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Impacts of Investment Portfolio Diversification to Reduce Risks of Share Price Volatility in Iraqi Banks

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This study aims determine the impacts of investment portfolio diversification used for reducing the severity of risks surrounding the volatility of share prices. Research analyses sample reports of Iraqi banks listed in the Iraqi market for securities from the fiscal years of 2016, 2017, and 2018, and examines the resultant returns of the investment portfolio according to dividends distributed to investors. A statistical analysis has been conducted on the volatility of stock prices and changes in portfolio returns in accordance with the statistical program (SPSS), through which the hypothesis of the research has been tested and proven. Results show that the diversified investment portfolio reduces risks arising from the volatility of market share and book prices. Diversification mechanisms of the investment portfolio vary according to the size of activities and circulation in capital markets. Based on relevant findings, the study recommends that Iraqi banks diversify financial investments in their portfolios in order to expand financial returns and avoid potential investment losses.

Key words: *Investment portfolio, Financial risk, Shares price fluctuations, Financial returns, Diversification of investment portfolio.*

Introduction

Increased financial risks arising from different stock prices in the financial market have led many international banks, particularly Iraqi banks, to invest a surplus of funds in investment stocks and bonds. Both long and short-term investments have been implemented to obtain fixed returns aimed at covering costs of financial risks. Because these investments vary from bank to bank, institutions are required to create specific investment portfolios that include detailed security measures in which companies can safely invest their money in stocks and bonds (Ali and Mustafa, 2019).

This study aims to determine the extent of returns used to cover costs of low profits and unstable share prices from within Iraqi bank investment portfolios. The research is sectioned into three components: the research methodology, a theoretical framework on the concept and influence of the investment portfolio and its policies, and a practical examination which tests and ultimately confirms the research hypothesis.

Methodology

Research questions

Most Iraqi banks suffer from fluctuations in share prices as a result of varying profits and low sales volume. These fluctuations can lead to a decrease in the value of dividends distributed to investors, which must in turn be covered by profits sourced from the investment portfolio. Iraqi banks must therefore use reserves on financial investments to reduce such fluctuations. This study aims to address the following relevant research questions:

1. Do price fluctuations in the value of shares reduce profits distributed to investors?
2. Can profits from the investment portfolio be compensated by the dividend distributed to investors in a manner that reduces the risk of stock fluctuations?

Significance of the research

Investment portfolios play a crucial role in the stability and success of financial institutions' infrastructures. These portfolios provide a financial reserve used for dividend distribution in the event of profit declines and consequent share price fluctuations, marking them as vital components for both banks and investors. In order to reduce risks surrounding fluctuations in share prices and avoid monetary losses, further research is needed to better understand investment portfolio diversification within financial institutions.

Research objectives and hypothesis

This study aims to substantiate the hypothesis that investment portfolios play an active role in providing necessary funds to face the financial risks that arise from share price fluctuations. Objectives of the research are as follows:

1. To provide a theoretical framework on the concept and importance of the investment portfolio and its ability to provide funds to banks when facing deficits.

2. To identify and understand the elements that lead to fluctuations in share prices and the potential methods to deal with such fluctuations.

3. To conduct an applied study which determines the ability of the investment portfolio to face stock fluctuations.

Research sample

The research is focused on Iraqi banks operating in the Iraqi market for securities characterised by fluctuations in book and market share prices. The sample comprises the Iraqi Investment Bank, the Mansour Bank and the Bank of Baghdad.

Limitations of the research

Limitations of the research involve spatial boundaries and temporal limits. Spatial boundaries are represented by the research sample described above, which is limited by the examination of only three financial institutions. Secondly, temporal limits represent the financial years studied, with only three years' worth of data between 2016 and 2018. While broader enquiry may be needed in the future, however, these analyses provide a good starting point for this important field of research.

Theoretical Analysis

The concept of the investment portfolio

The investment portfolio is defined as a group of shares invested in different companies (Considine, 2019) and is characteristic of a combination of securities such as ordinary shares, preferred shares and bonds (Hnaka and Rachid, 2018; Christensen,). It can also be classified as the sum of the quoted values of investors' shares or bonds (Jiang and David, 2017). The investment portfolio is designed to reduce risk through diversification and can theoretically be categorised as a traditional, modern or efficient portfolio (Bock and Richard, 2017).

The investment portfolio is typically characterised according to type and quality. In terms of type, a portfolio can contain real assets which have a tangible economic value such as real estate, gold or silver, or economic projects and financial assets such as stocks, bonds, treasury bills and options. In terms of quality, portfolios can contain either low-risk and risk-return assets or high-risk and risk-return assets, or a combination of both (Chris and Ioannis, 2018).

Types of investment portfolios

Five types of investment portfolios used in the finance market are the income portfolio, the growth portfolio, the mixed portfolio, the balanced portfolio and the specialised industry portfolio (Ziakas, 2019; Zhong, et al., 2017).

The income portfolio focuses on securities that produce high annual income, whether from dividend distributions to shareholders or from interest paid to bondholders. These securities involve conservative investors and do not favour activities of risk, even if this risk may result in greater returns.

The growth portfolio is based on investment instruments that generate capital income which leads to increased portfolio funds. The management of these companies usually resort to capitalisation in order to use this money in their operations. Investments in this type of portfolio are typically made due to this policy, as such investors aim to increase portfolio fund growth rather than that of cash dividends.

The mixed portfolio is based on cash dividends and capital gains, which result from shares that achieve high revenue growth. Mixed portfolios diversify their investments between stocks that give high cash dividends and shares, which lead to growth and increase the portfolio funds.

The balanced portfolio consists of ordinary shares, preferred shares and bonds. Investors in this portfolio aim to obtain capital gains in addition to cash bonuses from dividends and interest on bonds while maintaining investment capital.

Lastly, industry specialised portfolios focus on investing shares of selected industrial companies such as airlines or natural resources enterprises, for instance energy or oil companies.

Components of the investment portfolio

The investment portfolio consists of physical assets and financial assets, which can be characterised by distinct elements (Fama, 1979). Physical assets are real, tangible assets such as investments in real estate, industrial and agricultural projects or trading in precious metals. These assets involve low liquidity and require specific expertise because of their heterogeneity and high investment costs. Financial assets are securities that provide certificates of ownership to the holder of these securities, which detail the rights of the holder and authorise him or her to claim all or part of that value. Financial assets generate high profits while incurring various risks and consequences from external factors.

Concept and types of shares

Company financing depends on the capital accumulated from the value its shares. A share may be defined as the document representing a share or shareholder's items in the capital of the company (Wang and Xiaohong., 2016). Types of shares include ordinary shares, dividends, preferred shares, treasury shares and restricted shares.

Ordinary shares are defined as title deeds owned by a company which allow the holder special attendance at a company's annual general assembly and reception of dividends if the company obtains sufficient profits.

Dividends are distributed to shareholders in accordance with their ownership of ordinary shares. Dividends are generated by the retention of a portion of a company's profits and are considered an increase in a company's capital. Shareholders of such dividends possess the right to increase this capital.

Preferred shares grant the owner additional rights to the ordinary shareholder, which include the owner taking precedence in obtaining a percentage of company profits. The owner also has priority in obtaining rights in the case of company liquidation.

Treasury shares issue company purchases back from the market via the stock exchange. Treasury shares are not entitled to distributions or voting rights during periods of company ownership (Julian, et al., 2017).

Restricted shares are defined as classified stock listings in the local or international stock exchanges. This listing process involves special procedures which allow the stock exchange to grant shareholders their appropriate and confidential rights.

Stock price fluctuations

Exchange rate fluctuations are a market, or systematic, risk for many international companies. Such risks are resultant of variables in commodity prices, exchange rates, interest rates and market forces (Wild, et al.). Depending on the size and trends of stock price fluctuations, varying exchange rates may either add to these risks or reduce them (Anne, 1984: 18). Exposure to an exchange rate risk has been defined as a company's share price sensitivity, which is measured in currency; a change in exchange rate therefore directly influences the value of that currency (Stjepan, et al., 2018).

Causes of stock price fluctuations

Stock price fluctuations can be caused by the exchange rate of a particular currency, which is determined by trading supply and demand. This is evidenced in a number of situations seen in financial institutions. Firstly, exchange rate declines occur due to deficits in the balance of payments to a country and subsequent increases in supply. These deficits lead to currency devaluations, which in turn lower a country's exchange rate against other currencies (Marco and Luca, 2018). Secondly, changes in the value of goods and services imports and exports can directly influence changes in stock price. Additionally, changes in domestic and foreign interest rates, particularly changes resulting in higher interest rates, lead to an increase in currency demand which can in turn increase its value or vice versa (Hüseyin et al., 2019). Government interventions can also affect stock prices, which occur when a government body intervenes through the Central Bank by buying or selling according to its financial and economic policies (Loriana et al., 2016). Moreover, a country's monetary inflation leads to higher prices and subsequent loss of competition, resulting in the devaluation of any exchange rate against other currencies and vice versa (Gagnon, 2016). Finally, political and military circumstances can directly influence exchange rates; turmoil in these fields may affect capital flows to and from the state, leading the capital to move towards areas marked by unrest and instability and thus causing fluctuations in stock price (Domhoff, 2017).

The impact of the diversification of the investment portfolio in providing financial returns to face fluctuations in share prices

Management of Iraqi banks practice many investment activities by providing appropriate methods to form investment portfolios. As discussed, these portfolios are implemented to combat potential financial risks as caused by low profits, reduction of sales volume and subsequent fluctuations in share prices. Achieving appropriate financial return from these portfolios provides financial liquidity that can help to overcome the risks of share price fluctuations, meaning that the amount of liquidity available for distribution is an essential component of an investment portfolio.

Practical Examination

Reboot

A sample of financial reports from Iraqi banks published in the Iraqi market for securities was analysed in this study to gain data and support the hypothesis. Financial ratios published in these reports show the market and book value for each company. The researchers examine any changes or fluctuations surrounding these figures as well as mechanisms of diversity present for each bank. In determining the impact of the investment portfolios impact on these fluctuations, researchers used statistical analysis according to the program (SPSS). The samples, comprising of three Iraqi banks, are detailed below.

Description of the sample

Al-Mansour Investment Bank, Bank of Baghdad and Iraqi Investment Bank

Established in 2005, the Al-Mansour Investment Bank is an Iraqi mixed shareholding company operating within the banking sector. The bank has a nominal capital of 55 billion dinars and was listed in the Iraq Stock Exchange in 2008, at which time the company's capital was 55 billion dinars. The Bank of Baghdad was established in 1992 as an Iraqi private shareholding company in the banking sector with a nominal capital of 100 million dinars. The bank was listed in the Iraq Stock Exchange in 2004 with a listing capital of 5.28 billion dinars. Lastly, the Iraqi Investment Bank also operates in the banking sector as an Iraqi private shareholding company. This bank was established in 1993 with a nominal capital of 100 million dinars. It was listed on the Iraq Stock Exchange in the year 2004 with an initial capital of 5.76 billion dinars. All three banks have a 100% proportion of the private sector, meaning that each company directly credits its respective partners and investment parties. This entails a substantial range of financial risks.

Table 1: Sample description

Banks	Number of shares	Market value	P / E ratio
Bank of Baghdad	26,134,103	227,500	11.24
Al-Mansour Bank	12,951,541	247,500	17.07
Iraqi Investment Bank	11,140,477	150,000	14.74

Analysis of the investment portfolios

Elements of these companies' investment portfolios are analysed below to determine the extent of diversification present in the portfolios and the annual profits earned from each.

Table 2: 2016 research sample of diversification of investment portfolios

Banks	Number of portfolio investments	Type of portfolio investments	Returns from the portfolio
Bank of Baghdad	**2**	**Long shares, short Shares**	**636,961**
Al-Mansour Bank	**1**	**Short-term shares**	**202,895**
Iraqi Investment Bank	**2**	**Shares, deposits**	**118,870**

As seen in Table 2 above, for the year 2016 the Bank of Baghdad ranked first in investment returns, while the Al-Mansour Bank and the Iraqi Investment Bank came second and third respectively. These latter banks must then compensate for these lower returns due to the incurred financial losses.

Table 3: 2017 research sample of diversification of investment portfolios

Banks	Number of portfolio investments	Type of Portfolio Investments	Returns from the portfolio
Bank of Baghdad	**2**	**Long shares, short Shares**	**758,483**
Al-Mansour Bank	**1**	**Short-term shares**	**434,895**
Iraqi Investment Bank	**2**	**Shares, deposits**	**48,870**

Table 3 depicts very similar results for the year 2017. The Bank of Baghdad again ranked first in investment returns, with the Al-Mansour Bank and the Iraqi Investment Bank came in second and third respectively for their financial returns.

Table 4: 2018 research sample of diversification of investment portfolios

Banks	Number of portfolio investments	Type of Portfolio Investments	Returns from the portfolio
Bank of Baghdad	**2**	**Long shares, short shares**	**753,717**
Al-Mansour Bank	**1**	**Short-term shares**	**435,895**
Iraqi Investment Bank	**2**	**Shares, deposits**	**53,870**

Table 4 again displays the same trends for the year 2018, with the Bank of Baghdad achieving the highest number of returns followed by the Al-Mansour Bank and the Iraqi Investment Bank respectively.

Determine fluctuations in the market value and book value of shares

The following results depict the market value and book value of shares for the Bank of Baghdad, which indicate important changes being made within the research sample.

Table 5: Market and book value fluctuations in the Bank of Baghdad

Banks	2016	2017	2018	Amount of fluctuations (contrast)	Ratio Fluctuation
Market value	**2.07**	**1.08**	**1.07**	**0.57**	**%57**
Book value	**1.131**	**1.012**	**1.03**	**0.064**	**%6**

Table 5 above signifies that the Bank of Baghdad's market value has fluctuated over the years 57% according to the coefficient of value variation. These fluctuations are resultant of the low volume of dividend distributed to investors and the decrease in the sales volume. The book value also shows a fluctuation of 6%.

Table 6: Market and book value fluctuations in the Al-Mansour Bank.

Banks	2016	2017	2018	Amount of fluctuations (contrast)	Ratio Fluctuation
Market value	**1.150**	**1.03**	**1.002**	**0.07**	**%7**
Book value	**2.8**	**1.77**	**1.9**	**0.56**	**%56**

Table 6 signifies that the Al-Mansour Bank's market value has fluctuated over the years by 7% according to the coefficient of value variation. These fluctuations are again resultant of the low volume of dividend distributed to investors and the decrease in the sales volume. The book value for this company shows a much higher degree fluctuation by 56%.

Table 7: Market and book value fluctuations in the Iraqi Investment Bank

Banks	2016	2017	2018	Amount of fluctuations (contrast)	Ratio Fluctuation
Market value	**0.19**	**0.27**	**1.34**	**0.64**	**%64**
Book value	**1.159**	**1.23**	**1.20**	**0.03**	**%3**

Table 7 indicates that the Iraqi Investment Bank's market value has fluctuated by 64% according to the coefficient of value variation. These fluctuations are also resultant of the low volume of dividend distributed to investors and the decrease in the sales volume. The book value for this company shows the lowest fluctuations of 3%.

Table 8: Ratios of change in banks' investment portfolio returns

Banks	Portfolio returns 2016	Portfolio returns 2017	Portfolio returns 2018	Volume change (contrast)	Change ratio
Bank of Baghdad	**636,961**	**758,483**	**753,717**	**68,826**	**%9**
Al-Mansour Bank	**202,895**	**434,895**	**435,895**	**13,423**	**%7.2**
Iraqi Investment Bank	**118,870**	**48,870**	**53,870**	**39,051**	**%1.6**

Table 8 shows that the Bank of Baghdad produced the highest level of change in returns at 9% with a volume change of 68,826. This was followed by the Al-Mansour Bank with a 7.2% change in returns, amounting to a 13,423 volume change, and lastly by the Iraqi Investment Bank with a 1.6% change in returns and a 39,051 volume change. This data highlights the significant fluctuations in the Bank of Baghdad's investment portfolio to exploit its financial returns. This diversification covers the fluctuations in the value of market and book shares, thereby reducing risks incurred from these value changes. Table 9 below details a statistical analysis of the degree of fluctuation, the changes in stock prices and the value of portfolio returns in accordance with the statistical program (SPSS).

Table 9: Statistical analysis between volume and percentage fluctuations of stocks and investment portfolio

Components	**Statistical analysis indicators**
Views	**6**
Coefficient (T)	**6.301**
Coefficient (F)	**11.633**
B	**4.270**
Link size	**- 0.785**
Moral level (sig)	**0.042**

Table 9 above shows an inverse correlation between the volume of changes in investment portfolio returns and the amount of fluctuations in share prices. The correlation value, or link size, is -0.785 while the moral level is 0.042, which is a significant difference of 5%. An increase in the diversity of the investment portfolio is reflected in the one unit increase in returns, which reduces the volatility of stock prices by 4.270. These findings support the research hypothesis that the investment portfolio plays an active role in providing funds to combat financial risks that arise from stock price fluctuations.

Conclusions & Recommendations

Conclusion

Findings from the practical examination of this study have elicited a number of important conclusions. Firstly, returns from the diversified investment portfolios have been found to reduce risks arising from fluctuations in market share and book prices. Secondly, diversification mechanisms of Iraqi banks' investment portfolios vary according to the volume of activities and circulation within financial markets. The management of Iraqi banks have been found to play a prominent role in determining these diversification mechanisms in a manner that reduces the future financial risks. Fears also exist of Iraqi banks engaging in financial investments due to the possibility of carrying future losses. Finally, prevailing economic conditions in the country have been shown to play an important role in determining the types of banks invested; increased manipulation of stocks has negatively affected the stability of financial institutions and may continue to do so in the future.

Recommendations

The researchers posit a number of recommendations in light of the study's findings. Firstly, Iraqi banks must diversify financial investments in their portfolios in order to expand financial returns and avoid losses from a particular investment through coverage of another investment. Iraqi banks are also urged to consider the risks involved in unstable shares, and not to jeopardise their investment portfolio because of this consequent risk factor. Another recommendation is for Iraqi banks to obtain steady, regular and fair profits from investment opportunities to accurately distribute dividends to all shareholders, which will in turn ensure prolonged financial survival. Finally, it is Iraqi banks should develop appropriate alternatives for the distribution of financial returns arising from financial investments to cover any deficits in financial liquidity.

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