DISCOUNTED CASH FLOW VALUATION OF JMT NETWORK SERVICES PUBLIC COMPANY LIMITED

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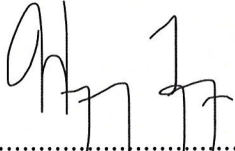for the degree of Master of Management
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ABSTRACT

This thematic paper aims to evaluate the stock price of JMT Network Services Public Company Limited (JMT) using the discounted cash flow valuation model (FCFF), which represents the concept that a company's stock price should reflect its intrinsic value in terms of cash flow, growth, and risk. Considering the increase in personal financial demand in Thailand, the trend in the non-life insurance market, and the increase in non-performing loans, as well as the monthly income per household, these factors will enhance JMT's performance. The target price as of year-end 2022 of JMT is equal to 104.23 Baht per share with 40% upside from the current price of 74.50 Baht per share on 26 July 2022. Therefore, the valuation is indicative to BUY. In conclusion, the valuation study is intended to suggest a company's intrinsic value, though the method has some limitations. As a result, the value must be carefully examined and re-evaluated if certain factors change. However, the study can still provide investors and others interested in asset management companies with guidance on intrinsic valuation.

KEY WORDS: JMT/ Valuation/ Discounted Cash Flow/ Debt collection service / Non-performing loans

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CHAPTER I
HIGHLIGHT

JMT Network Services Public Company Limited (JMT) has registered to be an asset-management company (AMC). The company's services can be decomposed into 4 groups of revenue which are Services income from debts collection, Revenues from collection of purchased accounts receivable, Interest income and Dividend income and Insurance Brokerage business.

Market capitalization of JMT's listed stock is THB 109,798 mn. The average trading volume within the past 1 year is 9.722 million shares.

Table 1.1 Market profile

Market Profile	
Closing Price	THB 74.5
52-Week Price Range	40.5 - 74.5
Average Daily	9.722 M
Share Outstanding	1,367 M
Market Cap.	109,798 M
Dividend Yield	1.20%
Trailing P/E	59.05
Forward P/E	67.40
P/BV	4.77
ROE	10.66%
EPS	THB 1.27
Dividend per share	THB 0.82
Book value per share	THB 15.61

Source : SET and Capital IQ

Thailand's household debt has been rising for years. Bank of Thailand: household debt at end of the third quarter 2021 was 14.34 billion baht. This accounts for 89.3% of the country's GDP and grew by 300 billion baht year-over-year. This indicates the economic slowdown caused by Covid-19 may increase future household debt.

Even though the Covid-19 pandemic slowed the economy in 2021, the company adjusted its operating strategy and management to account for economic risks, leading to significant performance growth in business operations. The company's performance has been outstanding for 6 years in a row, both for debt collection and operation.

According to the upside of personal financial demand in Thailand, the trend in the non-life insurance market, and the increase in non-performing loans, as well as the monthly income per household, I forecast revenue starting from 6,155 million baht in the current year (2022) and increases to 15,902 million baht by FY2027, which is 17% CAGR. After the year 2027, I assume the sales growth of the company is 2.40% per annum (perpetual growth), which is a conservative rate considering the past six years' average growth rate of real GDP.

We issue a BUY recommendation on JMT Network Services Public Company Limited with a target price of THB 104.23 applying the Discounted Free Cash Flow to Firm Method with offering 40% upside from its closing price of THB 74.50 per share on 26 July 2022.

CHAPTER II
BUSINESS DESCRIPTION

JMT Network Services Public Company Limited ("the Company") was established in 1994 with paid-up capital of 5 million baht by Jay Mart Group to operate a debt collection service, business prosecution, and execute lawsuits across Thailand. The Jay Mart Group has expertise in selling various brands of electrical appliances before entering the mobile phone retail business. In 2006, the business expanded to the non-performing debt management services and service business for car-rent purchase loans, respectively. The Company registered its conversion to a public company limited on April 19, 2012 and registered to the Stock Exchange of Thailand on November 27, 2012. As of December 31, 2021, the Company has a registered capital of 764,571,745.00 baht and has a paid-up registered capital of 683,655,056.00 baht, divided into 1,367,310,111 common stocks with a par value of 0.50 baht per stock.

Vision of the company is to be the Number-One debt collection service provider across all areas. Mission is to be a leader in debt management and aim for excellence in ethics of human resource management and operation in accordance with the principles of good governance to shareholders, business partners, customers, employees and society. (JMT Annual report,2022,p.1)

2.1 Company's group structure

The core business of the company consists of 3 main businesses: debt tracking business, debt management and insurance, and insurance brokerage business, which are under the group of companies of JMT Network service, the major shareholder, The group structure of JMT Network Services Public Company Limited is as follows as of 31 December 2021;
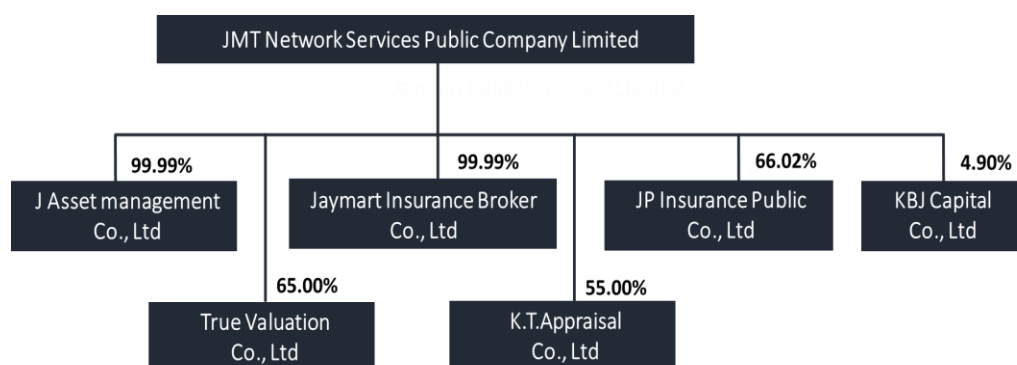
Figure 2.1 Company's group structure

Source: JMT Annual report 2021

2.2 Products or Services Characteristics

At present, the company, its subsidiaries and investment companies, operate in 4 main businesses comprising **debt collection service business**, **non-performing debt management business**, **insurance business**, and **insurance brokerage business**. The details are as follows:

1) **Debt tracking and collection service business**

The company is a debt collection service provider for the non-performing debt that the creditor cannot/ does not desire to track due to the cost. The service covers all types of debt such as personal loan debt, credit card debt, debt for utilities, service charges debt, and etc. Various creditors (clients) will send the names and information of debtors to the company. The company will search for additional debtor information, check and follow up with debtors, and negotiate with each debtor for debt repayment under the conditions that the company gets permission from the client at a percentage of the debt that the company is able to follow up and agree to allow the debtor to pay the debt

As of December 31, 2021, the company has been assigned by the clients to follow up debts in the amount of 31,573 million baht. The main clients are financial institutions and hire purchase companies.

In addition, the company also provides other services related to the debt collection service business such as providing legal services on execution of all types of

liabilities. The company received profits in the form of service charges and fees in percentage of the amount received from the debt repayment from the execution.

The debt tracking and collection services consists of three main process as follows:

A. Phone Collection

This is the first process of debt tracking and collection service. First, the company receives debtor's information and inputs this information into the database of the debt tracking system. Then, the phone collector, who is responsible for each specific debtor of the client, will make a phone call to the debtor to negotiate for the debtor to pay back the debt.

B. Field Collection

This is the process where the company sends out the field collector to facilitate payment collection for certain types of clients or to track the debt in some important cases. The field collection is normally used with the debtors who have a considerably high amount of debt and are more difficult to track.

C. Filing a lawsuit for enforcement of debt repayment

This is the last step in the case that debtors do not wish to pay back debt. The company will consult with the client in hiring a company's lawyer to draft and send a suing request to prosecute against the debtors who are unable to pay the debt.

2) Non-performing debt management business

The company operates a non-performing debt management business by purchasing non-performing debt from financial institutions or companies that have general policy for non-performing debt sales. Normally, financial institutions will use debt auction methods. The creditors will allow companies that specialize in debt collection to bid for non-performing debts at a discounted price from the full debt, which the auctioneer has to administer and bear the risk of collecting the auctioned debts.

The company, with expertise in analysis for personal debt collection and expertise in debt collection for more than 20 years, has enabled the business to analyze and assess opportunities for effective debt collection and success in business operations by choosing to bid on the debt that the company has specialization in debt collection only. The company will compare the debt's information with the company's database from the debt tracking service to estimate the success rate and expenses throughout the

target period of debt collection. The company also has to estimate the target rate of return from investing in non-performing debt management in order to assess and determine the price for bidding.

In terms of debt management and debt collection, the company will estimate the amount of debt collected quarterly, then the company will compare this amount to the actual amount from debt collection. If the amount of debt collected is lower than the estimated amount, the company will impose a policy to increase debt tracking and collecting process as well as adjusting estimation of debt collection to be appropriate with the company's policy and current situation.

As of December 30, 2021, the company has non-performing debt under management, with a total book value of investment equal to 16,381 million baht.

3) Insurance brokerage business

The company provides various types of insurance brokerage services. The income structure reflects the portion of the return commission from the customer's insurance premium. This is a business that has low risk in terms of product impairment because it does not require inventories or policies from the business. The Company; therefore, acts as a broker who points out insurance channels between customers and insurance companies.

4) Non life Insurance business

The company's products can be categorized into two types which are motor-insurance and non-motor insurance. The list of products for each category are as follows:

1. Motor Insurance

- Compulsory Motor Insurance
- Voluntary Motor Insurance

2. Non-Motor Insurance

- Fire insurance
- Marine/Cargo insurance, Inland transit insurance, Carrier liability insurance
- Miscellaneous
    - Accident insurance
    - Travel insurance
    - All risk insurance

- ○ Public liability insurance
- ○ Contract work insurance
- ○ Burglary insurance
- ○ Professional liability insurance
- ○ Engineering insurance including all types of risks of construction contractors, insurance for all risks of machinery installation contractors, boiler and pressure vessel explosion insurance, and machine insurance
- ○ Insurance for money
- ○ Billboard insurance
- ○ Product liability insurance
- ○ Insurance for the liability of directors and executive officer of the company
- ○ Statutory liability insurance arising from the operation of controlled business type 3 for petrol service station

2.3 Revenue structure

The revenue structure of the company in accordance to the consolidated financial statement for years 2019 to 2021 are segmented by the business consists of revenue as follows:

Table 2.1 Revenue Structure

The Company's revenue structure	31 December 2019		31 December 2020		31 December 2021	
	MB.	%	MB.	%	MB.	%
Core Business						
Revenue from contracts with customers	363.7	14.3	362.1	11.3	300.6	8.2
Interest and dividend income	1294.5	51.0	1726.5	53.8	2073.8	56.7
Profit on Loans on Acquisition of Accounts	655.7	25.9	902.9	28.2	1056.4	28.9
Income from insurance	210.6	8.3	199.2	6.2	194.2	5.3
Total revenue from core business	2524.6	99.5	3190.8	99.5	3625.0	99.1
Other income	11.8	0.5	16.0	0.5	31.3	0.9
Total income	2536.4	100.0	3206.8	100.0	3656.3	100

Source: JMT Annual report 2021

For the revenue from contracts with customers, this includes income from debt collection services, income from legal services and prosecution, and insurance commission income which is the income from the main business of its subsidiary.

For interest and dividend income, it includes interest income from loans from purchases of non-performing debtors and income from dividend income.

For income from insurance, it includes insurance income from business operations of JP Insurance Public Limited Company, which is a subsidiary that the company has invested in the proportion of 60.02%.

Other income includes interest received from back deposits and profit (loss) from investment in financial assets.

Table 2.2 Income Statement

Income Statement						
For the Fiscal Period Ending	12 months	Reclassified 12 months	12 months	Reclassified 12 months	12 months	LTM 12 months
	Dec-31-2017	Dec-31-2018	Dec-31-2019	Dec-31-2020	Dec-31-2021	Mar-31-2022
Currency	THB	THB	THB	THB	THB	THB
Revenue	1,351.8	558.2	1,019.4	1,265.0	1,357.1	1,436.8
Insurance Div. Revenue	-	98.3	210.6	199.2	194.2	213.9
Interest And Invest. Income (Rev)	4.5	1,228.4	1,294.5	1,726.5	2,073.7	2,244.0
Other Revenue	-	-	-	-	-	-
Total Revenue	1,356.3	1,884.9	2,524.6	3,190.8	3,624.9	3,894.7
Cost Of Goods Sold	574.4	672.4	875.4	870.3	865.3	894.5
Insurance Div. Operating Exp.	-	110.0	236.2	162.6	168.6	255.9
Gross Profit	781.9	1,102.5	1,413.0	2,157.8	2,591.0	2,744.3
Selling General & Admin Exp.	185.7	302.8	382.5	441.1	601.1	638.3
Provision for Bad Debts	-	-	11.6	203.3	55.9	144.4
R & D Exp.	-	-	-	-	-	-
Depreciation & Amort.	25.3	-	-	-	-	-
Other Operating Expense/(Income)	(5.4)	(4.6)	(11.8)	(16.1)	(25.0)	(39.5)
Other Operating Exp., Total	205.6	298.2	382.3	628.4	632.1	743.2
Operating Income	576.3	804.3	1,030.7	1,529.4	1,958.9	2,001.0
Interest Expense	(76.9)	(133.6)	(206.2)	(313.9)	(345.0)	(337.8)
Interest and Invest. Income	-	-	-	-	-	-
Net Interest Exp.	(76.9)	(133.6)	(206.2)	(313.9)	(345.0)	(337.8)
Other Non-Operating Inc. (Exp.)	-	-	-	-	-	4.0
EBT Excl. Unusual Items	499.4	670.7	824.5	1,215.5	1,614.0	1,667.2
Impairment of Goodwill	-	-	-	-	-	-
Gain (Loss) On Sale Of Invest.	-	(5.5)	14.4	(5.8)	-	-
Other Unusual Items	-	-	-	-	6.3	6.3
EBT Incl. Unusual Items	499.4	665.2	838.9	1,209.7	1,620.3	1,673.5
Income Tax Expense	103.3	185.5	189.4	173.6	241.0	238.7
Earnings from Cont. Ops.	396.1	479.7	649.4	1,036.1	1,379.3	1,434.8
Earnings of Discontinued Ops.	-	-	-	-	-	-
Extraord. Item & Account. Change	-	-	-	-	-	-
Net Income to Company	396.1	479.7	649.4	1,036.1	1,379.3	1,434.8
Minority Int. in Earnings	0	25.8	31.9	10.9	21.1	49.7
Net Income	396.1	505.5	681.4	1,047.0	1,400.4	1,484.5

Source: S&P Capital IQ

The table 2.2 shows the income statement of JMT which represents revenues and profits over the past five years. The figure shows that the total revenue of JMT has

been increasing over the past few years. In addition, the gross profit and net income also increases as well. It can be seen that the amount of revenue and net income since 2019 has been increasing significantly more than the previous level. This is partly due to the Covid-19 situation that caused an increase in non-performing debt amount from financial institutions.

2.4 Marketing and Business Strategy

1) Debt tracking and collection service business

<u>Experience in debt tracking and maintaining the seller's reputation</u>

The company has more than 20 years experience in debt collection. Therefore, the company has a database on debt collection and is able to manage debt collection by choosing the appropriate method that suits each type of debt and debtor's behavior. Furthermore, the company also has training programs and policy to control the debt collectors and make sure that they treat the debtors with polite manner while still following the company's standard strictly to maintain reputation of the company and sellers of debt to the company.

<u>Distribution and Service and distribution channel</u>

The company clearly categorizes employees into each specific department of service, one is for debt tracking and another one is for non-performing debt management. For debt tracking and collection service, the debt tracking employees will negotiate with debtors to pay back debt through the specified channel set by the client. For non-performing debt management, the debtors will be able to pay back debt at different channels provided by the company such as at commercial banks and other payment service providers.

The Company aims to maintain its leadership in the debt collection service business with a plan to keep the balance of receivable debtors of 10,000 million baht. The Company is mainly focusing on expanding services to financial institutions customers both in the existing customers and new customer groups. A guideline to achieve its goals is as follows:

- Focusing on the quality of debt collection services that meet the standard and are efficient to customer satisfaction. There must be no complaints about the quality of service from customers.

- Developing information systems and collecting up-to-date information for the system to be updated in every circumstance.

2) Non-performing debt management business

The Company has a goal to buy more non-performing debt to manage, with a short-term goal to buy the full amount of debt in an average of no less than 30,000 million baht per year. The main focus and implementation is as follows:

- Bidding conservatively at auctions under careful growth policy.

- Developing a database for carefully monitoring and evaluating debt collection before proceeding and conducting an auction bid.

- Using capital and tracking costs carefully and thorough evaluation of debt collection and costs on a quarterly basis.

In 2021, the company bought debts to manage in the amount of 32,561 million baht from various financial institutions that contain a policy in selling more non-performing debt portfolios.

3) Insurance broker business and Non-life insurance business

Market condition of the insurance and non-life insurance broker in 2021 is considered to have high competition. Due to the high number of players in the market, the company has a strategy to expand its sales channels through telemarketing and social media platforms through brokers both small and large. Also, the company directly sells insurance through the company's platforms such as Facebook and Line applications. The company also plans to expand further because of the potential that non-life insurances are mostly sold through social media platforms, especially compulsory insurance such as motor insurance. Moreover, technology nowadays also plays a significant role in insurance sales, especially for InsurTech, which will be an upcoming trend of insurance business in the future.

Moreover, The company aims to expand the insurance business by increasing the proportion of insurance customers, or adding insurance plans with a damage rate that the company can manage to create positive returns for shareholders.

The company aims to increase the proportion of outside car insurance and use distribution channels through companies in the company's group.

To conclude, the company intends to proceed as follows:

● Expanding marketing business channels to respond to both internal and external customers.

● Expanding to online markets via websites.

● Expanding channels through Jay Mart mobile phone stores across branches.

● Expanding channels through company' partners.

● Expanding channels through telephone sales agents (Telesales).

The company sees it as an interesting business because there is no risk of impairment of goods and services in the insurance brokerage business.

2.5 Corporate Governance

According to the JMT Annual Report in 2021, the company perceives an importance in efficient management which emphasizes transparency and accountability. This helps boost the confidence of all parties involved and result in sustainable business growth under ethical operation in accordance with relevant laws and regulations. The company, therefore, has established a policy of good corporate governance to enhance existing operations to have a clear standard system and spread the practice to employees of the company at all levels. This is to foster a true corporate governance culture. The company has also adopted Good Corporate Governance guidelines for listed companies in year 2006 as set by the Stock Exchange of Thailand which covers 5 categories as follows (JMT Annual Report, 2021, p.62-66):

The First Category: Rights of shareholders

The company places an importance on the rights of shareholders which may not be limited to the rights stipulated by laws. This is to not act in a manner that violates or deprives the rights of shareholders. The company also encourages shareholders to exercise their rights. The fundamental rights of shareholders are such as purchasing, selling, or transferring shares, obtaining sufficient news and information of the company, and attending the meeting to exercise rights to vote.

The Second Category: Approach to the shareholder equity

The company has a policy to provide shareholders with equal and fair treatment.

The Third Category: The role of interest person

The company places high importance on taking care of all the stakeholders both internally and externally. The internal interest persons are such as shareholders, employees, and administrators. The external interest persons includes customers, creditors, competitors, business partners, society, communities, and government sectors. This is because the support and opinion from all the stakeholders will be beneficial in the business process and development of the company. Therefore, the company will follow the related laws and regulations to maintain rights of interest persons. Also, the company will not behave in any manners that violates rights of interest persons.

The Fourth Category: Information disclosure and transparency

After the company has been listed on the Stock Exchange of Thailand, the board of directors will place importance on the disclosure of information that is accurate, complete, timely and transparent. The company will also report both financial and general information that is important and has an effect on stock price and other information in accordance with the regulations of the Securities and Exchange Commission and the Stock Exchange of Thailand. Furthermore, the company has a policy to disclose information to shareholders, investors, and the public through various channels including the company's website which will frequently update the information.

The Fifth category: Responsibility of committee

1. Board of directors structure

The company's board of directors has a role to determine the organization's policy including accessing and evaluating company's operations to be in accordance with the plan. The committee will consist of 7 members who will hold the position for 3 years. Out of these 7 members, 4 of the members will come from the administrative department, and the other 3 members from non-administrative departments. There will be 3 independent committee members in accordance with the rules imposed by the Securities and Exchange Commissions that the listed company board must consist of independent committees greater or equal to one third of the total board members. The

company's directors consist of experts from various industries including business, accounting, and finance which are all related and support all of the company's business.

2. Roles and Responsibility of the board of directors

The board of directors is responsible for considering and approving important matters of company operations including vision and mission, strategy, goal, plan, and budget. The board of directors also has to supervise the management to efficiently and effectively operate in accordance with policies and plans.

2.5.1 Major shareholder

Following the latest information from the Stock Exchange in Thailand (SET), Percent Shares in Minor Shareholders (% Free float) is 45.93% of total shareholders. The top 10 of major shareholders follows the table below.

Table 2.3 Major shareholders of JMT

Rank	Major Shareholders	# Shares	% Shares
1.	บริษัท เจ มาร์ท จำกัด (มหาชน)	766,390,264	53.4
2.	บริษัท Thai NVDR Company	96,769,330	6.74
3.	น.พ. พงศ์ศักดิ์ ธรรมธัชอารี	30,348,336	2.11
4.	นาย ไพบูลย์ เสรีวิวัฒนา	28,106,696	1.96
5.	กองทุนเปิด บัวหลวงหุ้นระยะยาว	25,372,200	1.77
6.	SOUTH EAST ASIA UK (TYPE	23,275,496	1.62
7.	น.ส. พิชญ์สินี เสรีวิวัฒนา	16,125,569	1.12
8.	นาย SOMKUAN	13,308,778	0.93
9.	นาย ณภัทร ปัญจคุณาธร	13,015,000	0.91
10.	กองทุนเปิด บัวหลวงหุ้นระยะยาว	12,377,800	0.86

Source: the stock exchange in Thailand (SET)

CHAPTER III
MACROECONOMICS, INDUSTRY, AND COMPETITION ANALYSIS

3.1 Macro-Economic Analysis

3.1.1 Global and Thai GDP

Figure 3.1 Global and Thailand GDP Growth

Source: International Monetary Fund (IMF)

According to the International Monetary Fund (IMF), it can be seen from figure 3.1 that the historical GDP growth of both global and Thailand declined significantly from 2019 to 2020, which is the impact from Covid-19. In 2020, the global GDP growth rate fell to about -3.1% while it was about -6.2% for Thailand. However, the growth started to rise again to about 3.6% for global and 3.3 % for Thailand in 2021. For the future forecasted growth, the International Monetary Fund (IMF) forecasted that the GDP growth of both global and Thailand from 2022 onwards will remain relatively stable at the level it was at the end of 2021 of about 3% to 4%.

The Coronavirus disease 2019 (Covid-19) pandemic negatively impacts every segment around the world. From the company's annual report, it is also stated that

the Covid-19 is having an impact on all businesses and industries. On one hand, the impact of Covid-19 which leads to economic downturn seems to be positive for JMT as the demand for bad debt collection by banks will increase. On the other hand, the pandemic also negatively affects the company's in terms of uncertainties in the operations as well as the company's ability to receive payment from debtors. Hence, it possibly lead to an impact on the company's future performance and cash flow.

3.1.2 Interest rate, Inflation rate and Exchange rate
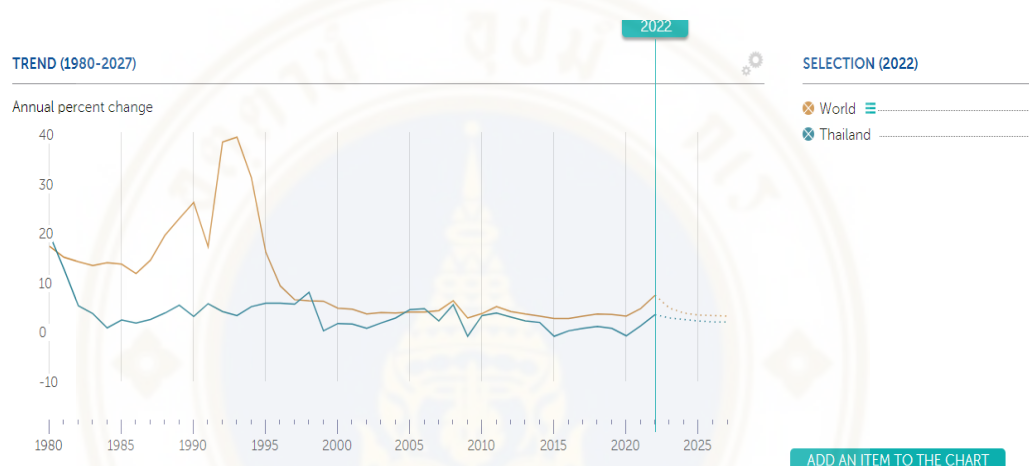
Figure 3.2 Global and Thailand Inflation

Source: International Monetary Fund (IMF)

The historical rates of inflation for the global economy were about 2 to 3 percent during the past few years, and the rates were 1 percent or below for Thailand. According to figure 3.2 from the International Monetary Fund (IMF), the inflation rates since 2020 have been increasing significantly to about 7.4 percent for global inflation and 3.5 percent in Thailand in 2021. In terms of forecasted inflation rates, the forecast from the International Monetary Fund (IMF) shows that the inflation rates from 2022 onwards will fall down slightly from the previous year.

Due to the fact that inflation is high recently, it is also expected to increase further throughout 2022 from the factors of energy and food price which put higher pressure on purchasing power of households. High inflation, when the income is in slow recovery phase due to the fragile labor market, will affect real income and purchasing

power which will lower debt payment ability. In particular, low income people who spend more than half of their total expenditure on food and energy may need to incur additional debt when their income is inadequate as their expense accelerates from inflation. This means the company might be negatively affected from high inflation as debt paying ability will be lower. However, as the amount of debt increases, the demand for debt collection from the banks will also increase as well and this is beneficial for the company.

Figure 3.3 Thailand Interest Rate

Source: Trading Economics

There is a relationship between interest rate and inflation. To clarify, the policy interest rate affects inflation control, and it is also considered as an important tool in reducing the severity of inflation. Although the interest rate does not directly affect inflation, the way that the interest rate affects incentives in depositing and borrowing can cause interest rate adjustments to affect inflation. By raising interest rates, this will cause more money to flow into the banking system, which means money or liquidity circulating in the economy will decrease. This leads to a decline in price of goods and services which ultimately lead to lower inflation. Hence, when there is high cost of living or inflation, a rising interest rate is one of the methods that can be used to deal with the situation.

In addition, an adjustment in interest rates can also imply the rise or fall of deposit and borrow rates. The policy interest rate tends to have a positive relationship with the deposit and borrow rates as they tend to move in the same direction. Therefore, an increase in interest rate incentivizes more bank deposits as the return from deposit is higher. This, at the same time, will also lower incentives for borrowing as the cost of interest to be paid is higher. On the other hand, a reduction in policy interest rate has an opposite effect as it will encourage more borrowing and less of depositing.

According to the Bank of Thailand, the interest rates of Thailand started to fall in 2019 and it remained at about 0.5% from the early of 2020 until now as can be seen in the figure 3.3. It can be seen that the interest rate is relatively low compared to the past few years. By having a low interest rate, the company might be able to benefit from an increase in borrowing amount in which it might increase the amount of debt in the system. However, inflation is also a factor that should be considered together with interest rate as it might also affect the ability of debtors to pay back debt. Therefore, the next direction of the Bank of Thailand in adjusting an interest rate to deal with inflation is also important for JMT as the company business relies heavily on the interest rate.

3.2 Industry Analysis

In terms of industry, JMT operates in the financial sector and the company is considered to be one of the asset management businesses in Thailand. The trend of asset management business tends to have relatively few large players within the industry due to the type of business that is very specific.

Over the past few years, the situation of household debt in Thailand has been increasing continuously. According to the Bank of Thailand, household debt at the end of quarter 3 in 2021 was about 14.34 billion baht. This accounts for about 89.3% of total GDP of the country in which it increased by 3 hundred billion baht on a year on year basis. This means the economic slow down due to the situation of Covid-19 might increase the chance that the household debt will rise further in the future.

With the current economic condition that results in a high household debt, businesses that operate in the industry can consider this as an opportunity to generate more revenue and profit. This is because the asset management business has become an

important mechanism for stabilizing the financial institution system in Thailand through the role of purchasing and managing non-performing loans (NPLs) from financial institutions. Thus, financial institutions do not have to set additional reserves and can provide loans to the business sector smoothly which leads to a positive impact on the circulation of the economy in the country.

An increase in non-performing debt will be an opportunity for asset management companies that are well prepared in terms of operation and investment system to act as an intermediary to help debtors who are facing financial problems to have credit back to normal level in order to enter the financial system again. Hence, JMT Network Service Public Company Limited is one of those asset management companies that can enjoy this opportunity and help improve the health of the financial system in Thailand.

The company also expects that in the second half of the year 2022, financial institutions, especially banks, will release large amounts of non-performing debt as debtors are unable to pay back debt due to the fact that they are negatively affected by the Covid-19 pandemic. By considering the household debt alone, it is expected that the level of debt will be approximately 300,000 million baht. This amount of debt is still currently not a bad debt yet. However, if the debtor assistance measure is terminated by the government and there is no further assistance, this amount of debt will turn to be bad debt that the company expects the banks to release.

This prediction is also in line with JMT's investment strategy for debt management in 2022. Initially, JMT plans to set an investment budget of about 10,000 million baht to buy debt to manage. However, the company also has to wait and see the amount of bad that will come out in the second half of the year. The company's investment potential has reached the level of 30 billion baht due to the fact that debt-to-equity (D/E) is still low. Therefore, if in the second half of the year or continuing in 2023, there is a large amount of bad debt released to the market, the company can use other financial channels to raise funds.

In addition, the company's plan for the next three years aims to invest in buying bad debt for corporate customers because the company's potential at that time will allow the company to buy these amounts of bad debt. However, there is still no sign

of bad debt from the corporate group at this time because there is still a policy to suspend debt for customers.

Even though the Covid-19 pandemic caused the economy to slow down in 2021, the company has also adjusted the operating strategy and management that concern about economic risks which lead to significant performance growth in the operation of business. Moreover, the company is also confident to be a leader in Thailand in the debt management business for unsecured loans.

In 2021, the company's performance is outstanding and has a highest record for 6 years consecutively both for debt collection and operation. In terms of debt collection, JMT has a cash flow of 4,590 million baht, which is 15% growth from 2020. This is a result from higher efficiency in debt collection and the company's investment in a debt portfolio that has a high potential. The company's net profit in 2021 is approximately 1,400 million baht, which grew from 2020 by 34%. This is the highest net profit for the company for 6 consecutive years since the inception of the company as can seen on figure 3.4.

Figure 3.4 JMT Net Profit

Source: JMT Annual report 2021

In terms of operation for a non-performing debt management business in 2021, the company was able to purchase distressed debt with an investment amount of

8,516 million baht. The company used this amount to purchase both secured and unsecured distressed debt.

3.3 Competition Analysis

The debt issue remains a major concern for financial institutions and the Bank of Thailand (BOT) as a result of the coronavirus's impact. Therefore, they had to come out with measures to help debtors during the past 1 year. As a consequence, after the debt reduction program expires and the trend of increasing interest rates is coming, these positive factors will drive this business growth this year from higher debt volume. The market is projected to see a huge spike in NPLs requiring financial institutions to sell nonperforming loans in order to maintain asset quality and this presents an opportunity for AMC firms to acquire at a lesser cost. It also assists financial institutions in providing credit in an efficient manner combined with strong asset quality and assisting small debtors with debt restructuring to ease their payback burden.

There are five asset management companies listed on the Thai Stock Exchange, namely BAM, JMT, CHAYO, TH and KCC, with total assets of 185,813 million baht, with BAM being the market leader that owns the highest amount of NPL-NPA Portfolio. It buys secured poor loans, whereas JMT and CHAYO buy unsecured loans. TH and KCC are new competitors that have just entered the market and which still have small market capitalization.

Table 3.1 Market share of NPL and NPA

STOCK	NPL-NPA Portfolio (million THB)	Performance 2021		Market cap.
		Revenue	Net Income	
JMT	283,213	3,656	1,400	108,331
BAM	483,240	13,306	2,600	56,237
CHAYO	74,295	805	219	12,049
TH	4,045	158	96	4,825
KCC	527	125	52	4,371

Source : Efinance Thailand

CHAPTER IV
FINANCIAL ANALYSIS

4.1 Growth Analysis
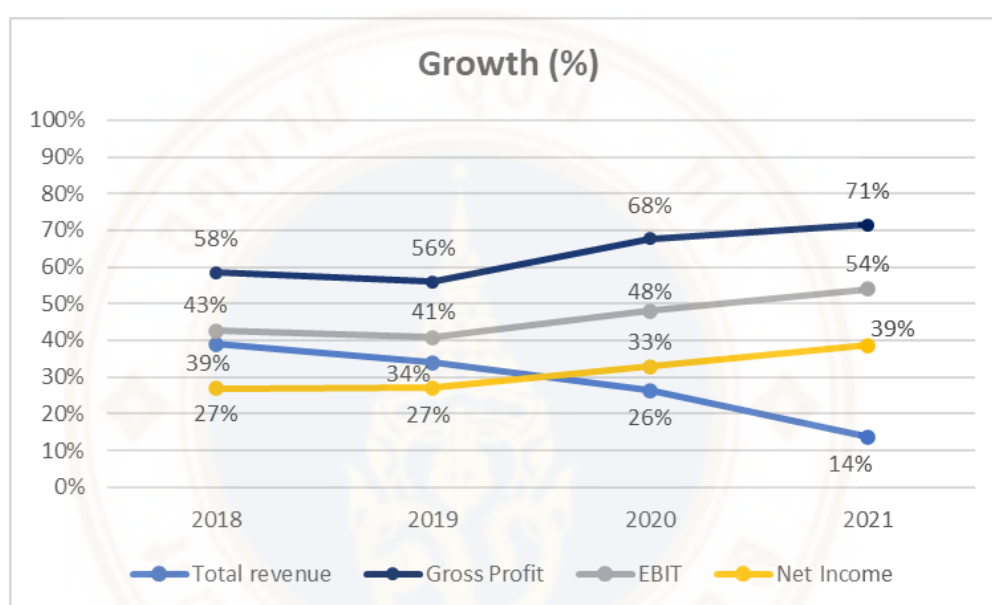
Figure 4.1 Percentage of growth camparing with competitors
Source : S&P IQ

According to the above figure, it shows the growth trend of Total revenue, Gross profit, EBIT and Net income of the company in the period 2017-2021. The growth rate of revenue is dropping each year while gross profit and EBIT are upside each year. It could be implied that the company had the lower cost of goods sold each year and effectively controlled their Selling General & Admin Exp. Even though the revenue grows slowly, they still generate higher profitability each year.

4.2 Dupont Analysis

Table 4.1 Dupont Calculation

ROE Benchmark with competitors					
	2017	2018	2019	2020	2021
JMT	0.17	0.15	0.20	0.18	0.07
BAM	0.11	0.12	0.26	0.04	0.06
CHAYO	0.17	0.11	0.11	0.14	0.06

JMT					
	2017	2018	2019	2020	2021
Net profit margin	29%	27%	27%	33%	39%
total asset turnover	0.26	0.23	0.25	0.22	0.13
the asset/equity	2.26	2.41	2.95	2.48	1.47
Dupont or ROE	0.17	0.15	0.20	0.18	0.07

BAM					
	2017	2018	2019	2020	2021
Net profit margin	87%	106%	151%	68%	86%
total asset turnover	0.05	0.05	0.06	0.02	0.02
the asset/equity	2.43	2.57	2.91	3.16	2.94
Dupont or ROE	0.11	0.12	0.26	0.04	0.06

CHAYO					
	2017	2018	2019	2020	2021
Net profit margin	28%	33%	38%	32%	30%
total asset turnover	0.50	0.31	0.16	0.17	0.14
the asset/equity	1.25	1.09	1.82	2.45	1.47
Dupont or ROE	0.17	0.11	0.11	0.14	0.06

Source : S&P IQ

This section will analyze DuPont's ROE, its growth over the past five years, and some industry-specific financial ratios. Bangkok Commercial Asset Management Public Company Limited (BAM) and Chayo Group Public Company Limited (CHAYO) are JMT's main competitors.

Before covid impact, the company's CARG 2017-2019 ROE growth is 5%, which is lower than BAM, the market leader, but higher than CHAYO, a company of comparable size. The company has a positive trend of increasing its net profit margin from 29 percent in 2017 to 39 percent in 2021, whereas the trend of its competitors is declining. Total asset turnover is equal to net sales divided by a company's total or average assets; it measures an organization's ability to generate income efficiently from

its assets. JMT is more efficient than its competitors because the company maintains its efficiency well. BAM's total assets turnover is very low, whereas CHAYO's growth of efficiency in using their assets to generate income is marked by declining.

CHAPTER V
INVESTMENT RISKS

In this section, the possible investment risks of JMT will be clarified for each type of service that the company provides.

Debt tracking and collection service business

1) The risk from the changes in the Non-performing debt management policy and the bargaining power of the customer

In the past, the customer group had a policy to hire the company to track non-performing debts due to the need to reduce the burden and costs in tracking debts. However, recently many customers adjust their policy to do debt tracking and collection by themselves or even sell the non-performing debts. This is due to the fact that many customers now place more importance on debt tracking and collection processes to reduce the risks. These risks are especially in terms of image risk. Also, the customers are also willing to minimize the bad debts to total loans rate. Therefore, this is a factor that can possibly cause the company to be at risk of loss of revenue from debt collection services.

2) Risk of competition in the industry

Debt collection service business is a business with a large number of operators, which may result in competition in commission rate from debt collection fee. In addition, such a business does not require much investment and has a simple business structure. Therefore, there is a risk that new entrepreneurs will compete in the business more and more. The competitors may be international firms or a related business operator such as the litigation, law firms, and non-performing debt executives. Therefore, the company may face high competition and this may affect the operating results negatively.

3) The risk of reliance on major customers

The company operates the business of debt collection services with the revenue of debt tracking and collection from the customer who is a financial institution.

The proportion is relatively high of about 30-40% compared to the revenue from debt collection each year. This is approximately 10% of total income. In the past, the company had a good relationship with the customer. However, there are many companies who operate similar businesses. Therefore, there is a chance of the customer not renewing the contract with JMT or turn to other service providers. This may negatively impact the revenue of the company. Also, if the company cannot find other new customers in replacement, it may negatively impact the company's business in the long run.

Non-performing debts management business

1) Risk of competition in the industry

In the non-performing debts management business, there are few competitors currently. Therefore, there is a risk that there will be new companies entering into the market and increasing competition. This as a result might affect the competition in price auctioning which might affect the revenue of the company negatively as well.

Insurance broker business

1) Potential risks from the competition within the industry

The insurance broker business has many large and small brokers in the market. As of 30 June 2021, there are 519 legal entities that provide non-life insurance. In addition, the competition in the market is highly dependent on the price of insurance and the service provider as these are factors that affect customers' decision in using the service.

CHAPTER VI
VALUATION

This section of the valuation report is divided into two parts. The initial section addresses the valuation of JMT using the discounted cash flow model. Following the arrival of the result, the second section focuses on the conclusion. The conclusion will indicate the most appropriate value, how that value was determined, and the methodology employed.

6.1 Discounted Cash Flow Valuation

Discounted cash flow (DCF) is the valuation method which attempts to determine the intrinsic value of a firm based on the present value of projections of its future cash flows.

6.1.1 Pro forma statement

Revenue The revenue from JMT business can be decomposed into 4 groups of revenue which are Services income from debts collection, Revenues from collection of purchased accounts receivable, Interest income and Dividend income and Insurance Brokerage business. Therefore I forecast revenue based on different assumptions.

(1) Services revenue from debt collection and other sources are recognized as income on an accrual basis, based on the agreed rate, when services are rendered to customers. According to the revenue associated with the total amount of outsource collection portfolio value that the company manages in order to earn a fee from providing collection service which I acquire from the annual report. Comparing the portfolio to the management fee, the average fee between 2016 to 2021 is 1%, and I forecast that the management fee will remain constant. I determined the company's NPL portfolio's market share in proportion to the Gross Personal Consumption NPL in Thailand. I predict that the company's market share will increase by 3% following the

CAGR of its NPL portfolio between 2016-2018. I forecast that the size of the Gross Personal Consumption NPL will increase in line with the real GDP growth trend which based on historical data, the Gross Personal Consumption NPL is growing higher than real GDP growth around 180.2% in average between 2016-2021. Real GDP growth is calculated by subtracting inflation from nominal GDP growth. The data was obtained from the Bank of Thailand ("BOT"). After obtaining the forecast of Gross Personal Consumption NPL, the company's NPL portfolio will be calculated by multiplying Gross Personal Consumption NPL with the estimated market share.

Table 6.1 Services revenue from debt collection forecasting

Unit : million THB

Revenue	2019	2020	2021	2022F	2023F	2024F	2025F	2026F	2027F	CARG (2016-2018)	Average (2016-2021)
Services income from debts collection	363.7	362.1	300.6	342.1	381.1	421.2	461.9	505.4	551.4	29%	
The total amount of outsource collection portfolio value	43,000.0	32,682.0	31,573.0	34,606.6	38,550.7	42,606.7	46,716.3	51,117.9	55,772.4		
Fee (%)	0.8%	1.1%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%		1.0%
Market share	31%	23%	22%	23%	23%	24%	25%	26%	27%	3%	
Gross Personal Consumption NPL	140,573	144,380	143,717	152,339	164,114	175,408	185,995	196,819	207,670		
Size of NPL growth	16.7%	2.7%	-0.5%	6.0%	7.7%	6.9%	6.0%	5.8%	5.5%		
Nominal GDP Size (BtBn)	16,892	15,654	16,180	17,528	18,769	19,955	21,062	22,164	23,285		
Nominal GDP Growth	3.2%	-7.3%	3.4%	8.3%	7.1%	6.3%	5.6%	5.2%	5.1%		
Inflation	0.7%	-0.9%	1.2%	5.0%	2.8%	2.5%	2.2%	2.0%	2.0%		
Real GDP Growth	2.5%	-6.5%	2.1%	3.3%	4.3%	3.8%	3.4%	3.2%	3.1%		
Gross PC NPL industry/Real GDP growth	675.4%	-41.8%	-21.6%	180.2%	180.2%	180.2%	180.2%	180.2%	180.2%		180.2%

(2) Gain on loans receivable from purchase of accounts receivable will be recognized when repayment from receivables exceeds the cost of loans receivable from purchase of accounts receivable. The company will buy NPL from mostly commercial banks at a discount rate. For example, buying NPL at a discount rate of 5%. Then if the presence value or actual value of NPL in the auction is 100 baht, the company will buy at 5 baht. Thus, the presence value or actual value of NPL will be booked into the company at 95 baht. However, there are many transactions of buying NPL with different discount rates. Thus, I will focus on finding the discount rate of the total NPL portfolio of the company. The company always releases the news by updating their status of the presence value of the total NPL portfolio which could determine the approximate discount rate of the total NPL portfolio. I predict that the company's discount rate of its NPL portfolio will increase by 12% following the CARG between 2019-2021 because in this period the industry was more competitive due to the growing amount of the total Gross Personal Consumption NPL. In the coming year, there will be more new

competitors entering into the market and bidding higher discount rates on the auction to buy NPL. The success rate of debt collection is the revenue that the company collected divided by the presence value of the A/R portfolio. I would like to be conservative by using the average success rate between 2016-2021 to be constant on the forecast. Similar concept with Services revenue from debt collection, I will forecast the amount buying NPL of the company with the total Gross Personal Consumption NPL. According to the annocement from Mr. Sutthirak Trichira-aporn, Director of JMT said that the company plans to buy NPL around 10,000 million baht which is 6.6% of total Gross Personal Consumption NPL. I would like to be conservative on the forecast of the amount buying NPL by assuming the constant proportion at 6.6% of total Gross Personal Consumption NPL.

Table 6.2 Revenue from collection of purchased A/R

Unit : million THB

Revenue											
	2019	2020	2021	2022F	2023F	2024F	2025F	2026F	2027F	CARG (2016-2018)	Average (2016-2021)
Revenues from collection of purchased A/R	655.7	902.9	1,056.4	2,243.3	2,783.8	3,210.2	3,530.6	3,757.1	3,900.1	26%	
Presence value or Actual value of A/R portfolio	150,491.4	174,323.3	217,639.9	309,575.7	384,157.1	443,004.8	487,221.6	518,478.6	538,204.4		
Success rate of debt collection	0.4%	0.5%	0.5%	1%	1%	1%	1%	1%	1%		1%
Amount buying NPL of JMT / total NPL	1.4%	1.3%	4.6%	6.6%	6.6%	6.6%	6.6%	6.6%	6.6%	37%	2%
Amount buying NPL of JMT	2,031.6	1,913.4	6,547.5	10,000	10,773	11,514	12,209	12,920	13,632		
Discount rate of total portfolio	5.0%	5.3%	7.0%	7.8%	8.8%	9.8%	11.0%	12.3%	13.7%	12%	
NPL portfolio	7,920.6	9,834.0	16,381.5	26,302.0	36,884.3	48,131.3	59,991.8	72,476.9	85,583.7		
Gross Personal Consumption NPL	140,573	144,380	143,717	152,339	164,114	175,408	185,995	196,819	207,670		
Size of NPL growth	16.7%	2.7%	-0.5%	6.0%	7.7%	6.9%	6.0%	5.8%	5.5%		
Nominal GDP Size (BtBn)	16,892	15,654	16,180	17,528	18,769	19,955	21,062	22,164	23,285		
Nominal GDP Growth	3.2%	-7.3%	3.4%	8.3%	7.1%	6.3%	5.6%	5.2%	5.1%		
Inflation	0.7%	-0.9%	1.2%	5.0%	2.8%	2.5%	2.2%	2.0%	2.0%		
Real GDP Growth	2.5%	-6.5%	2.1%	3.3%	4.3%	3.8%	3.4%	3.2%	3.1%		
Gross PC NPL industry/Real GDP growth	675.4%	-41.8%	-21.6%	180.2%	180.2%	180.2%	180.2%	180.2%	180.2%		180.2%

(3) Interest and Dividend income, Interest income is recognised on an accrual basis based on the effective interest rate and when the right to receive dividends is established, dividends are accounted for as revenue. The interest rate is the interest income that is received from the personal loan services which are related with the NPL portfolio. The latest interest rate that companies charge to customers is 12.7%. Dividend income is received from a subsidiary company. To be conservative, I will use the interest rate and the amount of dividend income constant with Y2021 which are the lowest rate and amount since 2015.

Table 6.3 Interest and dividend income

Unit : million THB

Revenue									
	2019	2020	2021	2022F	2023F	2024F	2025F	2026F	2027F
Dividend income	1.4	0.8	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Interest income	1,293.1	1,725.7	2,073.5	3,339.2	4,702.7	6,160.1	7,705.5	9,340.8	11,066.3
NPL portfolio	7,920.6	9,834.0	16,381.5	26,381.5	37,154.4	48,668.7	60,878.0	73,797.8	87,429.8
Interest rate (%)	16.3%	17.5%	12.7%	12.7%	12.7%	12.7%	12.7%	12.7%	12.7%

(4) Income from insurance brokerage is recorded on the date the insurance policy goes into effect, net of any discounts, and services have been rendered. I predict that the company's market share of insurance will increase by 15% following the CARG of its market share between 2016-2018. I calculated the insurance brokerage revenue using linear regression between non-life insurance and income per capita, as there is a positive relationship between the two variables. This is because, according to Maslow's hierarchy of needs theory, people with higher incomes will spend more on insurance to meet their safety needs.

Table 6.4 Linear regression between non-life insurance and income per capita

Unit : million THB

| Revenue										CARG (2016-2018)	Average (2016-2021)
	2019	2020	2021	2022F	2023F	2024F	2025F	2026F	2027F		
Insurance brokerage business	210.6	199.2	194.2	223.0	239.7	255.6	270.5	285.3	300.3	19%	
JMT market share	0.09%	0.08%	0.07%	0.08%	0.08%	0.08%	0.08%	0.08%	0.08%	15%	0.07%
Nominal GDP Size (BtBn)	16,892	15,654	16,180	17,528	18,769	19,955	21,062	22,164	23,285		
Population (Mn)	66.56	66.19	66.17	66.21	66.25	66.29	66.33	66.37	66.41	0.1%	
GDP Per Capita (Bt)	253,796	236,511	244,513	264,721	283,292	301,014	317,528	333,932	350,617		
Non-life insurance per capita	3,667	3,817	3,994	3,987	4,282	4,564	4,827	5,087	5,353		
Non-life insurance market	244,062	252,618	264,285	263,980	283,702	302,553	320,153	337,659	355,482		
- Growth	4.3%	3.5%	4.6%	-0.1%	7.5%	6.6%	5.8%	5.5%	5.3%		
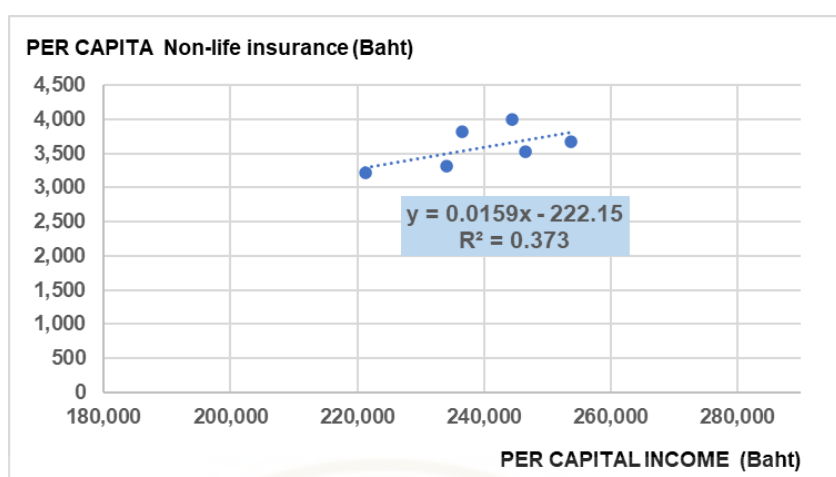
Figure 6.1 Linear regression between non-life insurance and income per capita

Expenses The expenses incurred by the JMT business can be divided into two categories: cost of goods sold and service cost, and operating expenses.

(1) Cost of goods sold and service cost, I forecast cost of goods sold by using linear regression between COGs and total revenue excluded insurance revenue. Cost of insurance division comprises Gross claim and loss adjustment expenses, minus Claims recovery from reinsurers, plus commission and other underwriting expenses. I implemented the non-life insurance market's growth rate to forecast the gross claim and loss adjustment amount. For the remaining of insurance expenses, I use the average common size of the expense to gross claim and loss adjustment.

Table 6.5 COGs and service cost forecast

Unit : million THB

| COGs and service	2019	2020	2021	2022F	2023F	2024F	2025F	2026F	2027F	Average (2017-2021)
Total Revenue Excl.insurance	2,314	2,992	3,431	5,932	7,888	9,828	11,750	13,672	15,602	
Cost Of Goods Sold	875	870	865	1,442	1,824	2,201	2,576	2,951	3,327	
% Sales	35%	27%	24%	23%	22%	22%	21%	21%	21%	33%
Insurance Revenue	211	199	194	223	240	256	270	285	300	
Insurance Div. Operating Exp.	236	163	169	161	173	184	195	206	217	
Gross claim and loss adjustment expenses	241	210	97	97	104	111	117	123	130	
Less: Claims recovery from reinsurers	(134)	(146)	(14)	(48)	(51)	(55)	(58)	(61)	(64)	
Commissions and brokerages expenses	56	43	37	49	52	56	59	62	66	
Other underwriting expenses	73	55	49	63	68	73	77	81	85	
% Sales	112%	82%	87%	72%	72%	72%	72%	72%	72%	98%
Total COGs and Services	**1,111.53**	**1,032.94**	**1,033.95**	**1,603.07**	**1,996.44**	**2,385.92**	**2,771.39**	**3,156.58**	**3,543.62**	
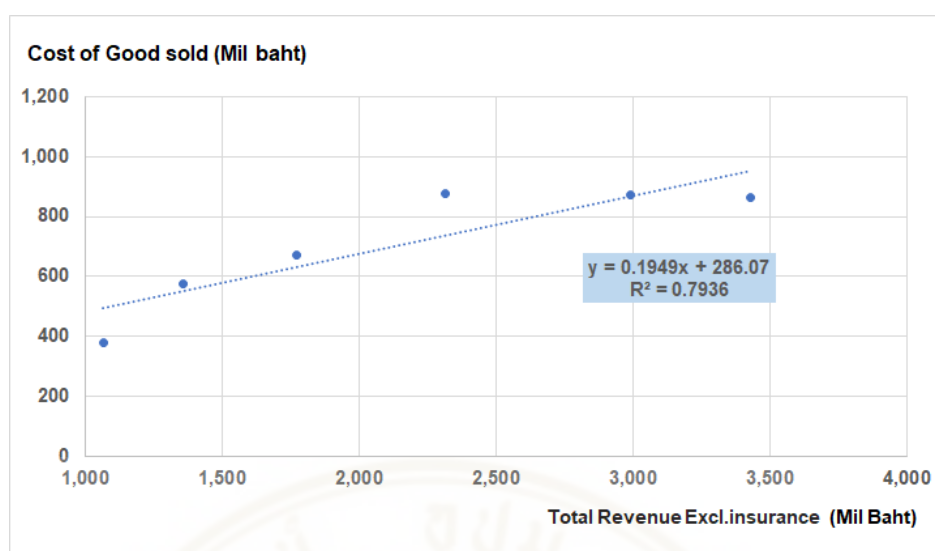
Figure 6.2 Linear regression between COGs and Total revenue exclude insurance

(2) Operating expenses consist of selling and admin expenses, provision for bad debt and other expenses. I'm using the average common size of expense to revenue between 2017-2021 to forecast.

Table 6.6 Operating expenses forecast

Unit : million THB

Operating expenses	2019	2020	2021	2022F	2023F	2024F	2025F	2026F	2027F	Average (2017-2021)
Total Revenue	2,525	3,191	3,625	6,155	8,128	10,083	12,021	13,957	15,902	
Selling and admin expense	382	441	601	929	1,227	1,522	1,814	2,106	2,400	
% Sales	15%	14%	17%	15%	15%	15%	15%	15%	15%	15%
Provision for Bad Debts	12	203	56	404	569	745	932	1,130	1,338	
% to NPL < 1 year portfolio	3%	60%	10%	24%	24%	24%	24%	24%	24%	24%
Depreciation & Amort.	-	-	-	-	-	-	-	-	-	
% Sales										
Other Operating Expense/(Income)	(12)	(16)	(25)	(12)	(12)	(12)	(12)	(12)	(12)	
% Sales	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	-0.5%
Total Operating Exp	382	628	632	1,321	1,783	2,255	2,734	3,224	3,726	

Depreciation and CAPEX I'm using linear regression to forecast. First, I calculated CAPEX by finding the relationship with revenue. It has a positive relationship because the company must invest more in CAPEX to support its expanding revenue. The company must purchase additional equipment, such as computers and telephones, to support its debt collection operations. In order to predict depreciation, I consider that the company's assets are growing because it operates in the asset

management industry, a growing industry. Thus, the relationship between CAPEX and depreciation would be positive.

Table 6.7 Capex and depreciation forecast

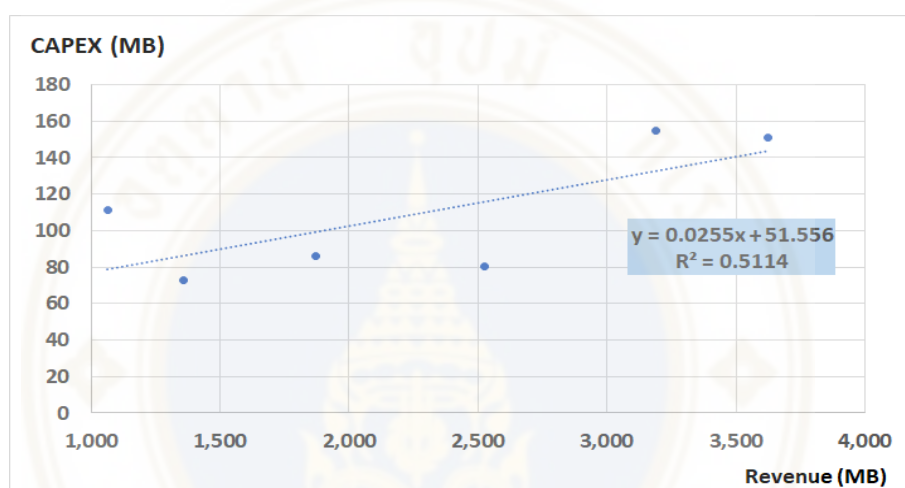| Year	2019	2020	2021	2022F	2023F	2024F	2025F	2026F	2027F
Revenue	2,525	3,191	3,625	6,155	8,128	10,083	12,021	13,957	15,902
CAPEX	80	155	151	209	259	309	358	407	457
Depreciation	54	94	100	129	166	202	238	274	310

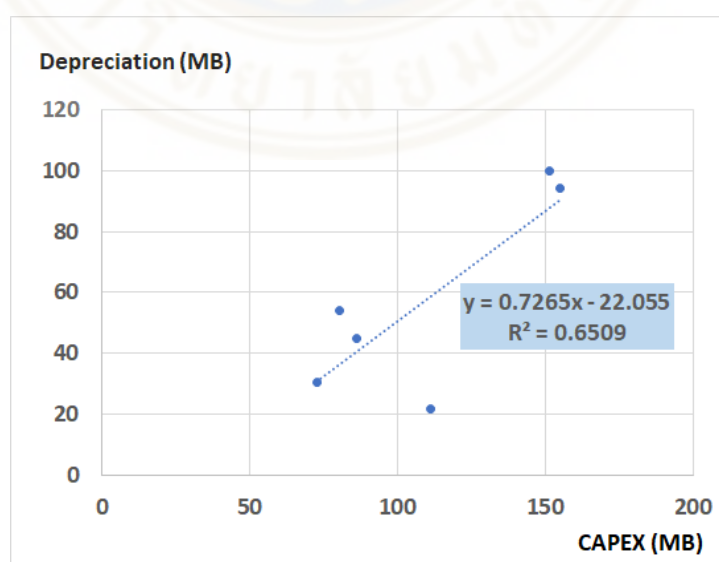**Figure 6.3 Linear regression between CAPEX and Revenue**

Figure 6.4 Linear regression between Depreciation and CAPEX

Financial costs I use the latest effective interest cost that the firm paid to financial institutions to operate the business, which is 4.15%.

Tax I applied the corporate tax 20% following the standard of regulation. The statement is shown in **Table 6.8**

Table 6.8 Pro forma statement

Unit : million THB

Year	2016	2017	2018	2019	2020	2021	2022F	2023F	2024F	2025F	2026F	2027F
Revenue												
Services income from debts collection	135	242	289	364	362	301	342	381	421	462	505	551
Revenues from collection of purchased A/R	739	1,110	1,480	656	903	1,056	2,243	2,784	3,210	3,531	3,757	3,900
Interest income	-	-	-	1,293	1,726	2,073	3,329	4,669	6,092	7,593	9,174	10,833
Dividend income	190	4	1	1	1	0	0	0	0	0	0	0
Insurance brokerage business	-	-	98	211	199	194	223	240	256	270	285	300
Total revenue	1,064	1,356	1,869	2,525	3,191	3,625	6,138	8,073	9,979	11,857	13,722	15,585
COGs and Services	378	574	782	1,112	1,033	1,034	1,600	1,986	2,366	2,739	3,111	3,482
Operating expenses	408	206	298	382	628	632	1,317	1,771	2,231	2,696	3,168	3,650
Total Expenses	786	780	1,081	1,494	1,661	1,666	2,917	3,757	4,597	5,435	6,279	7,132
EBITDA	278	576	788	1,031	1,529	1,959	3,221	4,317	5,383	6,421	7,443	8,453
Depreciation	22	30	45	54	94	100	129	165	200	235	270	304
EBIT	256	546	743	977	1,435	1,859	3,092	4,152	5,183	6,186	7,173	8,149
Financial Cost	(85)	(77)	(134)	(206)	(314)	(345)	(415)	(497)	(595)	(710)	(841)	(991)
Tax	47	103	186	189	174	241	535	731	917	1,095	1,266	1,432
Net Profit	125	366	424	581	948	1,273	2,141	2,923	3,670	4,381	5,066	5,726
EPS	0.17	0.48	0.48	0.65	0.97	0.93	1.56	2.13	2.68	3.20	3.70	4.18

The company has revenue starting from 6,155 million baht in the current year (2022) and increases to 15,902 million baht by FY2027, which is 17% CAGR. The expenses grow from 2,924 million baht to 7,270 million in the same period, with 16% CAGR. This leads to the net profit of the company growing from 2,149 million baht to 5,865 million, with 18% CAGR.

To compare the valuation with other analysts, see the table below. The valuation appears to be in the same range as other analysts.

Table 6.9 JMT's valuation from other analyst

Broker	Analyst Name	EPS 2022F	EPS 2023F	NI 2022F	NI 2023F	Date updated
TRINITY	ธนภัทร ฉัตรเสถียร	1.47	2.07	2,115.00	2,963.00	1/8/2565
CNS	Anuwat Srikajornratkul , Pete Boonnat	1.62	2.39	2,377.81	3,501.54	25/07/2565
KTBST	Jutamas Temwattanangkul	1.52	2.38	2,214.00	3,472.00	21/07/2565
ASPS	Anakepong Putthapibal	1.41	2.01	2,044.28	2,910.80	21/07/2565
FSSIA	Yuvanart Suwanumphai	1.50	2.12	2,132.00	3,131.00	21/07/2565
CGS-CIMB	Thanapol Jiratanakij	1.57	1.80	2,151.84	2,537.69	30/06/2565
KS	Korakot Sawetkruttamat	1.41	2.00	2,022.00	2,872.95	30/06/2566
	Our valuation result	1.56	2.13	2,141.32	2,923.30	

Source : JMT on Settrade.com

6.1.2 Discounted Cash Flow (DCF)

I determine the value of a company using the discounted cash flow method (DCF) by discounting future cash flows to the present. I determine the discount rate based on the weighted average cost of capital.

$$WACC = w_d r_d(1-Tax) + w_e r_e$$

where:

WACC = weighted average cost of capital

wd = weight of debt

rd = cost of debt

Tax = corporate tax

we = weight of equity re = cost of equity

$$re = rf + Beta*MRP$$

where:

re = cost of equity

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

Beta = relative market risk

MRP = market risk premium

Cost of debt (rd) is calculated using the most recent effective interest rate of 4.15% by dividing financial cost by the average interest-bearing debt. The interest-bearing debt consists of bank overdrafts and short-term and long-term borrowings from financial institutions, respectively. Accounts payable and other liabilities that do not incur interest expense are liabilities that are not considered to be debts.

Tax is applied to the standard rate for corporate tax which is 20%.

For the Beta, I calculate by using the covariance between the daily change of SET index and JMT stock price for the last 12 months.

Table 6.10 Historical Beta of JMT

BETA	Linear Change	Log Change
2016-2019'	1.21	1.21
LAST 12 MONTHS'	1.44	1.43
YTD	1.10	1.10

Figures 6.5 Trend of Historical Beta of JMT

Cost of equity (re), I calculated from the CAPM equation.

Risk-free rate (rf), The Thai Bond Market Association provides me with the 10-year government bond yield on July 26, 2022, which is 2.58%.

Equity risk premium (MRP), I retrieved the market risk premium from Professor Aswath Damodaran (http://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/ctryprem.html), which is 5.82% and the data was updated on January 5, 2022.

According to the capital structure of the most recent market capitalization as of 26 July 2022, the weight of debt (wd) and weight of equity (we) are 6.33 percent and 93.67 percent, respectively.

After I get all the requirement input, I calculate the WACC, which is 10.43%, the calculation is shown in the table below.

Table 6.11 WACC Calculation

WACC	
RISK FREE	2.58%
EQUITY RISK PREMIUM	5.82%
BETA	1.43
RQD. RETURN ON EQUITY	**10.91%**
COST OF DEBT	4.15%
AFTER TAX COST OF DEBT	3%
Tax	20%
WACC	**10.43%**

Share price	74.5
# shares (Mn)	1367
Equity Value (BtMn)	101,865
Latest Available Net Debt (BtMn	6,881
NET DEBT / (EQUITY + NET DEBT)	6.33%
NET EQUITY / (EQUITY + NET DEB	93.67%

I use the discount rate derived from the WACC calculation to discount future cash flows to the present and calculate the Terminal value (TV), which is the present value at a future point in time of all future cash flows assuming a constant growth rate.

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

where:

TV = Terminal value FCF = Free cash flow

g = perpetual growth of free cash flow

I applied perpetual growth at 2.4% following the average growth 6 years of real GDP in Thailand following that we use historical data 6 years to forecast a pro forma statement.

The discounted cash flow as shown in Table below.

Table 6.12 Discounted cash flow

Unit : million THB

Year	2019	2020	2021	2022F	2023F	2024F	2025F	2026F	2027F	Terminal Value
EBIT	2,525	3,191	3,625	6,138	8,073	9,979	11,857	13,722	15,585	
TAX	189	174	241	535	731	917	1,095	1,266	1,432	
EBIT AFTER TAX	2,335	3,017	3,384	5,603	7,343	9,062	10,761	12,455	14,153	
DEPRECIATION	54	94	100	129	165	200	235	270	304	
WORKING CAPITAL CHANGE	(337)	(7)	(338)	34	(229)	(233)	(262)	(294)	(331)	
CAPEX	(80)	(155)	(151)	(208)	(257)	(306)	(354)	(401)	(449)	
FREE CASHFLOW TO THE FIRM	1,972	2,949	2,994	5,557	7,021	8,723	10,380	12,029	13,678	174,412
DISCOUNTED CASHFLOW				5,557	6,358	7,153	7,708	8,089	8,329	106,202

WACC	10.43%
TERMINAL GROWTH	2.4%
PV OF FIRM VALUE	149,396
NET DEBT	6,881
PV OF EQUITY VALUE	142,515
No. OF SHARES (MN)	1,367
EST. SHARE VALUE	104.23

The terminal value of the firm is 174,412 million baht, assuming a perpetual growth rate of 2.4%. The firm has present value of 149,396 million baht is deducted by net debt of 6,881 million baht, it will make the equity value of the company 142,515 million baht and divide by the number of shares (1,367 million shares), the estimated share value is 104.23 baht per share as of 6 July 2022. The estimated share value is higher than the latest share price as of 6 July 2022, which is 74.5 baht per share.

6.1.3 Sensitivity Analysis

Various input variables, such as WACC, terminal growth, cost of debt, cost of equity, etc., are used to derive the discounted cash flow valuation. These variables influence the stock price. In the analysis, I generate hypothetical situations that illustrate the sensitivity of these variables by ±5%, ±10% ±20% ±30% ±40%, and ±50% respectively to outcome the effect of the stock price as shown in Table 6.13

Table 6.13 Sensitivity Analysis

Deviation	Cost of Debt	Price (Baht)	Cost of Equity	Price (Baht)	WACC	Price (Baht)	Terminal Growth	Price (Baht)
70%	7.05%	102.22	18.55%	51.75	17.73%	51.19	4.08%	126.39
60%	6.63%	102.50	17.46%	55.95	16.69%	55.40	3.84%	122.53
50%	6.22%	102.78	16.37%	60.83	15.65%	60.29	3.60%	118.95
40%	5.80%	103.07	15.28%	66.55	14.60%	66.04	3.36%	115.60
30%	5.39%	103.36	14.18%	73.33	13.56%	72.88	3.12%	112.48
20%	4.97%	103.65	13.09%	81.52	12.52%	81.15	2.88%	109.56
10%	4.56%	103.94	12.00%	91.58	11.47%	91.35	2.64%	106.81
5%	4.35%	104.08	11.46%	97.52	10.95%	97.39	2.52%	105.50
0%	4.15%	104.23	10.91%	104.23	10.43%	104.23	2.40%	104.23
-5%	3.94%	104.38	10.37%	111.86	9.91%	112.03	2.28%	103.00
-10%	3.73%	104.52	9.82%	120.61	9.39%	121.00	2.16%	101.80
-20%	3.32%	104.82	8.73%	142.62	8.34%	143.69	1.92%	99.51
-30%	2.90%	105.12	7.64%	173.76	7.30%	176.10	1.68%	97.34
-40%	2.49%	103.62	6.55%	283.88	6.26%	297.14	1.44%	92.56
-50%	2.07%	104.62	5.46%	284.88	5.22%	298.14	1.20%	93.56
-60%	1.66%	105.62	4.36%	285.88	4.17%	299.14	0.96%	94.56
-70%	1.24%	106.62	3.27%	286.88	3.13%	300.14	0.72%	95.56

According to the sensitivity spider chart, the stock price is most sensitive to WACC and cost of equity. WACC directly discounts future free cash flow value to present value. And because the company's capital structure has equity accounting for 93.67% of total capital, it is more price sensitive to changes in the cost of capital.
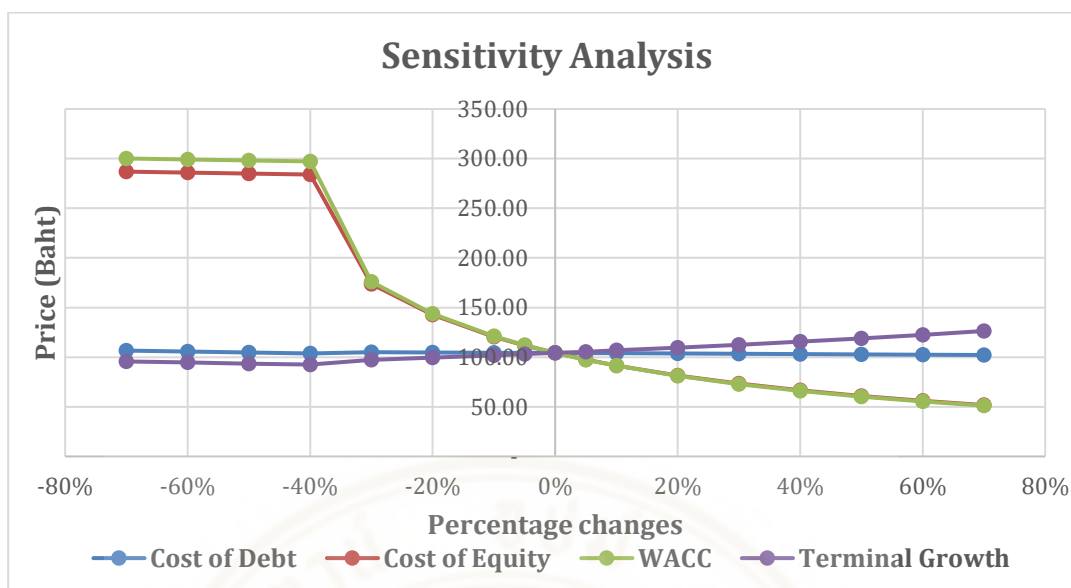
Figure 6.6 Spider chart of sensitivity Analysis

To determine whether the stock price is undervalued or overvalued, I calculated the implied WACC and the implied cost of equity, as shown in the table below. Using the same 2.40% perpetual growth rate, the implied WACC is 13.34% and the implied cost of equity is 14.01% in order to keep the current stock price at 74.5 baht. Even if we assume a 0% perpetual growth rate, the implied WACC and cost of equity are still higher than our estimate, which is 11.73% and 12.31%, respectively. (The estimate of WACC and cost of equity in our valuation is 10.43% and 10.91%, respectively.) Consequently, it can be concluded that JMT's stock is undervalued.

Table 6.14 Implied WACC and cost of equity

Stock Price(Baht)	Perpetual growth	Implied WACC	Implied cost of equity
74.5	2.40%	13.34%	14.01%
74.5	0.00%	11.74%	12.31%

6.2 Valuation Recommendation

Therefore, the appropriate target price for JMT is 104.23 baht per share which is higher than the latest price on 26 July 2022 which is 74.5 baht per share about 40%. My recommendation for JMT is "BUY".

CHAPTER VII
CONCLUSIONS

In this paper, I chose to evaluate the JMT company, which operates in the asset management industry in Thailand. To determine whether the stock price is undervalued or overvalued, I implement the discounted cash flow (DCF) valuation method.

For the valuation, I began by projecting the company's performance from Y2022-Y2027 in order to estimate the free cash flow projection. Different assumptions were utilized, but they were primarily based on real GDP growth, historical growth, and the linear regression approach.

To discount the cash flow from forecasting, I must estimate the cost of capital for the discount rate. For this analysis, I estimated the cost of equity to be 10.91% (with a weight of 93.67%) and the cost of debt to be 4.15% (with a weight of 6.33%), resulting in a WACC of 10.43%. Furthermore, I had to estimate the terminal growth rate to determine the company's terminal value to be discounted. To reflect Thailand's recent economy, I estimated the terminal growth rate at 2.4% based on real GDP growth rates over the last six years.

In addition, I performed sensitivity analysis based on potential factors such as cost of equity, cost of debt, and terminal growth. The output range of stock price ranges from 51.19 to 300.14 baht per share, a difference of -31% to +300% from the recent stock price.

In addition, I ran a solver on financial model to estimate the cost of equity based on two scenarios: perpetual growth of 2.40% (stock value = market price) and no growth (stock value = market price) . We found that JMT is undervalued since the implied cost of equity was 14.01% and 12.31% respectively, greater than we had predicted.

Based on the DCF valuation model, the stock price target is 104.23 baht per share, providing 40% upside compared to the latest price as of 26 July 2022 of 74.5 baht per share. Therefore my recommendation for JMT is "BUY".

7.1 Triggers for re-assessment

As I have already indicated, DCF valuation relies on a number of critical assumptions that, if they change, will force a re-assessment of the stock's value.

Cost of equity or shareholders' required rate of return is determined by the risk-free rate, the equity risk premium, and the beta. Thus, we need to reevaluate the stock's value if there is a real change in the risk-free rate of a 10-year government bond. Furthermore, beta, which measures the stock's volatility relative to the market, may change over time. These must also be updated for re-assessment.

The cost of debt is related to the cost of borrowing from financial institutions. The interest rate is determined by financial institutions based on the Bank of Thailand's policy rate, the type of loan, and the company's credit rating. Therefore, the valuation should be reevaluated if JMT's financial cost has changed.

The capital structure is one of the most important triggers for re-evaluation because, at present, the company uses more than 93% of its equity to run the business at an equity cost of 10.91%; therefore, if the capital structure were to change, the cost of capital, which used to be the discount rate, would also change.

Terminal growth, in this analysis, I utilize the average real GDP growth over the past six years to represent Thailand's recent economic growth and to be more conservative for the valuation. Nonetheless, the company's future business strategy and operating results must also be taken into account. Therefore, it should be regarded to reevaluate the stock quarterly in order to monitor the business plan, it quarterly earnings, and the Thai economy.

7.2 Limitations

Due to the limitations of DCF valuation, it is challenging to estimate the company value with a high degree of confidence. In order to forecast and assess, we rely on different assumptions. The projection of free cash flow is based on past growth and the assumption that there will be no new competitors. However, JMT's business has expanded significantly during the past few years. The expansion of the personal finance business has attracted new competitors to the industry. These factors could affect the projected free cash flows. For terminal growth rate and cost of capital, which we estimate based on several assumptions, the value result is also sensitive. To apply DCF valuation to estimate intrinsic value, it is essential to focus on each major assumption and monitor them for reassessment periodically as new information about the company and its performance becomes available.

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