

**RELATIVE VALUATION OF ORIGIN PROPERTY PUBLIC
COMPANY LIMITED**



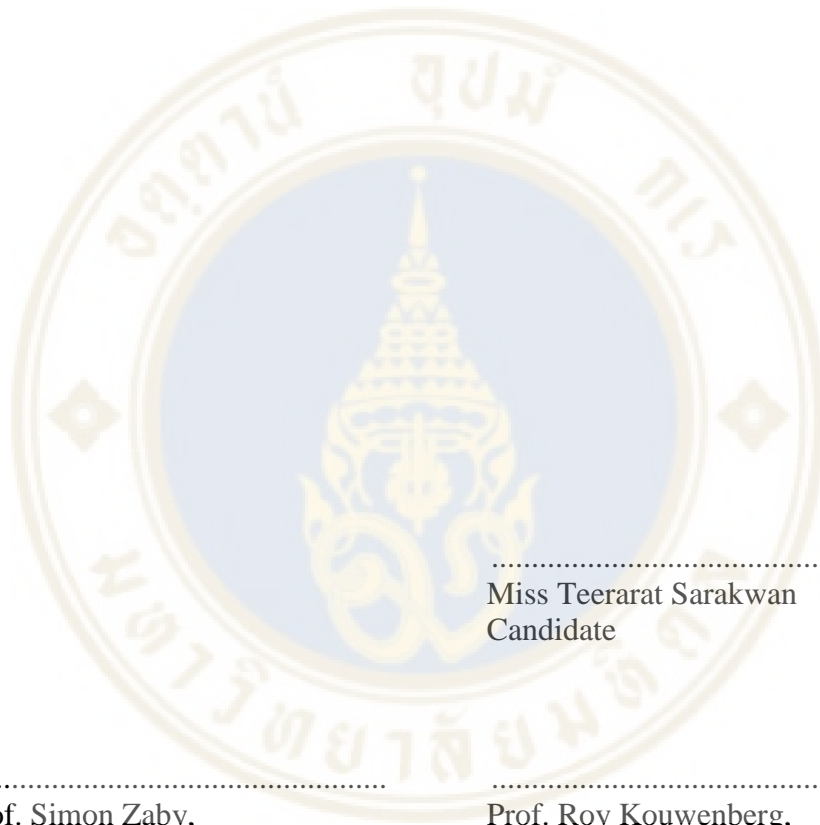
**A THEMATIC PAPER SUBMITTED IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR
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entitled
**RELATIVE VALUATION OF ORIGIN PROPERTY PUBLIC
COMPANY LIMITED**

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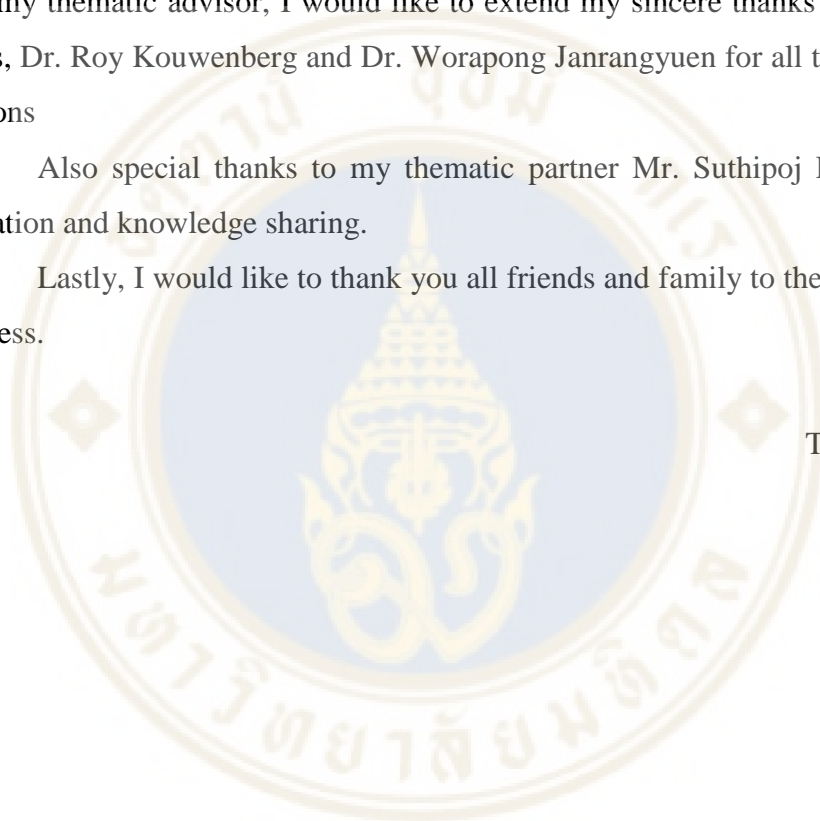
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RELATIVE VALUATION OF ORIGIN PROPERTY PUBLIC COMPANY LIMITED

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ABSTRACT

Origin property public company is one of the top 10 market capitalization in real estate sector based on the Stock Exchange of Thailand. Which mainly provide the property products which are house, condominium, hotel, and home service.

Relative valuation is the method to value the company's stocks by implementing the multiple values from the relative's company in the industry or peer company. Under the five years average of historical data would be used to tell that our target company which is Origin is undervalue or overvalue. Based on average in trailing price earnings ratio (P/E), trailing price to book value(P/BV), trailing enterprise value to earnings before interest and taxes (EV/EBITDA) and forward P/E, forward P/BV lastly forward EV/EBITDA. The expectation price of ORI in 2022 and 2023 is overvalue compared to its current price. From this valuation gives ORI target price by 2022 is 11.835 THB and 12.773 THB for 2023. Compare to the current price at 29th of April 2022 which is 11.000 THB. Thus, the recommendation for this stock is to "Buy"

KEY WORDS: Relative Valuation/ P/E/ P/BV/ EV/EBITDA/ ORI

39 pages

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CHAPTER I

“GETTING TO KNOW ORIGIN PCL.”

Origin Property development conducts their business mainly on developing condominiums and housing along BTS and MRT (Mass Transit System) around the Bangkok area and its vicinity. The company focuses on rental, resale, and property development businesses. This valuation report mainly discussed valuation of the company using 2 different approaches: Discounted Cash Flow approach and Multiple approach under COVID-19 pandemic situation and Thailand’s economic situations.

[Business Description]

1.1) Who is ORIGIN PROPERTY PCL?

Origin Property Public Limited (SET: ORI) was established as a limited company on December 16, 2009, by Peering Jaron-ek and Arada Jaroon-ek with registered capital of 10.0 million Thai Baht. The business was registered as a real estate development company. Origin Property focusses on various kinds of property development projects such as real estate development business, development of residential condominiums, housing projects, industrial estates in Bangkok and its surrounding area. Origin Property is known for its uniqueness for the designs, and combination between design and its functionality, the main emphasis of the company is its properties’ location which is in proximity with BTS and MRT (Bangkok Mass Transit system).

Currently Origin Property Public Limited company is operated by subsidiaries and a corporation of 60 companies, where its subsidiaries are responsible for various types of business functions. Origin has received a lot of positive recognition from various locations which are in proximity with Bangkok Mass Transit systems (BTS and MRT) for

instance Bearing BTS in Samut Prakan, MRT-Green Line: Mo Chit-Saphan Mai-Khu Khot section. MRT Purple Line: Central City of Sathorn, Ramkhamhaeng, Minburi.

Aside from Origin's property development business, the company also focuses on property operation services such as condominium tenant management services, condominium juristic person management services which operates under Primo Service Solution Company Limited. Recently, the company improved its revenue recognition apart from selling real estate development projects by operating build-to-rent property development to create a continuous and recurring income stream that operates under one of its subsidiaries, One Origin Group Company Limited to give Origin Property Public Limited a stable income stream to boost its stability. (Origin Property PCL 2021 Annual Report.)

1.2) Understanding Company Products and Services

Origin Property Public Limited's property and real estate development projects can be categorized into multiple projects depending on its designing concept and target group from each specific area. Currently Origin Property Public Limited has 4 primary condominium brands: Park Luxury, KnightBridge, The Origin, Notting Hill and Kensington. And one housing development brand, Britannia. The company has created multiple branding to target different groups of consumers from different areas. Kensington as mid-level condominium product, Notting Hill as mid-upper to mid-level condominium product, The Origin (mid-upper mid-level), Knight bridge as upper mid-high-level product and lastly Park Origin being their most premium condominium product. Another housing development project or so-called horizontal development project is called 'Britania' housing project which aims for consumers who prefer to live in more spacious living space. The company tries to develop multiple product lines to suit each consumer group categorized by income range and area they live in. (Origin Annual Report, 2021)

Aside from real estate development projects, Origin property public limited also operates business services that are related to real estate. Origin operates these businesses

though its own subsidiary company called Primo Service Solution. Primo Service Solution offers services such as tenant services, condominium juristic person management services.



Figure1.1 ORIGIN PROPERTIES PCL COMPANY STRUCTURE
(Source: ORIGIN Properties plc.'s website, 2022)

1.3) Origin Properties' Income sources

Origin Property Public Limited's revenue structure can be categorized by its product line and business group as follows. The company has 2 business structures: real estate development business and service businesses related to real estate. Origin Property Public Company has divided its type of revenue structure into 6 different categories: revenue from real estate business, revenue derived from service related to real estate, revenue from project management service, revenue from transfers of land sale contracts, revenue from the disposal of investment subsidiaries and other revenue.

As of fiscal year end of 2020, revenue from real estate business accounts for 88.80 percent. Followed by revenue from project management service of 5.54 percent.

Service revenue from business related to real estate accounts for 2.03 percent. And lastly other revenue of 2.00 percent and revenue from the disposal of investments in subsidiaries of 1.63 percent with no revenue from transfers of land sale contracts. (Origin Annual Report, 2021)

Table 1.1: Origin Property Revenue Structure

Type of Revenue	Operated by	Shareholding Percentage	Consolidated Financial Statements***					
			Fiscal Year 2018		Fiscal Year 2019		Fiscal Year 2020	
			Thousands of Baht	Percentage	Thousands of Baht	Percentage	Thousands of Baht	Percentage
Revenue from Real Estate Business	The Company and Subsidiaries	99.99	14,523,121.2	87.29	12,278,599.7	86.95	9,870,483.01	88.80
Service Revenue from Business Related to Real Estate *	The Company	99.99	64,228.3	0.39**	174,969.8	1.24	225,252.36	2.03
Revenue from Project Management Services	The Company and Subsidiaries	99.99	1,225,925.9	7.37**	918,893.5	6.51	615,214.68	5.54
Revenue from Transfers of Land Sale Contracts	The Company and Subsidiaries	99.99	311,977.5	1.88**	564.0	0.00	-	-
Other Revenue	The Company and Subsidiaries	85.0 - 99.99	197,758.7	1.19	290,537.6	2.06	222,423.51	2.00
Revenue from the Disposal of Investments in Subsidiaries	The Company and Subsidiaries		314,821.6	1.89	458,557.8	3.25	180,759.41	1.63
Total Revenue			16,637,833.3	100.00	14,122,122.3	100.00	11,114,132.97	100.00

(Source: Origin Annual Report, 2020.)

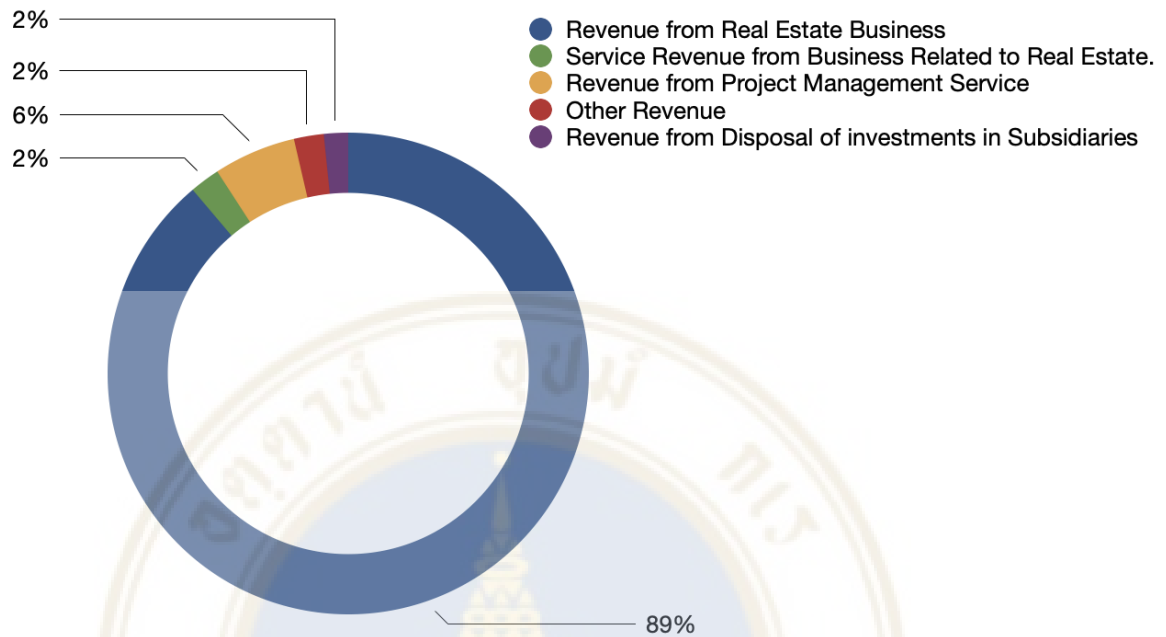


Figure 1.2 Origin Property Revenue Structure by Percentage
(Source: Origin Annual report 2020)

1.4) How does Origin Properties compete in real estate business?

Emphasis on location

The company gives the greatest emphasis on the project's location as their primary decision on where to build their real estate development projects, as it is one of the most important factors when consumers choose to buy their real estate properties. Two of the most important factors that Origin Property is aiming to achieve is to build their properties near major transportation routes like BTS and MRT lines, and must be also convenient, for example, in Bangkok and its surroundings. Another factor that Origin Property uses to make decisions where to build their property development is job demands and job quality in that area with jobs selections. This will increase the likelihood of their customer to have greater purchasing power, this results in Origin aiming to develop their project near the industrial area and Eastern Economic Corridor (EEC).

Unique design under various product brands

Origin Property has multiple condominium development projects and housing development projects. The company is aware that one of the most important factors for consumers to decide whether to buy the property or not is its design language. Under different projects which are categorized under different branding, the company can create different designs for different locations under the concept called 'EMPATHY' which pays close attention to each unique individual customer.

Blue Ocean marketing strategy

Origin Property development tries to use blue ocean marketing strategy to avoid repetitive experience with its competitors by using unique design under the concept of condominium space maximization. By using blue ocean marketing strategy, company's executives believe that they can differentiate themselves from its competitors to further create competitive advantage. Another aspect that the company places great emphasis on is to cater toward foreign (expats) customers due to the growth of international business. These customers are Japanese, Chinese, Taiwanese, and Singaporean. For this reason, Origin Property trains their sales team and marketing team with Japanese, Chinese and English language to meet these customers' demand.

Target specific group sorted by monthly income level

Origin Property development conducted customer group study by targeting specific consumer groups sorted out by monthly income level. To determine proper price for development properties to facilitate sales level. Origin has set the price as shown below.

Table 1.2 Condominium brand pricing strategy

Condominium Brand		
Brand and Project Type	Monthly Income Level (Baht/month)	Customer Group
Park Origin Natural in the City	60,000 Baht and up	High Level
Knightsbridge English – Elegant Style	45,000 - 60,000 Baht	Upper Mid- High Level
The Origin Live your value	25,000 - 50,000 Baht	Mid-upper -Mid Level
Notting Hill English – Modern Style	35,000 - 45,000 Baht	Mid upper- Mid Level
Kensington English – Charming Style	20,000 - 35,000 Baht	Mid Level

(Source: Origin Annual Report 2020)

Table 1.3 Housing Project Brand

Housing Project Brand		
Brand and Project Type	Monthly Income Level (Baht/month)	Customer Group
Belgravia Premium Detached house	500,000 Baht and up	Upper Level
Grand Britania Semi-Detached house, Detached house	130,000 Baht and up	Upper Mid to High Level
Britania Townhome, Semi-Detached house, Detached house	50,000-130,000 Baht	Mid to Upper Mid Level
Brighton Townhome, Semi-Detached house	30,000-50,000 Baht	Mid Level

(Source: Origin Annual Report 2020)

1.5) Origin core value for long-term sustainability

Origin Property Public Company Limited adheres to long term sustainable guidelines from SEC for the greater good of environment, society, and corporate governance to further improve their business performance. According to the company's annual report 2020, the company has prepared a sustainability goal to achieve by the end of year 2022 which is in line with Origin's core value; Optimize, Responsive, Innovation, Growth, Integrity, Neat, Service Excellence, Teamwork.

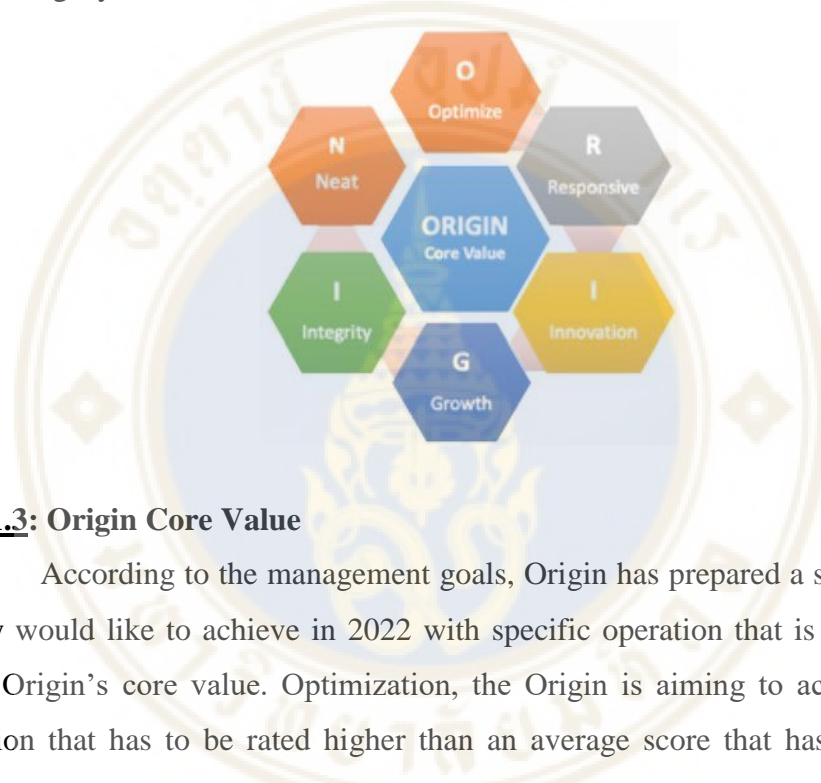


Figure 1.3: Origin Core Value

According to the management goals, Origin has prepared a sustainability goal that they would like to achieve in 2022 with specific operation that is in-line with each specific Origin's core value. Optimization, the Origin is aiming to achieve customers' satisfaction that has to be rated higher than an average score that has been set by the company. In terms of increase in responsiveness, the company monitors and assesses risk in the economy, society, and environment to improve its operations once a year in order to be able to deal with the problem fast enough. Innovation, Origin is aiming to develop and implement more of the renewable energy resources to help reduce greenhouse gas emissions by 2022.

Next aspect of Origin's core improvement matrix is its growth, the company is trying to develop their personnel skills by having their employee train no less than 6 hours per person before they can begin their real working task to achieve high working standard. Integrity, every Origin's employee must comply with code of business conduct strictly and

the company regulates by monitoring any complaints from Origin's customers. Nearliness, in 2022, Origin's property projects are certified with environmental guidelines and must also consider corporate social responsibility, for example, its condominium and housing design projects must be designed in such a way it reduces energy consumption.

Last 2 aspects are service excellence and teamwork. This can be monitored by increasing in customer satisfaction scoring and receiving less customer complaints and receiving more customers' compliments. And for the teamwork aspect, employee's commitment rate increases every year and leads to lower Origin's employee turnover rate.



CHAPTER II

ORIGIN PROPERTY PCL IN ECOECONOMICS CLIMATE

[Macroeconomic]

2.1) Thailand GDP

From 25 years back from 2020 as the recorded data from world bank in the picture below. Thailand GDP has slightly grown up in GDP from the pass until 1995 and 1996 with \$3,043 thousand. After 1996 Thailand faced to Thai economic recession in 1997 which made the GDP of the country significantly drop until 1998 Thailand has the lowest value of GDP in 25 years which is \$1,845.829 thousand. All investment in Thailand has significantly drop due to the economic situation, the investor stops investing in Thailand.

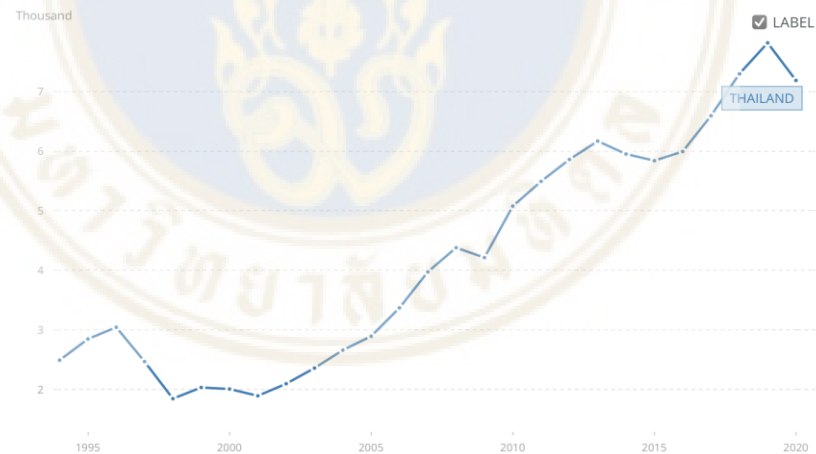


Figure2.1 Thailand's GDP from 1995 to 2021(Source: World bank website, 2022)

After economic crisis for 4 years in 2001 Thailand could be able to recovery their economic, investors are investing again include foreigner investor which come to invest in Thailand and makes country GDP has significantly grow from \$1,893 thousand to \$7,817 thousand which growth 313% mainly from industrial investment agricultural export.

After 2019 world has faced with Covid 19 pandemic that makes world economic stuck and effect to world GDP and Thailand GDP which mainly exporting product to overseas.

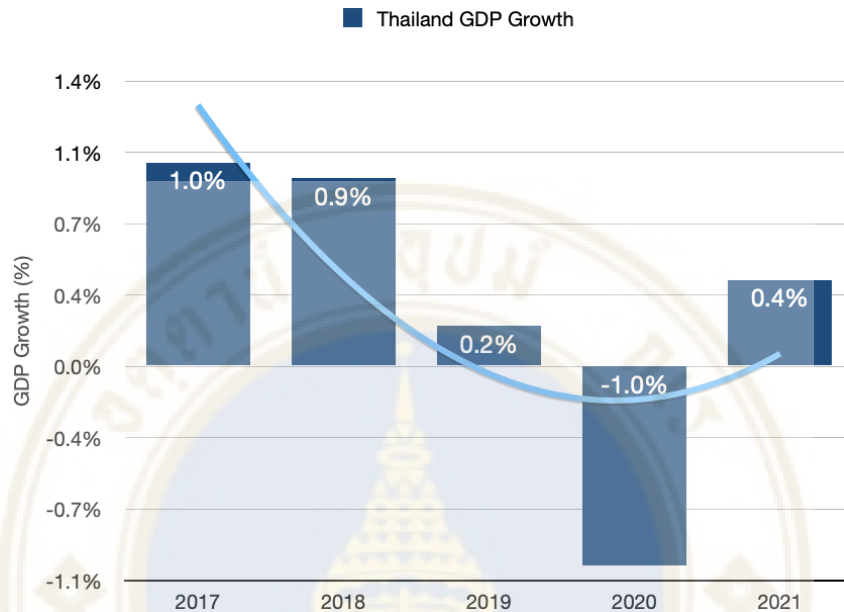


Figure 2.2 Thailand's YoY GDP Growth

(Source: BOT Website, 2022)

From the graph above represent year on year Thailand GDP growth from 2017 to 2021.

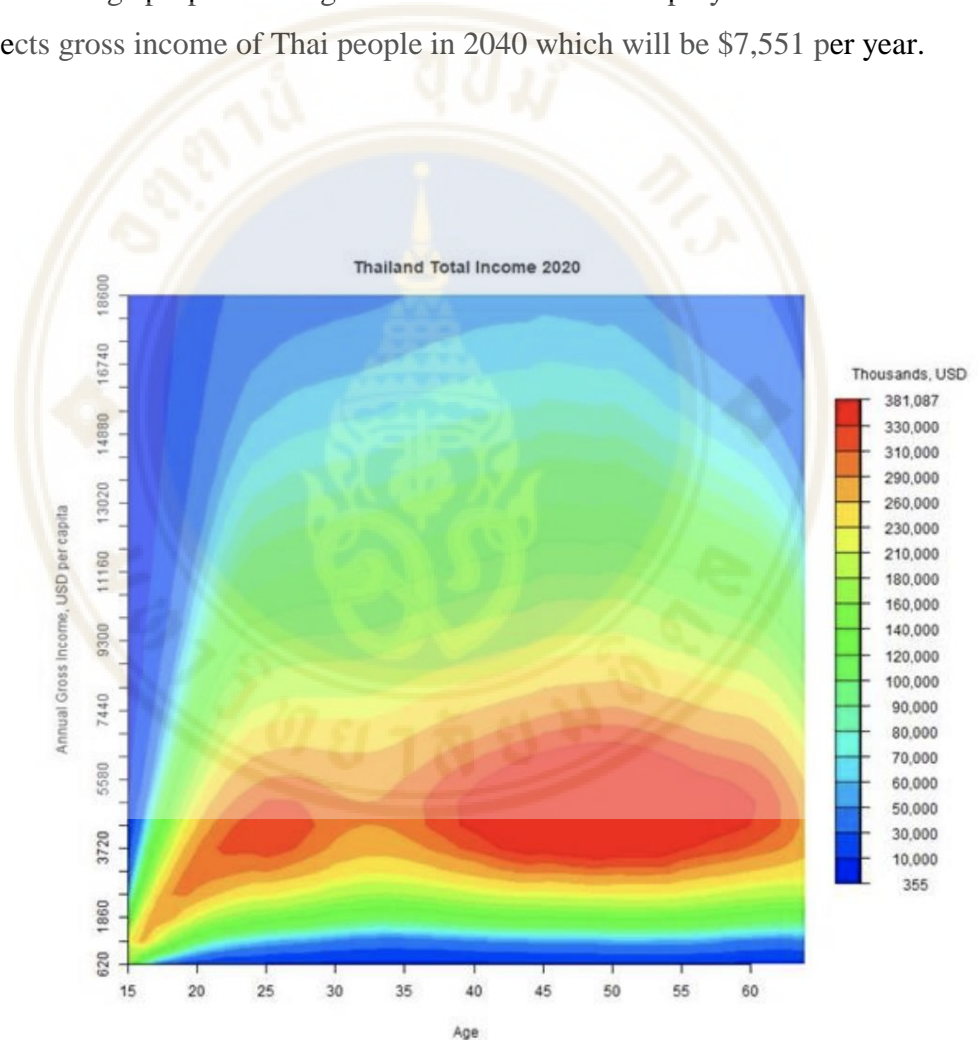
2.2) Thailand's Income

Thailand has wide range of income. Regarding to Thailand total income in 2020 from Euro monitor which represented by using color chart to categorize the range of income among the age.

Most of Thai people have gross income per year in the range of \$7500 to \$12,000 among the age of 15 to 60 years. From these data illustrate that Thailand has a high volume of middle-class income regarding to the color chart above. The people that have the

age over 40 years old tend to have high range of income from successful from the jobs and know how to manage their income.

For the source of income from Euromonitor in 2020 in the picture below. Thai people have average gross income about \$4,367 per year. From their gross income almost 60% come from employment, follow with income from investment which around 7.5% and the gross income from benefits is around 6%. From this data shown that most of Thai population has high proportion of gross income from their employment. And the data below also projects gross income of Thai people in 2040 which will be \$7,551 per year.



Source: Euromonitor International from national statistics

Figure 2.3 Thailand's total income 2020

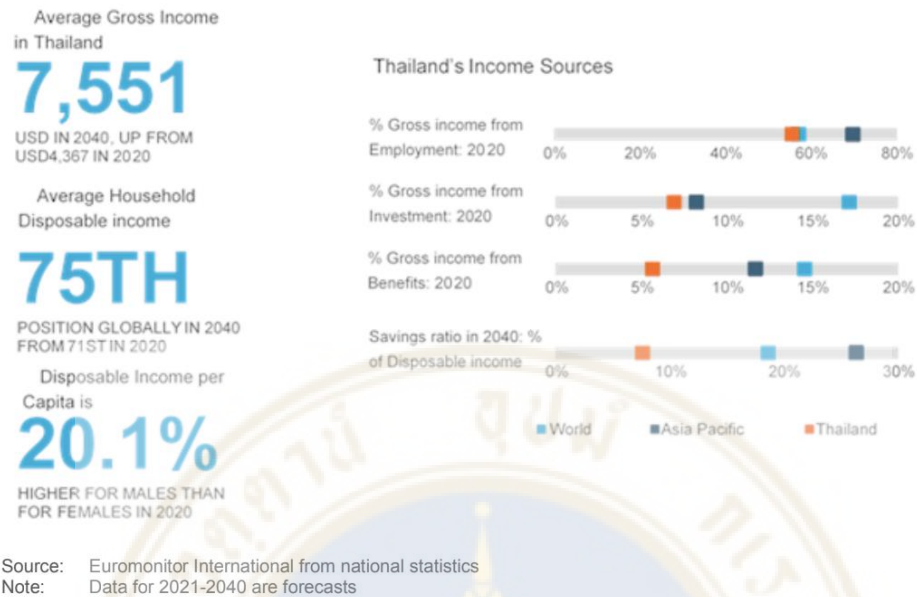


Figure 2.4 Thailand's Income Sources

2.3) Thailand Inflation

Regarding to the data from bank of Thailand (BOT) from 2017 to 2021 could see that Thailand doesn't have much increasing index of inflation rate comparing in year on year. In 2017 Thailand has only 0.67% of inflation rate compare with 2016. During pandemic in 2020 Thailand faced with deflation by having -0.85% changed of inflation compared with 2019. And in 2021 Thailand has 1.23% change compared to 2020. Currently in the latest record in March 2022 Thailand has highest inflation rate when compared to the past 13years which is 5.73% change from the same period in 2021 regarding to data from BOT.

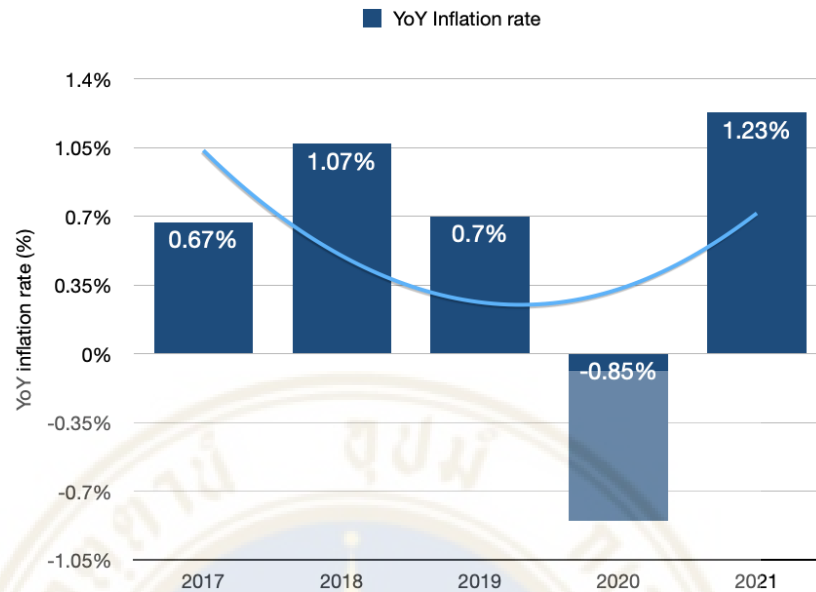


Figure 2.5 YoY Inflation Rate

(Source: Tradingeconomics.com, 2022)

2.4) Government project (train, tolls, EEC)

From 2022 government has project on developing and expanding country's infrastructure which mainly in transportation system by having expanded 5 highways from urban area to rural area starting from 2022, the route will be starting from Bangkok to other part of Thailand which are northeast, western part, south of middle part and 2 shortcut highways between urban area to suburb area near by Bangkok. (Source: www.thebangkokinsight.com)

Another infrastructure is train in Bangkok expanding routes around Bangkok and the suburban area which has many project lines around Bangkok and downtown. From the picture below will see all the trains in Bangkok and projects in the future.



Figure 2.6 Bangkok railway projects list (Source: E-Finance)

Government also willing to expand economic area into eastern part of Thailand under the Eastern Economic Corridor project which aim to invite investor to invest in eastern part of Thailand by preparing business facilities that also related to living base and industrial in term of convenience transportation and business opportunity in that area.



Figure 2.7 EEC mapping (Source: EEC website, 2022)

2.5) Industry Analysis

The Thai real estate industry has five different categories which consist of real estate for agricultural, real estate for commercial, real estate for industrial, leisure real estate and residential real estate. For agricultural real estate is the real estate for any agricultural activities which include fields, farm, orchard or any plantation area, commercial real estate is for office building, shopping mall hotels, fresh markets, convention centers, commercial buildings, real estate for industrial are plants for factory or industrial estate, leisure real

estate are resort or hotel for vacation purpose only, lastly is residential real estate which consist of condominium, house, and apartment

From the table shows listed company in Thailand under property sector in SET index, there are 18 companies in total, the highest market capitalization is Land and house company with 114.7 billion baht, Land and House is the company which has wide base in Thailand which mainly provide residential product in low rise, high rise, financial business under brand LH bank also construction firm, for the lowest market capitalization company is Asset Wise company with 0.78 billion baht, Asset Wise is new comer company in the industry which mainly provide low rise resident.

Table 2.1: Listed Company in SET

Company	Market cap. (Billion baht)
Land and House	114.717
Supalai	43.249
AP	33.347
Frasers property	32.47
Pruksa	31.74
Origin	29.434
Q house	24.643
Sansiri	18.457
SC asset	16.628
Singha Estate	13.296
Sena	7.467
L.P.N. Development	6.777
Ananda	6.166
Property perfect	5.149
All Inspire development	1.729
Major Development	1.618
Noble	1.611
Asset Wise	0.783

(Source: Terrabkk.com, Yahoo Finance.2022)

After seeing overall market from property sector in SET index the pine chart below will show the proportion of the market could see that 32% of total market

capitalization value come from Land and House company follow with Supalai 12% and AP, Pruksa, Fraser has 9% and our target company Origin hold 8% from from overall market capitalization. From the proportion of the market capitalization Land and household wider proportion when compare with the competitor in the industry due to the product line and of Land and House company specially the recurring in from LH bank.

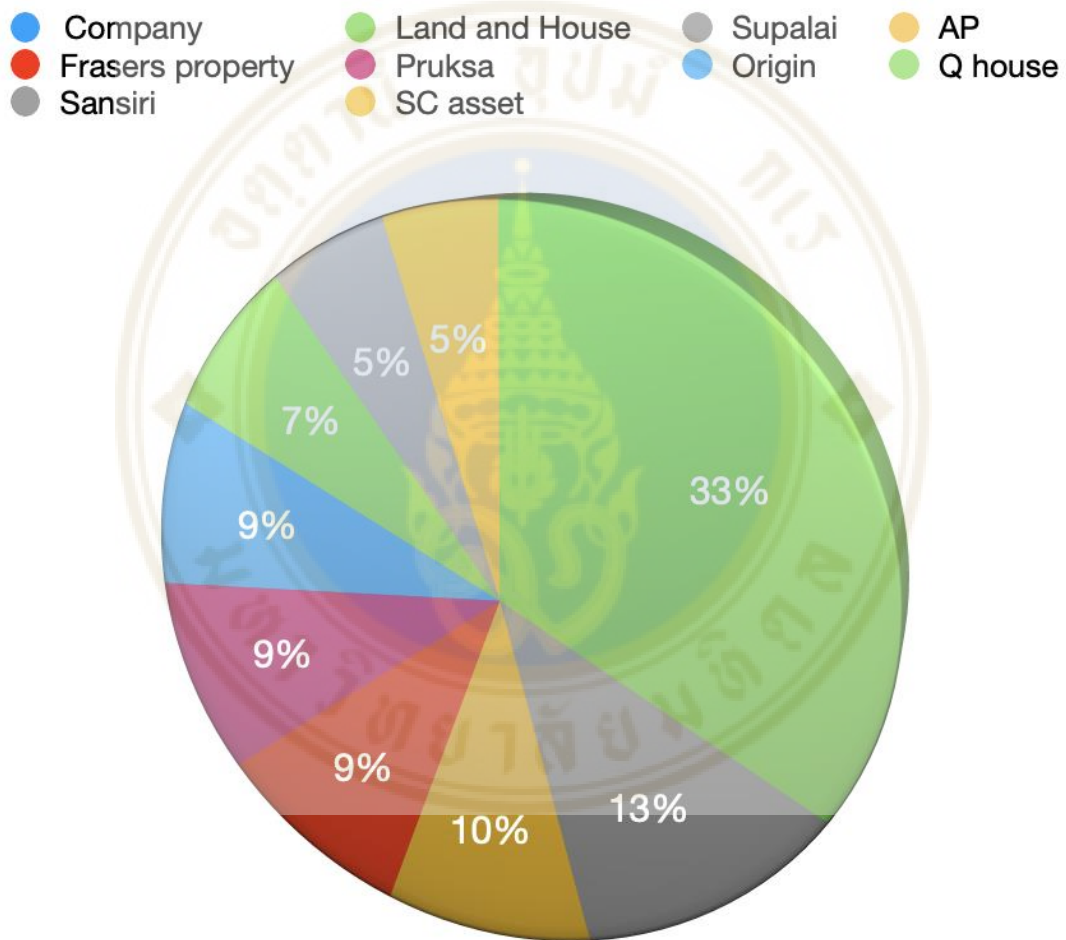


Figure 2.8 Top 10 properties company market capitalization

(Source: Terrabkk.com)

CHAPTER III

VALUATION

Origin Property PCL Relative Valuation

The valuation of Origin property under part of relative valuation in multiple valuation consist of:

3.1 Earnings Multiples

3.1.1 Trailing P/E or historical

Trailing P/E or historical trailing band which come from the Origin's stock under the price performance and trailing earnings per share in selected period. With the five years data of historical trend of price earning from Reuters Eikon and average of the stock valuation for compare performance of itself to see that the firm has overvalue or undervalue when compare with their own average in the past 5 years. The range to compare based on their own standard deviation are +1/-1, +2/-2 range.

The recent price earnings ratio(P/E) information of Origin on 20th of April 2022 is 8.678x which is lower than average P/E over the past 5 years which is 11.025, from these could see that the Origin has undervalued in relation to itself.



Figure 3.1 Trailing P/E

3.1.2 Forward P/E

From forward price earnings ratio could see that the recent price earnings ratio is 7.706x in 20th of April 2022 is slightly lower than five years forward average 7.879x. From this could see that Origin property has overvalue in relation to itself.

When compare this forward P/E to trailing P/E could see that forward P/E is lower than trailing PE so it could be illustrating that historical earning is higher than forward earnings.



Figure 3.2 Forward P/E

3.2 Book Value Multiples

3.2.1 Trailing P/BV

Book value multiple or price to book value is the financial ratio which use to measure the company's price in stock market over their own book value of equity. From the information below that compare historical price to book value with company's standard deviation boundary and historical average. Their historical price to book value in 20st of April 2022 is 1.823x which is much lower than average price to book value in five years historical data, which is about 3.798x. And it also lower than its positive boundaries.

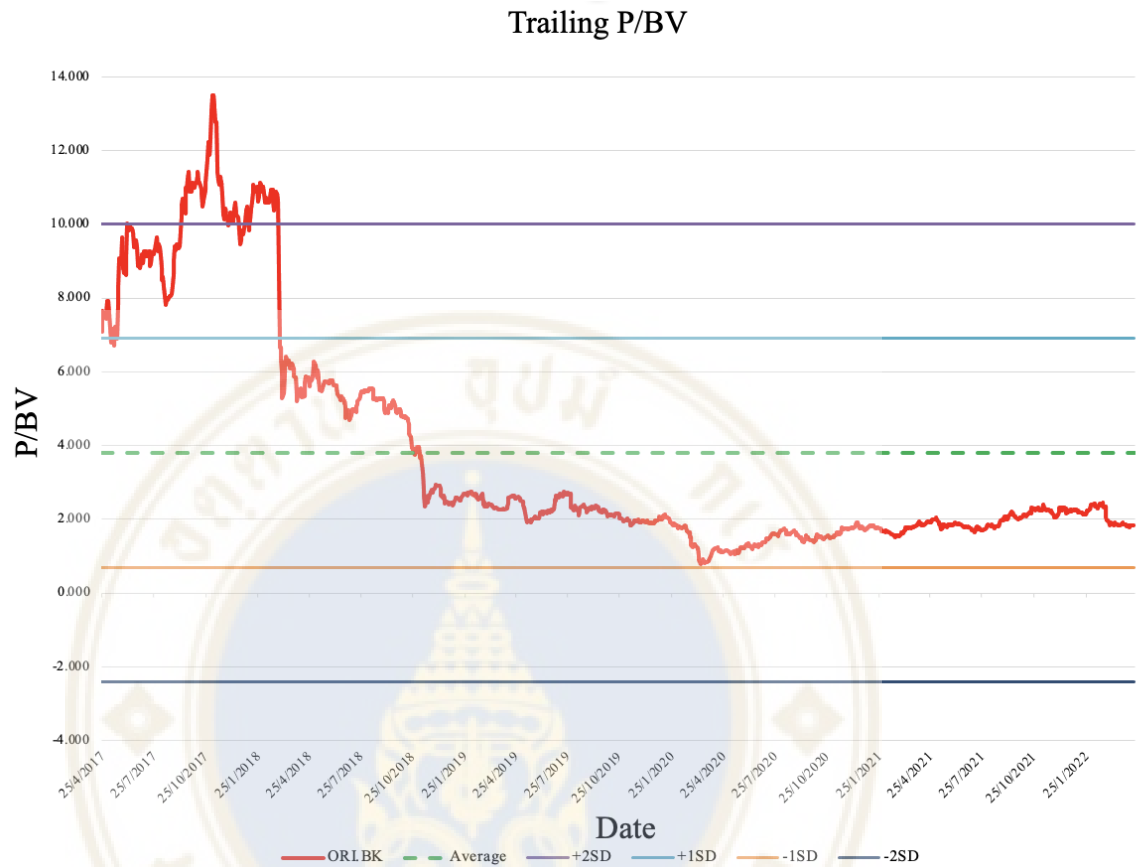


Figure 3.3 Trailing P/BV

3.2.2 Forward P/BV

For the forward price to book value or P/BV, forward P/BV at 20th of April 2022 which is 1.586x that lower than its average 2.541x and +1SD boundary 4.111x but still higher than -1SD boundary.

When compare with trailing P/BV could see that trailing P/BV is higher than forward P/BV. And Origin has undervalued to itself in both trailing and forward.

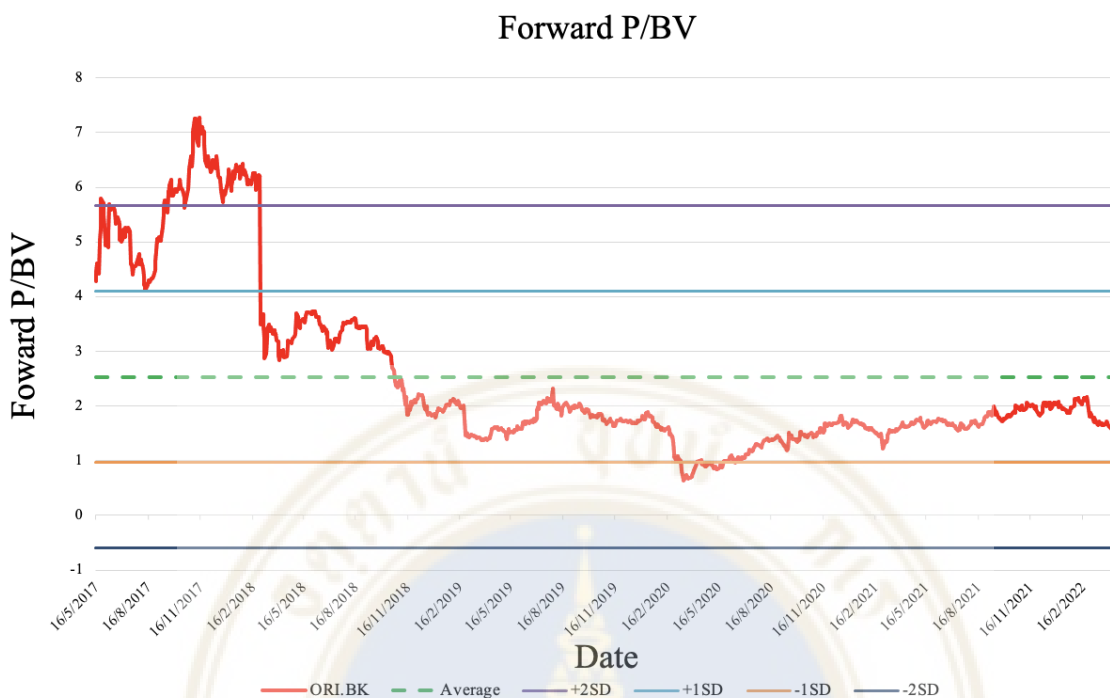


Figure 3.4 Forward P/BV

3.3 Enterprise value multiples

Enterprise value (EV) to EBITDA

EV calculation from Eikon

EV = Market Capitalization + Total Liabilities

– Cash and Cash equivalent +non-controlling interest

+Preferred share

Where, non-controlling interest and preferred shares use data from book value.

Market Capitalization calculated by Close price x Number of common shares.

Note that all figures come from annual financial statement and number of shares is the number of shares of parent company.

Enterprise value is one of financial ratio that use to measure the company's value in the market and earnings before interest, tax, depreciation, and amortization or

EBITDA is use for measuring company's performance in term of profitability and others financial performance.

3.3.1 Trailing EV/EBITDA

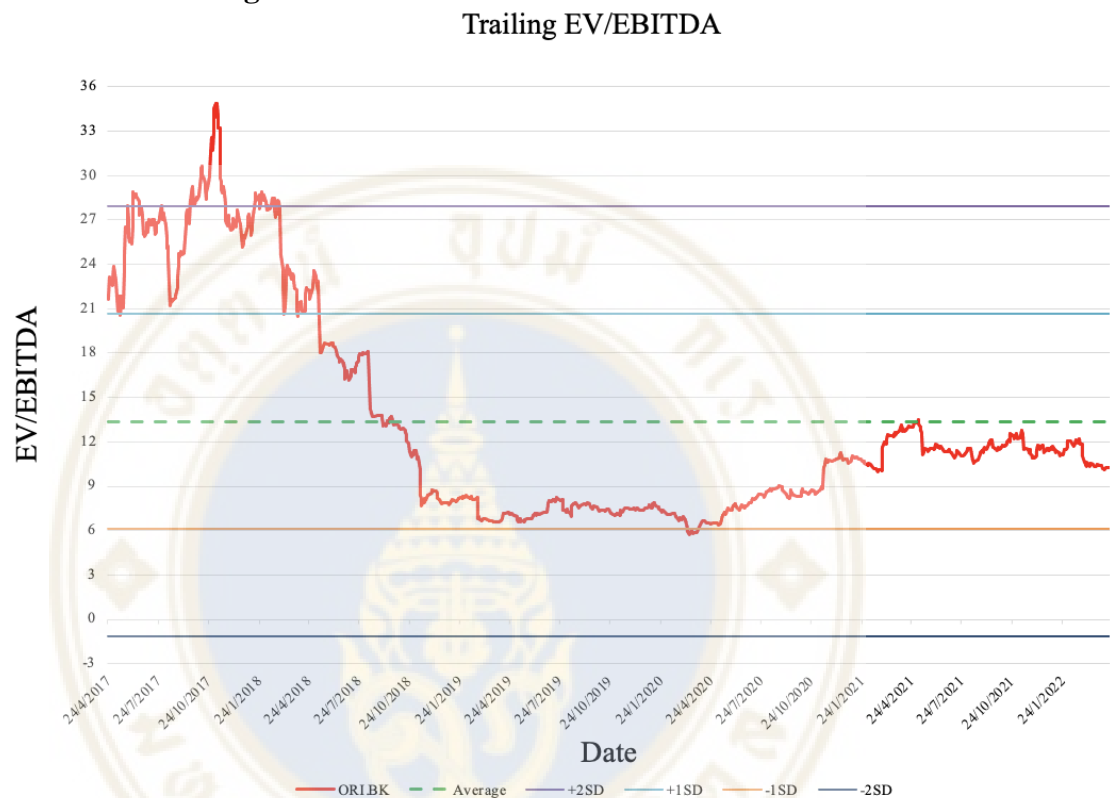


Figure 3.5 Trailing EV/EBITDA

For Trailing EV/EBITDA from the Figure 3.5 shows the relation of EV/EBITDA on the 20st of April 2022, 10.269x that lower than its historical average 13.385x but it is still higher than -1SD boundary 6.197x. When look further to the past this is not the lowest point, the lowest point of EV/EBITDA was reach -1SD boundary in the beginning of second quarter in 2020. From this means in relation to itself, the Origin id undervalued.

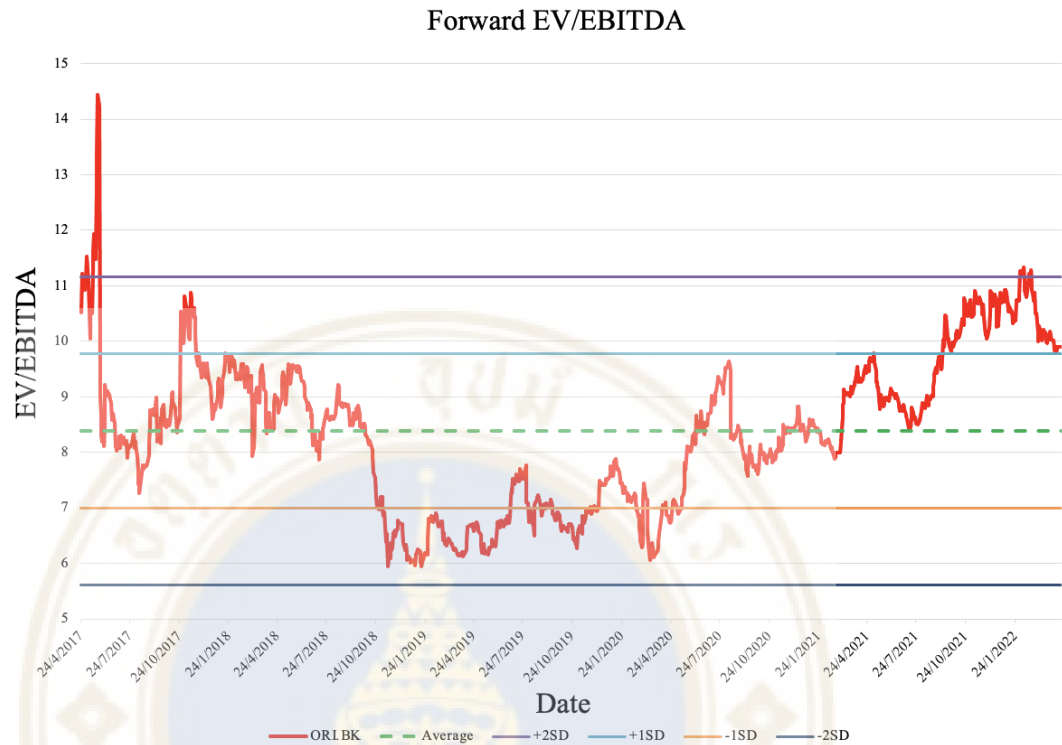


Figure 3.6 Forward EV/EBITDA

3.3.2 Forward EV/EBITDA

For forward EV/EBITDA, on 20th of April 2022 it has 10.076x of EV/EBITDA and it is higher than its five years average which is 8.39 and it is slightly higher than +1SD boundary. In the beginning of 2022, it's going to reach +2SD boundary that was the highest point in three years past. And the firm still undervalued to when compared to itself which under expectation.

3.4 Peer Multiples

Comparing Trailing and forward trailing PE include average and median of benchmark

Benchmark are selected by using the range of product in the competitive market which are high-rise and low-rise product and hotels, for instance condominium, land, and

house. The data below are from Reuter Eikon in 21st of April 2022. The table below show the multiple data of Origin and the peers, there are AP Thailand or AP. BK, Pruksa or PSH.BK, Sansiri or SIRI.BK, Supalai or SPALI.BK, and SC Asset Corporation or SC.BK. From the provided multiple data could see that Supalai has the highest closing price which is 22.60 THB. Pruksa has the highest P/E ratio 22.22x in last twelve month means that Pruksa has the low earning due to pandemic. For the highest P/BV is 1.11 from AP which still higher than the average among peers. And the highest EV/EBITDA is 17.77 from Sansiri.

In comparison of Origin to peer by comparing P/E, P/BV, and EV/EBITDA could see that Origin has lower value when compared to the average of the peer in P/E and EV/EBITDA but have higher value in P/BV. For the market capitalization Supalai has the highest market cap which is 44,032.50 million baht, follow with Pruksa, AP, and Origin is the third place. (Source: Thomson Reuters.com 2022)

Table 3.1 Trailing multiples

Company Name	Identifier (RIC)	Country of Headquarters	Company Market Cap (Millions)	Closing price 21st Apr'22	Trailing PE	Trailing PBV	Trailing EV/EBITDA
Origin Property PCL	ORI.BK	Thailand	THB 27,291.58	11.20	8.52	1.82	10.27
AP Thailand PCL	AP.BK	Thailand	THB35,863.25	11.50	7.91	1.11	11.18
Pruksa Holding PCL	PSH.BK	Thailand	THB29,332.60	13.30	12.47	0.68	11.55
Sansiri PCL	SIRI.BK	Thailand	THB17,413.17	1.17	10.48	0.44	17.77
Supalai PCL	SPALI.BK	Thailand	THB44,032.50	22.50	6.23	1.05	7.68
SC Asset Corporation PCL	SC.BK	Thailand	THB16,300.54	3.88	7.94	0.81	12.07
				Peer Average	9.00	0.82	12.05
				Peer Median	7.94	0.81	11.55
				Peer Max	12.47	1.11	17.77
				Peer Min	6.23	0.44	7.68

Table 3.2 Forward multiples

Company Name	Identifier (RIC)	Country of Headquarters	Company Market Cap (Millions)	Closing price 21st Apr'22	Fwd PE	Fwd PBV	Fwd EV/EBITDA
Origin Property PCL	ORI.BK	Thailand	THB27,291.58	11.20	7.71	1.59	9.90
AP Thailand PCL	AP.BK	Thailand	THB35,863.25	11.50	7.26	1.00	10.29
Pruksa Holding PCL	PSH.BK	Thailand	THB29,332.60	13.30	9.59	0.66	9.47
Sansiri PCL	SIRI.BK	Thailand	THB17,413.17	1.17	7.70	0.43	18.26
Supalai PCL	SPALI.BK	Thailand	THB44,032.50	22.50	7.23	1.03	8.18
SC Asset Corporation PCL	SC.BK	Thailand	THB16,300.54	3.88	6.82	0.74	10.80
				Peer Average	7.72	0.77	11.40
				Peer Median	7.26	0.74	10.29
				Peer Max	9.59	1.03	18.26
				Peer Min	6.82	0.43	8.18

3.5 Expected Price from Relatives**Table 3.3 Estimated data**

	2022F	2023F
EPS	1.48	1.58
BV/share	6.96	7.89
EBITDA/share	1.7286	1.8523
EBITDA (Thousand, THB)	4,240,119.00	4,543,493.00
Net Income (Thousand, THB)	3,755,994.27	3,849,894.12
No. Outstanding shares (Thousand)	2,452,862.45	2,452,862.45
Cash (Thousand, THB)	1,567,873.00	1,639,449.00
Total Debt (Thousand, THB)	15,572,000.00	15,572,000.00
Total Asset (Thousand, THB)	38,206,049.00	41,356,998.00

Regarding to the given data from estimate data from Thomson Reuters on table above. They are using to calculate earnings per share or EPS by using net income divided by number of outstanding shares. Total asset and total debt are using for finding book value per share by use the subtracting of total assets and total debt then divided by listed shares. Lastly EBITDA per share has gotten by using EBITDA divided by outstanding shares.

3.5.1 Expected Price from trailing data

Table 3.4 Expected price from trailing data

	2022F	2023F
Trailing P/E	11.733	12.511
Trailing P/BV	5.652	6.404
Trailing EV/EBITDA	19.966	21.395
Average	12.450	13.436

3.5.2 Expected Price from Forward data

Table 3.5 Expected price from forward data

	2022F	2023F
Forward P/E	10.730	11.442
Forward P/BV	5.134	5.817
Forward EV/EBITDA	17.796	19.069
Average	11.220	12.109

After knowing the EPS of the company in 2022F and 2023F could be able to find the target price in term of trailing P/E by using the median value from peer analysis which exclude Origin PCL, multiply by the EPS, vice versa to forward P/E. From this calculation could see that trailing P/E is higher than forward P/E.

For target price under the price to book values or P/BV calculated from the result of book value per share multiply by median of the peer analysis which exclude Origin PCL. After calculation trailing P/BV slightly higher than forward P/BV from the increasing of liabilities in 2023F as proforma shows.

Lastly is the enterprise value to EBITDA which under the multiplication of median results in peer analysis and the EBITDA per share. From this calculation shows that trailing EV/EBITDA has given higher value of target price than forward EV/EBITDA which is the results of the lower depreciation in 2023F.

From the different of the target price in each category are from the lower expectation in the next twelve months of benchmark companies which forecast based on economic situation.

Since the expected price a lot higher than the current price come from the high number of enterprise value to EBITDA which could reflect the rational of property industry high fix asset. For low value of price to book value in both trailing and forward come from the high number of liabilities which make the low value of book value that is the result from the different of total asset and total liability. Lastly for price earnings ratio provide high number when compared to current price because of the low earning from the last twelve-month due pandemic situation.

3.6 Expected price or Target price calculation

Regarding to data from the calculation above, by using the value from trailing P/E, trailing P/BV, forward P/E, forward P/BV, trailing EV/EBITDA, and forward EV/EBITDA to find the average of all calculated target price. It gives target price goes up from 11.00THB at 26th of April 2022 to 11.835 THB in this fiscal year 2022F and 12.773THB in the next fiscal year 2023F.

Table3.6 Expected price or Target price

	Trailing P/E	Trailing P/BV	Trailing EV/EBITDA	Forward P/E	ForwardP/BV	Forward EV/EBITDA	Target Price
							Average
2022F	11.733	5.652	19.966	10.730	5.134	17.796	11.835
2023F	12.511	6.404	21.395	11.442	5.817	19.069	12.773

3.7 Sensitivity Analysis

According to the expected price calculation sensitivity in the Fig.3.11, it was calculated price sensitivity under the range of 10% boundary of market multiple and book value per share for price to book value, earning per share for price earnings ratio, and enterprise value to EBITDA per share for enterprise value to EBITDA ratio.

From the sensitivity of price to book value in boundary of 10%, the worst P/BV is 4.578 THB, and the best price is 6.839 THB regarding to the base price of 5.652 THB.

From the sensitivity of P/E in boundary of 10%, the worst P/E is 9.504 THB, and the best price is 14.197 THB regarding to the base price of 11.730THB.

Lastly is the sensitivity of EV/EBITDA in boundary of 10%, the worst EV/EBITDA is 16.173 THB, and the best price is 24.159 THB regarding to the base price of 19.966THB

Table 3.7 Sensitivity

		Sensitivity P/BV			
			-10%	10%	
			Worst	Base	Best
		5.652	6.268	6.964	7.660
-10%	Worst	0.730	4.578	5.087	5.596
	Base	0.812	5.087	5.652	6.217
10%	Best	0.893	5.596	6.217	6.839

		Sensitivity P/E			
			-10%	10%	
			Worst	Base	Best
		11.73	1.33	1.48	1.63
-10%	Worst	7.14	9.504	10.560	11.615
	Base	7.94	10.560	11.733	12.906
10%	Best	8.73	11.615	12.906	14.197

		Sensitivity EV/EBITDA			
			-10%	10%	
			Worst	Base	Best
		19.966	10.395	11.550	12.705
-10%	Worst	1.556	16.173	17.970	19.767
	Base	1.729	17.970	19.966	21.963
10%	Best	1.902	19.767	21.963	24.159

CHAPTER IV

INVESTMENT SUGGESTION

From doing company valuation under discounted cash flow method and relative valuation. The expected price that gets from discounted cash flow valuation (DCF) is 13.26 THB with based on 2.5% percentage of growth. For the relative valuation method gives 11.835 THB per share of expected share price in 2022F.

Regarding to the analyst valuation from two institute, Kasikorn Securities that valuation on March 2022 is 13.40 THB per share. And KTBST Securities which valuation on December 2021 is 15.00 THB per share.

From all valuation method gives expected price in 2022 higher than current price on 26th April 2022 which is 11.00 THB per share. Could be conclude the investor rather to buy or hold.

Table 3.8 Target price comparison

Valuation Analysis (SET:ORI)	Target Price of 2022 (Baht/Share)	Responsible Analyst and Institutions
Discounted Cash Flow Valuation (DCF)	13.82	Suthipoj Rugtrakul, Corporate Finance, CMMU 2022.
Relative Valuation	11.84	Teerarat Sarakwan, Corporate Finance, CMMU 2022.
Sum-of-the-part method and Relative	13.40	Sorapong Jakteerungkul, Kasikorn Securities. (March 2022)
Relative Valuation (on 2021 and 2022E)	15.00	Amnart Ngosawang, KTBST Securities (December 2021)
Average Price Consensus	13.52	
Current Market Price on date of defence	11.00 (Apr 26th 2022)	Thailand Stock Exchange



Appendix A : Origin PLC Financial Data

1. Origin PLC comprehensive income.

Table 3.9 ORI's Comprehensive Income

Annual Standardised in Millions of Thai Baht

	2021	2020	2019	2018	2017
Earnings Quality Score	55	45	12	32	26
Period End Date	31-Dec-2021	31-Dec-2020	31-Dec-2019	31-Dec-2018	31-Dec-2017
Revenue	14,548	10,486	13,197	15,749	8,765
Net Sales	14,548	10,486	13,197	15,749	8,765
Other Revenue, Total	--	--	--	--	--
Total Revenue	14,548	10,486	13,197	15,749	8,765
Cost of Revenue, Total	9,018	6,308	6,934	8,611	5,662
Cost of Revenue	9,018	6,308	6,934	8,611	5,662
Gross Profit	5,530	4,178	6,263	7,138	3,102
Selling/General/Admin. Expenses, Total	2,344	1,822	2,687	2,872	1,452
Selling/General/Administrative Expense	2,344	1,822	2,687	2,872	1,452
Depreciation/Amortization					
Unusual Expense (Income)	(676)	(181)	(459)	(315)	(641)
Other Unusual Expense (Income)	(676)	(181)	(459)	(315)	(641)
Other Operating Expenses, Total	(711)	(432)	(455)	--	--
Other, Net	(711)	(432)	(455)	--	--
Total Operating Expense	9,968	7,502	8,697	11,168	6,474
Operating Income	4,580	2,984	4,501	4,581	2,291
Interest Expense, Net Non-Operating	(297)	(263)	(273)	(262)	(51)
Interest Expense - Non-Operating	(680)	(700)	(273)	(262)	(51)
Interest Capitalized - Non-Operating	383	436	--	--	--
Interest/Invest Income - Non-Operating	(42)	604	(239)	(224)	(218)
Investment Income - Non-Operating	(42)	604	(239)	(224)	(218)
Interest Income(Exp), Net Non-Operating	--	--	--	--	--
Interest Inc.(Exp.),Net-Non-Op., Total	(338)	341	(512)	(487)	(269)
Net Income Before Taxes	4,242	3,325	3,989	4,356	2,603
Provision for Income Taxes	865	560	848	981	583
Net Income After Taxes	3,377	2,764	3,141	3,376	2,020
Minority Interest	(183)	(102)	(114)	(38)	0
Net Income Before Extra. Items	3,194	2,662	3,027	3,338	2,021
Net Income	3,194	2,662	3,027	3,338	2,021

2. Origin PLC Financial Statement

Table 3.10 ORI's Financial Statement

Annual Standardised in Millions of Thai Baht

	2021	2020	2019	2018	2017
Earnings Quality Score	55	45	12	32	26
Period End Date 31-Dec-2021 31-Dec-2020 31-Dec-2019 31-Dec-2018 31-Dec-2017					
Assets (THB Millions)					
Cash and Short Term Investments	2,066	808	1,330	1,819	830
Cash	1,966	808	1,330	1,819	820
Cash & Equivalents	0	0	0	0	0
Short Term Investments	100	--	--	0	9
Total Receivables, Net	1,603	450	897	157	294
Notes Receivable - Short Term	230	76	308	7	0
Receivables - Other	1,373	374	589	150	294
Total Inventory	23,676	23,846	22,920	20,304	18,379
Inventories - Other	23,676	23,846	22,920	20,304	18,379
Prepaid Expenses	127	197	135	86	--
Other Current Assets, Total	584	1,202	1,198	1,139	833
Other Current Assets	584	1,202	1,198	1,139	833
Total Current Assets	28,056	26,503	26,481	23,505	20,335
Property/Plant/Equipment, Total - Gross	2,435	2,621	1,946	949	691
Property/Plant/Equipment, Total - Net	2,114	2,343	1,746	794	561
Accumulated Depreciation, Total	(322)	(279)	(199)	(155)	(130)
Goodwill, Net	190	190	190	190	190
Intangibles, Net	185	219	236	237	244
Long Term Investments	4,613	4,150	3,076	2,161	1,389
Other Long Term Assets, Total	240	288	350	315	206
Total Assets	35,398	33,694	32,079	27,203	22,925
Liabilities (THB Millions)					
Accounts Payable	885	1,152	1,032	783	736
Payable/Accrued	0	0	0	0	0
Accrued Expenses	839	815	949	930	402
Notes Payable/Short Term Debt	2,327	1,546	1,740	2,547	695
Current Port. of LT Debt/Capital Leases	6,182	7,644	4,708	5,471	4,548
Other Current Liabilities, Total	1,579	2,410	2,394	3,454	5,525
Total Current Liabilities	11,811	13,568	10,822	13,183	11,906
Total Long Term Debt	7,063	7,428	9,606	4,513	3,827
Total Debt	15,572	16,618	16,054	12,531	9,071
Deferred Income Tax	560	662	696	688	771
Deferred Income Tax - LT Liability	560	662	696	688	771
Minority Interest	1,003	635	1,277	1,364	1,290
Other Liabilities, Total	24	28	21	17	9
Total Liabilities	20,461	22,320	22,423	19,766	17,803
Shareholders Equity (THB Millions)					
Common Stock, Total	1,226	1,226	1,226	1,225	813
Common Stock	1,226	1,226	1,226	1,225	813
Additional Paid-In Capital	2,337	2,337	2,337	2,299	2,234
Retained Earnings (Accumulated Deficit)	11,377	7,827	6,120	3,940	2,092
Treasury Stock - Common	--	--	--	--	--
ESOP Debt Guarantee	--	--	--	--	--
Unrealized Gain (Loss)	--	--	--	--	--
Other Equity, Total	(3)	(17)	(27)	(27)	(16)
Other Equity	(3)	(17)	(27)	(27)	(16)
Total Equity	14,937	11,373	9,657	7,437	5,122
Total Liabilities & Shareholders' Equity	35,398	33,694	32,079	27,203	22,925
Total Common Shares Outstanding	2,453	2,453	2,453	2,449	2,439
Shares Outs - Common Stock Primary Issue	2,453	2,453	2,453	2,449	2,439

3. Origin PLC Statement of Cash flow

Table 3.11 ORI's Statement of Cash Flow

Annual Standardised in Millions of Thai Baht

	2021	2020	2019	2018	2017
Earnings Quality Score	55	45	12	32	26
Period End Date	31-Dec-2021	31-Dec-2020	31-Dec-2019	31-Dec-2018	31-Dec-2017
Cash Flow-Operating Activities (THB Millions)					
Net Income/Starting Line	4,242.1	3,324.8	3,988.9	4,356.4	2,603.4
Depreciation/Depletion	182.6	165.0	118.7	134.0	86.6
Depreciation	182.6	165.0	118.7	134.0	86.6
Non-Cash Items	(315.9)	(502.9)	97.3	548.3	(342.8)
Unusual Items	(657.2)	(166.0)	(445.0)	(299.4)	(636.9)
Equity in Net Earnings (Loss)	41.7	(604.1)	239.0	536.4	218.5
Other Non-Cash Items	299.6	267.2	303.4	311.3	75.7
Changes in Working Capital	(3,399.2)	(2,524.1)	(5,910.3)	(3,653.4)	(2,425.0)
Accounts Receivable	(713.1)	201.4	(238.1)	144.5	(293.0)
Inventories	(1,089.0)	(1,439.8)	(3,616.0)	(1,988.0)	(2,518.5)
Other Assets	416.9	(92.9)	74.6	(618.8)	(126.0)
Payable/Accrued	(65.7)	361.5	191.6	930.8	1,243.8
Other Liabilities	(537.1)	34.6	(910.8)	(620.0)	(121.3)
Other Operating Cash Flow	(1,411.3)	(1,588.9)	(1,411.5)	(1,501.9)	(610.0)
Cash from Operating Activities	709.6	462.7	(1,705.4)	1,385.3	(77.8)
Cash Flow-Investing Activities (THB Millions)					
Capital Expenditures	(261.9)	(254.5)	(1,215.7)	(582.5)	(378.7)
Purchase of Fixed Assets	(256.9)	(253.3)	(1,200.6)	(546.7)	(363.9)
Purchase/Acquisition of Intangibles	(4.9)	(1.3)	(15.1)	(35.8)	(14.8)
Other Investing Cash Flow Items, Total	750.2	268.9	(291.3)	(2,973.8)	(1,191.8)
Sale of Business	560.9	179.6	396.4	369.6	1,177.0
Sale of Fixed Assets	1.2	0.2	1.3	11.6	--
Sale/Maturity of Investment	105.3	238.2	--	--	0.0
Investment, Net	(155.5)	(0.4)	(0.1)	(0.2)	76.5
Purchase of Investments	(1,189.9)	(1,019.3)	(567.8)	(3,185.0)	(2,448.6)
Other Investing Cash Flow	1,428.2	870.7	(121.2)	(169.8)	3.3
Cash from Investing Activities	488.3	14.4	(1,507.0)	(3,556.3)	(1,570.5)
Cash Flow-Financing Activities (THB Millions)					
Financing Cash Flow Items	(194.2)	(225.1)	(240.4)	(19.6)	(7.3)
Other Financing Cash Flow	(194.2)	(225.1)	(240.4)	(19.6)	(7.3)
Total Cash Dividends Paid	(1,496.2)	(711.3)	(1,383.7)	(961.4)	(125.4)
Cash Dividends Paid - Common	(1,496.2)	(711.3)	(1,383.7)	(961.4)	(125.4)
Issuance (Retirement) of Stock, Net	1,971.6	(520.0)	25.4	461.6	1,416.6
Sale/Issuance of Common	2,585.6	--	0.0	2.6	1,002.0
Common Stock, Net	2,585.6	--	0.0	2.6	1,002.0
Sale/Issuance of Preferred	--	--	0.0	414.0	400.0
Repurchase/Retirement of Preferred	(614.0)	(520.0)	--	--	--
Preferred Stock, Net	(614.0)	(520.0)	0.0	414.0	400.0
Options Exercised	0.0	0.0	25.4	45.0	14.6
Issuance (Retirement) of Debt, Net	(321.3)	457.7	4,321.7	3,689.2	664.1
Short Term Debt Issued	--	--	427.7	1,850.2	497.0
Short Term Debt Reduction	--	--	(420.0)	--	--
Short Term Debt, Net	779.4	(184.8)	8.0	1,852.8	497.0
Long Term Debt Issued	10,360.8	6,935.1	10,129.6	10,319.7	5,121.2
Long Term Debt Reduction	(11,461.6)	(6,292.7)	(5,815.9)	(8,483.3)	(2.1)
Long Term Debt, Net	(1,100.7)	642.4	4,313.7	1,836.4	167.1
Cash from Financing Activities	(40.2)	(998.7)	2,723.0	3,169.9	1,948.0

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