

CHAPTER II

LITERATURE REVIEW

2.1 Literature Review

2.1.1 Behavioral Finance

Behavioral finance explains the aspects surrounding finance and investment from human perspective, where it studies psychological and sociological factors that foster the financial decision-making process in order to acknowledge the reasoning behind patterns of investors (Ricciardi & Simon, 2000). Behavioral finance is a study combination of psychology and economics to recognize how emotional and cognitive biases impact the investment decisions (Rosid et al., 2024). Behavioral finance fathoms deviations from rational decision-making model proposed by classical finance theory – such as efficient market theory – and its impact towards portfolio performance and market dynamics (Chandna, 2024). In short, behavioral finance is an important aspect of finance and investment that studies investor's investment decision through the psychological view, where it explains the shift from rational decision making in financial market.

Behavioral finance practices often show cognitive bias decisions, such as overconfidence, loss aversion, recency bias, herding, and even FOMO. Overconfidence is an overestimation of knowledge, ability, and market outcome control (Chandna, 2024). Overconfidence is an attitude of excessive self-confidence related to the extent of one's assumptions or feelings about how well they understand their abilities and the limits of their own knowledge (Pradhana, 2018). According to Ricciardi & Simon (2000), it is normal for human beings to have a tendency of overconfidence for success.

Another cognitive bias decisions apart from overconfidence are loss aversion and recency bias. Loss aversion is a tendency to avoid losses rather than gain profits (Pradhana, 2018). This bias will significantly influence investor decisions, where investors would rather be holding on losing investment longer than

rational analysis suggest, with a hope to avoid realizing a loss (Chandna, 2024). On the other hand, recency bias is an act where investors will make investment decisions by trusting more on the recent information (Alvia & Sulistiawan, 2011). Also, according to Rose & Armansyah (2022), investors will have the same view of the current market situation because the media provided by stock exchanges or investment companies tend to be the same media. Therefore, these collective practices will foster lower overall returns and misprice in the market.

Last but not least, herding behavior is also a biased decision in an investment market. It is an absence of independent decision by investors, where they are following others' decisions instead. Sibarani & Suparno (2024) argue that these investors do this behavior when they are unable to make the best decisions for themselves due to the lack of information or simply because they think others' knowledge are more superior than theirs. Besides herding, there is a similar and more recent behavior, which is known as FOMO (Fear of Missing Out). FOMO is an emotional response to the perception that others are enjoying experience, opportunity, or reward, which then create the act of following them impulsively (Idris, 2024). These behaviors usually lead to negative outcomes like emotional investing and overtrading, especially without proper financial literacy and calculation from the investors themselves.

2.1.2 Market Anomaly

Market anomaly refers to patterns or behavior in the market that couldn't be represented by Efficient Market Theory (Rosid et al., 2024). According to Michaud (1999), there are two sets of main reasons behind market anomaly. The first one is associated with market inefficiency and economic significance due to irrational investor behavior. The second one includes analytical flaws, data and interpretation issues, and result distortions. Moreover, market anomaly influences not only return patterns, but also trading activity and eventually market liquidity (Muktiyanto, 2015). In conclusion, market anomaly is a pattern that is against the Efficient

Market Theory because investors actually have a chance to gain abnormal return in the market.

Some of the most popular form of market anomaly are momentum and contrarian. According to Ren (2024), momentum is the tendency of stocks with good past performance will retain similar high return in the following period. Momentum emerged from research by Jegadeesh & Titman (1993) which provides significant evidence of momentum effects in market. Meanwhile contrarian comes from a finding by De Bondt & Thaler (1985) that in the long run, there will be a return reversal in the market. By arguing that past performance does impact the future return (momentum) and indicating the existence of behavioral bias (contrarian), both of these anomalies deny the traditional concept of market efficiency.

2.1.3 Return Reversal

De Bondt & Thaler (1985) found that the market truly experiences a behavioral pattern where it overreacts to recent information. The collective overreaction will lead to a mispricing from overrated stocks, and when stock prices deviate so far from their fundamental value, they will soon correct themselves. Hence why a return reversal is more than possible to occur. Therefore, return reversal is quite literally as it sounds, it is a situation where there is a correction from overpriced stocks. Investors who invested in those stocks expected to gain a high return, but instead these investors would gain lower returns due to the correction. Otherwise, investors who invested in underpriced stocks will gain higher returns. This is a situation where expectations and reality in the market are reversed.

Studies have proved the existence of return reversal, for instance in the U.S. REIT market, underperforming stocks significantly exceeded the return of high-performing stocks (Kowalke, 2023). Even before the 20s century, return reversal has confirmed its existence in Europe market (Brouwer et al., 1996). It doesn't stop there, return reversal also seems to exist in emerging markets with a generally

higher volatility, specifically during crisis and the down state of the market. (Munir et al., 2022).

2.1.4 Contrarian Strategy

Contrarian strategy believes that the financial market is inefficient due to the phenomenon of investors overreacting to news. This overreaction hypothesis proposed by De Bondt & Thaler (1985) still serves as the fundamental of contrarian theory, suggesting that extreme price movements, whether upward or downward, are often corrected as markets revert to the mean. Through this strategy, stocks are divided into 2 portfolios: winner and loser. Winner is the current high-performing stocks, and loser is the complete opposite. Therefore, contrarian strategy involves going against market trend to generate profits. Contrarian investors tend to look for – currently – losing stocks, and short selling the winners (Munir et al., 2022).

As for the efficiency of this strategy, there are conflicting results from many previous studies. Most studies show a clear assumption; contrarian strategy is more common in emerging market as it has higher volatility and more behavioral biases. Meanwhile in developed market, this strategy is more rarely happening because it is a strong-efficient market. A perfect finding that supports this assumption is a study by Zhang et al. (2023), where the result stated that emerging market (China) is more suitable for contrarian strategy. Meanwhile developed market (U.S.) is more suitable for momentum strategy.

2.2 Previous Research & Hypothesis Development

Table 2.1 Previous Research

Author(s)	Research Title	Result	Similar	Difference
Ali Fayyaz Munir, Mohd Edil Abd. Sukor, and Shahrin Saa'id Shahrudin (2022)	Adaptive Market Hypothesis and Time-varying Contrarian Effect: Evidence From Emerging Stock Markets of South Asia	This study investigates the effect of changed market conditions on time-varying contrarian profitability in order to examine the presence of the Adaptive Market Hypothesis (AMH) in South Asian emerging stock markets. The empirical findings reveal that a strong contrarian effect holds in all the emerging markets. It is also found that the stock return opportunities vary over	This study explores the existence of contrarian strategy in South Asia emerging markets, specifically Bangladesh, India, and Pakistan. Both studies assess the contrarian strategy in multiple market. Both studies use return data from stocks in emerging market. This study also examines the crisis period during the chosen time horizon (1998 – 1999 and	This study is also aiming for testing the presence of Adaptive Market Hypothesis (AMH). Moreover, this study doesn't compare the effectiveness of contrarian strategy in different market state (developed and emerging), it solely focuses on emerging market.

		time based on contrarian portfolios. This study shows that contrarian returns strengthen during the down state of market, higher volatility and crises periods, particularly during the Asian financial crisis. The overall findings on the time-varying contrarian returns in this study provide partial support to AMH. Another significant outcome of this study implies that investors in South Asian emerging markets, like investors in the developed markets, could not adapt to evolving market conditions. Therefore, contrarian profits	2007 – 2009). Thus, both study captures the market volatile state into the research.	
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		often exist, and persistent weak-form market inefficiencies prevail in these markets.		
Abdulrahman A. AlQuraishi (2025)	Market anomalies during COVID-19: the case of Kuwait, a GCC emerging market	This study investigates the performance of a contrarian investment strategy in Kuwait's market during the COVID-19 pandemic, focusing on the influence of pandemic-related variables on contrarian returns. The analysis reveals that the strategy produced statistically and economically significant positive returns both before and during the pandemic, with no significant differences between the two	This study investigates how well the contrarian strategy was during the Covid-19 pandemic era. This study's research scope is also coming from emerging market, which in this case is Kuwait. This study also assesses the strategy into 3 stages of time: pre-Covid, during Covid, and post-Covid. With that being said, it's confirmed that both studies are investigating the same strategy in emerging market, while also taking the	This study only uses one market as the research object, therefore there's no comparison of the contrarian strategy performance between different markets. This study uses pandemic-related variables to see how it affects contrarian strategy. Furthermore, this study also compares the analysis with the 2008 crisis, showing the differences in government interventions actually

		periods. An analysis incorporating COVID specific variables failed to explain the variation in contrarian returns. This study found that the strategy continued to deliver positive risk-adjusted returns during the pre-COVID and COVID periods. However during post-COVID period, the returns became mixed and statistically insignificant. The findings emphasize that while crises typically increase market inefficiencies, timely government interventions during COVID-19 mitigated overreactions.	same phenomenon into consideration of the research, which is Covid-19 pandemic. Both studies compare the contrarian strategy performance before, during, and after Covid-19, to witness if this pandemic truly impact investors' behavior.	stabilize the overreaction behavior.
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Krzysztof Kowalke (2023)	The effectiveness of the contrarian and momentum strategies on the US REIT market	This study is conducted to compare the effectiveness of momentum and contrarian investment strategy on the U.S. REIT market in different ranking periods. The results of the analyses conducted showed that for the three-year ranking period, the rates of return of the portfolio composed of loser REITs significantly exceeded the rates of return of the portfolio of winner REITs. This means that during this period the use of the contrarian strategy was more effective than the use of the momentum strategy. For other ranking	This study is testing the effectiveness of contrarian strategy in U.S. REIT market. In other words, this study aims to find whether there will be a reversal in the number of returns from winner and loser stocks of U.S. REIT stocks. Moreover, this study uses stocks listed in NYSE and NASDAQ. Accordingly, both studies analyze a developed stock market, which is U.S. market, specifically in NYSE index. Both studies also aim for a return reversal in this market.	The comparison in this study is not between markets, but between strategy. This study is also analyzing momentum strategy along with contrarian strategy. Besides, this study solely focuses on REIT market only. REIT itself stands for Real Estate Investment Trusts, which covers companies that have and manage property assets to generate profit. So, instead of including couple of sectors, this study limits the research into the real estate market only.
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		periods analyzed, the differences in rates of return were not statistically significant.		
Floris Laly (2025)	High-frequency momentum and contrarian strategies in U.S. blue chips	This study is testing the performance of momentum and contrarian trading strategies in a high frequency setting, with tick-by-tick data from Refinitiv (TRTH), and 288 strategies tested across 28 highly liquid U.S. blue chip stocks from 2020 – 2021. The study reveals that certain strategies actually show superior performance compared to the benchmark strategy, however after deduction of transaction cost,	Both of the studies are exploring over return reversal and whether contrarian strategy is applicable in the U.S. market. Both studies can help readers to determine which strategy can be used when it comes to investing in U.S. stocks.	Despite of conducting research on the same market, this study is limited to blue chips stocks. Blue chip stocks are large, reputable, and well-established companies that generally show stable performance. The example of blue chip stocks are Apple, Adobe, Amazon, Costco, Walt Disney, Intel, etc. These stocks obviously couldn't represent the whole market situation. Next, is the strategy method of the research, where

		turns out none can outperform the benchmark strategy. These findings suggest that sophisticated retail traders may be unable to exploit underreaction or overreaction in stock prices at high frequency.		this study uses tick-by-tick data (it captures every individual trade in the market in real-time). So this study is not analyzing monthly data, but a detailed real-time market data instead.
Iwan Kusmayadi, Djoko Suprayetno, Laila Wardani, Zainal Abidin, Muhammad Ahyar (2024)	Contrarian Strategy: Evidence of Price Reversal on Winner- Loser Portfolios	This study aims to analyze the effectiveness of the contrarian strategy by demonstrating the existence of price reversal phenomena in winner-loser stock portfolios on the Indonesia Stock Exchange (IDX). The results show that the winner and loser stock portfolios experienced price reversal in	This study is using Indonesian capital market as the research object in proving the existence of contrarian strategy. Therefore, both studies are looking for indication of return reversal in emerging market, specifically Indonesian market. Both studies also use monthly closing price from	There's no comparison in this study, as it only assesses Indonesian stock market, which means the study doesn't analyze the existence of contrarian strategy in developed market. Moreover, this study only cover data of 4 years – 3 and a half year to be exact – which doesn't

		the first month after the formation period. However, in the second and third months, the winner stock portfolio did not experience a price reversal but showed significant changes. Meanwhile, the loser stock portfolio experienced price reversals in the first, second, and third months after the formation period. Both portfolios exhibit significant differences in AAR and CAAR values, leading to the general conclusion that price reversal symmetry occurred. Such conditions present opportunities for investors or	stocks listed in IDX Composite. This study also covers data from 2020 – 2023, which shows that both studies covers the Covid-19 pandemic period.	capture the situation pre-Covid 19.
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		traders, serving as signals to make contrarian decisions buying loser stocks or selling winner stocks. This phenomenon also provides evidence of the winner-loser anomaly in the Indonesian capital market.		
Hajar El Merbouh, Sıtkı Sönmezer (2023)	The Profitability of Contrarian and Momentum Strategies: Evidence from Emergent Markets	This study evaluates the presence of the momentum and the contrarian strategies in the Brazilian and Istanbul stock exchanges and aim to assess which of the strategies is most profitable for the investors. The findings of the empirical study have shown the effective existence of the momentum strategy and the	Apart from the fact that both journals are testing the existence and effectiveness of contrarian strategy, both studies also conduct the research in two different markets. To be specific, both studies are conducted in American and Asian stock market. Not only that, but both studies altogether use	This study doesn't solely explore contrarian strategy, but also momentum strategy. Besides that, this study was conducted in different markets (Brazil and Istanbul) where both countries are coming from emerging markets.

		contrarian strategy in selected stock markets. Also, the findings demonstrate that momentum strategies are ideal for generating a maximum positive return in the long term in BIST 100, while the contrarian strategies are more exhibited in the short term for BOVESPA and the long-term trend.	monthly return from respective markets as the research data.	
Zhehao Zhang, Ruina Xing, Jiajun Liu, Yifei Shao (2023)	Correlation-based investment strategies: A comparison between Chinese and US stock markets	This study explores the feasibility of correlation-based investment strategies in the Chinese and US stock markets. The investment strategies are investigated under two stock selection methods and three portfolio	This study is comparing the potency of contrarian strategy in both U.S. and China market. This means that both studies are investigating and comparing contrarian strategy in emerging and developed markets simultaneously. This	This study however doesn't evaluate the contrarian strategy in Indonesian Market. Even though both Indonesia and China are emerging markets in Asia, still they have different economy scales and market

		construction methods, and SSCI and S&P500 Index are chosen as benchmarks respectively. The study then resulted in contrarian strategy performing better in Chinese stock market, while momentum strategy performing better in U.S. market. The results show that correlation-based investment strategy is more feasible in the Chinese stock market than in the U.S., and the U.S. stock market exhibits a stronger form of efficiency than the Chinese stock market.	is a distinct similarity between both studies, where there is a comparison between two vastly different markets (developed and emerging) regarding the same strategy, contrarian investment strategy.	capitalization. Moreover, this study also conducts research based on correlations. For instance, the stocks selection is based on correlation of returns and volatility. Lastly, this study also seeks for momentum strategy efficacy in the same markets.
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Luis Berggrun, Emilio Cardona, Edmundo Lizarzaburu (2025)	Return reversal of Latin American industries	This study analyzes inter-industry reversal, or whether loser or underperforming industries yield higher returns than winner or outperforming industries in Latin America. This study also investigates intra-industry reversal by assessing whether loser stocks outperform winner stocks within the same industry. The analysis is then extended to market segments defined by stock characteristics. As for the result, it has been proven that no evidence of inter-industry reversal for the whole market or for specific market	This study explores the return reversal phenomenon in industries specifically in Latin American. Therefore, it is safe to say that both studies are aiming for the same thing, to assess whether there is a reversal of return between winner and loser stocks, which then be the fundamental of contrarian investment strategy.	There is no comparison in this study as it solely limited to Latin American market. There is no differentiation between developed and emerging markets in this study. Furthermore, this study is analyzing industry instead of individual stocks. This means the portfolio in this study consists of industries (a collection of multiple stocks).
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		segments was found. Moreover, in both the entire market and certain segments, a contrarian intra-industry reversal strategy does not yield profits. Overall, investors in Latin American industries would have been unable to profit from exploiting return reversion across and within industries in the region.		
Jessica Willa Wiranata, Anastasia Sri Mendari (2021)	Abnormal Return Analysis on Winner – Loser Portfolio on Companies Listed in Kompas 100 index	This study aims to analyze whether there is a difference in abnormal return average of stock portfolios in winner and loser categories during two different periods namely formation and testing periods	This study is analyzing the root of contrarian strategy – which is return reversal – in Indonesian market. It shows that both studies go into the existence of contrarian strategy in Indonesian	This study however gives no comparison between emerging and developed market, as it only focuses on Indonesian market. This study is also limited to the stocks under Kompas 100

		to test winner-loser anomaly occurrence. As a result, either winner and loser stocks display a significant difference in average abnormal return during formation period and testing period. The significant difference indicates return reversal in the market as a sign of overreaction.	market. Both studies also divide stocks into 2 portfolios, winner and loser.	index, which is an index measuring the performance of 100 highly liquid and huge market capitalization stocks. This obviously isn't the same with all stocks under IHSG.
Eka Radiyanti, Sri Hasnawati (2024)	Overreaction Hypothesis Analysis on Stock Prices (Study of Manufacturing Companies Listed in Indonesian Stock	This study explores to see if there is an overreaction hypothesis on stock prices on the Indonesia Stock Exchange. The results of the study show that winner and loser stocks have experienced several reversals, but these	This study investigates whether (manufacturing) stocks in Indonesian Stock Exchange do experience return reversal. Hence, both of the studies are exploring contrarian strategy efficacy in Indonesian market, by	This study solely limited to the manufacturing sector in Indonesia. Therefore, it doesn't represent the whole market, because other sectors are excluded. Furthermore, this study also doesn't provide any comparison. It

	Exchange in 2018 – 2022)	symptoms cannot be proven statistically. As a result, there is no overreaction hypothesis for manufacturing companies registered on the Indonesia Stock Exchange between 2018 and 2022. With that being said, the contrarian strategy isn't applicable and quite risky in this market.	analyzing the indication of overreaction in Indonesian investors. Both studies gives readers an understanding to strategy application when it comes to investing in Indonesian stocks (specifically manufacturing).	only analyzes one market only, which is Indonesia (emerging market).
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Source: Multiple sources (2026)

These researches are studying the same thing, which is the existence of return reversal or abnormal return that becomes fundamental for contrarian investment strategy. This indicates that these researches are aiming to see whether the loser stocks can actually outperform the winner stocks. These researches are studying many markets as the object, some of them are studying developed market which tends to have more stable volatility, higher efficiency, and more institutional investors. With these characteristics, abnormal return seems to have lower chance to appear. It is consistent with some findings stated that there is no reversals in U.S. market (as a representative of developed market), and even if there is reversal, it is not significant nor profitable, so strategy like momentum strategy is more compatible in this market (Berggrun et al., 2025; Laly, 2025; Zhang et al., 2023). Based on these findings from previous studies, a hypothesis can be constructed as follows:

(H1): Contrarian strategy is not effective in U.S. stock market

Apart from U.S. market, most of these researches are also conducted in emerging markets, with the same objective; to identify whether there is a reversed return between winner and loser stocks so that it is known whether contrarian strategy can be implemented or no. Munir et al. (2022) confirms the existence of contrarian strategy in Pakistan, India, and Bangladesh markets, especially during crisis time with extreme volatility. Findings by AlQuraishi (2025) also support this, because during Covid-19 pandemic, Kuwait market proved the contrarian effect. Studies in another emerging markets, such as Brazil and China, also resulted that contrarian strategy is suitable for this type of market (Merbouh & Sonmezer, 2023; Zhang et al., 2023). Furthermore, as emerging market, Indonesian stocks also indicate a return reversal between winner and loser (Kusmayadi et al., 2024; Wiranata & Mendari, 2021). Based on these findings from previous studies, a hypothesis can be constructed as follows:

(H2): Contrarian strategy is effective in Indonesian stock market

Some studies didn't focus on one market at one research but also conduct it in separate markets to show a comparison of how market anomalies can be optimized to gain profits through the selection of the proper strategy. For instance, Munir et al. (2022) compares between Pakistan, India, and Bangladesh markets, and contrarian effect exists in all three markets; Merbouh & Sonmezer (2023) compares between Brazil and Istanbul markets, where contrarian is suitable for Brazil market, and momentum is suitable for Istanbul market; meanwhile Zhang et al. (2023) compares between U.S. and China markets, and resulted in China being more compatible for contrarian strategy, and U.S. more compatible for momentum strategy. Therefore, based on these findings from previous studies, along with the usage of U.S. as a representation of developed market and Indonesia as a representation of emerging market, a hypothesis can be constructed as follows:

(H3): There is a difference in effectiveness of contrarian strategy between U.S. and Indonesian Markets

2.3 Conceptual Framework

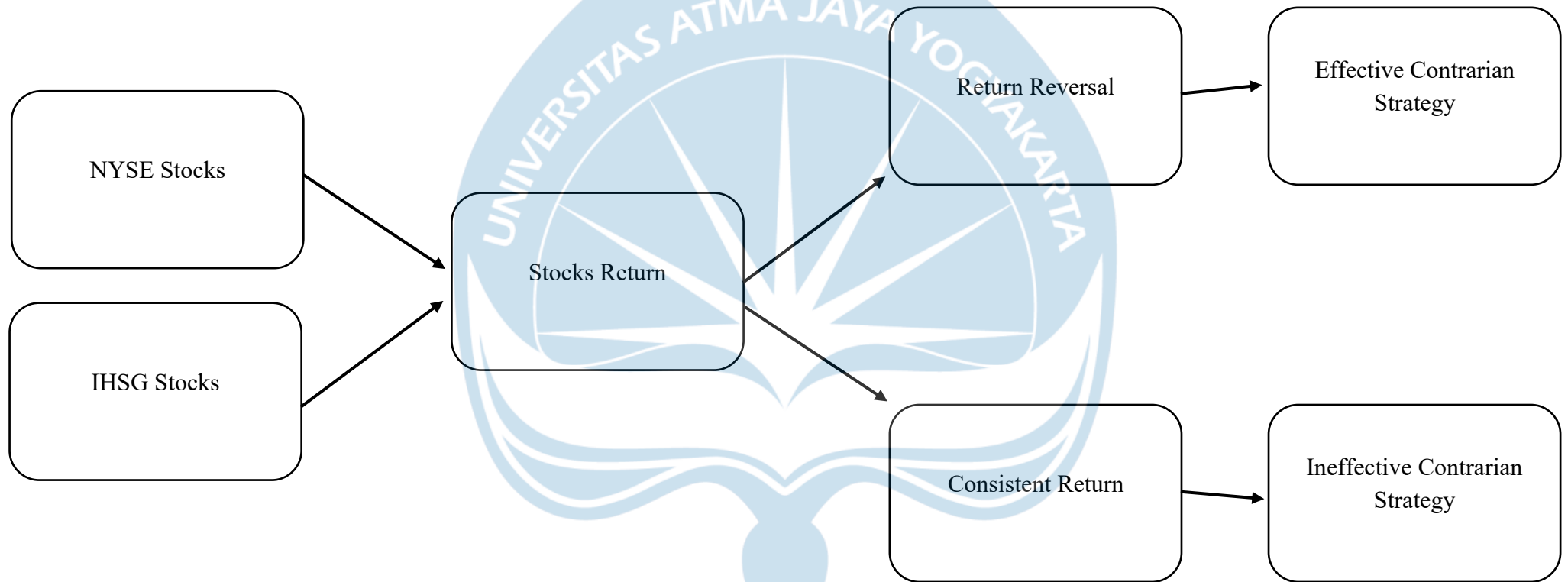


Figure 2.1 Conceptual Framework