"THEORETICAL FRAMEWORK ON EMERGING MARKET INVESTING - MULTI-ASSET GRANULAR AND DYNAMIC PORTFOLIO APPROACH"

Abstract Authors

"No one can beat the market all the time. Multi-asset strategies provide an instrument that satisfies the need for asset allocation by all investors, particularly long-term investors. This is precisely where the fundamental value-add of investment managers comes in. Multi-Asset Strategies: The Future of Investment Management examines the overall theory and practices of multiasset investing, providing investment managers with an invaluable reference." Hong Lei Chairman, Asset Management Association of China "Larry Cao has brought together top-flight investment professionals with a diverse approach to multi-asset class management. As a global asset allocator, I very much appreciate the mosaic approach of Multi-Asset Strategies. Without doubt, this book leaves the reader with a holistic view of best practice in the field."

Robert Browne, CFA CIO, Northern Trust Hong Lei Chairman, Asset Management Association of China. This research report provides an in-depth analysis of emerging market investing using a multiasset granular and dynamic portfolio approach. Emerging markets offer attractive investment opportunities but are also associated with higher risk and volatility. Therefore, a comprehensive and adaptive investment strategy is crucial to maximize returns while managing risks (Pierpaolo Grippa and Lucyna Gornicka, 2016). This report explores the benefits, challenges, and key considerations of implementing a multi-asset approach in emerging market investing. It also examines the importance of granularity in portfolio construction and the significance of dynamically adjusting allocations based on market conditions.

Keyword: market investment, Portfolio, multiple assets, risk factors.

Dr. Pradeep Mitra
Professor & Associate Dean
Department of MMS Finance
Vivekananda Education Society's
Institute of Management Studies
& Research
pradip.mitra@ves.ac.in

Dr. Neetu Bhardwaz SharmaAssistant Professor
Department of PGDM Finance
Vivekanand Business School
neetu.bhardwaz@ves.ac.in

I. INTRODUCTION

Emerging market investing has gained significant attention in recent years due to the potential for high returns and diversification benefits Josh (DavisGrace (Tiantian) QiuGerman RamirezHelen GuoDing LiZhihui Yap 2022). Emerging markets encompass economies that are in the process of rapid industrialization and growth, exhibiting characteristics such as expanding middle classes, increasing urbanization, and favorable demographics. These markets present unique investment opportunities across various sectors, including technology, consumer goods, energy, and finance.

- 1. The Objective of this Research Report: To explore the multi-asset granular and dynamic portfolio approach in emerging market investing. By combining multiple asset classes and adopting a granular approach, investors can diversify their portfolios and capture specific opportunities within emerging markets. Additionally, the report aims to highlight the importance of dynamically adjusting portfolio allocations to navigate the ever-changing market conditions and effectively manage risks.
- 2. Growth Potential and Investment Opportunities: Emerging markets offer compelling growth potential due to several factors, including favorable demographics, expanding consumer markets, and untapped resources (Amundi 2019). These markets often experience higher economic growth rates compared to developed economies, presenting attractive investment opportunities across various sectors. Sectors such as technology, consumer goods, infrastructure, and healthcare are particularly promising in emerging markets.
- 3. Risk Factors and Challenges Associated with Emerging Market Investments: While emerging markets offer enticing opportunities, they also come with inherent risks and challenges. Some of the key risk factors include political instability, regulatory uncertainties, currency volatility, liquidity constraints, and inadequate infrastructure. Investors need to be aware of these risks and implement risk management strategies to mitigate potential downsides associated with investing in emerging markets.

Moreover, emerging markets are susceptible to global macroeconomic factors, such as changes in interest rates, trade policies, and commodity prices. These external factors can significantly impact the performance and stability of emerging market investments, making it crucial to closely monitor and adapt investment strategies accordingly.

Understanding the opportunities and challenges of emerging markets sets the foundation for implementing a multi-asset granular and dynamic portfolio approach. The subsequent sections of this research report will delve into the specific strategies and considerations involved in adopting this approach to maximize returns while effectively managing risks in emerging market investments.

Multi-asset investment strategies involve diversifying investments across multiple asset classes to achieve a balance between risk and return. By spreading investments across different asset classes, such as stocks, bonds, commodities, real estate, and

alternative investments, investors can potentially reduce risk and enhance returns (Hensel, Chris R., D. Don Ezra, and John H. Ilkiw1991).

II. HERE ARE THE KEY POINTS TO CONSIDER REGARDING THE APPLICATION OF A MULTI-ASSET GRANULAR PORTFOLIO APPROACH:

- 1. Overview of a Multi-Asset Investment Strategy: A multi-asset investment strategy involves constructing a portfolio that combines various asset classes based on the investor's risk tolerance, investment goals, and time horizon. The goal is to achieve optimal risk-adjusted returns by diversifying across different asset classes that have historically exhibited low correlation with each other.
- 2. Benefits of Diversification Across Asset Classes: Diversification is a fundamental principle in investing. By including assets with different risk and return characteristics in a portfolio, the overall risk can be reduced without sacrificing potential returns. Asset classes tend to perform differently under different economic conditions, so diversification across asset classes helps mitigate the impact of market volatility and specific risks associated with individual investments.
- 3. Importance of Granularity in Emerging Market Investments: Emerging markets can offer attractive investment opportunities, but they also carry higher levels of risk compared to developed markets. Granularity refers to the ability to diversify investments within specific markets or sectors. In emerging markets, it becomes crucial to allocate investments across different countries, industries, or specific companies to spread risk and capture potential growth opportunities while mitigating country-specific or sector-specific risks.
- 4. Asset allocation considerations in a multi-asset portfolio: Asset allocation is a critical aspect of multi-asset portfolio construction. It involves determining the appropriate mix of asset classes based on factors such as risk tolerance, return objectives, investment horizon, and market conditions. Factors to consider when allocating assets include historical performance, correlation between asset classes, market trends, economic indicators, and fundamental analysis (Bodie Z and Brière M, 2014)

The allocation decision should be based on a thorough understanding of the investor's risk appetite and financial goals. For example, a more conservative investor may allocate a larger portion of their portfolio to fixed-income assets like bonds, while an aggressive investor may allocate a higher percentage to equities. Other factors to consider include liquidity needs, tax implications, and potential currency risks.

In summary, a multi-asset granular portfolio approach allows investors to diversify across different asset classes, reducing risk and potentially enhancing returns. The granularity becomes especially important in emerging market investments to diversify risks within specific markets or sectors. Careful asset allocation considerations should be made to align the portfolio with the investor's risk tolerance and investment objectives.

- 5. Dynamic Portfolio Management in Emerging Markets: Dynamic portfolio management in emerging markets is crucial due to the unique characteristics and risks associated with these markets. The need for dynamic portfolio adjustments arises from the dynamic nature of emerging markets, including frequent changes in economic and political conditions, regulatory environments, and market sentiments. Here are some key points related to dynamic portfolio management in emerging markets:
- **6.** Market Timing and Tactical Asset Allocation: Dynamic portfolio management involves making adjustments to asset allocation based on market conditions and opportunities. Market timing refers to the practice of adjusting the allocation of assets in anticipation of market movements. Tactical asset allocation involves actively shifting the allocation of assets based on short-term market trends and opportunities.
- 7. Key Factors Influencing Dynamic Portfolio Management: Several factors influence dynamic portfolio management in emerging markets (Brinson Gary P., Brian D. Singer, and Gilbert L. Beebower.1991). These factors include macroeconomic indicators, political stability, regulatory changes, currency risks, liquidity conditions, and market sentiments. Portfolio managers need to continuously monitor and assess these factors to make informed decisions regarding portfolio adjustments.
- **8. Risk Management Techniques in Dynamic Portfolios:** Dynamic portfolio management in emerging markets requires effective risk management techniques. These techniques may include diversification across asset classes and geographic regions, active monitoring of portfolio exposures, stress testing, and the use of derivative instruments for hedging purposes. Risk management is crucial to mitigate the specific risks associated with emerging markets, such as currency fluctuations, political instability, and liquidity risks.
- 9. Implementing the Multi-Asset Granular and Dynamic Approach: Implementing a multi-asset granular and dynamic approach involves constructing portfolios that encompass a diverse range of asset classes and adopting a dynamic investment strategy. Here are some key aspects related to implementing this approach:
- 10. Portfolio Construction Methodologies: The multi-asset granular and dynamic approach requires a systematic and structured process for constructing portfolios. This involves identifying suitable asset classes, determining their weightings based on risk-return considerations, and setting target allocations. Modern portfolio theory and optimization techniques can be employed to create efficient portfolios that maximize returns for a given level of risk.
- 11. Selection Criteria for Individual Investments: When implementing a multi-asset approach, careful consideration is given to selecting individual investments within each asset class. Selection criteria may include fundamental analysis, valuation metrics, historical performance, risk factors, and qualitative assessments. The goal is to identify investments that align with the portfolio's objectives and contribute to its overall diversification and risk-return profile See (Pascal Blanqué P and Mortier V 2019).
- 12. Performance Evaluation and Benchmarking: To assess the effectiveness of the multi-asset granular and dynamic approach, performance evaluation and benchmarking are

essential. Performance metrics, such as risk-adjusted returns, portfolio volatility, and tracking error, are used to measure the portfolio's performance against a benchmark index or a set of predetermined targets. Regular evaluation allows portfolio managers to identify areas for improvement and make necessary adjustments to enhance portfolio performance.

Overall, implementing a multi-asset granular and dynamic approach involves constructing portfolios that are well-diversified across asset classes and continuously adjusting the asset allocation based on market conditions. This approach aims to optimize risk-adjusted returns and adapt to changing market dynamics in order to meet investment objectives.

- 13. Implementing the Multi-Asset Granular and Dynamic Approach requires careful consideration of portfolio construction methodologies, selection criteria for individual investments, and performance evaluation and benchmarking. Here's an overview of each aspect:
- **14. Portfolio Construction Methodologies:** The Multi-Asset Granular and Dynamic Approach aims to build a diversified portfolio across multiple asset classes while considering the dynamic nature of market conditions. Some common methodologies used in this approach include:
 - Asset Allocation: Determine the optimal allocation of assets across different asset classes (e.g., equities, fixed income, commodities, real estate) based on risk-return objectives and market conditions. This can be done using quantitative models, fundamental analysis, or a combination of both.
 - **Risk Management:** Implement risk management techniques to control portfolio volatility and downside risk. This may involve diversification, hedging strategies, or incorporating risk models and scenario analysis.
 - Tactical Asset Allocation: Make strategic adjustments to asset allocation based on short-term market outlook or opportunities. This could involve overweighting or underweighting certain asset classes based on market trends, valuations, or other factors.
- **15. Selection Criteria for Individual Investments:** To implement the Multi-Asset Granular and Dynamic Approach, specific selection criteria should be established for individual investments within each asset class. Some common criteria include:
 - Fundamental Analysis: Evaluate the financial health, growth prospects, competitive positioning, and valuation of individual companies or assets. This may involve analyzing financial statements, industry trends, management quality, and conducting company-specific research.

- Quantitative Analysis: Utilize quantitative models and techniques to assess investment opportunities. This may include factors such as historical performance, valuation metrics, earnings growth, or other quantitative indicators.
- **Risk-Return Profile:** Consider the risk-return characteristics of individual investments. Assess factors such as volatility, liquidity, credit quality, and correlation with other holdings to ensure proper diversification and alignment with portfolio objectives.
- **16. Performance Evaluation and Benchmarking:** To evaluate the performance of a Multi-Asset Granular and Dynamic portfolio, it is essential to establish relevant benchmarks and performance evaluation methods. Some considerations include:
 - **Benchmark Selection:** Choose appropriate benchmarks that reflect the asset allocation and investment strategies employed in the portfolio. For example, a broadbased market index, a blended index, or a custom benchmark tailored to the portfolio's unique characteristics.
 - **Performance Measurement:** Calculate portfolio returns, risk-adjusted performance metrics (e.g., Sharpe ratio, information ratio), and other relevant indicators such as tracking error, draw downs, and portfolio attribution.
 - **Regular Monitoring:** Continuously monitor and review the portfolio's performance against the benchmarks and objectives. Identify areas of outperformance or underperformance and assess the effectiveness of the portfolio construction methodologies and investment selection criteria.
 - Performance Attribution: Analyze the sources of portfolio performance, such as asset allocation decisions, security selection, or market timing. This helps identify the drivers of returns and provides insights for future decision-making(Gary P. Brinson, Randolph Hood, and Gilbert L. Bee bower 1986)

III. EXAMPLES

By implementing these portfolio construction methodologies, selection criteria, and performance evaluation techniques, you can effectively apply the Multi-Asset Granular and Dynamic Approach to investment management. It is important to adapt these approaches to your specific investment objectives, risk tolerance, and market conditions. To illustrate the application of the multi-asset granular and dynamic approach in emerging market investing, one could consider hypothetical case studies based on past market scenarios. These case studies would involve analyzing the performance of diversified portfolios in different emerging markets and how the granular and dynamic approach could potentially enhance returns or mitigate risks (Lee, Wai 2011)

For example, a case study might focus on a diversified portfolio in an emerging market with exposure to equities, bonds, and commodities. By conducting rigorous research and analysis, the portfolio manager identifies specific stocks, bonds, and commodities that

show promising growth potential. Over time, the portfolio manager actively adjusts the allocation based on changing market conditions and regularly reviews the individual assets to ensure they continue to meet the investment thesis.

IV. COMPARISON WITH TRADITIONAL APPROACHES

When comparing the performance of the multi-asset granular and dynamic approach with traditional approaches in emerging market investing, several factors come into play. Traditional approaches often involve broader market exposure through index funds or passive strategies. While these approaches offer simplicity and lower costs, they may not take advantage of specific investment opportunities or adapt to changing market conditions as actively managed strategies can.

The multi-asset granular and dynamic approach aims to generate alpha by actively selecting assets and adjusting the portfolio allocation. This approach may provide the potential for outperforming traditional approaches during favourable market conditions or when certain sectors or industries within emerging markets are performing well. However, it is important to note that active management also introduces the risk of underperformance if the portfolio manager's decisions do not align with market movements.

To evaluate the performance of the multi-asset granular and dynamic approach against traditional approaches, various metrics such as risk-adjusted returns, volatility, and correlation analysis would be necessary(Rockafellar, R.T., and S. Uryasev. 2000)Additionally, it's crucial to consider the time horizon, market cycles, and the specific emerging markets under examination.

In practice, the performance comparison between different investment approaches can vary depending on the specific market conditions, the skill and expertise of the portfolio manager, and the overall investment strategy employed. Conducting a comprehensive analysis and reviewing historical data, case studies, and research reports from reputable sources would provide a more accurate and reliable assessment of the performance comparison.

V. CONCLUSION

The research on emerging market investing has highlighted the importance of adopting a multi-asset granular and dynamic portfolio approach. This approach takes into account the unique characteristics and risks associated with investing in emerging markets, and seek to optimize returns while managing risks effectively.

1. Key Findings:

• **Diversification:** A granular portfolio approach allows investors to diversify their investments across a wide range of emerging market assets, such as stocks, bonds, commodities, and currencies. This diversification helps mitigate the impact of individual asset volatility and improves overall portfolio stability.

- **Risk Management:** By employing a dynamic portfolio strategy, investors can actively manage their exposure to different emerging market sectors and countries based on changing market conditions. This helps in reducing potential losses during market downturns and capitalizing on opportunities during upturns.
- Research and Due Diligence: Granular portfolio management requires in-depth research and due diligence to identify attractive investment opportunities within emerging markets. This involves analyzing economic indicators, political stability, regulatory frameworks, and company fundamentals to make informed investment decisions.

2. Recommendations for Investors and Fund Managers:

- **Embrace Granularity:** Investors and fund managers should embrace the granular portfolio approach to optimize their exposure to emerging markets. By diversifying across multiple assets and sectors, they can capture the potential upside while managing downside risks effectively.
- **Regular Review and Rebalancing:** Regularly review and rebalance the portfolio to align with the changing dynamics of emerging markets. This involves assessing the performance of individual assets, analyzing market trends, and adjusting the portfolio composition accordingly.
- Access to Research and Expertise: Investors and fund managers should have access to comprehensive research and expert insights on emerging markets. This can be achieved through partnerships with research providers, hiring experienced analysts, or leveraging the expertise of investment professionals.

3. Future Prospects and Potential Areas for Further Research:

- **Impact of Geopolitical Factors:** Further research can explore the impact of geopolitical factors, such as trade tensions, political instability, and regional conflicts, on the performance of granular portfolios in emerging markets.
- Sustainable Investing: Investigate the integration of environmental, social, and governance (ESG) factors into granular portfolio management in emerging markets. This would analyze the potential benefits and challenges of incorporating sustainability considerations in investment decision-making.
- **Technology and Innovation:** Explore the role of technology and innovation in enhancing the granular portfolio approach. This could include evaluating the impact of emerging technologies, such as artificial intelligence and block chain, on portfolio optimization and risk management.

REFERENCE

- [1] "Investing with External Managers, The 20 year review", Norges Bank Investment Management, April 2020.
- [2] "Determinants of Portfolio Performance," by Gary P. Brinson, Randolph Hood, and Gilbert L. Beebower, Financial Analysts Journal, July/ August 1986.
- [3] See Pola G, "Managing Uncertainty with DAMS, Asset Segmentation in Response to Macroeconomic Changes", Amundi Working Paper WP-034, May 2013.
- [4] Bodie Z and Brière M, "Sovereign Wealth and Risk Management: a Framework for Optimal Asset Allocation of Sovereign Wealth", Journal of Investment Management, Q1 2014.
- [5] In particular, see Pola G and Tazé-Bernard E, "Asset allocation in a context of falling oil prices: the case of institutions in commodity exporting countries", Amundi Cross-Asset Special Focus, January 2015.
- [6] See Blanqué P "The road back to the 70's, Implications for Investors", Amundi CIO Insights, Spring 2019 and "Covid-19 the invisible hand pointing investors down the road to the '70s", May 2020.
- [7] See Pascal Blanqué P and Mortier V, "How investors should deal with the liquidity dilemma", Amundi CIO Insights, February 2019
- [8] "Traditional and Alternative Factors in Investment Grade Corporate Bond Investing", Amundi Working Paper WP-78-2018, February 2019.
 Arnott, Robert D., and Ronald J. Ryan. "The Death of the Risk Premium", The Journal of Portfolio Management 27, no. 3 (2001): 61–74.
- [9] Arnott, Robert D., and Peter L. Bernstein. "What Risk Premium is 'Normal'?", Financial Analyst Journal 58, no.2 (2002): 64–85.
- [10] First Sentier Investors. (2012a). Integrated Approach to ALM, Risk Budgeting and Alpha. First Sentier Investors (2012b). Inflation-Linked Investment Objectives with Liquid Asset Portfolios.
- [11] Brinson, Gary P., L. Randolph Hood, and Gilbert L. Beebower. "Determinants of Portfolio Performance" Financial Analysts Journal 42, no. 4 (1986): 39–44.
- [12] Brinson Gary P., Brian D. Singer, and Gilbert L. Beebower. "Determinants of Portfolio Performance II: An Update", Financial Analysts Journal 47, no. 3 (1991): 40–48.
- [13] Hensel, Chris R., D. Don Ezra, and John H. Ilkiw. "The Importance of the AssetAllocation Decision", Financial Analysts Journal 47, no. 4 (1991): 65–72.
- [14] Ibbotson, Roger G., and Paul D. Kaplan. "Does Asset Allocation Policy Explain 40, 90, or 100 Percent of Performance", Financial Analysts Journal 56, no. 1 (2000): 26–33.
- [15] Ibbotson, Roger G. "The Importance of Asset Allocation," Financial Analysts Journal 66, no. 2 (2010): 18–20.
- [16] Kritzman, Mark. "Are Optimizers Error Maximizers?" The Journal of Portfolio
- [17] Management 32, no. 4 (2006): 66-69.
- [18] Lee, Wai. "Risk-Based Asset Allocation: A New Answer to an Old Question?" The Journal of Portfolio Management 37, no. 4 (2011): 11–28.
- [19] Rockafellar, R.T., and S. Uryasev. "Optimization of Conditional Value at Risk", Journal of Risk 2, no. 3 (2000): 21–41.
- [20] Rockafellar, R.T., and S. Uryasev. "Conditional Value at Risk for General Loss Distributions", Journal of Banking and Finance 26 (2002): 1443–1471.
- [21] Xiong James X., Roger G. Ibbotson, Thomas Idzorek, and Peng Chen. "The Equal Importance of Asset Allocation and Active Management," Financial Analysts Journal 66, no. 2, (2010): 22–30
- [22] Josh DavisGrace (Tiantian) QiuGerman RamirezHelen GuoDing LiZhihui Yap The Journal of Portfolio Management Emerging Markets 2022, 48 (8) 25 43DOI
- [23] 10.3905/jpm.2022.1.355IMF Working PaperMonetary and Capital Markets DepartmentMEASURING CONCENTRATION RISK - A PARTIAL PORTFOLIO APPROACHPrepared by PierpaoloGrippa and Lucyna Gornicka1Authorized for distribution by Michaela ErbenovaAugust 2016