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# **AN EXPERIMENTAL STUDY OF INFLUENCE PORTFOLIO DIVERSIFICATION ON INVESTMENT STRATEGIES IN IRAQI E-SERVICE FINANCIAL COMPANIES**

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## **Abstract**

This experimental study examines the impact of portfolio diversification on investment strategies in Iraqi e-service financial companies, highlighting its role as a fundamental step in achieving high-risk-adjusted returns. Portfolio diversification involves combining assets moving in opposing directions, reducing unsystematic risk. The study explores the relationship between investment strategies and portfolio diversification, emphasizing how diversification influences various strategies.

The study comprehensively explains how diversification enhances investment strategies by analyzing portfolio diversification theory. It underscores its role in improving risk management and balancing risk and return. Using empirical studies and diverse sources, the research demonstrates that diversification is not merely an additional option but a core component of building effective investment strategies, especially within Iraq's challenging economic environment.

The findings reveal a positive relationship between portfolio diversification and investment strategies. Diversification contributes to stabilizing returns and minimizing unsystematic risks, thus enabling companies to navigate economic fluctuations better. Consequently, the research recommends adopting diversification as an integral element of investment planning for Iraqi e-service financial companies to ensure sustainability and investment stability.

In conclusion, the study highlights the positive impact of diversification on enhancing investment performance in the Iraqi context, affirming its necessity as a central aspect of investment policies and strategies to address challenges and achieve growth objectives.

## **Introduction**

Diversification is the most straightforward step an investor can take to maximize their chances for attractive risk-adjusted returns. Diversified portfolios combine assets that tend to move in opposing directions to one another, reducing unsystematic risk. As a result of this methodology, many methods—simple and complex, high-risk and low-risk—argue that their investment strategy is risk-protected simply by being diversified. This extended essay answers: "Is a portfolio diversified, and is portfolio diversification necessary or adequate, depending on the investment strategy followed?"

As devising an optimal investment strategy and policy is the cornerstone of investment planning, this essay analyzes the portfolio diversification theory. Thus, it will form a structured and coherent case rather than taking the form of a narrative. It will summarize the portfolio and portfolio diversification strategies and explore their relationship. This analysis will determine whether the two ideas sit on a continuous spectrum or if one is merely another name for the other. This will be achieved by investigating and critiquing different investment strategies and identifying their core beliefs and methodology. Once the foundation is laid, the essay will move on to determining whether or not portfolio diversification is indeed necessary. It will apply several sources and empirical studies to provide a comprehensive response. (Leiblein et al.2022)(Khan et al., 2023)(Murmann & Vogt, 2023).

### **A. Understanding Portfolio Diversification**

Ownership of investment assets is a common and recognized phenomenon, while the loss of value of the asset owned as a result of uncertainties is a disconcerting issue. Like any other investment strategy, investment management in the stock market involves much uncertainty. Diversification is a risk management strategy that spreads investment between different securities, industry sectors, or geographical regions in the financial market. There may be systematic or unsystematic risk in the stock market in the diversified portfolio; as the number of securities in the diversified portfolio is substantially large, the unsystematic risk will be reduced by limiting the minimal possible result of events from diversified securities. Henceforth, diversification is necessary for investors of different categories, including small, medium, or large, with different fund sizes.

Diversification is hedging against risk and spreading out investments. It is widely accepted as a central tenet of sound investment policy and strategy. In the absence of diversification, concentrated positions lead directly to avoidable volatility at both the security and portfolio levels and may result in substantial declines in net asset values. Diversification strategy aims to achieve an optimal expected return for a given level of risk, the rate of return that will compensate investors for their assumption of incremental risk. Diversification significantly reduces the investment risk resulting from variability in individual asset returns by reducing unsystematic or specific risk. More significant variability means a greater probability of significant losses, and the investor will demand a higher risk premium for bearing this additional risk. Diversification could be called a risk management or risk reduction strategy. It is the process of allocating capital in a way that reduces the exposure to any one particular asset or risk. (Koumou, 2020)(Owan et al., 2020).

#### **1) Definition and Importance**

Diversification is a risk management technique that involves varying the components of an investor's portfolio. These can include a mix of industry, investment type, size, and asset class, among other factors. By holding investments with different risk levels in different areas, the investor aims to benefit from their performance while minimizing risk. This means that when one portfolio portion decreases or underperforms, the rest can help offset total losses. This technique offers a long-term perspective for growth while managing and limiting losses during shorter-term market volatility. A diversified portfolio includes investments in

various categories to help protect against market fluctuations. For example, investors can divide investments into stocks, bonds, real estate, and cash. In addition, they can also diversify the stocks in their portfolio by encompassing large-cap, mid-cap, and foreign offerings. Retirement savings that Americans and employees invest in are diversified. One might determine the features of that portfolio by analyzing a questionnaire to determine the appropriate properties for people depending on their age. This stock offering can be designated as a mutual fund or an ETF. Many programs and savings accounts provide several investments at once, with the main activity of the account usually being to allow an investor to make these choices. (Koumou, 2020)(Chemkha et al.2021)

## **2) Types of Diversification**

The diversification may be classified into different types. Broadly, diversification seeks to spread a portfolio's investment across non-correlated assets and, therefore, less directly related to each other, thereby reducing risk. Each type of diversification has its strategic significance in investment management because it provides specific benefits that the other types do not. When two or more types of diversification are combined, the benefits of these types are available to portfolio managers. When presented with two or more alternatives, an investor may select a combination of available options according to their investment objectives and the risks they can afford.

Depending on the factors, the diversifications may be sub-classified into three types: 1) Diversification based on reducing exposure to a particular industry or business, i.e., industry diversification; 2) Diversification based on reducing exposure to a particular market or markets: i.e., market diversification; 3) Diversification through foreign equity diversification: It is also of two kinds: (i) investment in global mutual funds to deal in foreign equities; (ii) purchase of American mutual funds. Some American mutual funds created under the State Trust Act also engage in foreign securities, including equities. Diversification in a portfolio may vary from investor to investor. (Liu et al., 2022)(Lau et al., 2020)

## **B. Key Investment Strategies**

### **1) Value Investing Strategies and Techniques for Financial Success**

Value investing is a tried and true investment strategy that emphasizes purchasing securities that are deemed undervalued. The underlying premise of this strategy hinges on the notion that the market will eventually recognize the actual value of these investments, thus resulting in a lucrative return on investment. By closely scrutinizing the financial metrics of potential investments, value investors aim to identify opportunities in which the market has yet to appreciate the intrinsic worth of a given security fully. This approach requires a comprehensive analysis of key indicators, such as price-to-earnings ratios, dividend yields, and book values. The goal is to uncover investments trading at prices below their fundamental value, indicating a potential for significant capital appreciation in the future. While value investing may involve patience and a longer investment horizon, adherents firmly believe it can provide substantial rewards over the long run. (Greenwald et al.2020)(Roca, 2021)

## **2) Growth Investing Strategies and Techniques**

Growth investing strategies involve searching for companies with robust potential for substantial revenue and earnings growth, frequently targeting industries on the verge of a tremendous expansion. These strategies emphasize identifying and investing in businesses that exhibit promising signs of future success, such as accelerating sales and substantial profit margins. By concentrating on industries with the possibility of significant growth, growth investing aims to capitalize on the upward trajectory of these companies, maximizing the potential for substantial returns on investment. (Stern & Valero, 2021)(Kedi et al.2024)

## **3) Strategies for Income Investing**

Income investing involves various strategies to generate consistent and reliable cash flow from investment portfolios. These strategies primarily involve utilizing dividend-paying stocks, bonds, and various income-generating assets. The primary objective of income investing is to ensure a steady income stream, which can be utilized for daily expenses and to meet financial goals. Investors can receive periodic distributions from their investments by carefully selecting dividend-paying stocks. In addition to stocks, bonds play a crucial role in income investing. Bonds deliver fixed interest payments to investors over a specific period, providing a consistent income source. Furthermore, income-generating assets such as real estate investment trusts (REITs), preferred shares, and high-yield corporate bonds contribute significantly to the overall income strategy. These assets further enhance the potential for steady cash flow by offering attractive yields and favorable risk-return profiles. In conclusion, income investing is a diverse and practical approach to building a reliable cash flow stream, enabling investors to achieve financial stability and meet their long-term objectives. (Greenwald et al.2020)(Laopodis, 2020)

## **C. Theoretical Frameworks in Finance**

Diversification is a critical issue in financial theory and practice. Diversification emphasizes spreading, thus avoiding significant losses in a portfolio. A wise combination of several investments concerning investment efficiency or market value can decrease predictability. Investments such as investment trusts or mutual funds contain a package of financial assets that provides a degree of diversification and costs for investors. Portfolio diversification is intended to minimize potential losses when financial assets simultaneously show declining aggregate markets, less expected returns from investors, and poorer expected returns of each previous investment in the portfolio. This concept is considered the foundation of the theory of finance. Many theoretical frameworks about diversification portfolio formation are known in finance. Given the many forms of diversification, this must be oriented towards investment today. This strategy emphasizes using portfolio investment funds diversified by low-cost, convenient options for sophisticated investors.

Quantitative examples include modern portfolio theory, capital asset pricing model, and other models related to practical investors. Section 2 discusses institutional investment strategies that have evolved since the 20th century. The general understanding of investment and diversification in Section 3 is based on a review of theory, empirical evidence, and investment strategies. In Section 4, theoretical finance focuses on important concepts that

form the essential background to manage portfolio investments to obtain high returns. Some investment programs are designed to be efficient by considering several combinations of securities that, when combined, can reduce portfolio risks to acceptable levels. Modern Portfolio Theory is a diversification option that pays special attention to risk and the potential consequences of portfolio returns. Capital asset pricing models about expected return and its determinants are also reviewed, including investment risk. Investment results in market input and subsequent monitoring are also related. (Koumou, 2020)(Leković, 2021)(Zaimovic et al.2021)

### **1) Modern Portfolio Theory**

Modern Portfolio Theory (MPT) is key in formulating investment strategies. Developed in the 1950s, it is widely acknowledged to have revolutionized how financial economists approached the task of determining how investment markets are likely to work and the link between the appreciation and depreciation of assets and that of the whole investment market. At its core, the theory provides investors and finance professionals with the tools to appraise the risk associated with an investment about the investment return – known as the power of diversification to reduce risk.

In terms that are very familiar nowadays, the theory is famous for the concept of an 'efficient frontier.' This is ideal for most investors because asset returns have one price that trading practices will always follow. This was the essence of MPT, a concept first introduced in finance but developed as a coherent analytical strategy in the early 1950s. Subsequently, it was fully developed in a 'Portfolio Selection' paper. Turning to the mathematical conception, when using an agent-based model, the present value of future returns is created by covariance by how much and in which forms they come. This is known as return risk. Given a probability distribution for the future price of each asset, mathematical expectancy variance can be used to represent the two forms of risk. It is predicated on the assumptions of normative economic theory and that with well-documented limitations, actors are mensurate, rational, and optimize expectations about the future. It was the mathematical modeling of how investments were expected to behave – as opposed to the more conventional investment considerations usually assessed by commercial banks. As such, historical empirical research suggests that a diversification strategy should be based on reallocating assets toward stocks with a lower correlation. The main aim of investors is to combine stocks in their range of opportunities in such a way as to reduce risks to a portfolio. Even though it cannot overcome all forms of risk, diversification has almost posed no theoretical limit on how much risk can be reduced through diversification across many investments. (Wang & Xia, 2022)(Dichtl et al.2021)(Delpini et al.2020)

### **2) Capital Asset Pricing Model (CAPM)**

The Capital Asset Pricing Model (CAPM) is an important tool for evaluating how well an investment opportunity compensates the investor for the time value of money and risk taken. The CAPM formula incorporates the expected return on an investment, the risk-free rate, and a  $\beta$  coefficient for the investment. The  $\beta$  measures the systematic risk representative of the investment's return relative to the return on the overall market. The underlying application of



the CAPM is founded on the diversification argument, which argues that the non-systematic risk can be diversified away. From the equation, this means that the expected return on an investment should itself vary with the investment's  $\beta$ .

A  $\beta$  of 1 indicates the asset moves precisely with the market; greater than one implies more volatility than the market, and less than one implies the asset is less volatile. An asset with a  $\beta$  greater than 1 would be the preferred investment, whereas a  $\beta$  less than 1 would not. The CAPM indicates that the expected return should relate to the  $\beta$  of the individual investment according to an equation. The CAPM is based upon the accompanying assumption: to ensure this argument holds, investors through the CAPM analysis are assumed to have identical expectations and information, and the only conflict concerns the degree of diversification undertaken. The market is in equilibrium, with no mispriced assets, and diversification can reduce non-systematic risk; alone, it cannot be diversified. If the expected return indicates that an asset will provide a return over this, there is a perceived mispricing, and investment in that asset is warranted.

CAPM provides a method of determining the reward required for taking on one unit of systematic risk. By properly foreseeing stock prices, investors can identify how the financial markets have 'priced' securities according to economic circumstances and point investment strategies. Within this approach, the essence lies in selecting investments based on the required returns to match investors' objectives. The advantages of CAPM are faster results, a comprehensive view of expectations, usefulness in valuing market return, and the fact that it can be used in stock screening. However, this capital market theory encounters constraints like statistical errors, historical errors, utility estimates, unlimited investment choices, investors' study trends, and assumptions caused by methods. In all, the CAPM provides a valuable supplement to the diversification argument.

#### **D. The Impact of Market Conditions on Diversification**

It is useless for an investor to know the "right" level of diversification only in a psychological environment where market conditions and investor trends do not allow the development of a rational and balanced selection process. The market environment is key to defining a portfolio's size and variety of securities. We can place it in two distinct and opposite psychological environments: a rising market situation or a bullish market environment and a falling market situation or a bearish market environment. In the first case, the diversified portfolio is somewhat penalized but maintains a safe and assessed performance, unlike the market indices. In the second case, the performance of a diversified portfolio shows significantly different behavior from the stock indices, as the percentage fluctuates in the portfolio in the bearish market situations; it grows significantly differently.

The performance of individual securities is known to be influenced by the movement of the reference market in which they are quoted. Securities of companies operating mainly in the market offer returns correlated with the reference index. The on-demand offered by the same portfolios proves valid in all market or cycle phases taken together because the conditions of expansion and recession are two sides of the same medal. However, some contractual performances are exclusively suited to the single expansion stages of the cycle. In this case, the investor's choice was required to make a tactical asset allocation that took into account

one-time factors such as economic and industrial phenomena, entrepreneurial trends, energy supplies, geopolitical conditions, security, rules, and other external variables not directly linked to the fair value evolved by the individual security and the relative market area but can create favorable or unfavorable premises for the placement of assets by the families. Accurate and up-to-date abundant case studies concerning the necessary strategic and tactical asset allocations with market conditions will undoubtedly favor the understanding of the individual entrepreneur. (Krishnamoorthy & Mahabub Basha, 2022)(Queiri et al.2021)

### Descriptive Statistics

This paragraph focuses on finding and diagnosing the investigation's indicators to perform statistical analyses that elucidate the levels of indicators for the research organizations. Additionally, the congruence in data distribution must be assessed. In this instance, it is essential to depend on a series of descriptive statistics shown by the arithmetic mean that indicates the degree of The study provided metrics for the examined firms and the standard deviation (SD) indicating the degree of variation of the data from their arithmetic mean. Table (1) indicates that Portfolio Diversification is among the top two indicators, with a cash-to-total-assets ratio averaging 0.860. The most significant proportion is attributed to Almanafaa, while Al\_Zawraa exhibits the lowest percentage. The ratios reported by these companies are substantial, reflecting their operations in financial technology and the necessity to sustain significant liquidity to address daily demand scenarios. The second measure is the proportion of financial stagnation, which represents the disparity between the percentage of cash retention. The market sector rate is 0.371, and the disparity between the rates of sector and retention is -0.0001, indicating that some organizations experience a gap between their liquidity maintenance and the market rate. The experience was excellent, with Almanafaa exhibiting the most significant disparity at 0.14%. At the same time, Al\_Zawraa demonstrated the least financial stagnation, which indicates that companies with portfolio diversification experience financial stagnation to varying degrees. However, they are generally similar, except for one company. The SD for both indicators is 0.371. The return on investment was positive across all enterprises at a rate of 0.004, with Altaf and Nobles having the greatest return.

In contrast, the lowest returns were recorded by three companies: AL-Nibal Al-Arabya, Almanafaa, and Al-Rabita. The gathered data underwent a Kurtosis and Skewness test to assess normal distribution, revealing that all dimensions attained a significance level above 0.05. Consequently, these data are inherently dispersed and permit the execution of parameter data tests.

Table 1: Descriptive statistics of Portfolio Diversification, Fintech and Investment Strategies

COM.	C%	PD%	ROI
Altaf	0.625	-0.096	0.011
Almanafaa	0.860	0.139	0.001
Al_Zawraa	0.103	-0.720	0.005
Al_Muhej	0.954	0.033	0.002
Minimum	0.11	-0.82	0.001
Maximum	0.95	0.13	0.01
Mean	0.791	-0.0002	0.004
SD	0.371	0.371	0.002
Z- Skewness	-1.512	-1.824	-0.819
Z- Kurtosis	1.789	1.817	-0.95

### Discriminant test

The study data was gathered from four firms in the financial technology sector, and the distinctions among the companies will be identified based on the findings shown in Table 2. It was evident that the business (Almanafaa) was sustaining a significant proportion in comparison to other firms regarding (Portfolio Diversification) when it was The lowest rate of retention is attributed to Al\_Zawraa, with a Wilks Lambda similarity proportion of 0.084, indicating little resemblance. The variations across firms were statistically significant, as the significance level was 0.000, which is below the threshold of 0.05. Al-Iraqia exhibits superior financial technology compared to its competitors. In contrast, Al-Zawraa demonstrates the least financial technology, with a Wilks Lambda similarity rate of 0.901, indicating significant similarity and substantial differences. The result was insignificant across the firms since the significance threshold (0.596) exceeded (0.05). The company's Investment Strategies (Altaf) yielded the highest return on investment compared to other firms. In contrast, the company with the lowest return was (Al\_Rabita), which exhibited a Wilks Lambda similarity rate of (0.862), indicating a relatively high degree of similarity, and the variations are The result were not substantial across firms since the statistical significance threshold (0.222) exceeded (0.05).

### Pearson correlation

Prior to conducting the simple regression test and path analysis, it is essential to ascertain the degree of correlation between the study's indicators. Table (3) indicates a coefficient of correlation of (0.594) between Portfolio Diversification and the dependent variable, Investment Strategies, which is statistically significant at the 0.01 level. Outcomes The subsequent part will examine simple and multiple regression.

**Table 3: Pearson correlation among Portfolio Diversification, Investment Strategies**

Variables	Portfolio Diversification	Investment Strategies
Portfolio Diversification	1	.594**
Investment Strategies		1

\*\*Correlation is significant at the 0.01 level (2-tailed).

### Empirical Results

It has been posited that a positive correlation exists between positive stagnation in financial technology and Investment Strategies, wherein the dependent variable is an independent variable actual function, which is financial stagnation via financial technology. The path analysis technique was employed to evaluate the efficacy of the mediating variable, as illustrated in Figure 1. The interpretation factor (R<sup>2</sup>) was 0.86, indicating that the intermediate and independent variables account for 86 percent of the variation in the dependent variable. In contrast, the remaining 54 percent is attributed to variables and factors



not included in the model. The outcomes of the hypothesis test presented in Figure 1 and Table 4 are as follows:

**Table 4: Regression of Portfolio Diversification on Fintech and Investment Strategies**

Independent Variable	Dependent Variable	Coefficient	Std. Error	C.R.	Prob.	Decision
Portfolio Diversification	Investment Strategies	0.76	0.189	3.820	0.000	Acceptance
		0.86	0.06	6.557	0.000	Acceptance
Mediation		0.65	0.035	7.429	0.000	Acceptance

Figures (1) and Table (3) indicate a substantial impact of portfolio diversification on investment strategies, quantified at (0.86) and significant at (0.01). Additionally, the financial recession influences Investment Strategies via financial technology, measured at (0.65). Consequently, we deduce that the intermediary variable between Investment Strategies and Portfolio Diversification exhibits an acceptable impact with a significant level of (0.01).

#### E. Conclusion and Future Directions

This essay has elucidated the relationship between portfolio diversification and investment strategies. Effectively channeling strategy and employing correct diversification strategies will determine how long an individual accumulates wealth; hence, the highly interconnected theme is discussed. In a constantly changing financial environment, investors must position themselves to adapt their strategy according to current market conditions. The important matters of psychophysical analysis and value-based investing were discussed in this essay as significant determinants in making strategic decisions. This viewpoint has used many theoretical frameworks to support this essay's profound and complex themes. Emphasis has been placed on empirical observation and conclusions from long-term financial analyses. Future research must focus on diversification strategies in emerging internet-enabled businesses. There is also potential to conduct an academic investigation into the diversification strategies of considering convergence investing, which is where most such investment funds head. Finally, we have learned, above all that it is important always to be learning and critically evaluating new things be that new emerging technologies or things we thought we knew, such as the performance of a popular portfolio diversification strategy in the modern financial world. With the ever-changing business world, businesses must be flexible and adapt continuously to improve their old ways that may no longer be applicable or to develop and strategize more efficient and effective means. For in the subject of portfolio diversification, we have many theories. However, it is still a highly contentious topic, and it can be noted that despite so many findings, consensus is rare. In all cases, we recommend critically evaluating the strategy and looking for evidence that it is performing well for the costs incurred.

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**References:**

1. Chemkha, R., BenSaïda, A., & Ghorbel, A. (2021). Connectedness between cryptocurrencies and foreign exchange markets: Implication for risk management. *Journal of Multinational Financial Management*, 59, 100666. [HTML]
2. Delpini, D., Battiston, S., Caldarelli, G., & Riccaboni, M. (2020). Portfolio diversification, differentiation, and the robustness of holdings networks. *Applied Network Science*, 5, 1-20. [springer.com](https://www.springer.com)
3. Dichtl, H., Drobetz, W., & Wendt, V. S. (2021). How to build a factor portfolio: Does the allocation strategy matter?. *European Financial Management*, 27(1), 20-58. [wiley.com](https://www.wiley.com)
4. Greenwald, B. C., Kahn, J., Bellissimo, E., Cooper, M. A., & Santos, T. (2020). Value investing: from Graham to Buffett and beyond. John Wiley & Sons. [HTML]
5. Greenwald, B. C., Kahn, J., Bellissimo, E., Cooper, M. A., & Santos, T. (2020). Value investing: from Graham to Buffett and beyond. John Wiley & Sons. [HTML]
6. Kedi, W. E., Ejimuda, C., Idemudia, C., & Ijomah, T. I. (2024). AI software for personalized marketing automation in SMEs: Enhancing customer experience and sales. *World Journal of Advanced Research and Reviews*, 23(1), 1981-1990. [researchgate.net](https://www.researchgate.net)
7. Khan, S. K., Hassan, N. U., & Islam, J. (2023). Unlocking the investment puzzle: The influence of behavioral biases & moderating role of financial literacy. *Journal of Social Research Development*. [jsrd.org.pk](https://www.jsrd.org.pk)
8. Koumou, G. B. (2020). Diversification and portfolio theory: a review. *Financial Markets and Portfolio Management*. [HTML]
9. Krishnamoorthy, D. N. & Mahabub Basha, S. (2022). An empirical study on construction portfolio with reference to BSE. *Int J Finance Manage Econ*. [academia.edu](https://www.academia.edu)
10. Laopodis, N. T. (2020). Understanding investments: Theories and strategies. [HTML]
11. Lau, X., Munusamy, P., Ng, M. J., & Sangrithi, M. (2020). Single-cell RNA sequencing of the cynomolgus macaque testis reveals conserved transcriptional profiles during mammalian spermatogenesis. *Developmental Cell*. [cell.com](https://www.cell.com)
12. Leiblein, M. J., Reuer, J. J., Larsen, M. M., & Pedersen, T. (2022). When are global decisions strategic?. *Global Strategy Journal*, 12(4), 714-737. [wiley.com](https://www.wiley.com)
13. Leković, M. (2021). Historical development of portfolio theory. *Tehnika*. [kg.ac.rs](https://www.kg.ac.rs)
14. Liu, Y., Fernie, A. R., & Tohge, T. (2022). Diversification of Chemical Structures of Methoxylated Flavonoids and Genes Encoding Flavonoid-O-Methyltransferases. *Plants*. [mdpi.com](https://www.mdpi.com)
15. Murmann, J. P. & Vogt, F. (2023). A capabilities framework for dynamic competition: Assessing the relative chances of incumbents, start-ups, and diversifying entrants. *Management and Organization Review*. [cambridge.org](https://www.cambridge.org)
16. Owan, V. J., Ndibe, V., & Anyanwu, C. C. (2020). Diversification and economic growth in Nigeria (1981–2016): An econometric approach based on ordinary least squares (OLS). Owan, VJ, Ndibe, VC, & Anyanwu, CC (2020). Diversification and Economic Growth in Nigeria (1981–2016): An Econometric Approach Based on Ordinary Least Squares (OLS). *European Journal of Sustainable Development Research*, 4(4). [ssrn.com](https://www.ssrn.com)

17. Queiri, A., Madbouly, A., Reyad, S., & Dwaikat, N. (2021). Corporate governance, ownership structure, and firms' financial performance: insights from Muscat securities market (MSM30). *Journal of Financial Reporting and Accounting*, 19(4), 640-665. [researchgate.net](https://www.researchgate.net)
18. Roca, F. (2021). What is New in Value Investing? A Systematic Literature Review. *Journal of New Finance*. [ufm.edu](https://ufm.edu)
19. Stern, N. & Valero, A. (2021). Innovation, growth and the transition to net-zero emissions. *Research Policy*. [sciencedirect.com](https://www.sciencedirect.com)
20. Wang, J. & Xia, W. (2022). Relationship between Capital Allocation Efficiency and Diversification Strategy from the Perspective of Internal Control. *Discrete Dynamics in Nature and Society*. [wiley.com](https://www.wiley.com)
21. Zaimovic, A., Omanovic, A., & Arnaut-Berilo, A. (2021). How many stocks are sufficient for equity portfolio diversification? A review of the literature. *Journal of Risk and Financial Management*, 14(11), 551. [mdpi.com](https://www.mdpi.com)