Prospect theory: Overcome risk disaster in emerging market

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Abstract. This paper investigates specific risk in emerging market. Emerging markets are accumulating capital at a faster rate than developed markets but they lag far behind developed markets. Risk is one of the main factors that investors consider when making investments. Risk contained in Financial Accounting come from accrual accounting method. Accrual measurements in the Balance Sheet are measured using persistence current operating accrual, persistence non-current operating accrual, financial persistence accrual, and accrual anomaly. Accruals in the income statement are measured using the accrual anomaly modified Jones model. Accrual measurements are used as information used by investors in predicting risk specifically. The idiosyncratic risk reflects the specific information about the company, and it will fluctuate according to the information itself. We find that the financial risk documented in this study is associated with the risk faced by the investor. Prospect Theory can be used to predict and explain behavior decision making to overcome disaster risk faced by an investor in the future.

1. Introduction
Emerging markets are accumulating capital at a faster rate than developed markets, and their market capitalization and share in world capitalization are growing, but they lag far behind developed markets, such as the US and European markets, regarding growth, some stocks listed, foreign investment, liquidity, and risk. In a global portfolio, advocate, weight needs to be assigned to these markets to generate higher returns because of growth potential [1]. The liquidity crisis began in early 2007, and a constant flow of unfavorable news about defaults and write-downs caused investor pessimism, which resulted in panic selling and redemption pressure on the financial market [2].

Some important features of EMs are higher transaction costs, multiple tax regimes, lack of transparency, illiquidity, non-synchronous trading, substandard accounting systems, lack of regulations, and weak enforcement of contracts. Financial markets cannot function smoothly because the physical and institutional infrastructure is poor or underdeveloped, and governance is weakened by corruption, an uncertain legal environment, political instability, and lack of transparency. The extant literature suggests that these markets are informationally inefficient, and how that liberalization and trading infrastructure is necessary but not sufficient to improve the quality of information in EMs. As the EMs integrate with developed markets, the higher positive correlation exposes these markets to global shocks and volatility [3]. The global financial crisis has made business opportunities less certain forcing companies to postpone long-term innovation investments [4].

The risk is one of the main factors that investors consider when making investments. The risk of securities consists of two components, which are a diversifiable risk and non-diversified risk. Portfolio securities are performed by investors to reduce diversifiable risk, while non-diversified risks will remain attached to each security. Capital Asset Pricing Model (CAPM) and the long formed the mindset of academics and practitioners on the relationship of risk and return. Persistence non-current operating accruals have a positive and significant impact on the idiosyncratic risk. Investors looking at
the change in operating non-current accrual as a change on account of fixed assets is a specific risk to the company. The increase in this account tells us the increase in risk [5]; [6, 7].

Indonesian capital market showed a positive effect of idiosyncratic volatility, although not as strong as documented evidence to Malaysia, Singapore and Thailand based on the considerations, to answer the variation pattern of this relationship researchers used the idiosyncratic risk as mediating variables that explain the relationship with the accrual rate in the stock price perspective prospect theory frame [8, 9]. The phenomenon of over/under reaction of investors to earnings information is an interesting issue in capital markets. The issue becomes even more interesting because it is assumed to be a factor of appearing of earnings error estimation by investors and analyst that followed by mispricing of securities [10].

The ability of idiosyncratic risk in determining the formation of financial disaster becomes the focus of this research. Idiosyncratic risk as an indicator forming past stock prices in the capital. Based on the above arguments, the formulation of this research is summarized as follows: in the context of Indonesia's capital market, whether there is an anomalous phenomena accrual, whether the formation of anomalous accrual and persistence of accruals affect Financial disaster and whether investors consider the idiosyncratic risk in the decisions that shape stock prices.

This study is urgent because of the different characteristics in assessing risk in the CAPM model that is not by the conditions of the Indonesian capital market. Changes in specific information that often occur affect a particular company or industry to be the main basis in risk assessment by investors. This consideration should be in the idiosyncratic model.

2. Literature Review
The cross-sectional relationship between idiosyncratic risk and stock prices with a positive result [11]. The monthly musing data and the size EGARCH (Exponential Generalized Autoregressive Conditional Heteroskedasticity) found a positive relationship and claimed superiority EGARCH measurement [12]. The produces a positive relationship [13]. The examines this relationship in 44 international markets [14]. For the Australian market, they find a negative relationship. The measures the volatility of idiosyncratic generate positive relationships using measures based EGARCH as practiced [12, 13]. Examined the relationship of positive returns and idiosyncratic risk in the Australian stock market using EGARCH size to measure volatility [14].

Idiosyncratic risk calculation allows assign the largest portion of the total risk, understand the relationship between return and idiosyncratic risk is important for small investors and institutional investors [15]. The contributes associated cross-sectional relationship between idiosyncratic volatility and expected returns for the various levels of the company [16]. The suggests a negative relationship between idiosyncratic risk and stock returns as a general phenomenon throughout the world called 'idiosyncratic risk-return puzzle', described by using alternative regression estimation using data Australia [13]. Behavior conditional distribution of extreme returns reflects differences Losses and investment gains. Characteristics relationship is not the same return on an average level and can affect the conclusion. The probability distribution of the cross-correlations of the stocks during the stock market disaster is fatter than that of others. Besides, the thresholds of cross-correlations are assigned to obtain the threshold networks and the power-law of degree distribution in these networks are observed in a certain range of threshold values. The networks during the stockmarket disaster also appear to have a larger mean degree and modularity, which reveals the strong correlations among these stock prices [17].

The study, applying quantile regression to overcome the return distribution, dimension squares least regression and portfolio methods are often used in research with negative results [18, 19, 20]. Finally, this study provides a new perspective on the shape of a cross-sectional relationship between idiosyncratic risk and stock returns, show empirical evidence that the relationship parabolic and quantile. Companies with a higher price variation will attract trade arbitration utilizing specific information. As a result, the company will track the company's fundamental values more closely. This will ultimately reduce the problem of information asymmetry that inhibits external funding and distorts capital spending decisions.
2.1. Prospect Theory
Prospect theory states that in making decisions, people tend to focus on the prospects, namely the prospect of gains and losses prospects, rather than on total wealth. As for, which is used as a reference point in calculating profit and loss always change from time to time. Furthermore, the decision-makers perceive a person or prospect (outcomes) in the form of the value function. This is consistent with the main conclusions explains that the function of the values defined regarding gains and losses [21]. Value function explained that in making decisions, people tend to be a risk-averse when it is in the domain of profit and risk-seeking when it is at a loss domain. The loss function is represented by a more concave and steeper curve, while the function of the profit value is represented in the form of a convex curve and not so steep. Relationships between variables in this study are based on prospect theory, the theory of real options, Financial disaster, and risk model development idiosyncratic. Developed in previous research. This study puts idiosyncratic risk as a mediating variable linking accrual persistence operating current, non-current operating persistence, persistence financial accruals, and accrual anomaly on Financial disaster. To build a model of the relationship between the operating current accrual persistence, persistence operating non-current accrual, accrual financial persistence and accrual anomaly against idiosyncratic risk used real options theory. Model of the relationship between idiosyncratic risk on Financial disaster using the prospect theory.

2.2 Market Anomaly.
Efficient Market Hypothesis (EMH) suggests the market is said to be efficient if stock prices reflect all available information appropriately, including accounting information [22]. The consequences of the Efficient Market Hypothesis is the ability of analysts expect future earnings to perfection, considering the element of accrual and cash in a profit element present. If future earnings forecasts can be perfectly predicted, then the current stock price will move into equilibrium fair price because the current fair price has accommodated future earnings, then there will be no price correction in the future when profit is announced. In discussing efficient market testing, it should also discuss the existence of irregularities (anomalies) associated with an efficient market hypothesis.

2.3. Idiosyncratic Risk.
Idiosyncratic risk reflects specific information about the company and fluctuates according to the information itself [23]. Factors that may affect this risk are announcements about seasonal earnings information, supplies and company requests and the dynamics of corporate competition. Company earnings information can be observed from the accrual quality in the financial statements. Idiosyncratic risk is possible also arise because of government regulations that have a direct impact on certain industries.

The residual error variance, the result is called idiosyncratic risk. To calculate the value of idiosyncratic risk can also be done through the Fama French regression model, the result of residual error variance is an idiosyncratic risk. Idiosyncratic risk is the risk that a part of the overall risk of the securities that are not related to the various risk factors that are not biased diversified. The five-factor model is the development of a three-factor model [24, 25].

Based on the research, there is a three-factor model which are the basis for empirical studies for Financial disaster [25]. The third factor is beta, size as measured by market capitalization and the book-to-market ratio (BMR) into the market index to describe the average rate of return. Size return premium is the difference between large and small firms are denoted by the SMB (small minus big) while the book-to-market premium is the excess return of the high and low BMR denoted by HML (high minus low).

Five models of Fama-French factors is done by regressing the difference in return (excess return) using five factors, as follows.

\[ R_{it} - RF_t = a_i + b_i (R_{M_t} - R_{F_t}) + \delta_h + \delta_i HMLt + SMBt + \delta_r + \delta_i CMA + \epsilon_i \] 

(1)

1. The difference between the return of the market portfolio,
2. Difference return of a portfolio of small stocks to the portfolio return small stock large stock deductible (Small Minus Big - SMB),
3. The difference between the return of the portfolio with a ratio Book To Market (BTM) high-yielding portfolio with low BTM ratio (High Minus Low-HML).
4. RMW difference between returns on portfolio diversification and low profitability.
5. CMA difference between returns lower stock portfolio diversification with a high investment company.

2.6 Idiosyncratic Volatility and Stock Price Information.
The importance of idiosyncratic volatility in corporate decision-making is of concern in recent years. States with the protection of property rights are better to tend to have lower return synchronicity which eventually leads to firm-specific information is reflected in the stock price resulting in higher market efficiency. Idiosyncratic risk increases will increase the accounting transparency of a country. This suggests that the efficiency of capital allocation positively correlated with idiosyncratic risk and stock returns in the country.

The managers of companies with high idiosyncratic risk incorporating information about the stock price into investment decisions [25]. Several studies have questioned the use of idiosyncratic volatility as a measure of market efficiency [26] [27] [28]. This study attempts to examine the relationship between idiosyncratic volatility and stock prices.

3. Theoretical Framework and Hypotheses

3.1 The theory of real options: the persistence relationship accrual and idiosyncratic risk.
Attributes are used to measure the quality include accrual quality, persistence, predictability, smoothness, value relevance, timeliness, and conservatism [29] [30] [31]. This study focuses on measuring the quality of persistence attributes are accrued using the operating current accrual persistence, the persistence operating non-current accrual, accrual financial persistence, and accrual anomaly. Accrual is not only the components of profitability but also an investment component [32].

The study emphasized the main traits irreversible on investment decisions, sustainability, and the uncertainty in the environment where the decision is implemented. Therefore, there is added value to get better information, but this is never enough [33]. The accounting of the treatment and disclosure could affect the company information environment which will then have an impact on risk information, idiosyncratic volatility, and capital costs (cost of capital) [34].

3.2 Prospect Theory: relationships idiosyncratic risk and Financial disaster.
Prospect theory begins with Kahneman and Tversky’s research on human behavior that is considered strange and contradictory in decision making. This prospect theory can be used to ‘photograph’ the phenomenon of investor behavior, especially in the decision-making process ‘unreasonable’. This theory is used to measure the behavior of people or organizations in making decisions. The same research subjects were given the same options but were formulated differently, and they showed two different behaviors. This is referred to as risk-aversion and risk-seeking behavior. This behavior is described using the value function in the face of gain and loss. In the domain of gains investors tend to risk aversion and in the domain of losses tend to be risk seeking.

![Figure 1](image-url)

*Figure 1. Relationship Prospect Theory, Risk Preferences and Return Volatility [35]*
Prospect theory emphasizes the psychological factor that in making decisions individuals tend to focus on their prospects, the profit and loss prospects, not the total wealth. In the prospect theory, noted that the frame is adopted person can influence his decision, under conditions of uncertainty people will choose the option that produces the greatest expected utility. Attitudes facing profits will be very different from the attitude of dealing with losses. As for, which is used as a reference point in calculating profit and loss always change from time to time. This is referred to as risk-aversion and risk-seeking behavior. This behavior is described using the value function in the face of gain and loss. In the domain of gains investors tend to risk aversion and in the domain of losses tend to be risk seeking. The loss-loss function is represented by a more concave and steeper curve, while the profit function is represented in the form of a convex curve and not so steep.

Measurement of risk in this study using the idiosyncratic risk (volatility and idiosyncratic). The volatility of the company's risk is measured using the Fama-French model of five factors. Idiosyncratic volatility risk then grouped in the domain of the gain or loss by a prospect theory utility function. This function connects the risk preference, volatility, and Financial disaster. Investor psychology factors in the decision making related to the financial disaster in the prospect theory associated with risk preference. In the domain of gains, investors tend to behave risk averse, so decisions tend to select stocks with lower idiosyncratic volatility because it provides high utility. In my domain loss, investors tend to behave in a risk-seeking, so decisions tend to favor stocks with high idiosyncratic volatility because it provides high utility. Investor behavior about decision-making can be observed based on the relationship of risk preference, volatility, and Financial disaster. Investor's decision related to the Financial disaster in the prospect theory envisaged utility function.

The idiosyncratic volatility is stronger than the risk of beta or firm size [36]. Firm size is positively correlated with stock returns after controlling for idiosyncratic risk is thus the Idiosyncratic risk is one of the important variables that affect the stock price; showed lower idiosyncratic volatility would occur when the accounting information is not found, it means that the information disclosure was positively correlated with idiosyncratic risk [9]. The stock returns and the size of the company today has a positive correlation after controlling for idiosyncratic risk, indicates the size of the company, stock returns are higher [10].

The stocks of small-sized companies having high risk Idiosyncratic and high transaction costs. Arbitrage risk is a part of the stock volatility found the transient behavior of institutional investors in response to repair the role of accounting information stock price efficiency [37, 38, 39]. Lower idiosyncratic volatility and lower stock returns occur when information is not transparent accounting and investor protection worse, information disclosure is negatively correlated with risk Idiosyncratic suggest the relevance of the value of earnings and the relevance of cash flow values can affect the Idiosyncratic risk of the firm [40, 41, 42]. The external financing activities are positively associated with risk [43].

The Short-term and Long-term accruals affect the risk [44]. The accrual quality can increase or decrease stock price synchrony [45]. The examine the information content of accruals against idiosyncratic risk [46]. Idiosyncratic risk is influenced by monetary policy, characteristic factors of the company, the funding policy the company and the company's operating activities [11]. Current operating accruals are the current changes in net cash operating assets and short-term investments minus changes in current operating liabilities. Operating assets when focusing on receivables and inventories. The accounts most widely used in the manipulation of revenue through early recognition of revenue [47].

The idiosyncratic risk is negatively correlated with the size of the company [13]. For accounts inventory, managers can defer recognize or allocate costs for inventory obsolescence [48]. As such, changes in inventory and accounts receivable account is considered a low persistence and a cause mispricing with negative results [49, 50]. Publication of accounting information plays an important role in the flow of information. Transparent information will encourage investors to collect specific information. Condensed financial statements as both annual and quarterly information is an opportunity for management companies to declare the performance to all stakeholders of the company [51].

The role of the publication of information will make a choice based on a tradeoff between cost and efficiency for the acquisition of specific information. Idiosyncratic volatility occurs when investors rely on specific information. Companies with higher transparency have lower volatility. This indicates the
volatility of the company reflects more firm-specific information rather than information about the market. Companies operating activities was measured using persistence operating current accruals provide an overview to investors about changes in current assets. Changes in current assets are company-specific information involve risks and can affect the idiosyncratic risk.

The relevance of the effect of profit values (relevance incremental value) and the incremental value relevance of idiosyncratic volatility of cash flows and the effects of external financing activities, debt financing, and equity of the company at risk idiosyncratic [43]. The predicts idiosyncratic volatility using financial is examined the impact of the liberalization of the financial markets on the share price and idiosyncratic risk in emerging markets [42, 53]. A positive relationship idiosyncratic volatility of the return of shares in the Southeast Asian market [8]. Positive results can also be found in the research [53, 54].

Some studies have questioned the use of idiosyncratic volatility as a measure of market efficiency [28, 29, 55]. This study tried to examine the relationship between idiosyncratic volatility and stock prices, could not find a positive relationship. A link nonlinear between idiosyncratic volatility and stock price information has been proposed [55]. The importance of idiosyncratic volatility in a corporate decision to the attention in recent years. States with the protection of property rights are better to tend to have synchronicity return lower ultimately leads to firm-specific information is reflected in the stock price resulting in higher market efficiency. Idiosyncratic risk increases accounting transparency of a country. This suggests that the efficiency of capital allocation positively correlated with idiosyncratic risk and the return of stocks in the country. Supposedly idiosyncratic risk a key consideration in shaping Financial investor disaster.

In the perspective of prospect theory, in the domain of losses investors behave risk seeking. In the domain loss curve shape prospect theory of utility function is convexity, so the demand for stocks with high idiosyncratic volatility is greater. In conditions of equilibrium, demand a rational investor is not perfectly elastic so that the demand for stocks with high idiosyncratic volatility will be greater so that the stock price is higher. For testing, the stock was separated into groups of capital loss and capital gain (positive and negative values CG).

4. Research method

4.1 Research Design.
This study aims to test empirically the variable persistence current operating accrual, non-current operating accrual persistence, persistence financial accruals, and accrual anomaly on Financial disaster through idiosyncratic risk. Design research is research explanatory that establish causal relationships between variables.

4.2 Population and Sample.
The population is all companies listed on IDX in the period 2010-2015 recorded 154 companies. The sample in this study determined using purposive sampling, the sampling technique with consideration or certain criteria, namely: The Company was sampled company listed on the Stock Exchange in 2010-2015 without delisting. The Company is not late in issuing audited financial statements as of December 2010 to 2015.

4.3 Types and Sources of Data.
Data used in this study is a documentary data in the form of annual and quarterly financial statements of companies listed on the Indonesian Stock Exchange (BEI) in the period 2010-2015. While the source of the data used in this research is secondary data in the financial statements obtained from www.idx.co.id

4.4 Data Collection Methods.
Data collection methods used in this study is a content analysis the method of data collection and analysis techniques of observation of the content or message of a document that aims to identify the characteristics or the information in the document.
4.5. Operational Definition and Measurement of Variables.

4.5.1 Financial Disaster. We calculate the mean volatility of each time window as follows:

\[
v(t) = \frac{\sum |R_i(t)|}{N}
\]  

(2)

where \( R_i(t) = \frac{P_i(t+1) - P_i(t)}{P_i(t)} \)

(3)

Is the return on stock \( i \) at time \( t \) and \( N \) represents the total number of stocks. Besides, \( P_i(t) \) is the price of stock \( i \) at time \( t \). In other words, the parameter \( R_i(t) \) represents the natural fluctuation of stock \( i \), while the mean volatility \( v(t) \) is the fluctuation index for the whole stock market.

4.5.2 Persistence Current Operating Accrual. [56] developed from Sloan Research (1996) by connecting reliability in the measurement of accrual persistence of earnings and stock prices. [56] equation fix Total Accrual used in Sloan (1996) further describes the accrual component.

In this equation, \( CO \) translated into changes in current assets excluding cash and short-term investments (COA) minus the change in short-term liabilities excluding short-term debt (COL).

\[
[ \text{Current Assets - Cash and Short-Term Investments} ] - [ \text{Current Liabilities - Debt in Current Liabilities} ]
\]

4.5.3 Persistence of Non-Current Operating Accrual. The persistence of non-current operating accrual (NCO) is the change in non-current assets do not include investment in non-equity long-term and advances (NCOA) reduced by changes in long-term liabilities, excluding long-term debt (NCOL).

\[
[ \text{Total Assets - Current Assets - Long Term Investments and Advances} ] - [ \text{Total Liabilities - Current Liabilities - Long Term Debt} ]
\]

4.5.4 Persistence Financial Accrual. Persistence financial accrual (FIN) represents a change in short-term investments (STI) and long-term (LTI) minus the change in short-term debt, long-term debt, and preferred stock (FINL).

\[
[ \text{Long Term Investments and Advances + Short Term Investments} ] - [ \text{Long Debt in Term Debt + Current Liabilities} ]
\]

4.5.5 Accrual anomaly. Accrual and Abnormal accruals using the Jones model to estimate normal and abnormal accruals: Accruals measured by discretionary accruals (DACC) is calculated by reducing the total accruals (TACC) and nondiscretionary accruals (NDACC). In calculating the DACC, use the Modified Jones model because this model is considered to be better among other models to measure accruals [57]. In this study, total accrual to the Modified Jones Model.

\[
\text{TACC}_i = \text{EBXT}_i - \text{OCF}_i
\]

\[
\text{TACC}_{it} / \text{TA}_{i,t-1} = \alpha_1 (1 / \text{TA}_{i,t-1}) + \alpha_2 (\text{REV}_{it}) / \text{TA}_{i,t-1} + \alpha_3 (\text{PPE}_i / \text{TA}_{i,t-1})
\]

\[
\text{NDACC}_i = \alpha_1 (1 / \text{TA}_{i,t-1}) + \alpha_2 (\text{REV}_{it} - \text{REC}_{it}) / \text{TA}_{i,t-1} + \alpha_3 (\text{PPE}_i / \text{TA}_{i,t-1})
\]

\[
\text{DACC}_i = (\text{TACC}_{it} / \text{TA}_{i,t-1}) - \text{NDACC}_i
\]

\[
\text{TACC}_i = \text{Total Accrual is measured as the difference between net income before extraordinary item (EBXT) with operating cash flow (OCF)}
\]

4.5.6 Variable mediation. Idiosyncratic risk Five-factor model of Fama French [24] carried out by regressing excess return using five factors:

\[
\text{Rit} - \text{RFt} = \alpha_i + \beta_i (\text{RMT} - \text{RF}) + \gamma_i \text{HMLt} \text{SMBt} + \alpha_i + \gamma_i \text{CMA} + \epsilon
\]

(4)

1. The difference between the return of the market portfolio,
2. Difference return of a portfolio of small stocks to the portfolio return small stock large stock deductible (Small Minus Big - SMB)
3. The difference between the return of the portfolio with a ratio Book To Market (BTM) high-yielding portfolio with low BTU ratio (High Minus Low- HML)
4. RMW difference between returns on portfolio diversification and low profitability
5. CMA difference between returns lower stock portfolio diversification with a high investment company.

4.6. Data Analysis Techniques.
Based on the framework of research already cited the method chosen for data analysis in this research is path analysis (path analysis) with the help of software AMOS (Analysis of Moment Structures) version 24.

5. Result and discussion

5.1 Descriptive Statistics.
The descriptive statistical analysis used to determine the description of the study variables: the magnitude of Current Operating Accrual, Non-Accrual Current Operating, Financial Accrual, Accrual Anomaly, Idiosyncratic Risk and Financial disaster. The value seen in the descriptive statistic is the maximum, minimum, average, and standard deviation. Descriptive statistical tests in this study can be seen in table 1 below.

| Variable                        | N  | Minimum | Maximum | Mean     | Std. Deviation |
|---------------------------------|----|---------|---------|----------|----------------|
| Financial Disaster             | 448| 1.39639461 | 5.4718418 | 3.4457125370 | .774548431000000 |
| Idiosyncratic risk             | 448| -3.3311755420 | .85660416 | -1.096006371000 | .728716501000000 |
| CurrentOperatingAcc            | 448| 3.403534684 | 8.6225976 | 6.21291967600 | .885659208000000 |
| NonCurrentOperatingAcc         | 448| 3.972781608 | 9.3257476 | 6.55363474200 | .889285354000000 |
| FinancialAccrual              | 448| 3.000209497 | 8.1824141 | 5.7208979100 | .925377246000000 |
| Accrual anomaly                | 448| -3.0911 | .3540 | -9.33667 | .6482952 |
| Valid N (listwise)             | 458|         |         |         | |

5.2. Testing Assumptions for Outliers.
Outliers in the multivariate evaluation of this research are done by using chi-square on the DF (degree of freedom) produces a value of chi-square 12, 009. So, all the observations that have a greater Mahala Nobis Distance value of chi-square 12, 592 are outliers in multivariate analysis. The test results assuming overall outliers can be seen in table 2 below.

| Information | N  | outlier | Chi-square | The   | Conclusion |
|-------------|----|---------|------------|-------|------------|
| Early testing | 552| 11      | 523.0      | 22.135 | Not fulfilled |
| Remove      | 541| 6       | 535        | 12.295 | Not fulfilled |
| Remove      | 535| 11      | 505        | 11.188 | Not fulfilled |
| Remove      | 524| 33      | 524        | 10.101 | Not fulfilled |
| Remove      | 491| 18      | 520        | 9.750  | Not fulfilled |
| Remove      | 473| 12      | 518        | 9.060  | Not fulfilled |
| Remove      | 461| 2       | 516        | 8.590  | Not fulfilled |
| Modification Indices | 458| 6.078 | 282        | fulfilled |

8
5.3 Testing Modification Indices.
The purpose of this test by way of modifications to the model to pass some test tools can be a great result as a decrease in number Chi-square, an increasing number of GFI. Interest modification is to see whether modifications made to lower the Chi-square value, the smaller the chi-square value indicates the Fit models with existing data.

Table 3. Covariances: (Group number 1 - Default model)

| The combination of variables | Estimate | SE  | CR       | P   |
|-----------------------------|----------|-----|----------|-----|
| Accrual Financial           | .554     | .047| 11.891   | *** |
| Non-Current Operating/Acc   | .419     | .035| 12.094   | *** |

The table shows the results of testing modification indices result of a recommendation of the AMOS program variable operating current Financial accruals and accrual to do the modification process. Table modification test results show the value of CMIN chi-square of 6.078 with probability P value of 0.193 indicates the model FIT with the data already available. Based on table 5.3 above is known that at the time of the initial sample testing as many observations obtained with the value 3.264 observation Mahala Nobis Distance p1 and the p2 smaller probability of 0.05. Rare further is to eliminate the data based on the value Mahala Nobis distance for each observation. Once all the data you see the extreme high and low omitted from the observation based on the Mahala Nobis distance, then the rest of the sample obtained by observation as much as 457 samples. So in this study, the problem of outliers has been overcome. Based on the test has been obtained value of chi-square of 6.078 < smaller than the value of chi-square table 12.592 and normality multivariate amounting to 0.282 was less than the critical value of 1.96 ± table with a significance level of 0.05 (p-value 5%).

5.4 Testing Normality Assumption

Table 4. CM

| Model                   | NPAR | CMIN | DF | P      | CMIN / DF |
|-------------------------|------|------|----|--------|-----------|
| default models          | 23   | 6.078| 4  | .193   | 1.520     |
| saturated models        | 27   | 0.000| 0  |        |           |
| Independence models     | 12   | 2191.150| 15 | .000   | 146.077   |

Testing multivariate this research requires the fulfillment of the normality assumption. The test is performed at the time of Amos operation running. There are two tests for normality, the normality of univariate and multivariate normality. Data distribution can be considered normal if the value of CR Skewness and the value of CR kurtosis is smaller than the critical value table ± 1.96 with a 0.05 significance level (p-value 5%). The following table is a normality test results of univariate and multivariate with Amos program version 24.

5.5 Results of Testing for normality

Table 5. Assessment of normality (Group number 1)

| Variable                  | min  | max  | skew | c.r. | skew | c.r. | kurtosis | c.r. |
|---------------------------|------|------|------|------|------|------|----------|------|
| accrual anomaly           | -3.091| .354 | -.856| -7.472| .525 | 2.292|
| CurrentOperatingAcc       | 3.404| 8.623| -.004| -.037| -.019| -.082|
| FinancialAccrual          | 3.000| 8.182| .026 | -.223| -.192| -.839|
| NonCurrentOperatingAcc    | 3.973| 9.326| .182 | 1.588| -.204| -.888|
| idiosyncratic risk        | -3.726| .857 | -.386| -3.364| .037 | .159|
| Financial Disaster        | 1.396| 5.472| .175 | 1.524| -.223| -.971|
| Multivariate              |      |      |      |      | .259 | .282|
Analysis univariate in table 5 above, it is known that there is a variable that has a value of skewness and kurtosis CR is greater than the critical value of 1.96 ± table. It can be concluded that the distribution of data in univariate and multivariate was normal at the 0.05 significance level (p-value 5%). Multivariate testing is done, it is known that the CR kurtosis of 0.282 is smaller than the critical value of 1.96 ± table. Therefore, we can conclude the data distribution is multivariate normal.

Figure 2. Volatility Financial disaster

The Stock Market Disaster happened in Indonesia stock market. During this period, many stocks dropped sharply simultaneously for a long time, and this event resulted Consequently, the high fluctuation and the corresponding high volatility Financial Disaster and Idiosyncratic risk.

5.6. Testing Causality with Path Analysis
After testing the suitability of the model (Goodness of Fit Model), it can be tested against the hypothesis by using a regression model in path analysis (path analysis) to predict the relationship between exogenous and endogenous variables. Based on the results of data processing have been obtained for this research model, it can be described as a path analysis model with the following.

5.7. Effect of Mediation significance Value Calculation (Sobel Test)
The significant value of the role of variable intermediation is obtained by calculating the estimated value (estimate) and standard error (SE) of a track [58] [59] with the following formula:

\[
 z\text{-value} = \frac{a \times b}{\text{SQRT}\left(b^2 \times \text{SE}_a^2 + a^2 \times \text{SE}_b^2\right)} \tag{5}
\]

| Variable combination                          | Value estimated | Standard Error | Sobel test statistic | One-tailed probability | Two-tailed probability |
|-----------------------------------------------|-----------------|----------------|----------------------|------------------------|------------------------|
| Current Operating Accrual -> Financial disaster via Idiosyncratic Risk Risk | -0.112; 0.447   | 0.029; 0.029   | -3.74626373          | 0.00008974            | 0.00017949            |
| Non-Current Operating Accrual -> Financial Disaster via Idiosyncratic Risk | 0.105; 0.447    | 0.029; 0.029   | 3.52475147           | 0.00021194            | 0.00042388            |
| Financial Accrual -> Financial Disaster via Idiosyncratic Risk | 0.017; 0.447    | 0.028; 0.029   | 0.60667240           | 0.27203417            | 0.54406834            |
| Accrual Anomaly -> Financial Disaster via Idiosyncratic Risk | 0.822; 0.447    | 0.040; 0.029   | 12.3306620           | 0.0                     | 0.0                    |
5.8. Hypothesis Testing

Hypothesis testing is done by comparing the p-value with a significance level (alpha) of 0.05. If the p-value alpha < alpha 0, hence H0 refused and H1 accepted. Conversely, if the p-value > 0.05 alpha, H0 rejected and H1 accepted. Results of testing the hypothesis in this study are summarized in the following table.

![Figure 3. Hypothesis testing](image)

| Variable | Hypothesis | P-value |
|----------|------------|---------|
| H1. Operating Current accrual | *** | be accepted |
| H2. Operating Current accrual Financial Disaster | .874 | rejected |
| H3. Operating Current accrual Financial Disaster via Idiosyncratic Risk | 0.0008974 | be accepted |
| H4 NonCurrent operating accrual Idiosyncratic Risk | *** | be accepted |
| H5 Non Operating Current Accrual Financial Disaster | *** | be accepted |
| H6. Operating Current Non-accrual Financial Disaster via Idiosyncratic | 0.00021194 | be accepted |
| H7. Financial Accrual | .551 | rejected |
| H8. Financial Accrual Financial Disaster | .188 | rejected |
| H9. Financial Accrual Idiosyncratic Risk | 0.27203417 | rejected |
| H10. Accrual Anomaly Idiosyncratic Risk | *** | be accepted |
| H11. Accrual Anomaly | *** | be accepted |
| H12 Accrual Anomaly Financial Disaster via Idiosyncratic Risk | 0.00 | be accepted |
| Idiosyncratic Risk H13 | *** | be accepted |

6. Concluding Remarks

6.1. Conclusion

Using a sample of 94 companies listed in Indonesia Stock Exchange 2010-2015 period resulted in some conclusions as follows:

1. Persistence of current operating accrual has a negative and significant impact on the idiosyncratic risk. The results of this study correlate negatively indicates that investors view the current operating persistence accrual as changes in current assets and current liabilities are not unidirectional company-specific risk premises. The increase in operating current accrual changes being considered a specific risk reduction company. This is because the Indonesian capital market investors more trading within a short time.
2. Accrual Anomaly has a positive and significant impact on the idiosyncratic risk. Investors looked reflect accrual accounting policies and the degree of flexibility of the manager. Managers can use judgment in financial reporting to alter the financial statements to achieve certain goals and means increased the risk for investors.
3. Accrual anomaly has a positive and significant influence on idiosyncratic risk. This result is understood by the investor that the recording and recognition are done on the substance of the economy. This creates many transactions whose cash has not been received (or excluded) but has been recognized in the books to enable the emergence of revenue recognition (or expenses) that are inconsistent with cash receipts and disbursements. This raises the risk of issuer companies. Accrual anomaly has an influence on financial Disaster through idiosyncratic risk. These results found that overweighting accruals are not always followed by underweighting cash components and accrual anomalies resulting from overweighting the accrual component means that accrual hikes make investors react positively Idiosyncratic Risk has a positive and significant impact on financial Disaster.

6.2. Theoretical Implications
The theoretical implications of this study reinforce real options theory put forward by [60] and by Prospect theory [61].

6.3. Practical Implications
The practical implication of this study is to provide consideration for companies and investors about the management of management decisions that impact on investment decisions that are reflected in the financial statements. Investors can understand the idiosyncratic risk that is formed from specific company information.

6.4. Limitations of the study and future research
This study has a limitation that can be used as a reference for future research. First needs to be expanded measurement range to capture specific information company. Both make a prediction idiosyncratic risk model fit the shape of the Indonesian capital market as an emerging market. The prediction model that does not fully capture the idiosyncratic volatility of the capital markets in Indonesia. The third use of prospect theory in the context of the Indonesian capital market still require further explanation of the behavior of herding behavior in the context of the company and investors in Indonesia. The fourth use of real options theory is not entirely appropriate in connection with the management company forms which do not fully have the flexibility of investment decisions related to regulations.

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