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Capital Asset Pricing Model (CAPM) Analysis as a Basis Decision Making to Invest in Shares in Financial Sector Companies

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Abstract - *This research was conducted to analyze the feasibility level of investment in BEI index shares for the 2023 period using the Capital Asset Pricing Model (CAPM) method in determining investment decisions. The type of quantitative research is descriptive. The population of this research is financial sector companies, Distribution which are listed on the index IDX Industrial Classification or IDX-IC for the period November 2022 – October 2023 . The sample used was 10 shares of financial holdings industry companies determined by the researcher. This research uses Microsoft Excel linear regression data analysis to determine the beta coefficient of the Capital Asset Pricing Modeling (CAPM) method and compares the expected return with the stock market rate of return during the observation period to better differentiate between efficient and inefficient stocks. The observation results show that 8 companies have efficient shares and 2 companies have inefficient shares which can be seen on the SML Security Market Line (SML) graph or CAPM model securities market line (GPS) for efficient shares and inefficient shares.*

Keywords: *CAPM; Investment Decisions; Shares; BETA; IDX index.*

INTRODUCTION

Investment is an important activity in a country's economy because it can encourage economic improvement and growth. High economic growth can reflect a country's success in implementing national development to improve the welfare of its people. Therefore, in this case a country needs investment support which is one of the main sources of funding for development.

In the world of investment, investors must be able to see promising investment opportunities, so that later these investments can produce a rate of return

optimal with minimal risk. One way that can help investors determine investments in the capital market is by using a balance model to determine the risk and expected rate of return of an asset.

The Capital Asset Pricing Model (CAPM) is a model that can relate the expected level of return from a risky asset to the risk of that asset in balanced market conditions. CAPM aims to help investors in selecting shares and minimizing risky investments. The use of CAPM is expected to help investors describe complex market conditions, as well as minimize investment risks and estimate the amount of return obtained.

Rational investors will prefer efficient shares, namely shares that have an expected return that is smaller than the actual return . " Efficient shares can be determined by choosing a certain level of expected return , then minimizing the risk or minimizing a certain level of risk, then maximizing the expected return " (Tandelilin, 2010). Inefficient stocks are stocks that should be avoided because they have individual returns that are small compared to the expected return . CAPM can also help investors calculate the risk that cannot be diversified in a portfolio and compare it with the predicted rate of return (return).

The level of risk and level of return are stated to have a positive and linear relationship. The risk measure which is an indicator of stock sensitivity in the CAPM is shown by the variable β (Beta). The greater the β of a stock, the greater the risk contained in it. The market rate of return used is the average rate of return from investment opportunities in the capital market (market index) This research was taken based on data available on the Indonesia Stock Exchange (BEI). This research aims to

analyze the best investment options in index shares on the Indonesia Stock Exchange (BEI) according to the Capital Asset Pricing Model (CAPM) approach in terms of risk and return.

Based on the description above, the author is interested in conducting research with the title: "Analysis of the Capital Asset Pricing Model (CAPM) as a basis for making decisions to invest in shares in the financial sector" .

Financial sector consists of various industries such as banking, insurance, financing, securities companies, and so on. This sector is the center of circulating money flows because the profits of this sector also contribute to national economic growth . The financial sector is a locomotive for real sector growth through capital accumulation and technological innovation. More precisely, the financial sector is able to mobilize savings and channel them to parties in need through credit. They provide borrowers with a variety of financial instruments with high quality and low risk. This will increase investment and ultimately accelerate economic growth. A country's economic growth will be optimal if the stability of the country's financial system can be well maintained. In Indonesia, the financial sector is still dominated by banking. This gives rise to high dependence on banking as a source of development financing and economy.

World financial institutions' projections that the global economy will face tough challenges in 2023 are starting to become evident. Currently, developed countries still have to struggle with rising interest rates due to inflation which weakens their economies.

In the midst of the weakening global economy, Indonesia remains resilient. Central Bureau of Statistics (BPS) noted that the Indonesian economy in the first quarter of 2023 grew by 5.03%, exceeding most market analyst estimates and is above China's economic growth which was at the level of 4.5% in the same quarter.

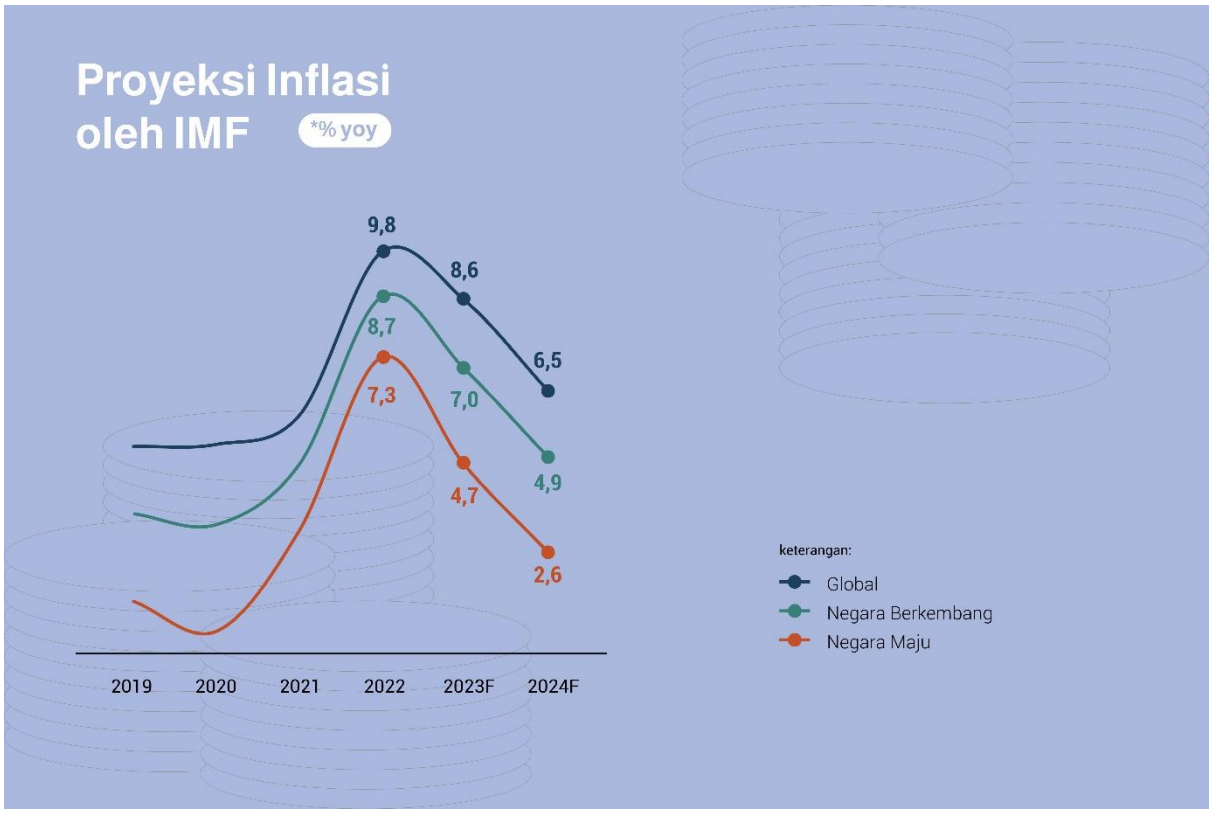


FIGURE 1. INFLATION PROJECTIONS BY THE IMF

Source: https://mediakeuangan.kemenkeu.go.id

World economic conditions are also still influenced by volatility and volatility in commodity prices. Although in general there is a downward trend, compared to 2022 especially in the middle of the year, which experienced a commodity boom. Commodity prices affect the inflation rate. Various countries then responded to the increase in inflation through monetary policy by increasing interest rates to control aggregate demand.

Other global risks that are still quite dominant include pressure in the financial sector, potential debt crisis in various countries, escalation of war in Ukraine, as well as geoeconomic fragmentation.

As a result, global economic recovery stalled. The International Monetary Fund (IMF) also lowered its expectations for global economic growth this year in the April 2023 World Economic Outlook (WEO), namely 2.8% (yoy). Even though the global economy is slowing this year , the IMF estimates that global growth will improve this year 2024, namely 3.0% (yoy).

Meanwhile, the IMF predicts that global inflation will still be high in 2023, namely at the level of 7.0%. Meanwhile, developing countries are projected to experience inflation of 8.6% and developed countries 4.7%. Inflation is predicted to only start to decline next year. However, historically it is still at a higher level than in previous years, even before the pandemic. Inflation will continue at a high level in the long term or will then be accompanied by high and rather long interest rates, " higher for longer".

In addition, the increase in high inflation, high interest rates and tightening liquidity has had an impact on the banking financial sector. Based on the results of the 2023 IMF-World Bank Spring Meeting in Washington DC, United States on April 10-16 2023, the banking crisis that occurred in Europe and America still needs to be watched out for.

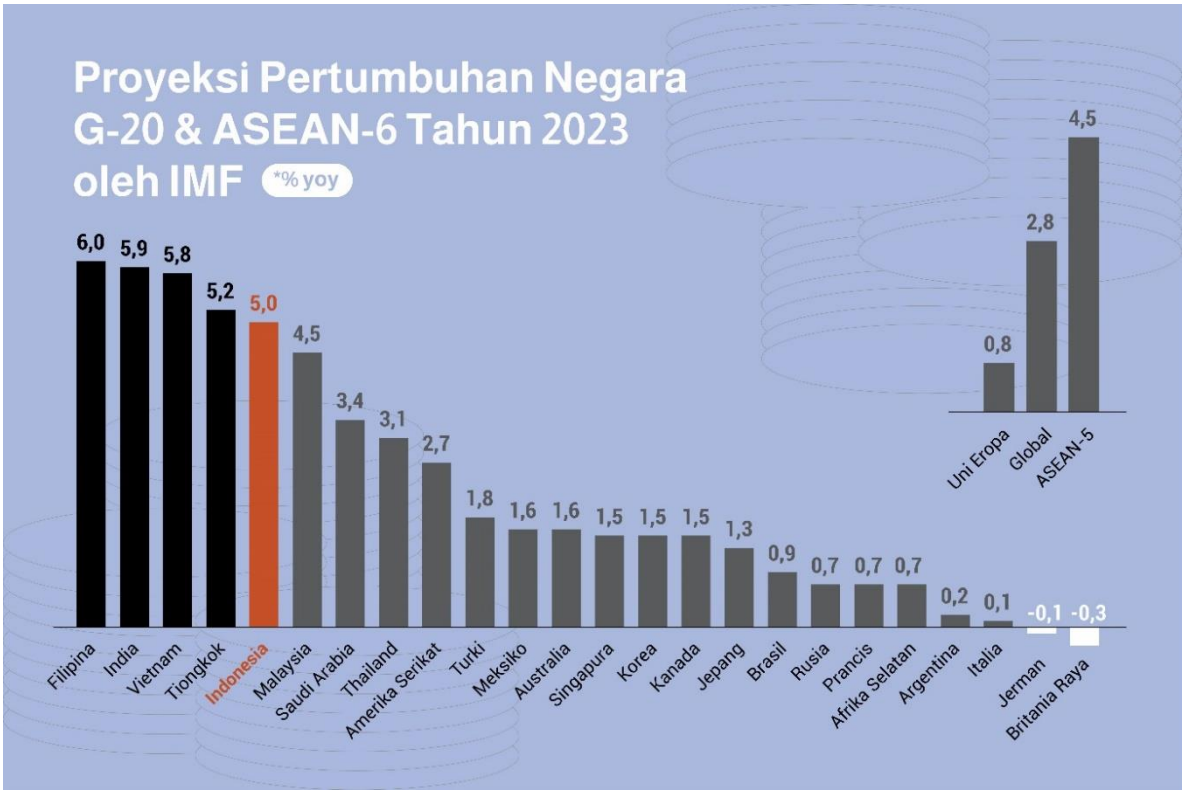


FIGURE 2. COUNTRY GROWTH PROJECTIONS

Source: https://mediakeuangan.kemenkeu.go.id

Even though the global outlook is slowing, Indonesia is predicted to be one of the countries that will still be able to grow strongly in 2023. The IMF projects that Indonesia will grow at 5.0% (yoy) in 2023. The outlook for domestic economic growth is relatively stable, driven by increasing domestic demand , both for home consumption ladder and investment.

LITERATURE REVIEW

Investment

Investment is a commitment of a certain amount of funds or other resources made at this time, with the aim of obtaining a certain amount of profit in the future. An investor buys a number of shares now with the hope of gaining profits from an increase in share prices or a number of dividends in the future, as a reward for the time and risks associated with the investment (Tandelilin, 2001).

Share

Shares are defined as a sign of participation or ownership of a person or entity in a company (Sunariyah, 2006). Another meaning of shares is a share of ownership in a company (Bodie, 2014). Based on the two definitions above, a conclusion can be drawn that the definition of shares is proof/sign of investor ownership of a company.

Return on Investment

According to Jogiyanto (2009), Return is the result obtained from investment. Based on the definitions of these experts, a conclusion can be drawn that return is the rate of return or profit obtained from the investment made.

Investment Risk

Risk is a loss faced by investors (Fabozzi, 1995). Risk is the possibility of an unfavorable event occurring (Brigham and Weston, 1990).

Capital Asset Pricing Model (CAPM)

CAPM is a balance model where according to Tandelilin (2010) by using the balance model we will be able to understand how investors behave as a whole, as well as the mechanisms for price formation and market returns in a simpler form. Equilibrium models can also help us understand how to determine the relevant risks to an asset, as well as the relationship between risk and the expected return of an asset when the market is in equilibrium.

Market capital

Market capital (capital market) according to Martalena And Melinda (2011:2) is market various instrument long-term finance that can be traded, including debt securities (bonds), equity (shares), mutual funds, derivative instruments and other instruments. The capital market is a means of funding for companies and other institutions (government) as well as a means of investment activities.

RESEARCH METHODS

Variable And Design Study

Research variables are certain characteristics or characteristics inherent in the object under study. This research analyzes taking decision investment share with method Capital Assets Pricing Model (CAPM) on the BEI Index on the Indonesia Stock Exchange for the period November 2022 – October 2023.

In do study required something design study which useful for make suite, descriptions and explanations of research so that the data makes it easier to carry out research. This research is classified as quantitative descriptive research. A descriptive research design was used in this research because it aims to describe investment decision making using the Capital Asset Pricing Model (CAPM) method on the IDX-IC Index on the Indonesian Stock Exchange.

Operational Definition of Variables

Variable study is attribute, characteristics, characteristic, ability, And size other Which different (varies) that researchers can apply to study and analyze.

Population and Sample

The population in this study are companies listed on the IDX-IC sector G511 index on the Indonesia Stock Exchange period November 2022 – October 2023 . Taking sample done with method purposive sampling namely the selection of sample members based on certain criteria. The criteria used in determining sample data were the Financial Holdings Company IDX-IC shares in the G511 sector during the period January 2022 – December 2022.

TABLE 1. TEN SAMPLE COMPANIES USED IN THIS RESEARCH

No.	Code	Company name
1	APIC	Pacific Strategic Financial Tbk
2	BCAP	MNC Kapital Indonesia Tbk
3	BPII	Batavia Prosperindo Internasional Tbk
4	GSMF	Equity Development Investment Tbk
5	SMMA	Sinarmas Multiartha Tbk
6	PEGE	Panca Global Kapital Tbk
7	POLA	Pool Advista Indonesia Tbk
8	SFAN	Surya Fajar Capital Tbk
9	STAR	Buana Artha Anugerah Tbk
10	VICO	Victoria Investama Tbk

Types and Techniques of Data Collection

The type of data used is secondary data, namely monthly closing prices for the period November 2022 – October 2023 , BI rates, And Index Market BEI. Acquisition data in study done with use library research and research via internet media. Data source obtained from www.idx.co.id , www.yahoofinance.com and www.bps.go.id . The data collection techniques used in this research were carried out using library research and research via internet media.

Data Analysis Techniques

The calculations were carried out using the Microsoft Excel program . Analysis of the application of the CAPM method in determining investment is carried out by: Based on the Capital Asset Pricing Model (CAPM) in investment, the variables that need to be studied are:

a) Stock returns

Return is the rate of return or results obtained from a stock investment.

Formula $Ri = \frac{P_t - P_{t-1}}{P_{t-1}}$

information:

R_i : Return on Stock i in period t

P_t : Stock price i in period t

P_{t-1} : Stock price in period $t-1$

b) Systematic Risk (Beta)

Risk is something form of uncertainty to something circumstances which will happen in then day on decision taken, based on current considerations. In CAPM, the risk is beta (β)

The formula $\beta = \frac{\sigma m}{\sigma^2 m}$

information:

β : Systematic risk

σ : Covariance between stock returns and market returns

σ^2 : Market Covariance

c) Level Risk-free rate of return (R_f)

Risk-free rate is the level of profit generated from a risk-free asset or investment. CAPM method obtained from the Bank Indonesia Interest Rate (SBI) or monthly market return index with an average in 2023 of 5.78%.

TABLE 2. MARKET RETURN INDEX DATA (R_F) FROM 2021 TO OCTOBER 2023

Month	2021	2022	2023
January	3,75%	3,50%	5,75%
February	3,50%	3,50%	5,75%
March	3,50%	3,50%	5,75%
April	3,50%	3,50%	5,75%
May	3,50%	3,50%	5,75%
June	3,50%	3,50%	5,75%
July	3,50%	3,50%	5,75%
August	3,50%	3,75%	5,75%
September	3,50%	4,25%	5,75%
October	3,50%	4,75%	6,00%
November	3,50%	5,25%	-
December	3,50%	5,50%	-
Average	**3,52%**	**4,00%**	**5,78%**
3-year average	4,43%		
Maximum	6,00%		
Minimum	3,50%		

Data source: Bank Indonesia

d) Market Returns

Market return is level return which expected from shares in a market.

Formula: $Rm = \frac{IHSG_t - IHSGt\text{-}_1}{IHSG_{t-1}}$

Information:

Rm: Market profit rate

IHSGt: Composite stock price index time -t

IHSG- 1 : Composite stock price index before time t

e) Count profit level which are expected according to CAPM

$$E(i) = Rf + \beta [E(Rm) - Rf]$$

f) Stock Classification as an Investment Decision

RESULTS AND DISCUSSION

Results Analysis Level Return Share Individual (Ri)

The rate of return on a stock is an indicator in investing. Respective rate of return share is big profit Which accepted investors in a way real when invest. Rate of return each share (Ri) calculated from difference price closing share period walk minus the previous period's share price then divided by the previous period's share price. The results can be seen in the following results table:

TABLE 3 - RESULTS CALCULATION AVERAGE RETURN INDIVIDUAL EACH COMPANY (RI)

No.	Code	Company name	Ri Monthly	Annual Ri
1	APIC	Pacific Strategic Financial Tbk	-0.0027	-0.0318
2	BCAP	MNC Kapital Indonesia Tbk	-0.0509	-0.6113
3	BPII	Batavia Prosperindo International Tbk	-0.0035	-0.0417
4	GSMF	Equity Development Investment Tbk	-0.0238	-0.2852
5	SMMA	Sinarmas Multiartha Tbk	0.0072	0.0862

6	PEGE	Panca Global Kapital Tbk	-0.0235	-0.2824
7	POLA	Pool Advista Indonesia Tbk	-0.0448	-0.5372
8	SFAN	Surya Fajar Capital Tbk	0.0057	0.0680
9	STAR	Buana Artha Anugerah Tbk	-0.0155	-0.1855
10	VICO	Victoria Investama Tbk	-0.0168	-0.2014
Maximum			**0.0072**	**0.0862**
Minimum			**-0.0509**	**-0.6113**

Data source: www.yahoofinance.com

Based on table on, level return each share from 10 share company Which become research samples in the period November 2022 – October 2023 show that the shares of the company Sinarmas Multiartha Tbk (SMMA) have average whole highest level return individual during period study that is 0.0862, while the stock that had the lowest overall individual return average in that period was MNC Kapital Indonesia Tbk (BCAP) as big as -0.6113. Based on table on Also seen that 2 share The companies have a positive average individual return value , namely Sinarmas Multiartha Tbk (SMMA) 0.0862 and Surya Fajar Capital Tbk (SFAN) 0.0860 and 8 company shares have a negative average return value.

Results Analysis Market Rate of Return (Rm)

The market rate of return is the rate of return that is based on the development of the stock index. Index share Which used in study This is Index Price Share Combined (IHSG) Because IHSG represents all stock trading activities listed on the Indonesian Stock Exchange.

Mark average Rm as big as -0.0178 or -1.78%. Mark Rm highest happen on month July 2023 that is, as big as 0.0405 or 4.05% Which describe condition trading share Index BEI on This month is very active. Meanwhile, the lowest market return rate occurred in May 2023, namely -0.0408 or -4.08%, which means that share trading on the BEI Index was sluggish that month.

TABLE 4. PROCESSED RM DATA

Date	Close	Rm	%
01/11/2022	7.081.312.988	**IHSG**	
01/12/2022	6.850.619.141	-0,0326	-3,26%
01/01/2023	6.839.341.797	-0,0016	-0,16%
01/02/2023	6.843.238.770	0,0006	0,06%
01/03/2023	6.805.276.855	-0,0055	-0,55%
01/04/2023	6.915.715.820	0,0162	1,62%
01/05/2023	6.633.261.230	-0,0408	-4,08%
01/06/2023	6.661.878.906	0,0043	0,43%
01/07/2023	6.931.358.887	0,0405	4,05%
01/08/2023	6.953.259.766	0,0032	0,32%
01/09/2023	6.939.892.090	-0,0019	-0,19%
01/10/2023	6.896.291.992	-0,0063	-0,63%
17/10/2023	6.939.615.234	0,0063	0,63%
Monthly returns		**-0,0015**	**-0,15%**
Return 1 Year		**-0,0178**	**-1,78%**
Maximum		**0,0405**	**4,05%**
Minimum		**-0,0408**	**-4,08%**

Data source: www.yahoofinance.com

Results Analysis Level Return (Rf) Free Risk

Level return free risk or Risk-free rate is level return something investment free risk using Bank Indonesia Interest Rate (SBI) data with an average risk- free rate value in 2023 of 5.78% as shown in Table 1.

Results Analysis Risk Systematic Each Individual Share ( )

Systematic risk or Beta ( ) is a measure of market risk that affects the price of a share. The beta value of a stock comes from the relationship between the rate of return of a stock and the market rate of return (Hartono, 2012). Method CAPM Also explain that investors must consider beta a share because it influences the price fluctuations of a share and influences the size of the expected rate of return. Securities that have a beta (<1) have a smaller risk than market portfolio risk.

On the other hand, if it has the value (> 1) then it has a systemic risk that is greater than market risk. Calculation of beta for financial holdings industry companies Which made sample can processed with use Microsoft Excel data analysis as following:

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95,0%*	*Upper 95,0%*
Intercept	-0,0012	0,0136	-0,0864	0,9329	-0,0314	0,0290	-0,0314	0,0290
IHSG	**0,9968**	0,6795	1,4669	0,1731	-0,5173	2,5108	-0,5173	2,5108

Calculation table for data analysis obtained Beta Value (APIC) Pacific Strategic Financial Tbk = 0.9968

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95,0%*	*Upper 95,0%*
Intercept	-0,0480	0,0149	-3,2240	0,0091	-0,0812	-0,0148	-0,0812	-0,0148
IHSG	**1,9779**	0,7466	2,6493	0,0243	0,3144	3,6413	0,3144	3,6413

Calculation data analysis table obtained Beta Value (BCAP) MNC Kapital Indonesia Tbk = 1.9779

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95,0%*	*Upper 95,0%*
Intercept	-0,0034	0,0036	-0,9533	0,3629	-0,0115	0,0046	-0,0115	0,0046
IHSG	**0,0188**	0,1813	0,1037	0,9194	-0,3851	0,4227	-0,3851	0,4227

Calculation table for data analysis obtained Beta Value (BPII) Batavia Prosperindo Internasional Tbk = 0.0188

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95,0%*	*Upper 95,0%*
Intercept	-0,0217	0,0270	-0,8062	0,4389	-0,0818	0,0383	-0,0818	0,0383
IHSG	**1,3726**	1,3513	1,0157	0,3337	-1,6383	4,3835	-1,6383	4,3835

Calculation table for data analysis obtained Beta Value (GSMF) Equity Development Investment Tbk = 1.3726

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95,0%*	*Upper 95,0%*
Intercept	0,0072	0,0038	1,8774	0,0899	-0,0013	0,0158	-0,0013	0,0158
IHSG	**0,0174**	0,1924	0,0906	0,9296	-0,4113	0,4462	-0,4113	0,4462

Calculation table for data analysis obtained Beta Value (SMMA) Sinarmas Multiartha Tbk = 0.0174

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95,0%*	*Upper 95,0%*
Intercept	-0,0071	0,0935	-0,0760	0,9409	-0,2156	0,2013	-0,2156	0,2013
IHSG	**11,0624**	4,6901	2,3587	0,0400	0,6122	21,5127	0,6122	21,5127

Calculation table for data analysis obtained Beta Value (PEGE) for Panca Global Kapital Tbk = 11.0624

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95,0%*	*Upper 95,0%*
Intercept	-0,0442	0,0196	-2,2628	0,0471	-0,0878	-0,0007	-0,0878	-0,0007
IHSG	**0,3524**	0,9803	0,3595	0,7267	-1,8318	2,5367	-1,8318	2,5367

Data analysis calculation table obtained Beta Value (POLA) Pool Advista Indonesia Tbk = 0.3524

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95,0%*	*Upper 95,0%*
Intercept	0,0059	0,0109	0,5421	0,5996	-0,0184	0,0303	-0,0184	0,0303
IHSG	**0,1748**	0,5479	0,3190	0,7563	-1,0461	1,3957	-1,0461	1,3957

Calculation table for data analysis obtained by Beta Value (SFAN) Surya Fajar Capital Tbk = 0.1748

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95,0%*	*Upper 95,0%*
Intercept	-0,0149	0,0093	-1,6121	0,1380	-0,0356	0,0057	-0,0356	0,0057
IHSG	**0,3475**	0,4648	0,7476	0,4719	-0,6882	1,3831	-0,6882	1,3831

Calculation table for data analysis obtained by Beta Value (STAR) Buana Artha Anugerah Tbk= 0.3475

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95,0%*	*Upper 95,0%*
Intercept	-0,0116	0,0483	-0,2404	0,8149	-0,1192	0,0960	-0,1192	0,0960
IHSG	**3,4827**	2,4211	1,4385	0,1808	-1,9118	8,8773	-1,9118	8,8773

Calculation table for data analysis obtained by Beta Value (VICO) Victoria Investama Tbk= 3.4827

From the data analysis above, below are all the company's BETA values industrial finance holdings.

TABLE 5 - FINANCIAL HOLDING COMPANY BETA VALUE

No.	Code	Company name	BETA
1	APIC	Pacific Strategic Financial Tbk	0,9968
2	BCAP	MNC Kapital Indonesia Tbk	1,9779
3	BPII	Batavia Prosperindo Internasional Tbk	0,0188
4	GSMF	Equity Development Investment Tbk	1,3726
5	SMMA	Sinarmas Multiartha Tbk	0,0174
6	PEGE	Panca Global Kapital Tbk	11,0624
7	POLA	Pool Advista Indonesia Tbk	0,3524
8	SFAN	Surya Fajar Capital Tbk	0,1748
9	STAR	Buana Artha Anugerah Tbk	0,3475
10	VICO	Victoria Investama Tbk	3,4827
Maximum			**11,0624**
Minimum			**0,0174**

Based on table 5 mentioned above , seen that calculation risk systematic (beta) to 10 company sample Which research shows that 10 sample companies have positive beta.

Risk systematic (beta) highest owned by company Panca Global Kapital Tbk (PEGE) that is as big as 11.0624 Which shows that these shares have a large risk, are very active and sensitive to changes in market prices, meaning that if market returns (IHSG) increase then shares will also increase, above the increase in IHSG and vice versa (Tandelilin, 2010). Meanwhile, the company stock that has the lowest beta is Sinarmas Multiartha Tbk (SMMA), namely 0.0174.

Results Analysis Level Return Which Expected [E(Ri)]

The expected rate of return [E(Ri)] is the amount of profit that investors expect from investment shares held. The CAPM method is used to calculate the expected rate of return using the variables risk-free rate of return (Rf), market rate of return (Rm), and systematic risk ( ). Results calculation level return Which expected from 10 share company can seen on table 6 in lower This.

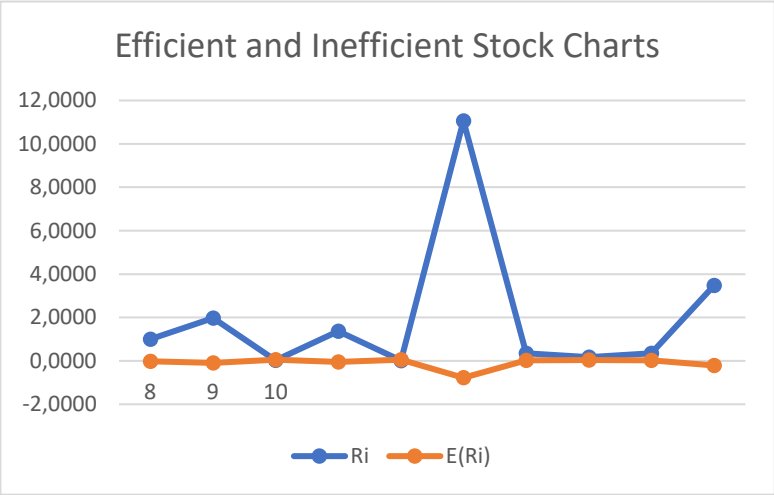
TABLE 6. THE RESULTS OF CALCULATING THE EXPECTED RATE OF RETURN FOR 10 COMPANY SHARES

code	Rf	Beta	Rm	Rm-Rf	Beta (Rm-Rf)	ER_i = RF+ Beta (Rm-Rf)
APIC	0,0578	0,9968	-0,0178	-0,0756	-0,0753	-0,0176
BCAP	0,0578	1,9779	-0,0178	-0,0756	-0,1495	-0,0917
BPII	0,0578	0,0188	-0,0178	-0,0756	-0,0014	0,0563
GSMF	0,0578	1,3726	-0,0178	-0,0756	-0,1037	-0,0460
SMMA	0,0578	0,0174	-0,0178	-0,0756	-0,0013	0,0564
PEGE	0,0578	11,0624	-0,0178	-0,0756	-0,8359	-0,7782
POLA	0,0578	0,3524	-0,0178	-0,0756	-0,0266	0,0311
SFAN	0,0578	0,1748	-0,0178	-0,0756	-0,0132	0,0445
STAR	0,0578	0,3475	-0,0178	-0,0756	-0,0263	0,0315
VICO	0,0578	3,4827	-0,0178	-0,0756	-0,2632	-0,2054
Maximum						**0,05643**
Minimum						**-0,77816**

Based on table 6, it can be seen that the average expected rate of return for the 10 shares of the companies studied is -0.09189 or -9.189%. The Sinarmas Multiartha Tbk (SMMA) company has the highest expected rate of return, namely 0.0564 or 5.64%. Meanwhile, Panca Global Kapital Tbk (PEGE) has the lowest expected return, namely -0.7781 or -77.816%. If the expected return value is negative, it means that the stock experiences a capital loss , where an increase (decrease) in the share price can result in losses for investors (Tandelilin, 2010: 102). The resulting negative value is also influenced by the negative BETA value. So that in the process of calculating the expected return a negative value is obtained. This shows that the size of the expected return depends on the size of the stock risk which is indicated by the BETA value.

Classification Share Efficient And Decision Investment

Efficient shares are shares whose individual rate of return is greater than the expected rate of return or [(Ri) > E(Ri)]. Meanwhile, inefficient shares are shares whose individual returns are smaller than the expected level of return [(Ri) < E(Ri)]. Efficient and inefficient shares can be seen from the following SML graph.



Based on the graph, seen that position average level return individual (Ri) efficient stocks on the chart are above the expected return point or E(Ri).

On the contrary, on shares Which No efficient, position average level return individual (Ri) is at below the expected return point or E(Ri).

TABLE 6. GROUPING OF SHARES

No.	Code	Nama Perusahaan	Ri	E(Ri)	Share Grouping	Decision
1	APIC	Pacific Strategic Financial Tbk	0,9968	-0,0176	Efisien	*Buy*
2	BCAP	MNC Kapital Indonesia Tbk	1,9779	-0,0917	Efisien	*Buy*
3	BPII	Batavia Prosperindo Internasional Tbk	0,0188	0,0563	Tidak Efisien	*Sell*
4	GSMF	Equity Development Investment Tbk	1,3726	-0,0460	Efisien	*Buy*
5	SMMA	Sinarmas Multiartha Tbk	0,0174	0,0564	Tidak Efisien	*Sell*
6	PEGE	Panca Global Kapital Tbk	11,0624	-0,7782	Efisien	*Buy*
7	POLA	Pool Advista Indonesia Tbk	0,3524	0,0311	Efisien	*Buy*
8	SFAN	Surya Fajar Capital Tbk	0,1748	0,0445	Efisien	*Buy*
9	STAR	Buana Artha Anugerah Tbk	0,3475	0,0315	Efisien	*Buy*
10	VICO	Victoria Investama Tbk	3,4827	-0,2054	Efisien	*Buy*

Based on table 8 above, it can be seen that of the 10 company shares in the research sample, there are 8 company shares that are included in the efficient group and 2 company shares that are included in the inefficient share group.

a. Companies that fall into the efficient category are

TABLE 7. COMPANIES THAT FALL INTO THE EFFICIENT CATEGORY

No.	Code	Company name
1	APIC	Pacific Strategic Financial Tbk
2	BCAP	MNC Kapital Indonesia Tbk
3	GSMF	Equity Development Investment Tbk
4	PEGE	Panca Global Kapital Tbk
5	POLA	Pool Advista Indonesia Tbk
6	SFAN	Surya Fajar Capital Tbk
7	STAR	Buana Artha Anugerah Tbk
8	VICO	Victoria Investama Tbk

Efficient shares are shares that have an individual rate of return that is greater than the rate of return Which expected or [Ri > E(Ri)]. Decision investment share Which efficient is with consider buying these shares.

b. Companies that fall into the inefficient category are

TABLE 8. COMPANIES THAT FALL INTO THE INEFFICIENT CATEGORY

No.	Code	Company name
1	BPII	Batavia Prosperindo International Tbk
2	SMMA	Sinarmas Multiartha Tbk

Whereas 2 share company Which including in group share No efficient is share Which have mark returns individual more small from level returns which are expected or [Ri < E(Ri)]. Decision Which taken to shares Which No efficient is taking into account the sale of these shares.

CONCLUSION

Based on results study And discussion in study This, researchers concluded that CAPM can explain the relationship between risk and return because Beta is used as an ingredient consideration taking decision investment in a way optimal. No all share company Which listed on the IDX following the rise and fall of share values on the market/IHSG on the Indonesian stock exchange.

There are 8 company shares that are included in the efficient group and 2 company shares that are included in the inefficient share group. Companies that fall into the efficient category are Pacific Strategic Financial Tbk (APIC), MNC Kapital Indonesia Tbk (BCAP), Equity Development Investment Tbk (GSMF), Panca Global Kapital Tbk (PEGE), Pool Advista Indonesia Tbk (POLA), Surya Fajar Capital Tbk (SFAN), Buana Artha Anugerah Tbk (STAR), Victoria Investama Tbk (VICO). Efficient shares are shares that have an individual rate of return greater than the expected rate of return or [Ri > E(Ri)]. An efficient stock investment decision is to consider buying the shares.

Company shares are included in the inefficient share group, namely Batavia Prosperindo Internasional Tbk (BPII) and Sinarmas Multiartha Tbk (SMMA) . Inefficient shares are shares that have an individual return value that is smaller than the expected return level or [Ri < E(Ri)]. The decision taken regarding inefficient shares is to consider selling these shares.

SUGGESTION

Based on the results of the research that has been carried out, the suggestions that researchers can give are as follows : For Investors and Prospective Investors Before making an investment decision, investors and potential investors should first choose which shares are capable of providing profits or rates of return. which was greater than investors expected. The CAPM method can be used as a basis for investment considerations for investors and potential investors who will invest in shares . However, to get an accurate estimate, you should use a long period of time with the latest data, don't just look for sources of information based on the CAPM method which describes the risk and return relationship more simply because it only uses one variable (beta). The CAPM method also uses technical analysis, so if you are in doubt about the results of this analysis, you can use another analysis that uses fundamental techniques .

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