, the company would be impacted by the exchange rate fluctuations in different ways. First of all, recently, the depreciation of THB against the USD during 2021 to the end of 2022, the company would be positively impacted by having higher net revenue from the worldwide operations such as the residential projects in the US, United Kingdom, and also neighboring countries like Cambodia, Laos, Myanmar, and Vietnam (“CLMV”), as when the THB depreciates, the amount of THB per USD 1 would increase. Secondly, the appreciation of THB against the USD during the end of 2022, according to the Sansiri financial report, the company’s debt mostly relied on the Thailand’s commercial bank. Thus, the value of debt would not be increased unless the company borrows from international bank in terms of USD. If so, the appreciation of THB would increase the amount of that Debt. Moreover, the raw material of the construction such as manpower, contractors, and construction materials of Sansiri are mostly from domestic suppliers (Sansiri, 2022). Thus, the appreciation of THB would not impact the company, as the raw materials are not supplied from overseas.

3.5 Industry Analysis

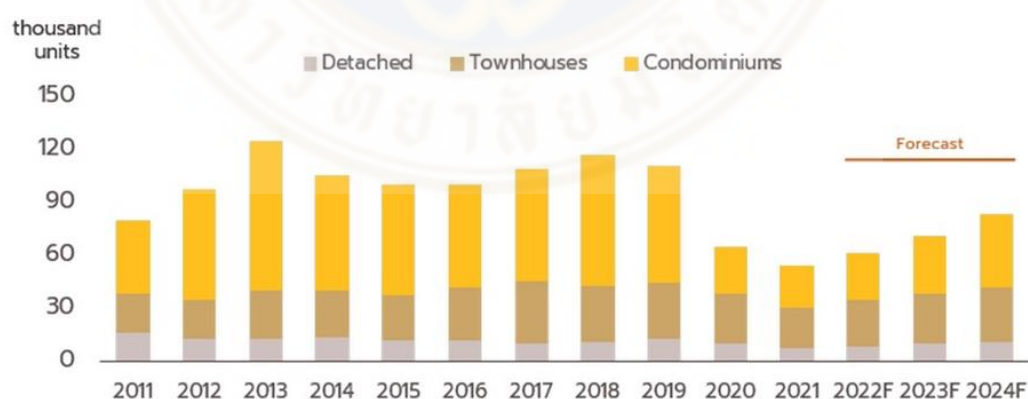


Figure 3.9 Thailand’s New Residential Projects

Source: Krungsri Research

As can be seen in **Figure 3.9** above, the number of new residential projects including houses, townhouses, and condominiums in Thailand dramatically grew during

2011 to 2013 before decreasing in 2014, which might from the lower confidence level in real estate development, as can be seen the drop in **Figure 3.7 Thailand's Foreign Direct Investment**, which indicated the lower amount of foreign direct investment in 2014. However, in 2016, the number of new residential projects in Thailand started to continuously grow but the growth was pulled by the COVID-19 in 2019. The number of new residential projects dropped dramatically down to around a half amount from the peak, which can be seen in 2021. The Krungsri Research predicted that the number of new residential projects in Thailand would be recovered from the relaxed policy after the COVID-19 pandemic by assuming that the confidence level of the demands in the real estate industry back to the normal in 2023 and having a growth rate around 5% - 7% annually. The main factors drive the demands in the real estate industry are from the increase in purchasing power from recovering in the tourism industry, the acceleration in mega project, especially transportation sector, and the increase in foreign investment and expatriates. Accordingly, these factors would positively impact to the residential industry in Thailand (Klinchuanchun, 2022).

In terms of the company, the recovery in the real estate industry would positively benefit to Sansiri, as the main revenue of Sansiri is from house and condominium, which accounted for 70% of total revenue, as can be seen in the company's **Revenue Structure**. Moreover, the company recently launched both new house and condominium projects in 2023, which consist of 52 projects, 30 projects for houses and 22 projects for condominiums, worth THB 75 billion (Sansiri, 2023). The increase in consumer spending at the beginning of 2023 in **Figure 3.4** indicates that the higher confidence level and higher purchasing power would contribute to Sansiri as the leading real estate developer in Thailand. Moreover, the expansion of the city would benefit the company as well due to the mega projects on public transportation from the government. As a preparation, the company has been acquiring land in the suburban areas for developing house projects in the future. The value of the land and that such projects would be increased while the cost of acquiring was relatively low. Therefore, this would be a bright outlook for Sansiri after facing the COVID-19 pandemic recently.

3.6 Competitor Analysis

Table 3.1 Benchmark and Peers Analysis

Ticker	Name	Market Capital (million baht)	P/E (x)	D/E (x)	ROE (%)	ROA (%)	Gross Profit Margin (%)	Net Profit Margin (%)
Benchmark								
SET	Stock Exchange of Thailand	20,391,788.84	18.25	-	9.86	4.36	-	6.40
PROPCON	Property and Construction Industry	2,396,588.23	17.58	-	7.94	4.56	-	7.40
PROP	Property Sector	1,229,112.86	18.80	-	8.06	5.45	-	14.53
Peers								
ANAN	Ananda Development PCL	5,832.75	-	1.57	(3.75)	0.51	25.28	(8.72)
AP	AP Thailand PCL	38,694.56	6.77	0.79	17.05	11.41	33.59	15.82
LPN	LPN Development PCL	6,631.15	10.93	0.93	5.25	4.05	24.25	6.83
ORI	Origin Property PCL	29,204.06	8.23	1.40	24.64	13.49	42.76	28.75
PSH	Pruksa Holding PCL	28,699.41	11.07	0.62	6.08	5.24	30.53	8.98
QH	Quality Houses PCL	25,285.94	11.32	0.63	8.35	6.20	33.82	25.30
SIRI	Sansiri PCL	28,858.24	10.19	2.70	7.10	3.65	31.71	10.91
SPALI	Supalai PCL	47,849.82	5.39	0.75	21.23	15.24	39.43	23.92

Source: SETSMART, Refinitiv as of 9M 2022 (Market Cap. and PE are as of February 10, 2023)

According to the **Table 3.1**, in the period 9M 2022, the property sector generated ROE and ROA at 8.06% and 5.45%, while the SET could generate ROE and ROA at 9.86% and 4.36% respectively, which turned out that the property sector could generate higher ROE and lower ROA due to the companies in the property sector may require more time to recover after COVID-19. In terms of Sansiri, the company's financial performance was below than the sector's average, as can be seen the Sansiri ROE as of 9M 2022, the ROE and ROA was 7.10% and 3.65% respectively compared to the average of ROE and ROA of property sector at 8.06% and 5.45% respectively. This could indicate that Sansiri's financial performance was relatively low compare to other companies in the property sector.

The companies listed in the property sector operate in several product segments such as houses, condominiums, commercial building, and rental manufacturer. Thus, some companies operating in a specific segment such as Origin Property Public Company Limited ("ORI"), which only operates in the condominium segment, might not be the selected as peers. Further, some companies have a big difference in market capital such as Ananda Development Public Company Limited ("ANAN"), LPN Development Public Company Limited ("LPN"), or Supalai Public Company Limited ("SPALI") and might not be the appropriate peers for that reason. The most similar peers of Sansiri would be Pruksa Holding Public Company Limited ("PSH"), Quality Houses

Public Company Limited (“QH”), and AP Thailand Public Company Limited (“AP”), as these companies operated in both houses and condominium segments as Sansiri, including with the similar regional geographically areas and similar target consumers. In addition, these comparative companies have a similar market capitalization. As a result, PSH, QH, and AP are selected as the most relevant peers. In other words, these would be the main competitors for Sansiri.

Comparing to the peers, in terms of leverage, Sansiri is highly leveraged by having debt-to-equity ratio (“D/E”) at 2.70 times, which relatively higher than PSH, QH, and AP. However, the higher gearing did not benefit the company as the ROE and ROA of Sansiri was lower than AP. In terms of profitability, AP has a better performance as the ROE and ROA of AP were at 17.05% and 11.41% respectively, while the D/E was lower than Sansiri. In terms of cost efficiency, QH had a better performance as the gross profit margin (“GPM”) and net profit margin (“NPM”) were at 33.82% and 25.30% respectively, which reflected efficiency in cost control. In terms of price-to-earning per share (“P/E”), as of February 10, 2023, AP is traded at the lowest P/E at 6.77 times, which reflected that the AP’s market price is relatively cheaper than PSH, QH, and Sansiri. Additionally, the last close price on February 10, 2023 for each company is as follows, AP is THB 12.30, PSH is THB 13.10, QH is THB 2.36, and SIRI is THB 1.87.

AP was established in 1991 with the purpose of real estate development and listed on the SET in 2000 through backdoor listing (by acquiring an existed listed company to be the listed company). AP’s operation has been expanding across segments including houses, condominium, and property management, which led AP to be fully integrated real estate property developer (AP Thailand PCL, 2023). The recent financial report in Q3 2022, it indicated that AP has an excellent performance by having higher ROE and ROA above the property sector’s average and has an excellent in cost control by having high GPM and NPM above the property sector’s average as well. Moreover, the D/E was relatively lower than the others at 0.79 times. The current P/E is also lower than the property sector’s average at 6.77 times.

PSH was established in 1993 with the purpose of real estate development and listed on the SET in 2005 through the initial public offering (“IPO”). PSH has been operating across segments including houses, townhomes, and condominium. PSH is the

first developer in Thailand that applies technology to the construction to improve the operation's efficiency (Pruksa Holding PCL, 2023). The recent financial report in Q3 2022, it indicated that PSH's ROE and ROA were lower than the property sector's average. As can be seen from the **Table 3.1**, PSH's GPM and NPM were relatively lower than others, which could indicate that PSH has higher cost of construction and cost of management. As PSH has the lowest leverage compared to the others by having D/E at 0.62 times, which would result in a relatively low ROE.

QH was established in 1983 with the purpose of construction contractor before transforming to a real estate developer in 1990. In 1991, QH was listed on the SET through an IPO. However, in 1997, QH had the severe impacts from the Asia financial crisis ("Tom Yum Kung crisis"), which led QH to enter the debt restructuring process in 1999. QH has been operating across segments including houses, condominiums, and commercial building (Quality Houses PCL, 2023). The recent financial report in Q3 2022, the QH's profitability was beyond the property sector's average regarding ROE and ROA. QH has excellent cost control policies as the QH's GPM and NPM were relatively higher than the others, which would reflect that economy of scale existed. Moreover, QH had lower leverage than the peers by having D/E at 0.63 times.

CHAPTER IV FINANCIAL ANALYSIS

4.1 Growth Analysis

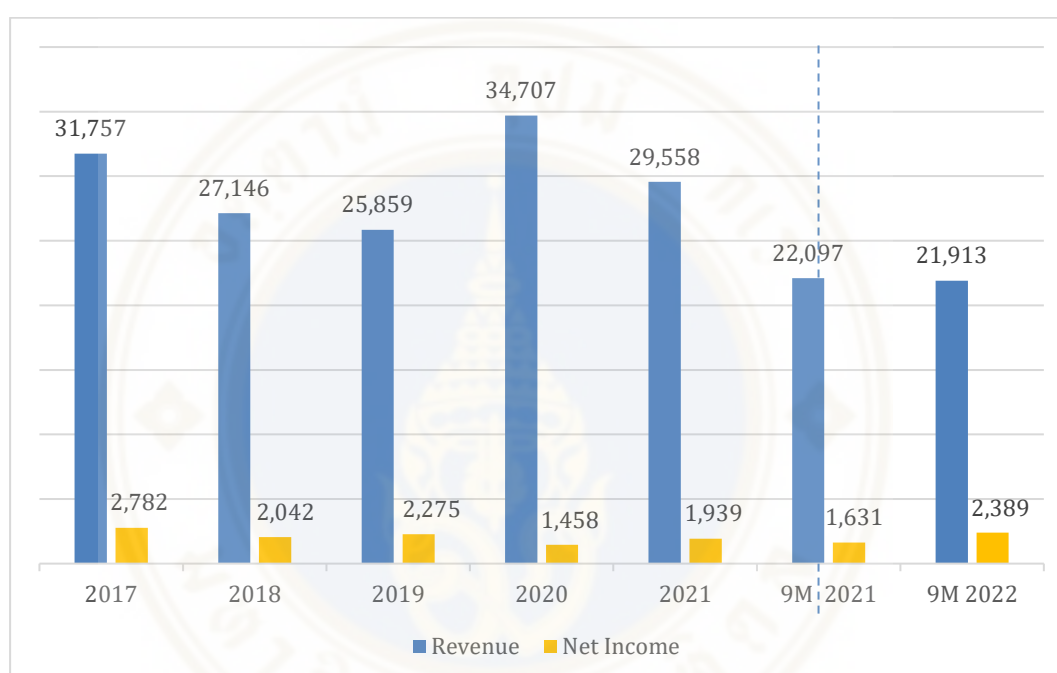


Figure 4.1 Sansiri Growth Analysis

Unit: million THB

Source: SETSMART, Refinitiv, Sansiri Financial Report

Table 4.1 Sansiri Growth Analysis

%YoY Growth	2018	2019	2020	2021	9M 2022
Revenue	-15%	-5%	34%	-15%	-1%
Net Income	-27%	11%	-36%	33%	46%

Source: SETSMART, Refinitiv, Sansiri Financial Report

As can be seen in **Figure 4.1 and Table 4.1**, during the pre-COVID-19 from 2017 to 2019, Sansiri's revenue slightly decreased by -18.58% from THB 31.76 billion to THB 25.86 billion, which could be due to the impacts from the trade war between the US and China that led to the price of raw materials increasing worldwide, as well as due to the issue of the government stability in Thailand. However, during the COVID-19 from 2020 to 2021, the performance turned more positive. The revenue increased by 34.22% YoY from THB 25.86 billion to THB 34.71 billion, which would result from the government policy that decreased the interest rate to 0.5% as can be seen in **Figure 3.6**, which led a cost of borrowing lower than previous period. Despite the fact that the revenue increased, the cost of raw material during the COVID-19 was also pushed up as well, which led the company to have lower net income by -35.91% YoY from THB 2.28 billion to THB 1.46 billion in 2019 and 2020 respectively. In 2021, the increasing cost of raw material was resolved, but the revenue declined as well, as the revenue pulled back from the excessive demand in the previous year. In 2022, the recent financial report as of 9M 2022 shows that Sansiri has successfully controlled the cost, as can be seen that, even though, the revenue was stable, but the net income increased by 46.47% from THB 1.63 billion to THB 2.39 billion. This is a positive signal that Sansiri turns from the downward trend to the upward trend, as the net income for 9-month period in 2022 has already exceeded the previous 4-year record since 2018 and it beats the highest net income in the last 5 years at THB 2.78 billion.

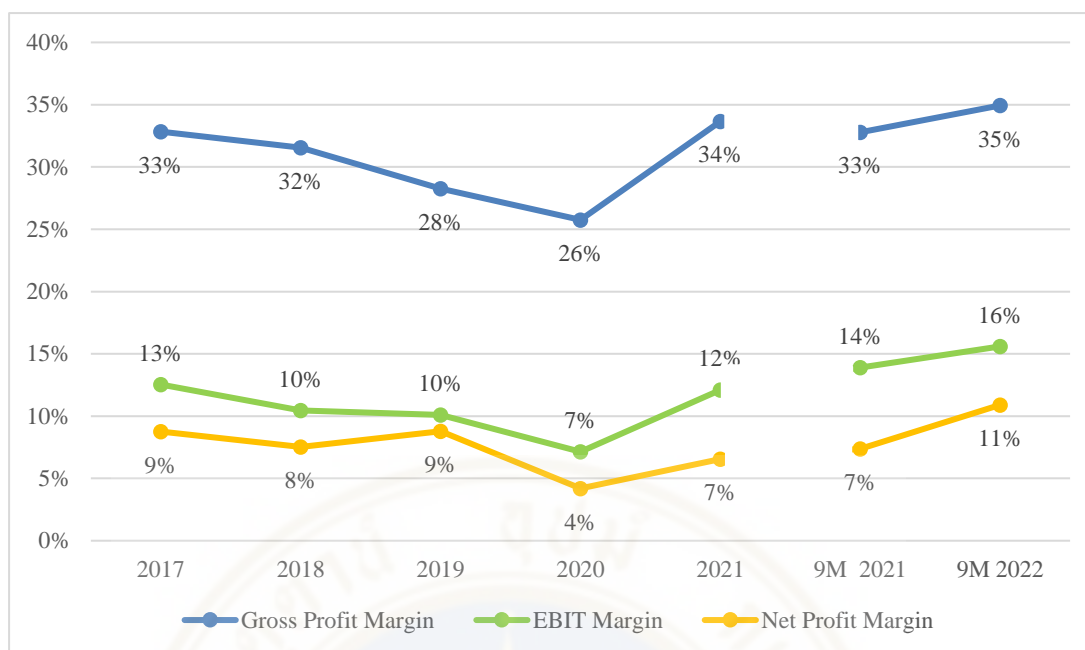


Figure 4.2 Sansiri Common Size Analysis

Source: SETSMART, Refinitiv, Sansiri Financial Report

Table 4.2 Sansiri Common Size Analysis

%Common Size	2017	2018	2019	2020	2021	9M 2021	9M 2022	AVG 2017-2019	AVG 2020-2021
Gross Profit Margin	33%	32%	28%	26%	34%	33%	35%	31%	30%
EBIT Margin	13%	10%	10%	7%	12%	14%	16%	11%	10%
Net Profit Margin	9%	8%	9%	4%	7%	7%	11%	8%	5%

Source: SETSMART, Refinitiv, Sansiri Financial Report

Sansiri has been maintaining the GPM to be on average of 31%, EBIT Margin on average of 11%, and NPM on average of 8% before the COVID-19 pandemic. However, the margin declined during the COVID-19, as the cost of sales and the cost of operation increased from the retention of pandemic including the impacts of trade war, which led the GPM, EBIT margin, and NPM to be slightly lower at 30%, 10%, and 5% respectively. In 2022, due the declining impact of both the pandemic and the trade war, Sansiri has an excellent performance to recover its operation by pushing its margin to the highest points over the last 5 years. The GPM, EBIT margin, and NPM were beyond the average by having 35%, 16%, and 11% respectively. It reflected that Sansiri has successfully controlled the cost and improved its operational efficiency.

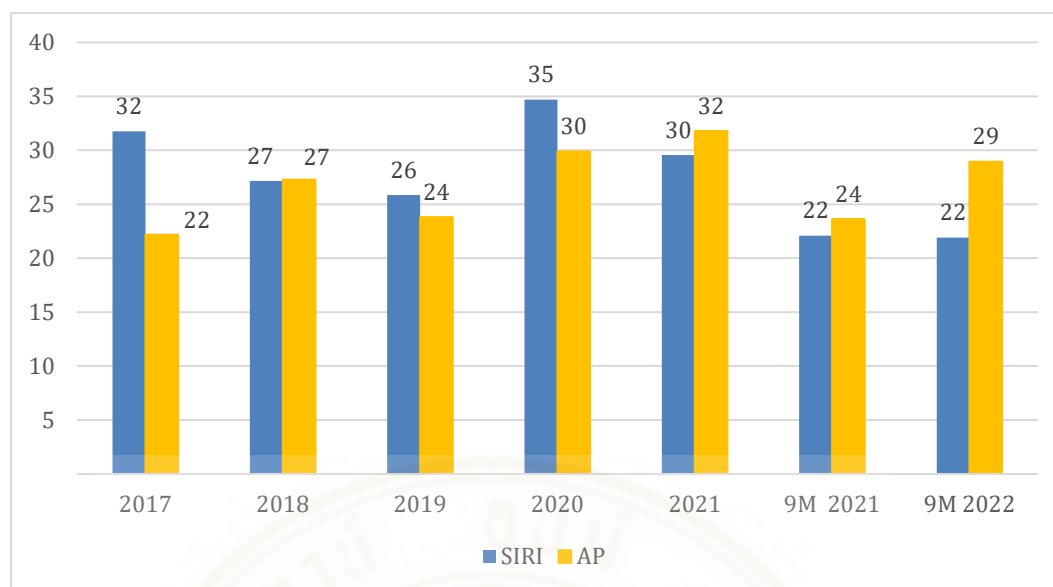


Figure 4.3 Sansiri and AP Growth Comparison

Unit: billion THB

Source: SETSMART, Refinitiv, Sansiri Financial Report

Table 4.3 Sansiri and AP Growth Comparison

%YoY Growth	2018	2019	2020	2021	9M 2022
SIRS	-15%	-5%	34%	-15%	-1%
AP	23%	-13%	26%	6%	22%

Source: SETSMART, Refinitiv, Sansiri Financial Report

AP is the selected peer for this one-on-one comparison, as AP has been excellently performing during the last 5 years among the peer group. Before the COVID-19 pandemic, during 2017 to 2019, Sansiri had higher revenue at THB 32 billion while AP was at THB 22 billion, but Sansiri's revenue had been declined over the years. AP had a better profitability during 2017 to 2021, as the growth was more stable even in the COVID-19 pandemic, which indicated that AP has a better profitability from the excellent sales and marketing teams. In 2022, as of 9M 2022, the recent report from both companies shows that Sansiri might take more time than AP to recover. As can be seen, AP's revenue grew by 22%YoY while Sansiri was down -1% YoY.

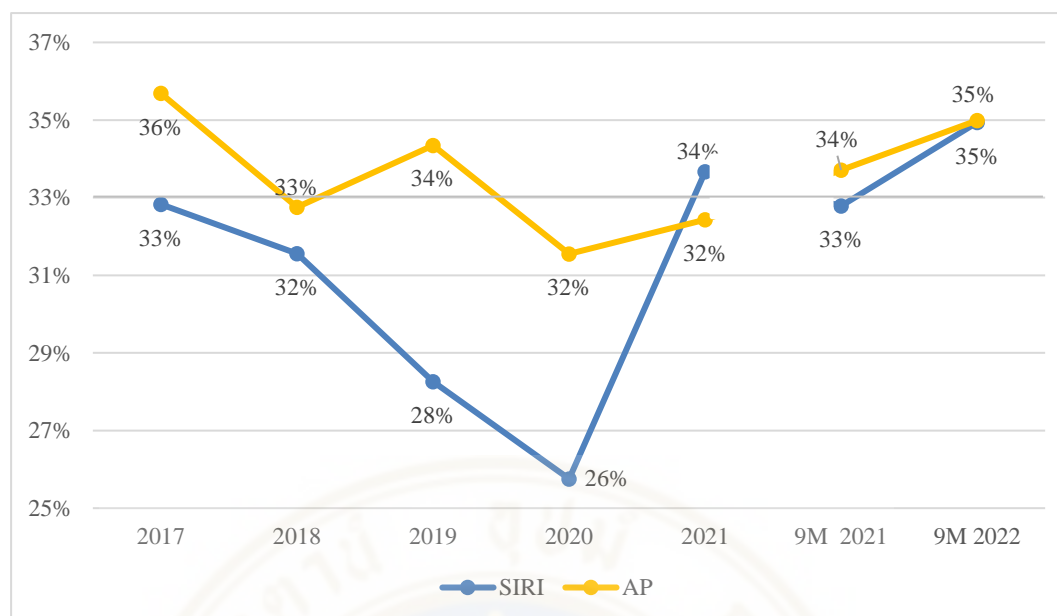


Figure 4.4 Sansiri and AP Gross Profit Margin Comparison

Source: SETSMART, Refinitiv, Sansiri Financial Report

Table 4.4 Sansiri and AP Gross Profit Margin Comparison

%GPM	2017	2018	2019	2020	2021	9M 2021	9M 2022	AVG 2017-2019	AVG 2020-2021
SIRI	33%	32%	28%	26%	34%	33%	35%	31%	30%
AP	36%	33%	34%	32%	32%	34%	35%	34%	32%

Source: SETSMART, Refinitiv, Sansiri Financial Report

To focus on the efficiency in cost of sales, GPM would be selected as the measurement. As can be seen, AP has been maintaining GPM above Sansiri since 2017. These companies were both impacted by the COVID-19, as the GPM fell down in 2020, when the price of raw material was rising, but AP was still maintained its average margin around 32% - 34%, while Sansiri's GPM declined to 26% lower than its previous average of 31%. However, in 2021, both companies could recover their operation by turning the GPM back to the previous average. In addition, Sansiri had a better operation efficiency after recovering, as it turned from 26% to 34% within a year and the cost tended to be more recovered. As can be seen in **Figure 4.4 and Table 4.4**, the 9M 2022 report, Sansiri would be able to turn its GPM to be the same level with AP at 35%, which was the highest GPM for Sansiri over the last 5 years. To sum up, the data indicate that, after the COVID-19 pandemic, Sansiri had the ability to recover and improve its costs

for both cost of sales and cost of operations, while AP was able to recover its GPM back to its previous average of 34%.

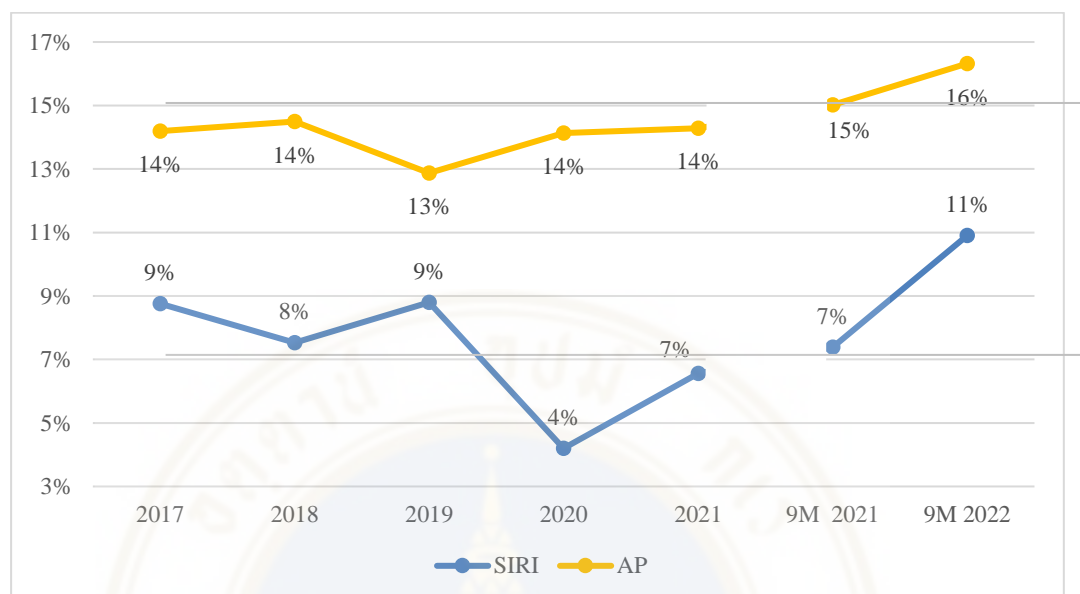


Figure 4.5 Sansiri and AP Net Profit Margin Comparison

Source: SETSMART, Refinitiv, Sansiri Financial Report

Table 4.5 Sansiri and AP Net Profit Margin Comparison

%NP M	201 7	201 8	201 9	202 0	202 1	9M 2021	9M 2022	AVG 2017-2019	AVG 2020-2021
SIRS	9%	8%	9%	4%	7%	7%	11%	8%	5%
AP	14%	14%	13%	14%	14%	15%	16%	14%	14%

Source: SETSMART, Refinitiv, Sansiri Financial Report

In terms of NPM, AP has been constantly maintaining its NPM at average of 14%, even when the COVID-19, AP was still able to maintain its NPM, which indicated the strength in its profitability and operations. Moreover, AP's NPM tended to increase after the COVID-19, as can be seen in **Figure 4.5 and Table 4.5**, 9M 2022 report showed that the AP's NPM continuously increased to 16%, which means that AP has improved its cost structure and went higher than the average at 14%. It is clearly that AP has an excellent in cost controlling. In terms of Sansiri, the average of NPM was around 5% - 4%, but the impacts of the rising in raw material price pulled the NPM down to 4% in 2020, which apparently indicate that Sansiri's operational management

was fragile. However, in 2021, Sansiri could recover the impacts of the price rise, and turn NPM to 7%. Recently, 9M 2022 report showed the improvement of Sansiri's operational management by having 11% NPM above the previous average around 5% - 8%, which was a positive signal that Sansiri's management team has clearly improved the cost control, even though, it was still as not strong as AP.

4.2 DuPont Analysis

Table 4.6 DuPont Analysis

ROE	2017	2018	2019	2020	2021
SIRI	9.44%	7.21%	7.70%	4.05%	5.07%
AP	15.57%	17.57%	12.66%	14.46%	14.37%
PSH	15.42%	15.68%	13.16%	6.27%	5.34%
QH	13.91%	14.38%	10.37%	7.72%	6.16%

Source: SETSMART and Refinitiv

As can be seen, the ROE of each company listed above in **Table 4.6**, it seems that most companies had high ROE during the pre-COVID-19, especially in 2017 and 2018 before the declining during the COVID-19. AP is the one that could maintain the ROE to not be deviated from the previous period, while SIRI, PSH, and QH had lower ROE, especially PSH, the ROE was 15.42% in 2017 and it fell to 5.34% in 2021. However, to provide more insights into the drivers of ROE, a DuPont ROE analysis is conducted below.

Table 4.7 Sansiri DuPont Analysis

SIRI	2017	2018	2019	2020	2021
Net Profit Margin	8.76%	7.52%	8.80%	4.20%	6.56%
Total Asset Turnover	0.41	0.31	0.25	0.32	0.26
Financial Leverage	2.63	3.09	3.50	3.01	2.97
ROE	9.44%	7.21%	7.70%	4.05%	5.07%

Source: SETSMART and Refinitiv

It is clear that the Sansiri's ability on generating profit from its assets has been declining over the last 5 years from 0.41 times in 2017 to 0.26 times in 2021, which

led the total asset turnover to be relatively low. Moreover, even though Sansiri has been increasing the financial leverage since 2017 from 2.63 times to 2.97 times in 2021, but it could not effectively support its ROE. As the major component is still the NPM and the NPM fell down from 8.76% in 2017 to 6.56% in 2021, Sansiri needs to improve its profitability to increase the ROE due to the fact that the NPM of Sansiri is relatively lower than its peers.

Table 4.8 AP DuPont Analysis

AP	2017	2018	2019	2020	2021
Net Profit Margin	14.20%	14.50%	12.87%	14.14%	14.29%
Total Asset Turnover	0.54	0.6	0.44	0.51	0.54
Financial Leverage	2.03	2.02	2.23	2.01	1.86
ROE	15.57%	17.57%	12.66%	14.46%	14.37%

Source: SETSMART and Refinitiv

AP had an excellent ability to generate the profit from its assets, as the total asset turnover has been maintaining over the last 5 years at 0.54 times. Even though, the financial leverage has been slightly declining from 2.03 times in 2017 to 1.86 times in 2021, but the ROE was not received significant impacts. This because of the strength in profitability and asset utilization that led the ROE remain stable, which can be seen in **Table 4.8**, the NPM still slightly increased even facing the COVID-19 from 14.20% in 2017 to 14.29% in 2021. Therefore, the ROE for AP was not impacted by neither the NPM nor asset utilization, but slightly by the deleveraging.

Table 4.9 PSH DuPont Analysis

PSH	2017	2018	2019	2020	2021
Net Profit Margin	12.64%	13.60%	13.60%	9.58%	8.45%
Total Asset Turnover	0.64	0.58	0.48	0.36	0.38
Financial Leverage	1.91	1.99	2.02	1.82	1.66
ROE	15.42%	15.68%	13.16%	6.27%	5.34%

Source: SETSMART and Refinitiv

PSH's ROE has been dramatically declining over the 5 years from 15.42% in 2017 to 5.34% in 2021. The main factor impacting the ROE is the NPM, as it fell down in 4 consecutive years including with the decreasing in asset utilization from 0.64

times in 2017 to 0.38 times in 2021. Moreover, PSH has been deleveraging from 1.91 times in 2017 to 1.66 times in 2021, which led the ROE to drop significantly.

Table 4.10 QH DuPont Analysis

QH	2017	2018	2019	2020	2021
Net Profit Margin	19.13%	23.26%	26.06%	22.65%	19.98%
Total Asset Turnover	0.34	0.3	0.21	0.19	0.18
Financial Leverage	2.14	2.06	1.89	1.79	1.71
ROE	13.91%	14.38%	10.37%	7.72%	6.16%

Source: SETSMART and Refinitiv

QH's ROE has been falling over the last 5 years since 2017 from 13.91% to 6.16% in 2021. Even though, QH has an excellent profitability as the NPM has been increasing since 2017 from 19.13% to 19.98%, even more, during the COVID-19, the NPM went up to 26.06% in 2019, but the ROE has been declining from 13.91% in 2017 to 6.16% in 2021. It is obvious that the main components impacted the ROE were asset utilization and financial leverage. The asset utilization, which can be seen in **Table 4.10**, the total asset turnover declined from 0.34 times in 2017 to 0.18 times in 2021, the lowest one compare to others. Moreover, QH has been deleveraging from 2.14 times in 2017 to 1.71 times in 2021, which resulted in a lower ROE.

4.3 Cash Conversion Cycle Analysis

Table 4.11 Cash Conversion Cycle Analysis

	Days Inventory Outstanding (Days)	Days Sales Outstanding (Days)	Days Payable Outstanding (Days)	Cash Cycle (Days)
SIRI	1,371.17	16.43	38.71	1,348.89
AP	698.81	1.41	42.09	658.13
PSH	1,098.93	1.45	31.35	1,069.03
QH	1,231.99	1.81	32.83	1,200.97

Source: SETSMART as of 9M 2022

Cash Conversion Cycle (“CCC”) would be the main factor directly impact the real estate developers’ revenue, the Days Inventory Outstanding (“DIO”) of the real estate developers are usually longer than the other industry as its goods required a long time to construct and deliver to the buyers while Days Sales Outstanding (“DSO”) and Days Payable Outstanding (“DPO”) would be similar to other industry, except the difference in bargaining powers.

As can be seen in **Table 4.11**, compare to the peers, SIRI has the longest DIO at 1,372 days, which is approximately 3.75 years for sourcing for material, constructing, and delivering, while AP has the lowest DIO at 699 days, which is approximately 1.92 years. These figures indicate that AP have a better operation not only for sourcing, constructing, or delivering, but also for marketing and sales. In terms of DSO, the average collection period of Sansiri is still the longest at 16.43 days, while other peers are around 2 days, for example, AP has only 1.41 days, which indicates that Sansiri’s cash recognition would be slower and usually last up to a half month and this could be from the longer credit terms Sansiri provided to the customers. In terms of DPO, the average payable period of Sansiri remain in the range of peers by having 38.71 days, while PSH has 31.35 days and AP has 42.09 days, which indicates that PSH has lower bargaining power to the suppliers, while AP has the highest bargaining power to the suppliers. Therefore, it is obvious that Sansiri is required to improve and develop its operational management. Additionally, according to aforementioned analysis, AP has excellent operational management and this could be the reason why AP could maintain and improve its profitability in **4.2 DuPont Analysis** to be more constant.

CHAPTER V

VALUATION

5.1 Discounted Cash Flow Valuation

5.1.1 Pro forma statement

Revenue Assumptions

The revenue of SIRI consists of 6 segments, which are (1) sales of real estate, (2) business management services, (3) hotel management services, (4) sales of construction materials, (5) projects for rent, and (6) other services. According to the **Table 5.1 Revenue Assumptions**, the growth rate for each segment will be varied from 2023 to 2025 depending on its previous performance. When the revenue has been fluctuating over the time, the average 3 years historical growth rate would be used to determine the forecast, when the revenue has been increasing or declining as a trend, the last year's growth rate would be used to determine the forecast. After 2025, the growth rate will be varied between 0% and 5% to reflect the segment's maturity stage and avoid an overestimation. The assumptions for each segment's revenue are as below.

(1) Revenues from sales of real estate

Assuming the revenue from sales of real estate grows by 20.93% during 2023 to 2025 as the economy will continuously recover after the pandemic before declining to 5.00% after 2025 to reflect the maturity of the company after expanding during 2023 to 2025. The growth rate of 20.93% is calculated from the average 3 years historical growth rate between 2020 and 2022 with the reason that, in 2019, the pandemic began and impacted the company's operation, which might result in the abnormal revenue. As a results, the growth rate in 2019 will be removed from the calculation. Currently, the sales of real estate seem to be a mature product as the growth rate would not as high as other products and services, but it can generate 87.80% of the total revenue.

(2) Revenues from business management services

Assuming the revenue from business management services has no growth during 2023 to 2025 as the revenue from business management services has been declining since 2020 to 2022, from -40.20%, -38.68%, and -0.50% respectively. However, the revenue from business management services seems to turnaround from negative to positive in the near future. Therefore, after 2025, 5.00% growth rate will be applied to the revenue from business management services.



(3) Revenues from hotel management services

Assuming the revenue from hotel management services grows by 65.30% during 2023 to 2025 calculated by the average 3 years historical growth rate due to there was the revenue's fluctuation due to Covid-19 pandemic. The growth rate will decline to 5.00% after 2025 to reflect that the company will enter the maturity stage after its expansion during 2023 to 2025. Currently, the hotel management services seem to be potential services as the growth rate is the highest among the other products and services. Even though, the hotel management services have been begun in 2019, but it might overcome the business management services in 2025.

(4) Revenues from sales of construction materials

Assuming the revenue from sales of construction materials has no growth during 2023 to 2025 and also after 2015 due to the sales of construction materials is not the main revenue generator, not the potential products, and it is also insignificant amount. Therefore, there will be the exact number from the previous actual year, 2022.

(5) Revenues from projects for rent

Assuming the revenue from projects for rent grows by 32.66% during 2023 to 2025 calculated by the average 3 years historical growth rate. The growth rate will decline to 5.00% after 2025 to reflect that the company will enter the maturity stage after its expansion during 2023 to 2025. Currently, the projects for rent seem to be another potential product as the growth rate is the secondly high among the other products and services. However, the revenue generated is slightly small when comparing to other products and services.

(6) Revenues from other services

Assuming the revenue from other services grows by 29.95% during 2023 to 2025 calculated by the average 3 years historical growth rate. The growth rate will decline to 5.00% after 2025 to reflect that the company will enter the maturity stage after its expansion during 2023 to 2025.

Other Revenues Assumptions

Assuming the other revenues have no growth as they are non-recurring items such as sales of land, sales of investment, dividend income, or forfeiture of booking. These items might be occurred one-time with varied value, which are unable to predict based on any assumptions.

Cost of Sales Assumptions

The cost of sales of SIRI consisted of 6 segments, which are (1) sales of real estate, (2) business management services, (3) hotel management services, (4) sales of construction materials, (5) projects for rent, and (6) other services. The cost of sales is calculated by the percentage of each segments' sales. According to the **Table 5.2 Cost of Sales Assumptions**, the percentage of sales for each segment will be varied from 2023 to 2032 depending on its previous characteristics. When the percentage cost of sales has been fluctuating over the time, the average 3 years historical percentage cost of sales would be used to determine the forecast, when the percentage cost of sales has been increasing or declining as a trend, the last year's growth rate would be used to determine the forecast. The assumptions for each segment's cost of sales are as below.

(1) Cost of sales of real estate

Assuming the percentage cost of sales of real estate is 64.57% during 2023 to 2032 calculated by using the previous actual percentage of real estate sales in 2022 as the trend is declining over the last 3 years, from 2020 to 2022, at 74.97%, 66.18%, 64.57% respectively, which represents the economy of scale over the time.

(2) Cost of business management services

Assuming the percentage cost of business management services is 63.80% during 2023 to 2032 calculated by using the previous actual percentage cost of business management services in 2022 as the trend is declining over the last 3 years, from 2020 to 2022, at 71.78%, 66.49%, 63.80% respectively, which represents the economy of scale over the time.

(3) Cost of hotel management services

Assuming the percentage cost of hotel management services is 90.00% during 2023 to 2032. Due to the hotel management services has been begun in 2019, the cost would be typically high in the beginning and would decline to the company's cost target. Over the last 3 years from 2020 to 2022, the percentage cost of hotel management services was declining at 339.38%, 231.32%, and 186.56% respectively. Therefore, in the next 10-estimated year, the company should maintain the average 10.00% sales margin or 90% cost of sales to generate the revenue.

(4) Cost of construction materials sales

Assuming the percentage cost of construction materials sales is 90.38% during 2023 to 2032 calculated by using the average 3 years historical percentage cost of sales to determine the next 10-estimated year percentage cost of construction materials sales.

(5) Cost of projects for rent

Assuming the percentage cost of projects for rent is 44.65% during 2023 to 2032 calculated by using the previous actual percentage cost of projects in 2022 as the trend is declining over the last 3 years, from 2020 to 2022, at 78.33%, 62.20%, 44.65% respectively, which represents the economy of scale over the time.

(6) Cost of other services

Assuming the percentage cost of other services is 90.00% during 2023 to 2032. Due to the other services has exceeded the revenue since 2019. Over the last 3 years from 2020 to 2022, the percentage cost of sales was declining at 127.61%, 111.10%, and 103.00% respectively. It seems that the cost is going to be lower than the revenue soon and might decline to the company's cost target. Therefore, in the next 10-estimated year, assume that the percentage cost of other services might be at most around 90% and the company should maintain the average 10.00% services margin or 90% cost of others sales to generate the revenue.

Expenses Assumptions

The expenses of SIRI consisted of (1) selling expenses, and (2) Administrative expenses. According to the **Table 5.3 Expenses Assumptions**, the selling expenses are calculated by the percentage of sales, while the administrative expenses are calculated by determining the growth rate. The assumptions are as below.

Table 5.3 Expenses Assumptions

Expenses - Assumption	2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
Trend														
FY22														
Selling expenses	1,725	1,859	1,651	1,768	2,058	2,495	3,039	3,191	3,350	3,518	3,693	3,878	4,072	4,275
% Total Sales and Services	6.67%	5.36%	5.59%	5.05%										
Growth														
Administrative expenses	2,568	3,853	3,981	4,456	4,545	4,636	4,729	4,824	4,920	5,018	5,119	5,221	5,326	5,432
Growth	-13.28%	50.04%	3.32%	11.93%										
Depreciation and Amortization														
Depreciation and Amortization	404	748	743	941	1,455	1,732	2,070	2,425	2,798	3,113	3,431	3,749	4,083	4,433
% Sales and Services	1.56%	2.15%	2.51%	2.69%										
Total expenses														
Total expenses	4,697	6,460	6,375	7,165	8,058	8,864	9,838	10,440	11,068	11,649	12,243	12,848	13,400	14,141
Operating profit														
Operating profit	2,610	2,479	3,576	5,228	6,025	8,022	10,648	11,071	11,518	12,066	12,658	13,298	13,972	14,684

Table 5.4 Property, Plant, and Equipment and Depreciation Assumptions

PPE and Depreciation		2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Assets at Cost																
Property, Plant & Equipment - Gross - Total		4,871	5,109	8,205	8,633	8,846	9,895	9,762	10,147	10,551	10,975	11,420	11,888	12,379	12,895	
↳ Buy (CAPX)	Trend	2,685	3,188	2,483	436	495	601	732	768	807	847	889	934	980	1,029	
↳ Sell	Trend	10,38%	9.91%	8.40%	1.22%	247	300	365	383	403	423	444	466	489	514	
↳ % Sales and Services		2,453	2,16	2,175	212	247	300	365	383	403	423	444	466	489	514	
↳ % Sales and Services		9.49%	0.62%	7.35%	0.61%	0.61%	0.62%	0.62%	0.62%	0.62%	0.62%	0.62%	0.62%	0.62%	0.62%	
↳ Transfer		5,103	8,325	8,633	8,846	9,095	9,395	9,762	10,147	10,551	10,975	11,420	11,888	12,379	12,895	
Depreciation																
Beginning accumulated depreciation		2,208	2,440	2,843	3,468	3,940	4,412	4,885	5,357	5,830	6,302	6,775	7,247	7,720	8,193	
↳ Depreciation		232	593	524	472	472	472	472	472	472	472	472	472	472	472	
Disposal		2,440	2,843	3,468	3,940	4,412	4,885	5,357	5,830	6,302	6,775	7,247	7,720	8,193	8,664	
Ending accumulated depreciation																
New Capex (Engel) Depreciation																
Years																
0																
1			17	17	17	17	17	17	17	17	17	17	17	17	17	
2			20	20	20	20	20	20	20	20	20	20	20	20	20	
3			24	24	24	24	24	24	24	24	24	24	24	24	24	
4			26	26	26	26	26	26	26	26	26	26	26	26	26	
5			27	27	27	27	27	27	27	27	27	27	27	27	27	
6			28	28	28	28	28	28	28	28	28	28	28	28	28	
7			30	30	30	30	30	30	30	30	30	30	30	30	30	
8			31	31	31	31	31	31	31	31	31	31	31	31	31	
9			33	33	33	33	33	33	33	33	33	33	33	33	33	
10			34	34	34	34	34	34	34	34	34	34	34	34	34	
Total New Capex Depreciation			17	17	17	17	17	17	17	17	17	17	17	17	17	
Total New Capex Accumulated Depreciation			17	53	114	201	314	456	627	829	1,064	1,334	1,604	1,874	2,144	
New Property, Plant & Equipment - Net			479	564	671	682	693	705	718	731	745	758	771	784	797	
Depreciation - Net - Total		232	593	524	472	472	472	472	472	472	472	472	472	472	472	
Total Accumulated Depreciation	to PL		998	1,531	2,090	2,676	3,290	3,934	4,602	5,297	6,019	6,761	7,523	8,305	9,108	
Property, Plant & Equipment - Net - Total	to PPE	2,663	5,381	5,166	4,906	4,906	5,381	5,166	5,381	5,166	5,381	5,166	5,381	5,166	5,381	

Table 5.5 Intangible Assets and Amortization Assumptions

	2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
Intangible Assets and Amortization														
Assets at cost														
Intangible Assets - Gross - Total	2,820	4,981	6,031	6,448	7,246	8,175	9,302	10,074	12,115	13,627	15,216	16,883	18,634	20,473
+ Buy	2,161	1,050	416	798	929	1,127	1,372	1,441	1,413	1,588	1,668	1,751	1,888	1,930
% Sales and Services	8.36%	3.02%	1.41%	2.28%										
- Sell														
+ Transfer														
Ending	4,981	6,031	6,448	7,246	8,175	9,302	10,674	12,115	13,627	15,216	16,883	18,634	20,473	22,403
Amortization														
Beginning accumulated amortization	1,063	1,206	1,450	1,669	2,422	3,175	3,928	4,681	5,435	6,188	6,941	7,694	8,447	9,200
+ Amortization	143	244	219	753	753	753	753	753	753	753	753	753	753	753
- Disposal														
Ending accumulated Amortization	1,206	1,450	1,669	2,422	3,175	3,928	4,681	5,435	6,188	6,941	7,694	8,447	9,200	9,953
New Capex (Intangible) Amortization														
Years	0													
1	1				77	77	77	77	77	77	77	77	77	77
2					94	94	94	94	94	94	94	94	94	94
3					114	114	114	114	114	114	114	114	114	114
4					120	120	120	120	120	120	120	120	120	120
5								126	126	126	126	126	126	126
6									132	132	132	132	132	132
7										139	139	139	139	139
8											146	146	146	146
9												153	153	153
10													161	161
Total New Capex Depreciation					77	171	286	406	532	664	803	949	1,102	1,263
Total New Capex Accumulated Depreciation					77	249	534	940	1,472	2,136	2,839	3,688	4,690	6,254
New Intangible Assets - Net					832	955	1,087	1,035	981	924	865	802	736	667
Amortization - Net - Total					831	924	1,039	1,159	1,285	1,417	1,556	1,702	1,855	2,016
Total Accumulated Amortization	143	244	219	753	831	1,755	2,794	3,553	5,238	6,655	8,211	9,913	11,769	13,785
Intangible Assets - Net - Total	3,776	4,581	4,779	4,824	7,344	7,547	7,880	8,162	8,390	8,561	8,672	8,721	8,704	8,618
Depreciation and Amortization					1,320	1,433	1,572	1,718	1,871	2,031	2,200	2,377	2,563	2,758

(1) Selling expenses

Assuming the percentage selling expenses of sales is 5.05% during 2023 to 2032 calculated by using the previous actual percentage selling expenses of sales in 2022 as the trend is declining over the last 4 years, from 2019 to 2022, at 6.67%, 5.36%, 5.59%, and 5.05% respectively.

(2) Administrative expenses

Assuming the administrative expenses grows by 2.00% during 2023 to 2032 by using the target inflation in Thailand announced by the Bank of Thailand.

Property, Plant, and Equipment and Depreciation Assumptions

According to the **Table 5.4 Property, Plant, and Equipment and Depreciation Assumptions**, assuming the investment in capital expenditures (CAPEX) and selling of property, plant, and equipment (PPE) in the estimated years is 1.22% and 0.61% of sales respectively, calculated by using the latest percentage of sales to determine the percentage of investment and selling from 2023 to 2032.

The current PPE will be continuously depreciated for the next 30 years, while the new CAPEX in each estimated year will be depreciated by 30 years according to the company's depreciation and amortization policy.

Intangible Assets and Amortization Assumptions

According to the **Table 5.5 Intangible Assets and Amortization Assumptions**, assuming the investment in intangible assets in the estimated years is 2.28% of sales calculated by using the latest percentage of sales to determine the percentage of investment in intangible assets from 2023 to 2032.

The current intangible assets will be continuously amortized for the next 12 years, while the new intangible assets in each estimated year will be amortized by 12 years according to the company's depreciation and amortization policy.

Table 5.7 Working Capital Assumptions

Working Capital	2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
Days	365	365	365	365	365	365	365	365	365	365	365	365	365	365
Account receivable														
Avg 4y	44.52													
Days	4,158	4,230	4,231	2,170	4,967	6,023	7,335	7,701	8,086	8,490	8,914	9,360	9,827	10,318
Days	58.69	44.49	52.25	22.65	44.52	44.52	44.52	44.52	44.52	44.52	44.52	44.52	44.52	44.52
Inventory														
Avg 4y	803.67													
Days	64,958	59,654	58,474	91,097	89,660	108,719	132,408	139,023	145,969	153,263	160,921	168,962	177,405	186,270
Days	916.87	625.25	722.08	950.46	803.67	803.67	803.67	803.67	803.67	803.67	803.67	803.67	803.67	803.67
Account payable														
Avg 4y	44.81													
Days	3,724	4,317	3,233	3,964	4,999	6,062	7,383	7,752	8,139	8,546	8,973	9,421	9,892	10,386
Days	52.57	45.41	39.92	41.35	44.81	44.81	44.81	44.81	44.81	44.81	44.81	44.81	44.81	44.81
Net working cap														
Charge in working cap	65,392	59,367	59,472	89,304	89,627	108,679	132,359	138,972	145,916	153,207	160,862	168,900	177,340	186,202
Charge in working cap	(6,025)		105	29,832	323	19,052	23,680	6,613	6,944	7,291	7,655	8,038	8,440	8,862

Loan and Interest Expenses Assumptions

According to the **Table 5.6 Loan and Interest Expenses Assumptions**, assuming the interest rate for the company is 1.03% calculated by using the average 4 years historical company's effective interest rate to determine the interest expenses in the estimated years from 2023 to 2032. Also, assuming the short-term loan and long-term loan have equally interest rate. Moreover, assuming that there is no additional loan to finance the company's operation.

Working Capital Assumptions

According to the **Table 5.7 Working Capital Assumptions**, assuming the Day Sales Outstanding (DSO) is 44.52 days, the Day Inventory Outstanding (DIO) is 803.67 days, and Day Payable Outstanding (DPO) is 44.81 days based on 365 days basis, calculated by the average 4 years historical DSO, DIO, and DPO respectively.

Tax Expenses Assumptions

Assuming the Tax rate is 20.00% by complying with Thailand's corporate tax rate.

5.1.2 Discounted Cash Flow

In order to determine the company's value, the discounted cash flow method (DCF) will be used to discount the future cash flows to find the intrinsic value by having the weighted average cost of capital (WACC) as the discount factor. The formula of WACC is as below.

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

Where:

w_d	=	Weight of Debt
r_d	=	Cost of Debt
w_e	=	Weight of Equity
r_e	=	Cost of Equity
T	=	Corporate Tax Rate

The weight of debt receives from the latest outstanding net interest bearing debt including both short-term and long-term on the 2022 financial report, while the weight of equity is calculated by the market value of equity, which is from the

multiplication of latest closed price and the latest shares outstanding. Then, it can indicate the proportion of each debt and equity from the total amount of all sources of fund as can be seen in the **Table 5.8 Weight of Debt and Weight of Equity**. As a result, the weight of debt and equity are 71% and 29% respectively.

Table 5.8 Weight of Debt and Weight of Equity

Share price	1.88	<i>as of 10 FEB 2023</i>
No. of share	15,398	<i>as of 10 FEB 2023</i>
Equity value	28,948	
Debt	72,235	<i>Latest Debt FY 2022</i>
Equity + Debt	101,182	
<i>We</i>	29%	
<i>Wd</i>	71%	

The cost of debt (r_d) will follow the average minimum loan rate (MLR) of commercial banks registered in Thailand as of 27 January 2023 according to the **Table 5.9 Average Minimum Loan Rate of Commercial Banks Registered in Thailand**, which is 6.8511%, and subtract by the company's interest agreement MLR -3.15% as receiving from the company's note to financial statement, which can be seen in the **Table**. The MLR -3.15% is selected due to the company's effective interest paid is quite low, so this would reflect the company's low rate. As a result, the cost of debt will equal to 3.7011%

Table 5.9 Average Minimum Loan Rate of Commercial Banks Registered in Thailand

Bank	MOR	MLR	MRR
Commercial Banks registered in Thailand			
Bangkok Bank	6.9000	6.4500	6.8000
Krung Thai Bank	6.7200	6.1500	6.7700
Kasikornbank	6.7400	6.3700	6.5000
The Siam Commercial Bank	6.7450	6.1500	6.5200
Bank of Ayudhya	6.7250	6.4800	6.6500
TMBThanachart Bank Public Company Limited	7.0500	6.9250	7.0800
United Overseas Bank (Thai) Company Ltd.	7.7500	7.6500	8.1500
CIMB THAI Bank	7.9000	7.4000	8.3500
Standard Chartered Bank (Thai)	7.1540	6.8430	-
TISCO Bank	7.2000	7.2000	7.3500
Mega International Commercial Bank	6.5000	6.0000	6.2500
Kiatnakin Phatra Bank	7.2000	7.2750	7.3000
Land and Houses Bank	8.0000	7.4250	8.1500
Industrial and Commercial Bank of China (Thai)	7.5750	7.0500	7.4000
The Thai Credit Retail Bank	8.2800	8.6000	9.2500
Bank of China (Thai)	7.7500	6.5000	7.0000
Sumitomo Mitsui Trust Bank (Thai)	6.8750	6.0000	-
Average of Commercial Banks registered in Thailand	7.2391	6.8511	7.3013

Table 5.10 The Interest Rate Per Agreement of SANSIRI

Company's name	Balance of long-term loans		Interest rate per agreement	
	2021	2020	2021	2020
	Million Baht	Million Baht	Percent per annum	Percent per annum
Sansiri Plc.	10,698	12,352	MLR - 2.00% to MLR - 3.15%	MLR - 1.50% to MLR - 3.15% and BIBOR (3 months) + 1.45% to BIBOR (3 months) + 1.60%

Source: Sansiri Financial Report

In order to determine the cost of equity (r_e), the Capital Assets Pricing Model (CAPM) will be calculated by using risk-free rate plus the multiplication of beta and market risk premium, which can be seen below.

$$r_e = r_f + (\text{Beta} \times \text{MRP})$$

Where:

r_e	=	Cost of Equity
r_f	=	Risk-free Rate (10-year Government Bond Yield)
Beta	=	Relative Market Risk
MRP	=	Market Risk Premium
MRP	=	Market Return – Risk-free Rate

The risk-free rate is 2.48% received from the ThaiBMA as of 27 January 2023 as can be seen in the **Figure 5.1 ThaiBMA Government Bond Yield Curve**. The beta is 1.76 received from the Refinitiv as a 5-year monthly basis. The market risk premium (MRP) is 3.07% received from the calculation of 10-year compound annual growth rate (CAGR) of SET capital gain, which is 2.54% plus the average SET dividend yield over the last 10 years, which is 3.01%, which can be seen in the **Table 5.11 Market Return Calculation**. Then, the market return is 5.55%. After that, the market return will be subtracted by the risk-free rate, 2.48% to get the market risk premium at 3.07% as can be seen in the **Table 5.12 Market Risk Premium Calculation**.

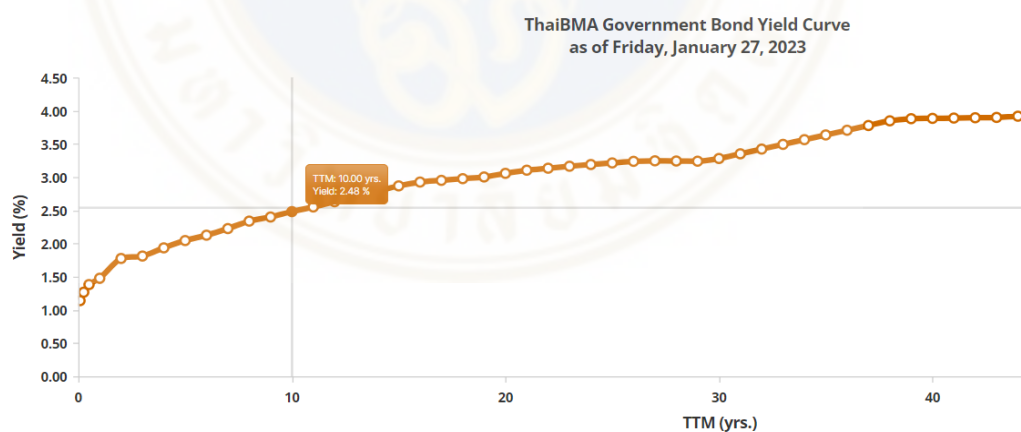


Figure 5.1 ThaiBMA Government Bond Yield Curve

Source: ThaiBMA

Table 5.11 Market Return Calculation

Month-Year	SET	Month-Year	SET	Month-Year	SET
Dec-22	1,668.66	Capital Gain (Annually)		Dividend yield	
Nov-22	1,635.36	Dec-22	1668.66	Dec-22	2.50%
Oct-22	1,608.76	Dec-21	1657.62	Nov-22	2.58%
Sep-22	1,589.51	Dec-20	1449.35	Oct-22	2.63%
Aug-22	1,638.93	Dec-19	1579.84	Sep-22	2.67%
Jul-22	1,576.41	Dec-18	1563.88	Aug-22	2.60%
Jun-22	1,568.33	Dec-17	1753.71	Jul-22	2.70%
May-22	1,663.41	Dec-16	1542.94	Jun-22	2.74%
Apr-22	1,667.44	Dec-15	1288.02	May-22	2.58%
Mar-22	1,695.24	Dec-14	1497.67	Apr-22	2.58%
Feb-22	1,685.18	Dec-13	1298.71	Mar-22	2.62%
Jan-22	1,648.81			Feb-22	2.61%
Dec-21	1,657.62			Jan-22	2.15%
Nov-21	1,568.69			Dec-21	2.10%
Oct-21	1,623.43			Nov-21	2.23%
Sep-21	1,605.68			Oct-21	2.18%
Aug-21	1,638.75			Sep-21	2.23%
Jul-21	1,521.92			Aug-21	2.20%
Jun-21	1,587.79			Jul-21	2.37%
May-21	1,593.59			Jun-21	2.28%
Apr-21	1,583.13			May-21	2.29%
Mar-21	1,587.21			Apr-21	2.33%
Feb-21	1,496.78			Mar-21	2.38%
Jan-21	1,466.98			Feb-21	2.84%
Dec-20	1,449.35			Jan-21	3.29%
Nov-20	1,408.31			Dec-20	3.32%
Oct-20	1,194.95			Nov-20	3.46%
Sep-20	1,237.04			Oct-20	4.17%

Table 5.11 Market Return Calculation (cont.)

Month-Year	SET	Month-Year	SET	Month-Year	SET
Aug-20	1,310.66			Sep-20	4.08%
Jul-20	1,328.53			Aug-20	3.85%
Jun-20	1,339.03			Jul-20	3.81%
May-20	1,342.85			Jun-20	3.82%
Apr-20	1,301.66			May-20	3.82%
Mar-20	1,125.86			Apr-20	3.99%
Feb-20	1,340.52			Mar-20	4.40%
Jan-20	1,514.14			Feb-20	3.71%
Dec-19	1,579.84			Jan-20	3.31%
Nov-19	1,590.59			Dec-19	3.14%
Oct-19	1,601.49			Nov-19	3.14%
Sep-19	1,637.22			Oct-19	3.11%
Aug-19	1,654.92			Sep-19	3.08%
Jul-19	1,711.97			Aug-19	3.07%
Jun-19	1,730.34			Jul-19	2.98%
May-19	1,620.22			Jun-19	2.96%
Apr-19	1,673.52			May-19	3.17%
Mar-19	1,638.65			Apr-19	3.07%
Feb-19	1,653.48			Mar-19	3.13%
Jan-19	1,641.73			Feb-19	3.03%
Dec-18	1,563.88			Jan-19	3.07%
Nov-18	1,641.80			Dec-18	3.22%
Oct-18	1,669.09			Nov-18	3.05%
Sep-18	1,756.41			Oct-18	2.99%
Aug-18	1,721.58			Sep-18	2.87%
Jul-18	1,701.79			Aug-18	2.92%
Jun-18	1,595.58			Jul-18	2.96%
May-18	1,726.97			Jun-18	3.16%

Table 5.11 Market Return Calculation (cont.)

Month-Year	SET	Month-Year	SET	Month-Year	SET
Apr-18	1,780.11			May-18	2.93%
Mar-18	1,776.26			Apr-18	2.85%
Feb-18	1,830.13			Mar-18	2.85%
Jan-18	1,826.86			Feb-18	2.72%
Dec-17	1,753.71			Jan-18	2.60%
Nov-17	1,697.39			Dec-17	2.70%
Oct-17	1,721.37			Nov-17	2.83%
Sep-17	1,673.16			Oct-17	2.79%
Aug-17	1,616.16			Sep-17	2.89%
Jul-17	1,576.08			Aug-17	2.99%
Jun-17	1,574.74			Jul-17	3.07%
May-17	1,561.66			Jun-17	3.09%
Apr-17	1,566.32			May-17	3.11%
Mar-17	1,575.11			Apr-17	3.14%
Feb-17	1,559.56			Mar-17	3.13%
Jan-17	1,577.31			Feb-17	3.04%
Dec-16	1,542.94			Jan-17	2.98%
Nov-16	1,510.24			Dec-16	3.04%
Oct-16	1,495.72			Nov-16	3.11%
Sep-16	1,483.21			Oct-16	3.14%
Aug-16	1,548.44			Sep-16	3.19%
Jul-16	1,524.07			Aug-16	3.06%
Jun-16	1,444.99			Jul-16	3.11%
May-16	1,424.28			Jun-16	3.29%
Apr-16	1,404.61			May-16	3.35%
Mar-16	1,407.70			Apr-16	3.38%
Feb-16	1,332.37			Mar-16	3.38%
Jan-16	1,300.98			Feb-16	3.47%

Table 5.11 Market Return Calculation (cont.)

Month-Year	SET	Month-Year	SET	Month-Year	SET
Dec-15	1,288.02			Jan-16	3.37%
Nov-15	1,359.70			Dec-15	3.36%
Oct-15	1,394.94			Nov-15	3.17%
Sep-15	1,349.00			Oct-15	3.09%
Aug-15	1,382.41			Sep-15	3.22%
Jul-15	1,440.12			Aug-15	3.15%
Jun-15	1,504.55			Jul-15	3.03%
May-15	1,496.05			Jun-15	2.91%
Apr-15	1,526.74			May-15	2.91%
Mar-15	1,505.94			Apr-15	2.86%
Feb-15	1,587.01			Mar-15	2.89%
Jan-15	1,581.25			Feb-15	2.73%
Dec-14	1,497.67			Jan-15	2.72%
Nov-14	1,593.91			Dec-14	2.94%
Oct-14	1,584.16			Nov-14	2.78%
Sep-14	1,585.67			Oct-14	2.82%
Aug-14	1,561.63			Sep-14	2.82%
Jul-14	1,502.39			Aug-14	2.89%
Jun-14	1,485.75			Jul-14	3.01%
May-14	1,415.73			Jun-14	3.02%
Apr-14	1,414.94			May-14	3.18%
Mar-14	1,376.26			Apr-14	3.16%
Feb-14	1,325.33			Mar-14	3.26%
Jan-14	1,274.28			Feb-14	3.33%
Dec-13	1,298.71			Jan-14	3.34%
				Dec-13	3.24%

Table 5.12 Market Risk Premium Calculation

Cap Gain Cagr	Div Yield	Market Return	Risk Free	Mrp
(%)	(%)	(%)	(%)	(%)
2.54%	3.01%	5.55%	2.48%	3.07%

Table 5.13 CAPM and WACC Calculation

CAPM	
Risk free	2.48%
Market Return	5.55%
Market Risk Premium	3.07%
Beta	1.76
r_e	7.88%
r_d	3.70%
Tax	20%
r_d After tax	2.96%
W_e	29%
W_d	71%
WACC	4.37%

According to the **Table 5.13 CAPM and WACC Calculation**, the CAPM calculation determines that the cost of equity is 7.88%, then, the WACC is 4.37%. Moreover, the corporate tax rate is 20.00%. At this point, the DCF model can be calculated by the aforementioned data, which can be seen below in **Table 5.14 DCF Valuation**.

5.1.3 Terminal Growth Rate

Assuming the terminal growth rate is 2.00% according to the Bank of Thailand, the nominal GDP growth rate in Thailand in 2022 was 2.70% and rounded down to 2.00% to be very conservative as the company's growth rate over 10 years has been divided to 2 growth stages already. In 2023 – 2025, the growth will reflect the economic recovery in the short-run and then declining to 5% during the 2026 – 2032. So, using the terminal growth rate at 2.00% would reflect the overall company's long-term growth.

According to the **Table 5.14 DCF Valuation**, the terminal value at 2.00% perpetual growth rate is THB 173,411 million. The current enterprise value is THB 103,878 million. Then, adding the cash and non-operating profit to the enterprise value to reflect others assets that have not been included in the aforementioned calculation, which is THB 3,103 million received from the company's balance sheet on the 2022 financial report. This will help to not missing any values on the balance sheet. Therefore, the total value of the firm is THB 106,981 million. Then, subtracting by the company latest available debt, which consisted of THB 32,313 million for the short-term loan and THB 39,992 million for the long-term loan received from the company's balance sheet on the 2022 financial report. After the subtraction, the value of the equity is THB 34,746 million, which is also can be used to calculate the estimated share price or intrinsic value by divided by the latest shares outstanding, which is 15,398 million shares. As a result, the estimated share price is THB 2.26 per share, while the latest close price on 24 April 2023 was THB 1.85 per share, which has the 22.16% upside. Moreover, the expected EPS in 2023 and 2024 are 0.28 and 0.40 respectively. If compare to the analyst forecast from Settrade in the **Figure 5.2 SRI Analysts Coverage**, it can be seen that in 2023, the min, median, and max are 0.24, 0.27, and 0.30 respectively, which means the forecast is reasonable. However, in 2024, the min, median, and max are 0.22, 0.27, and 0.31, which means the forecast in 2024 is more aggressive than the analysts due to the higher confidence on the economic recovering, which could be seen from the aforementioned macro and micro economic analysis along with the effective operation in 2022 that SANSIRI's revenue grew beyond the expectation according to the recent 2022 financial statement releasing news in the end of February 2023, that the company almost double its revenue from the expectation.

No.	Broker	EPS (Bah)				P/E	P/BV	DIV (%)	Target	Rec	Last	Viewer's Rating ⓘ
		2023F	%Change	2024F	%Change	2023F	2023F	2023F	Price		Update	
1	TISCO	0.26	-9.8	-	-	7.0	0.6	3.3	2.20	Buy	18/04/23	-
2	CNS	0.24	-2.3	0.22	-9.9	7.5	0.8	8.2	2.20	Buy	17/04/23	-
3	ASPS	0.29	3.7	0.27	-5.6	6.3	0.6	8.2	2.32	Buy	12/04/23	-
4	BLS	0.30	20.0	0.31	3.3	6.1	0.6	9.3	2.30	Buy	10/04/23	-
5	KS	0.27	-4.3	0.24	-9.3	6.8	0.6	8.2	2.10	Outperform Market	05/04/23	-
6	KSS	0.28	77.0	-	-	6.5	-	8.2	2.00	Hold	03/04/23	-
7	YUANTA	-	-	-	-	-	-	-	-	-	13/03/23	★★★★☆
8	PI	0.29	16.0	0.30	3.4	6.3	0.6	7.1	2.11	Buy	08/03/23	★★★★☆
9	FSSIA	0.26	-	0.27	3.8	7.0	0.7	7.7	2.20	Buy	08/03/23	★★★★☆
Average		0.27	14.3	0.27	-2.4	6.6	0.6	7.6	2.18			
High		0.30	77.0	0.31	3.8	7.5	0.8	9.3	2.32			
Low		0.24	-9.8	0.22	-9.9	6.1	0.6	3.3	2.00			
Median		0.27	3.7	0.27	-1.2	6.6	0.6	8.2	2.20			

Figure 5.2 SIRI Analysts Coverage

5.1.4 Sensitivity Analysis

The sensitivity analysis will determine the impacts from deviation of significant factors that might lead the estimated price to change accordingly. The selected significant factors are (1) Cost of debt, (2) Cost of equity, (3) WACC, and (4) Terminal growth rate. In addition, assuming the deviation will be 10% incremental and decremental for each factor as can be seen below.

Table 5.15 Sensitivity Analysis

Deviation	Cost of Debt	Price	Cost of Equity	Price	WACC	Price	Terminal Growth	Price
50%	5.55%	NA	11.81%	NA	6.55%	NA	3.00%	7.52
40%	5.18%	NA	11.03%	NA	6.11%	NA	2.80%	5.93
30%	4.81%	0.39	10.24%	0.30	5.68%	NA	2.60%	4.70
20%	4.44%	0.92	9.45%	0.84	5.24%	NA	2.40%	3.72
10%	4.07%	1.53	8.66%	1.49	4.80%	0.88	2.20%	2.92
0%	3.70%	2.26	7.88%	2.26	4.37%	2.26	2.00%	2.26
-10%	3.33%	3.13	7.09%	3.19	3.93%	4.27	1.80%	1.70
-20%	2.96%	4.19	6.30%	4.35	3.49%	7.48	1.60%	1.22
-30%	2.59%	5.52	5.51%	5.82	3.06%	13.37	1.40%	0.80
-40%	2.22%	7.22	4.73%	7.75	2.62%	27.62	1.20%	0.44
-50%	1.85%	9.48	3.94%	10.39	2.18%	109.85	1.00%	0.12

According to the **Table 5.15 Sensitivity Analysis**, the estimated price is significantly sensitive to the deviation in WACC, which is the result from the cost of debt and cost of equity. However, the deviation in cost of equity seems to significantly impact the estimated price more than the deviation in cost of debt due to the fact that the company's cost of equity is as high as 7.88% compare to the cost of debt at 3.70%. However, the estimated price would not be as fluctuated as the sensitivity analysis because the company's capital structure is heavily financed by debt at 71.00%.

Table 5.16 Implied WACC and Cost of Equity Calculation

Latest Price	Terminal growth	Implied WACC	Implied cost of equity
1.88	2.00%	4.47%	8.24%
1.88	0.00%	2.89%	2.71%

According to the **Table 5.16 Implied WACC and Cost of Equity Calculation**, assuming the cost of debt is unchanged, the implied WACC and the Implied cost of equity when the terminal growth rate is 2.00% as has been used in the aforementioned calculation are 4.47% and 8.24%, which indicates that the calculated WACC and cost of equity in the model is relatively lower at 4.37% and 7.88% respectively. This means the latest closed price is undervalued. However, if adjusting the terminal growth rate to be 0.00%, it turns out that the latest closed price will be overvalued. We note that the terminal growth rate is another important factor that can impact the estimated share price as well.

5.1.5 Scenario Analysis

According to the assumptions used in **5.1.2 Discount Cash Flow**, it seems that different business segments would have been assumed to grow by different rate and different assumptions. Therefore, the use of scenario analysis will be another tool that could be used to see how the price move when revenue growth and cost factors change. Thus, the scenario analysis has been made in 6 scenarios, which are (1) the growth is lower than the expectation by -10%, (2) the growth is lower than the expectation by -15%, (3) the growth is lower than the expectation by -20%, (4) the cost is higher than the expectation by 1%, and (5) the cost is higher than the expectation by 2%, where the base case has been mentioned in sections **5.1.1, Pro forma statement and 5.12, Discount Cash Flow** to indicate the deviation in revenue growth, cost of sales, and SG&A, and finally, the estimated price's result will be varied based on each case's assumptions, which can be seen below in **Table 5.17 Scenario Analysis**

Table 5.17 Scenario Analysis

Scenario Summary	Base Case	Scenario 1 Growth -10%	Scenario 2 Growth -15%	Scenario 3 Growth -20%	Scenario 4 Cost +1%	Scenario 5 Cost +2%
Changing Cells:						
Revenues from sales of real estate	20.93%	18.83%	17.79%	16.74%	20.93%	20.93%
Revenues from business management services	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Revenues from hotel management services	65.30%	58.77%	55.50%	52.24%	65.30%	65.30%
Revenues from sales of construction materials	1.79%	1.62%	1.53%	1.44%	1.79%	1.79%
Revenues from projects for rent	32.66%	29.39%	27.76%	26.13%	32.66%	32.66%
Revenues from other services	29.95%	26.95%	25.46%	23.96%	29.95%	29.95%
Cost of real estate sales	64.57%	64.57%	64.57%	64.57%	65.22%	65.86%
Cost of business management services	63.80%	63.80%	63.80%	63.80%	64.44%	65.08%
Cost of hotel management services	90.00%	90.00%	90.00%	90.00%	90.90%	91.80%
Cost of construction materials sales	90.38%	90.38%	90.38%	90.38%	91.28%	92.19%
Cost of projects for rent	44.65%	44.65%	44.65%	44.65%	45.10%	45.54%
Cost of other services	90.00%	90.00%	90.00%	90.00%	90.90%	91.80%
Result Cells:						
Estimated Share Price	2.26	1.82	1.61	1.40	1.31	0.36

Notes: Current Values column represents values of changing cells at time Scenario Summary Report was created. Changing cells for each scenario are highlighted in gray.

(1) the growth is lower than the expectation by -10%

The estimated share price drops to THB 1.82 per share (-19.47%)

(2) the growth is lower than the expectation by -15%

The estimated share price drops to THB 1.61 per share (-28.76%)

(3) the growth is lower than the expectation by -20%

The estimated share price drops to THB 1.40 per share (-38.05%)

(4) the cost is higher than the expectation by 1%

The estimated share price drops to THB 1.31 per share (-42.04%)

(5) the cost is higher than the expectation by 2%

The estimated share price drops to THB 0.36 per share (-84.07%)

As can be seen above, the increasing in the cost for each 100 basis points would dramatically impact the company's value, only 2% increase could possibly reduce the share price to THB 0.36 per share, which is -84.07% from the base case THB 2.26 per share. It could explain that the company has highly sensitive cost, if the revenue is about to stop growing and the cost tends to increase, the company might be devalued from that situation.

5.2 Valuation Recommendations

Comparing to the analysis from Investment Analyst Associate Consensus (IAA Consensus) as can be seen in the **Figure 5.3 SIRI IAA Consensus**, the target

prices from IAA consensus range between THB 1.60 per share to THB 2.32 per share. The maximum and minimum target are THB 2.32 and THB 1.60 per share respectively and the average target is THB 2.04 per share. The “BUY” recommendations are issued by 11 analysts, the “HOLD” recommendations are issued by 2 analysts. The 52 weeks high is THB 1.98 per share and the 52 weeks low is THB 0.97 per share, which can be seen in the **Figure 5.4 Price Comparison**.

According to the aforementioned analysis, the estimated target price in 2023 of SIRI is THB 2.26 per share, while the latest close price on 24 April 2023 was THB 1.85 per share, which has the 22.16% upside. As a result, the recommendation for SIRI is “BUY”.

วิเคราะห์เจาะหุ้นเด่น

โดยสมาคมนักวิเคราะห์การลงทุน (IAA Consensus)



Figure 5.3 SIRI IAA Consensus

Source: Settrade, IAA Consensus

Valuation Summary

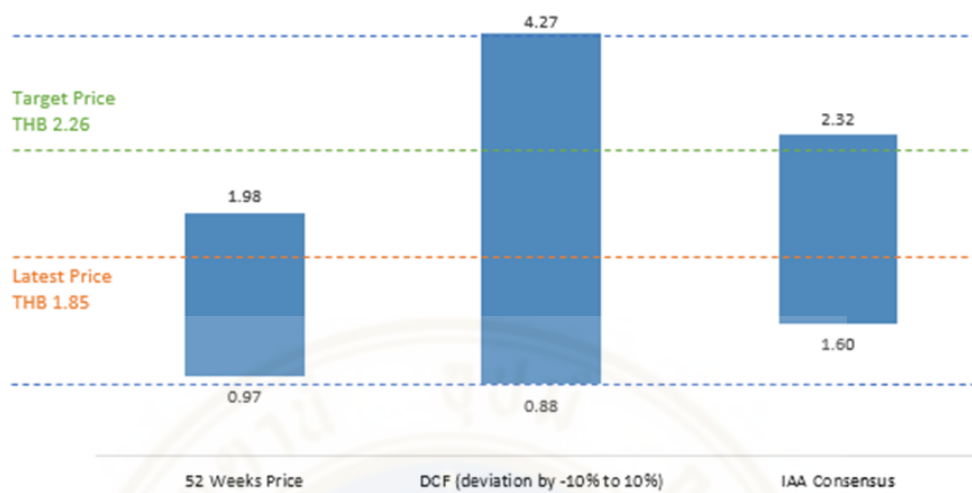


Figure 5.4 Price Comparison

CHAPTER VI

INVESTMENT RISKS

6.1 Investment Risks

The capital market investment has several involved risks, the investors should consider all possible risks thoroughly before investing in the capital market. Some certain risks can be explained as below.

6.1.1 Inflation Rate Risks

According to the recent inflation rate, the rate increased due to the retention of Russia and Ukraine, which pushed the world oil price to increase. Consequently, the cost of materials would be increased, especially in 2022. Even though, the world oil price reduced during the end of 2022, but the inflation rate is still increasing by other factors, for example, the world economic is recovered from the economic downside during COVID-19 pandemic. The supply of goods and services could not be served as the strong demand is outweighed. Moreover, if the purchasing power is fully recovered, it would be the major factor that will continuously push the inflation rate getting higher.

6.1.2 Exchange Rate Risks

The exchange rate fluctuation is another factor that could impact the performance of the company's operation due to the company has also been operating in other countries, which would receive the revenue in foreign currencies. During 2021 and 2022, Thai Baht depreciated against US Dollars, which positively impact the company's operation by having the same US Dollars amount, the more Thai Baht could be converted. In the other hands, if Thai Baht began to appreciate against US Dollars, it would negatively impact to the company. As the same US Dollars amount, the less Thai Baht could be converted. As can be seen, the exchange rate fluctuation would create the revenue uncertainty.

6.1.3 Interest Rate Risks

During the COVID-19 pandemic, the economic slowed down and the companies retained their cash instead of investing. The central bank concerned that it would impact the entire country such as higher unemployment rate or lower GDP. So, the central bank agreed to reduce the interest rate to stimulate the economic by hoping that the companies could borrowed more to finance its investment activities. However, after the COVID-19 pandemic, the economic was recovered too fast, the central bank realized it would result in a higher inflation in the near future. So, the central bank agreed to increase the interest rate to slow down the economic. This would result in the higher cost of borrowing. As a result, the company's financial cost would be higher and the interest expenses would be increased respectively. The more expenses the company has, the less income the company can create.

6.1.4 Regulation and Policy Risks

The regulation and policy would be the important factor to the property development sector. During the COVID-19 pandemic, while the economic was shrinking, the government tried to stimulate the economic in many ways by supporting both individuals and corporates to spend and invest more. However, recently, the economic was recovered too fast, the government also has to slow down the economic by trying to reduce the spending on individuals. The main policy that could negatively impact to the property developer is to restrict the loan to value amount (LTV). This would make the individuals who want to buy the houses or condominiums have to make a higher down payment. As a result, it could make the houses or condominiums have less attractive to the people.

6.1.5 Competition Risks

Due to the recent world economic recovery, many companies resumed their investment. Not only domestic property development, but also international property development began the new investment in Thailand, which could create an intensive competition. As can be seen from the competitor analysis, those competitors are also the major companies that already have its own strong market share. When the renowned

international companies joined the property development competition in Thailand, Sansiri would face even more competitive competition.



CHAPTER VII

CONCLUSIONS

7.1 Investment Recommendation

To conclude the investment recommendation, according to the assumptions used in the financial modelling, the cost of equity is 7.88%, which is from 2.48% of Risk Free, 3.07% of Market Risk Premium, and 1.76 of Beta. The cost of debt is 3.70%, and corporate tax rate is 20%. Then, the WACC would equal to 4.37%. The terminal growth rate is 2% based on the target inflation in Thailand. These assumptions result in the estimated share price at THB 2.26 accordingly. The recent IAA Consensus has issued the recommendation to BUY from 11 Analysts, to HOLD from 2 Analysts, and to SELL from none. The estimated prices from IAA Consensus are ranged between THB 1.60 and THB 2.32. The 52 weeks high is THB 1.98 per share and the 52 weeks low is THB 0.97 per share.

According to the above assumptions, the DCF valuation method indicates the estimated target price in 2023 of SIRI is THB 2.26 per share, while the latest close price on 24 April 2023 was THB 1.85 per share, which has the 22.16% upside. As a result, the recommendation for SIRI is “BUY”.

7.2 Triggers for Re-Assessment

Due to some assumptions used in the DCF valuation such as cost of equity, cost of debt, capital structure, and terminal growth rate are highly sensitive to the change.

In term of the cost of equity, the selection of 10-year government bond yield might not reflect a good prediction, the longer maturity term could be considered as the company might be operated and last longer than the expectation. Moreover, the beta used in the cost of equity would be varied over time. Thus, the cost of equity would be a major factor that could be a trigger for reassessment.

In term of the cost of debt, as the interest rate policy has been changing over time due to the adjustment from the central bank to reflect the economic situations. An increase of the interest rate would raise the company's cost of borrowing and vice versa. As a result, it would change the estimated target price. So, the cost of debt would be another factor that could be a trigger for reassessment.

In term of the capital structure, even though the valuation model has already used the target capital structure, but the capital structure is subjected to change due to the company's future capital funding. So, the capital structure would be another factor that could be a trigger for reassessment after the new recent financial report has been released.

In term of the terminal growth rate, the terminal value is highly sensitive to the adjustment on the terminal growth rate. The current terminal growth rate is the target inflation rate in Thailand, which is quite conservative due to the company perpetuity growth will be same rate with the target inflation. However, the terminal growth rate can be used from other factors depending on the given reason, for example, using the annual nominal GDP growth, which typically higher than the inflation rate. Therefore, it would push the estimated price to be higher. So, the terminal growth rate would be another factor that could be a trigger for reassessment.

7.3 Limitations

According to the use of DCF valuation, the final value, estimated price, is subjected to the assumptions used in the financial projection. The assumption would base on the author's analysis along with the economic and the company's past performance analysis. Then, these assumptions would not be a good prediction. However, conducting and researching the further information such as company internal budgeting's policy or the management interview would be advantage to build even more reliable assumptions. The estimated target price might be different to the actual price depending on the company's future performance. Therefore, this valuation should be reassessed periodically as the new recent financial statement has been released quarterly.

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