






# “Financial ratios and book value of shares for selected money transfer companies listed on the Iraq Stock Exchange”

<b>AUTHORS</b>	Sardar Shaker Ibrahim  <a href="https://orcid.org/0000-0002-7519-2137">https://orcid.org/0000-0002-7519-2137</a>  <a href="https://publons.com/researcher/3095674/sardar-shaker-ibrahim/">https://publons.com/researcher/3095674/sardar-shaker-ibrahim/</a> Odunayo Olarewaju  <a href="https://orcid.org/0000-0002-4366-040X">https://orcid.org/0000-0002-4366-040X</a>  <a href="https://publons.com/researcher/AAU-1024-2020">https://publons.com/researcher/AAU-1024-2020</a> Verna Yearwood
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Odunayo Magret Olarewaju, Verna  
Yearwood, 2021

Sardar Shaker Ibrahim, Lecturer,  
Department of Financial and  
Accounting Techniques, Duhok  
Polytechnic University, Duhok, Iraq.

Odunayo Olarewaju, Ph.D., Senior  
Lecturer, Department of Management  
Accounting, Durban University  
of Technology, South Africa.  
(Corresponding author)

Verna Yearwood, Lecturer, Department  
of Management Accounting, Durban  
University of Technology, South Africa.



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Sardar Shaker Ibrahim (Iraq), Odunayo Olarewaju (South Africa),  
Verna Yearwood (South Africa)

# FINANCIAL RATIOS AND BOOK VALUE OF SHARES FOR SELECTED MONEY TRANSFER COMPANIES LISTED ON THE IRAQ STOCK EXCHANGE

## Abstract

The study examined the nexus between the financial ratio and book value of shares for Iraqi money transfer companies. The data used was extracted from the financial reports of selected money transfer companies listed on the Iraq Stock Exchange, and a descriptive, correlation and panel least square regression technique were adopted for the analysis. The result revealed that the financial ratio captured by earnings per share (EPS), return on investment (ROI) and return on assets (ROA) were positively related with the book value of shares (BVAL), while debt ratio (DER) was negatively related with BVAL. Also, EPS, ROA, ROI and DER positively influenced BVAL. Thus, the engagement of competent and qualified personnel to manage the assets and investments in order to ensure optimal returns is urgently required. There is also a need for proper issuing of shares by the management of money transfer companies to ensure free access to the stock market.

## Keywords

financial analysis, financial system, companies' reputation, economic system, panel least square regression

## JEL Classification

B26, E44

## INTRODUCTION

Recently, book value of shares (BVAL) is essential for anyone looking to obtain money and raise capital, especially in the stock market. In view of this, it is an undeniable fact that little is known about the Iraqi financial system, but several individuals want to know how the firms' shares are valued and what is the forecast for share prices in the future (Ibrahim, 2019). Thus, long-term investment and speculation require investors to know the book value of the stocks in which the knowledge of financial ratios cannot be over-emphasized. A report from the Iraq Stock Exchange (2011) showed that the number of stocks in circulation were 693,433,876 shares, whose value was approximately 1,566,238,274 Iraqi Dinars, and the number of listed firms were 85 companies. However, the number of Iraqi firms trading on the Iraq Stock Exchange rise slightly after that year because of the essential roles the financial market played in the financial system.

The role of stock markets is very critical to the progress of any economy (Saymeh & Salameh, 2019), but the ability to monitor the activities of a stock market effectively remains an obstacle to the huge impact of the stock market on the Iraqi economy. Financial ratio allows the comparison of different firm performance meas-

urements in both trend and comparative analysis. Financial ratio acts as an input to predict a firm's risk, future cash flows, financial distress and credit ratings. Accurate BVAL ascertained via effective financial ratio strengthens the company's reputation and position because financial ratios are essential not only for knowing the firm's financial position, but also for analyzing and interpreting the financial evaluation and situations of the entire company.

Since the 2003 regime change and the first and second Gulf wars, Iraq has been faced with various challenges, which have made the maintenance of economic stability in the country difficult. In fact, Iraq has been unable to create a functioning stock market (Ali, 2016). Certainly, the country can build on many sectors despite the huge challenges in the areas of state administration, corruption, public sector maladministration and fighting terror. In this regard, the Iraq Stock Exchange Market is taking steps to trade actively and is encouraging corporations to get listed and trade yet again. Money transfer companies have been identified to trade on the Iraq Stock Exchange, but inefficiently. Undoubtedly, one of the causes for this limitation is inappropriate financial analysis that can resolve an efficient financial ratio. This is due to the fact that the price to book value was a good measure for the individual's investment attention because when shares are sold below the book value, it is considered undervalued, and in the opposite way, when shares are sold over the book value, it is called overvalued. Hence, there is a need to know whether the financial ratios of such earnings per shares (EPS), return on investment (ROI), return on assets (ROA) and debt ratio (DER) have an impact on BVAL for the money transfer companies listed on the Iraq Stock Exchange.

It is clear that for more than 3,000 years, money and capital have played a vital role in humans' lives, and before this period humans used the barter system as a means of transaction. It is an undeniable fact that the economy of Iraq, as a developing country, also suffered from the weak role of financial markets. Moreover, Iraqi financial markets cannot perform the required role because of the absence of the investment environment and the loss of confidence. In 2004, the Iraq Stock Exchange was established by law No. 74, which was located in Baghdad. The main purpose of establishing this market was to develop local financial sectors that positively reflected the economy of Iraq. Thus, it consisted of several companies from various sectors such as banking, insurance, industrial and investment, hotels, tourism, agricultural and service companies. However, in other countries stock markets or financial markets play a vital role in economic growth (Hussein, 2013; Hassan & Sabah, 2019).

According to Hassan and Sabah (2019), to increase the role of financial markets and their regeneration in Iraq, some factors such as creating an appropriate environment of establishing companies and encouraging them to issue shares, allow investors to enter the stock market and encourage them to buy and sell shares of the listed companies. Raising public awareness of the importance of the market and how it works and simplifying procedures for those wishing to work through media, advertising, and others should be taken into consideration. Bratamanggala (2018) opined that issuing shares led to obtaining more capital with the belief that factors such as EPS, price to book value and ROA affected the share price. Similarly, Macharia and Gatuhi (2013) stated that as global competition increased, companies attempt to focus on issuing more shares to survive.

The Iraq Stock Exchange (2020) reported that the banking sector and money transfer companies were the most effective sectors in terms of the large volume of trading and the number of shares traded, followed by the industrial sector and its traded share prices, which are still the best prices compared to the rest of the other traded shares. Thus, it can be emphasized that cash is the most popular method of payment used by the larger percentage of individuals in the country, and a smaller percentage was observed to use credit card facilities or ATM machines. It was also noted that in Iraq and the Kurdistan region, when one needs to change currency, money transfer offices serve as an appropriate means instead of banks and other financial institutions.

## 1. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Agirman and Yilmaz (2018) examined the link between financial ratios and stock returns for 47 listed companies between 2004 and 2014 using a descriptive and regression technique. The results showed that the financial ratio was positively related with the stock returns. Thus, it was emphasized that stock returns can be predicted by financial ratios of companies under consideration. Menaje (2012) examined the influence of some selected variables, such as ROA and EPS, on price of shares in Philippines. The data used was gathered from the sample of 50 randomly selected firms quoted in Philippines and analyzed. The ordinary least square regression technique was used. The results showed that EPS was positively related with the share price, on the one hand, and on the other hand, ROA had negatively influenced the share price of the quoted firms under consideration. Hence, it implied that both ROA and EPS were good determinants of share price.

Kabajeh et al. (2012) explored the relationship between ROE, ROI, and ROA ratios and price of shares in Jordanian insurance firms from 2002 to 2007. Through descriptive and correlation analysis carried out on the data collected for the study, it was found that a direct correlation exists between both ROI and ROA with share price of the companies. Atyeh and Al-Rashed (2015) examined the link between the book value, share price and cost of capital in Kuwait. A sample of quoted Kuwaiti companies for the period of 2005 to 2011 was selected for the study. The descriptive and regression analysis carried out on the collected data from the Kuwait Stock Exchange showed that book values had an inverse relationship with share prices, while cost of capital had a positive relationship with the share price for the selected quoted companies in Kuwait.

Atidhira and Yustina (2017) analyzed the impact of ROA, DER, EPS and company size on share returns in Indonesia between 2011 and 2014. Data extracted from the financial reports of the 35 selected property and real estate industries in Indonesia was analyzed using a panel least square

technique. The findings revealed that DER and EPS had a positive impact on share returns. It was further revealed that ROA and company size were negatively related with share returns of the industries under consideration. Thus, it was emphasized that the aforementioned variables determined the share return of the property and real estate industries in Indonesia. Ali et al. (2017) examined the relationship among ROA, ROCE, EPS and ROE with break-up share values of listed firms in Karachi, Pakistan, for the period 2006 to 2011. The descriptive and correlation analysis showed that all the variables except ROE were positively correlated with break-up share values. Hence, it implied that as the value of the aforementioned variables increases, the break-up share values also increase.

Wijesundera et al. (2016) empirically examined the impact of the financial ratio on stock returns of 60 listed Colombo companies between 2004 and 2013. Using the descriptive and regression analysis technique, the results indicated that the financial ratios such as ROE, EPS and Market Value/ Book Value positively related with the stock return. Thus, this provided empirical evidence for predicting stock returns using financial ratios. Shittu et al. (2016) explored the impact of price of both sales multiples and book value on the price of shares of 100 listed Nigerian firms between 2009 and 2013. The results of the random effect estimation model showed a positive relationship between the variables used for the study.

Abd et al. (2015) studied the influence of price to book value on the stock returns of listed property firms in Indonesia for the period of 2007 to 2013. A sample of 36 listed firms was used from which data was selected and analyzed using the ordinary least square regression technique. Thus, it was discovered that the price to book value significantly influenced shares. AL-Battat and AL-Humaydi (2017) examined the performance indicators of the Iraq Stock Exchange compared to some of the Arab financial markets from 2003 to 2013. The data collected in the study was analyzed using descriptive analysis and ANOVA and it was found that there was a clear gap between the Iraq Stock Exchange and most of the Arab financial markets. It was further found that investment awareness was very weak among investors in some Arab stock markets, which caused high risks in

the markets. Thus, the need existed to decrease the cost of deals so as to increase the process of stock trading operations in financial markets.

Maswadeh (2016) investigated the relationship between market value, firm's returns, and book value per share. The study was carried out on randomly selected sectors of listed Jordanian companies between 2008 and 2014. The ordinary least square regression result showed that book value per share was positively related with the market value. Hence, it was emphasized that any change in book value per share would lead to a change in the market value. Pathirawasam (2013) investigated the relevance value of earnings and book value in Sri Lanka. Data used for the study was gathered from a sample of 924 listed Sri Lanka firms from 2005 to 2009 and descriptive and correlation analysis methods were used. The result indicated that earnings were of less value than the book value of the companies under investigation. Also, it was further indicated that small companies had lower level of book value and earnings information than large companies considered in the study.

Saymeh and Salameh (2019) examined the determinants of stock services prices. A sample of 27 listed shareholding firms for the period of 2010 to 2015 was considered for the study. The analysis done using the regression technique revealed that market value of service share price was significantly affected by factors such as distributed profits, ROA and operational net cash flows. Islamoglu (2015) investigated the impact of the financial ratio on the index of the stock market among the Turkish banks between the years 2002 and 2013. In the study, a sample of 13 Turkish banks from which data was gathered and analyzed using the least square regression technique was considered. It was discovered from the results that debt to equity ratio negatively impacted the Turkish banks' index. It was further found that shareholders' equity to total assets ratio positively influenced the growth of the index stock market. Thus, it was emphasized that changes in the index of the stock market resulted from variations in financial ratios of the Turkish banks under consideration.

Hassan and Sabah (2019) examined the influence of some variables on the price of stocks indexed on the Iraq Stock Exchange over 10 years. Auto Regressive

Distributed Lag (ARDL) model was adopted for the study and the variables were cointegrated. Having established a long-run equilibrium relationship between the variables, the impact of financial ratios such as EPS, ROA, ROI and DER on book value of listed money transfer companies was examined. Generally, the redundant growth of the Iraqi stock market has piqued interest as to whether full awareness of the effect of financial analysis by investors will improve the activities of the market.

Thus, the hypotheses below should be tested:

$H_0$ : *Financial ratios do not have an effect on book value of shares for selected money transfer companies listed on the Iraq Stock Exchange.*

$H_1$ : *Financial ratios have an effect on book value of shares for selected money transfer companies listed on the Iraq Stock Exchange.*

## 2. RESEARCH METHOD

Explanatory research design was used to examine the subject matter in this study. The study was carried out on randomly selected listed money transfer companies listed on the Iraq Stock Exchange. The selection of the companies was based on the availability of required and adequate information on the variables to be examined. Financial statements and annual reports were the main source of the secondary data used. A panel data of eight companies (cross section) and four years (time period) was used. The companies included: AL-Harir for money transfer (AL-HA), Alatif money transfer (ALAT), Nobles for money transfer (NOBL), Al Rabita Al Maliya for money transfer (AL-RAB), Alnoor for money transfer (ALNO), Al Nibal AL-Arabia for money transfer (AL-NIB), Mouta for Remittance (MOUT), and AL Manafaa for money transfer (AL-MAN).

### 2.1. Model specification

Adopting the model specified by Agirman and Yilmaz (2018), the link between financial ratios and stock returns can be stated in functional form as:

$$STKR_{it} = f(FINR_{it}). \quad (1)$$

In a clear form, the model will be:

$$STKR_{it} = \alpha_0 + FINR_{it} + \mu_{it}, \quad (2)$$

where  $STKR_{it}$  – stock returns of the listed companies,  $FINR_{it}$  – financial ratios of the listed companies,  $\mu_{it}$  – stochastic error term,  $i$  – cross-section,  $t$  – time period, and  $\alpha_0$  – constant.

Therefore, to link the relationship between the book value (BVAL) of the money transfer companies (dependent variable) and financial ratios – EPS, ROA, ROI and DER (explanatory variables), the model will be

$$BVAL_{it} = f(EPS_{it}, ROA_{it}, ROI_{it}, DER_{it}) + \mu_{it}, \quad (3)$$

$$BVAL_{it} = \alpha_0 + \alpha_1 EPS_{it} + \alpha_2 ROA_{it} + \alpha_3 ROI_{it} + \alpha_4 DER_{it} + \mu_{it}, \quad (4)$$

where  $BVAL$  – book value,  $EPS$  – earnings per share,  $ROA$  – return on assets,  $ROI$  – return on investment,  $DER$  – debt ratio,  $\mu_{it}$  – error terms,  $t$  – years (time), and  $i$  – money transfer companies (cross section).

### 2.2. Estimation and diagnostic techniques

The descriptive analysis, correlation and the panel least square regression technique were used in this study. Specifically, pooled effect and fixed ef-

fect estimations were used. Post-estimation tests, such as a test for the coefficient of determination, T-test, standard error, F-test and probability test, were carried out.

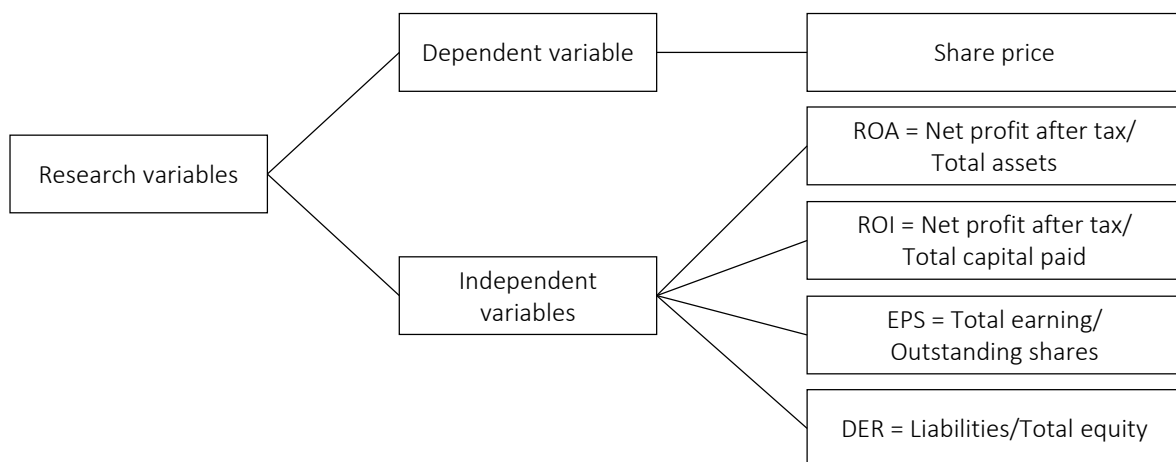
## 3. RESULTS AND DISCUSSION

**Table 1.** Descriptive analysis

VARIABLES	BVAL	EPS	ROA	ROI	DER
Mean	1.015	0.005	0.005	0.006	0.044
Median	1.014	0.005	0.004	0.004	0.003
Maximum	1.048	0.029	0.030	0.042	0.200
Minimum	0.999	0.000	-0.002	-0.004	0.000
Std. Dev.	0.011	0.006	0.006	0.009	0.064
Skewness	0.895	2.109	2.307	2.503	1.071
Kurtosis	4.033	7.817	9.461	9.949	2.509
Jarque-Bera	7.122	63.201	102.400	122.258	8.044
Probability	0.028	0.000	0.000	0.000	0.018
Observations	40	37	39	40	40

Table 1 showed the results of the descriptive analysis of estimating the relationship between BVAL of shares and the financial ratio of the listed money transfer companies for the period from 2013 to 2017. The financial ratio was captured by EPS, ROA, ROI and DER. The result revealed on average that BVAL, EPS, ROA, ROI and DER were 1.0149, 0.0055, 0.0049, 0.0058 and 0.0445, respectively. The implication of the result is that an effort must be made to improve EPS, ROA, and ROI through an effective share price, assets and investment management to enhance better returns for the money transfer companies under considera-

Source: Researchers' compilation, 2021.



**Figure 1.** Explanation of dependent and independent variables

tion. The maximum and minimum ratio for BVAL, EPS, ROA, ROI and DER were 1.048 & 0.999, 0.029 and 0.000, 0.030 and -0.002, 0.042 and -0.004 and 0.200 and 0.000, respectively. The standard deviation of the ratio of 0.011, 0.006, 0.006, 0.009 and 0.064 indicated the rate at which BVAL, EPS, ROA, ROI and DER deviated from their respective expected ratio.

BVAL, EPS, ROA, ROI and DER were positively skewed with coefficients of 0.895, 2.109, 2.307, 2.503 and 1.071, respectively, thus, a distribution with a long tail to the right is concluded. The kurtosis exhibited that BVAL, EPS, ROA and ROI with kurtosis coefficient indices of 4.033, 7.817, 9.460 and 9.949 were mesokurtic in nature, while DER with kurtosis coefficient indices of 2.510 was leptokurtic. From the coefficients of Jarque-Bera and probability values, BVAL, EPS, ROA, ROI and DER were statistically significant in examining the relationship between the dependent and independent variables.

**Table 2.** Correlation matrix

Variable	BVAL	EPS	ROA	ROI	DER
BVAL	1.000	0.841	0.853	0.766	-0.284
EPS	0.841	1.000	0.992	0.735	-0.135
ROA	0.853	0.992	1.000	0.739	-0.191
ROI	0.766	0.735	0.739	1.000	-0.174
DER	-0.284	-0.135	-0.191	-0.174	1.000

The correlation coefficients presented in Table 2 exhibited the extent of the relationship between the variables. From this table, BVAL of money transfer companies was positively correlated with EPS, ROA and ROI with 0.84, 0.85 and 0.77, respectively. Also, EPS was found to be positively correlated with ROA and ROI to the tune of 0.99 and 0.74 coefficients, respectively. The study also revealed a direct correlation between ROA and ROI with the correlation coefficient of 0.74. Also, DER was negatively

correlated with BVAL, EPS, ROA and ROI of the Iraqi money transfer companies under consideration. Thus, this implied that any continuous improvement in the financial ratio such as EPS, ROA and ROI would enhance BVAL for money transfer companies in Iraq.

The panel unit root test in Table 3 showed that all the variables were stationary at level. This was revealed as the probability of both Levin, Lin and Chu  $t$  statistic values, and Augmented Dickey Fuller (ADF) test statistical values for each of the variable was less than the probability of the error margin 0.05. This result establishes a short-run symmetry relationship between the variables.

Table 4 showed the result of the pooled, fixed and random effect panel regression to assess the relationship between BVAL and the financial ratio captured by EPS, ROA, ROI and DER for money transfer companies in Iraq. There is a linear relationship between BVAL, EPS, ROA, ROI and DER. Specifically, the result of the panel model exhibited that the financial ratio had a both positive and negative relationship with BVAL for the selected listed money transfer companies. Thus, it was revealed that EPS, ROA and ROI were positively related with BVAL for the listed money transfer companies, while DER was negatively related with BVAL. From the pooled effect model, the result further revealed that EPS, ROA and ROI prompted a development in BVAL for the selected money transfer companies to the tune of 0.09, 1.04 and 0.37 percent, respectively, while DER was negatively related with BVAL and thus impeded the performance of the selected money transfer companies by 0.02 percent.

The results from the fixed effect estimate shows that ROA, ROI and DER were positively related with BVAL for the selected money transfer com-

**Table 3.** Panel unit root test

Variable	Levin, Lin and Chu $t^*$ statistic	Prob	ADF statistic	Prob	PP statistic	Prob
BVAL	-4.082***	0.0000	29.562**	0.0204	29.842**	0.0188
EPS	-14.079***	0.0021	36.457***	0.0003	35.090***	0.0005
ROA	-4.879***	0.0000	30.019**	0.0179	27.039**	0.0410
ROI	-6.956***	0.0000	45.008***	0.0001	46.977***	0.0001
DER	-5.726***	0.0000	36.037***	0.0029	41.440***	0.0005

Note: \*, \*\* and \*\*\* – stationary with significance levels of 10%, 5% and 1%, respectively.

**Table 4.** Panel least square regression estimate

Dependent variable: BVAL							
Var	Pooled		Fixed		Random		
	Coef.	Prob.	Coef.	Prob.	Coef.	Prob.	
C	1.007	0.000***	1.007	0.000***	1.007	0.000***	
EPS	0.092	0.943	-0.336	0.764	-0.199	0.847	
ROA	1.038	0.436	1.212	0.287	1.181	0.263	
ROI	0.372	0.024**	0.326	0.013**	0.367	0.004***	
DER	-0.021	0.213	0.033	0.088*	-0.001	0.964	
Specification of Effects							
					S.D.	Rho	
					Cross-section random	0.0026	0.3103
					Idiosyncratic random	0.0039	0.6897
	Pooled (Cross-section)		Fixed (Cross-section)		Random (Cross-section)		
AL-HA	-		0.0045		0.0025		
ALAT	-		0.0050		0.0036		
NOBL	-		0.0035		0.0008		
AL-RAB	-		-0.0020		-0.0020		
ALNO	-		0.0024		0.0005		
AL-NIB	-		0.0038		0.0018		
MOUT	-		-0.0055		-0.0020		
AL-MAN	-		-0.0117		-0.0053		
R-squared	0.7809		0.9169		0.7588		
Adjusted R-squared	0.7535		0.8804		0.7286		
F-statistic	28.521		25.091		25.168		
Prob(F-statistic)	0.0000		0.0000		0.0000		

Note: \*, \*\* and \*\*\* refer to significance levels at 10%, 5% and 1%. Var stands for variable, Coef stands for coefficients, and Prob stands for the probability values.

panies and, thus, a better performance of the companies to the turn of 1.21, 0.33 and 0.03 percent, respectively, while EPS was negatively related with BVAL and thus limited the performance of the selected money transfer companies by 0.34 percent.

The random effect model showed that EPS, ROA and ROI led to an improvement in BVAL for the selected money transfer companies to the tune of 1.18 and 0.37 percent, respectively, while EPS and DER were negatively related with BVAL and thus impeded the performance of the selected money transfer companies by 0.20 and 0.001 percent, respectively. These findings contradict studies by Menaje (2012) and Atidhira and Yustina (2017), which revealed that EPS and DER were positively related with share returns. This confirmed the position of Islamoglu (2015), who previously found an inverse relationship between the stock index and debt to equity ratio. This means that there are impediments to the performance of the selected money transfer companies under consideration in Iraq.

The probability values of 0.024, 0.013, 0.004 < 0.05 revealed that the estimated parameter of ROI for the three estimates was statistically significant in assessing the subject matter. However, the probability values ( $P > 0.05$ ) revealed the insignificance of the estimated parameters of EPS, ROA and DER. A thorough examination of the result from fixed effect estimates based on the individual selected money transfer companies showed that the EPS, ROA, ROI and DER were positively influenced by BVAL for the AL-HA, ALAT, NOBL, ALNO and AL-NIB by 0.0046, 0.0051, 0.0035, 0.0020 and 0.0039 percent, respectively. Also, it was found that EPS, ROA, ROI and DER under consideration negatively affected BVAL for the AL-RAB, MOUT and AL-MAN, respectively, in Iraq money transfer companies.

The result from the random effect estimates, based on the individual selected money transfer companies, showed that ROA, ROI and DER positively influenced BVAL for the AL-HA, ALAT, NOBL, ALNO and AL-NIB to the tune of 0.0026, 0.0037,



**Table 5.** Hausman test (correlated random effects)

Test summary		Chi-Sq. statistic	Chi-Sq. d.f.	Prob.
Random (cross-section)		14.966	4	0.0048***
Random effects test comparisons (cross-section):				
Var	Fixed	Random	Var (Diff.)	Prob.
EPS	-0.3361	-0.1996	0.1782	0.7465
ROA	1.2123	1.1813	0.1690	0.9398
ROI	0.3263	0.3665	0.0012	0.2463
DER	0.0327	-0.0006	0.0001	0.0027***

Note: \*, \*\* and \*\*\* refer to significance levels at 10%, 5% and 1%. Var stands for variable, Coef stands for coefficients, and Prob stands for the probability values.

0.0009, 0.0006 and 0.0021 percent, respectively. Furthermore, it was revealed that money transfer companies showed that EPS, ROA, ROI and DER negatively influenced BVAL for the AL-RAB, MOUT and AL-MAN to the tune of 0.0021, 0.0021 and 0.0054 percent, respectively, in Iraqi money transfer companies. The idiosyncratic random error term having a rho value of 0.689 indicates a strong correlation between the cross-sectional error term and the individually selected companies.

0.754, 0.880 and 0.7287 as the adjusted R-squared for the three estimates (pooled, fixed and random effect) exhibited that 75.4, 88.0 and 72.9 percent variation in the book value of shares for the selected money transfer companies in Iraq can be explained by the financial ratio captured by EPS, ROA, ROI and DER under consideration. Thus, it implies EPS, ROA, ROI and DER enhance BVAL for money transfer companies. Overall, the probability values of the F- statistics of 0.000, 0.000 and 0.000, which is less than 0.05, is an indication that all the estimates were statistically significant. Thus, the estimations were reliable, valid and appropriate for assessing the impact of financial ratios on BVAL for the selected money transfer companies in Iraq.

Hausman test result is shown in Table 5. The chi-square value 14.966 is greater than 9.488, and 0.0048 probability value is greater than 0.05. This means that the random effect estimate was consistent with the impact of the financial ratio on the

book value of money transfer companies. Thus, the random effect estimate was better than the fitted fixed effect estimate, hence it was preferred. This made a random effect estimate when examining the impact of the financial ratio on BVAL for the money transfer companies selected for this study. Thus, the fact that the random effect model was found to be the most reliable, consistent, efficient and sufficient, led to the residual cross-sectional dependence (CD) test presented in Table 6.

**Table 6.** Residual CD test

$H_0$ : There is no CD/correlation in the weighted residual			
Period: 5			
Cross-sections: 8			
Total observations (balanced): 37			
Test	Statistic	d.f.	Prob.
Breusch-Pagan LM	33.030	28	0.235
Pesaran scaled LM	-0.396		0.692
Pesaran CD	1.102		0.271

Note: \*, \*\* and \*\*\* refer to significance levels at 10%, 5% and 1%. Var stands for variable, Coef stands for coefficients, Prob stands for the probability values.

Table 6 shows the result of the residual CD of Breusch-Pagan LM, Pesaran scale LM and Pesaran CD. Thus, the values of 33.030, -0.397 and 1.102, respectively, with the corresponding probabilities values of 0.235, 0.692 and 0.271 greater than 0.05 exhibited the acceptance of no CD. Hence, this suggests that there was CD between the financial ratios, such as EPS, ROA, ROI and DER, and BVAL for the money transfer companies in Iraq.

## CONCLUSION

An investigation of the impact of financial ratios on BVAL for the selected money transfer companies as revealed by the random effect model showed that ROA and ROI led to an improvement in BVAL for the selected money transfer companies. It was found that EPS and DER were negatively related with

BVAL. Post-estimation tests revealed that ROI had a great effect on the book value of money transfer companies and thereby enhanced the performance of Iraqi money transfer companies. The heterogeneity study of the selected money transfer companies revealed that financial ratios, such as EPS, ROA, ROI and DER, positively influenced BVAL, particularly for AL-HA, ALAT, NOBL, ALNO and AL-NIB as money transfer companies. Furthermore, it was found that money transfer companies showed that EPS, ROA, ROI and DER negatively influenced BVAL for AL-RAB, MOU and AL-MAN, respectively, in Iraqi money transfer companies.

Thus, it can be concluded that the management of money transfer companies must engage competent and qualified personnel to manage their assets and investments in order to ensure optimal returns. Information asymmetry should be minimal, and access to markets should be widened in such a way as to encourage investors and to be able to trade on the stock market. Operational efficiency, stability, profitability and liquidity give investors more pertinent information about companies. This allows analysts and investors to gain lucrative advantages in the stock market using widely accepted and debatably essential ratio analysis techniques.

## AUTHOR CONTRIBUTIONS

Conceptualization: Sardar Shaker Ibrahim.

Data curation: Sardar Shaker Ibrahim.

Formal analysis: Odunayo Olarewaju.

Investigation: Odunayo Olarewaju.

Methodology: Odunayo Olarewaju.

Resources: Verna Yearwood.

Software: Verna Yearwood.

Supervision: Odunayo Olarewaju.

Validation: Sardar Shaker Ibrahim, Verna Yearwood.

Writing – original draft: Sardar Shaker Ibrahim.

Writing – review & editing: Verna Yearwood.

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