Tikrit Journal of Administrative and Economic Sciences, Vol. 20, No. 65, Part (1): 314-330
Doi: www.doi.org/10.25130/tjaes.20.65.1.18

Tikrit Journal of Administrative and Economics Sciences
مجلة تكريت للعلوم الإدارية والاقتصادية

ISSN: 1813-1719 (Print)
E-ISSN: 3006-9149

The Impact of the Current Ratio and Profitability Ratio on Solvency Ratios: An Applied Study in the Tehran Stock Exchange

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Abstract: The purpose of this study is to investigate the impact of liquidity ratio and profitability ratio on the solvency ratio of pharmaceutical companies, which are listed on the Tehran Stock Exchange (TSETMC) for the period (2011-2017). To arrive at this conclusion, the simple linear regression method, using the secondary data of 10 pharmaceutical companies in the annual financial statements of these companies, after auditing them into the analysis program (SPSS 22). where each liquidity ratio (LR) measured the by current ratio (CR) and profitability ratio (PR) measured by return on equity (ROE), as two independent variables - based on liquidity ratio index (SR) used as the dependent variable used are evaluated. The results revealed that there is a statistically significant positive relationship between the solvency ratio (SR) and liquidity ratio (LR) in pharmaceutical companies. However, there is a statistically significant negative relationship between the profitability ratio (PR) and the debt-to-asset ratio, which serves as a measure of the solvency ratio (SR). Thus, the results of the study showed that each of the independent variables has an impact on the solvency ratio (SR) in the Iranian pharmaceutical sector. The study suggested that future research should examine the impact of liquidity ratio (LR) and profitability ratio (PR) on solvency ratio (SR) in other sectors and industrial establishments, especially important to compare Iranian firms with the same developing country firms in a situation financial are similar.

Keywords:
Liquidity Ratio, current ratio, Profitability Ratio, return on equity, Solvency Ratio, Debit Ratio.

ARTICLE INFO

Article history:
Received 18 Sep. 2023
Accepted 19 Feb. 2024
Available online 31 Mar. 2024

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تقييم أثر النسبة التداول ونسبة الربحية على نسب الملاءة: دراسة تطبيقية في بورصة طهران

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المستخلص

الهدف من هذه الدراسة هو معرفة تأثير نسبة السيولة ونسبة الربحية على نسبة الملاءة المالية. شركات الأدوية المدرجة في بورصة طهران (TSETMC) للفترة (2011-2017). وللتوصل إلى هذه النتيجة تم استخدام أسلوب الانحدار الخطي البسيط، وذلك باستخدام بيانات ثانوية لعشر شركات أدوية من القوائم المالية السنوية لهذه الشركات، بعد تدقيقها في برنامج التحليل (SPSS 22). حيث يتم قياس كل نسبة سيولة (LR) من خلال النسبة التداول (CR) ونسبة الربحية (PR) التي يتم قياسها من خلال العائد على حقوق الملكية (ROE)، كمتغيرين مستقلين - بناءً على مؤشر نسبة السيولة (SR) المستخدم كمتغير تابع يستخدم لتقييم. وأظهرت النتائج أن هناك علاقة موجبة وذات دلالة إحصائية بين نسبة الملاءة المالية (SR) ونسبة السيولة (LR) في شركات الأدوية. ومع ذلك، هناك علاقة سلبية ذات دلالة إحصائية بين نسبة الربحية (PR) ونسبة الدين إلى الأصول، والتي تعمل كمقياس لنسبة الملاءة المالية (SR). وهكذا أظهرت نتائج الدراسة أن كل من المتغيرات المستقلة يؤثر على نسبة القدرة (SR) في قطاع الأدوية الإيراني. اقترحت الدراسة أن الأبحاث المستقبلية يجب أن تدرس تأثير نسبة السيولة (LR) ونسبة الربحية (PR) على نسبة القدرة (SR) في القطاعات الصناعية والمشاريع الأخرى، وذلك بشكل خاص لمقارنة الشركات الإيرانية ذات الوضع المالي نفسه مع شركات البلدان النامية المشابهة.

الكلمات المفتاحية: نسبة السيولة، النسبة التداول، نسبة الربحية، العائد على حقوق المساهمين، نسبة الملاءة، نسبة الدين.

1. Introduction

Financial statements can be used as leverage to show significant information about the company's environment and what financial performance the company is at (Wali & Akkar, 2021). Based on the information in the financial statements, the government and businesses can make the necessary decisions and analyses on the sustainability of the company (Qader & Fakhr, 2016: 372). Financial ratios are one of the tools for analysis and one of the ones that predict the change in corporate earnings (Baraja & Yosya, 2018).

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At current rates, the liquidity position of an industry can be determined to assess the company's ability to pay its short-term obligations (Akaer, 2019). It is determined by dividing the current business's ratio of assets to current liabilities (Wali & Akkar, 2021). A high current ratio indicates that a company's present assets are sufficient to pay off its present obligations (Ajanthan, 2013). The current ratio is a subset of the liquidity ratio that measures a company's ability to pay short-term obligations. that the current liabilities of the company are calculated against the current assets to be distributed. When a company's current assets exceed its current liabilities, it has a high current ratio to cover the company's liabilities.

The results obtained in past studies suggest that the results are not all the same. Instead, the results vary according to the sectors and countries in which the study was conducted. For example, the results of (Pathan, 2022) and (Refni, 2021) studies show a positive relationship between liquidity ratio and solvency ratio. This result is the result obtained in this study by using the simple linear regression method, which shows a positive relationship between liquidity ratio and solvency ratio in the pharmaceutical sector in Iran at the same time. The opposite result was obtained in the studies of (Aziz & Rahman, 2017: 86) and (Waqas Bin Khidmat, 2016). This is because for the profitability ratio, the result is completely opposite to the result of the liquidity ratio. Therefore, we see that the results are in agreement with the results of the research of (Aziz & Rahman, 2017), (DAHIYAT, 2016), and (Waqas Bin Khidmat, 2016), and the opposite of the results of this study (Refni, 2021). Therefore, this study aimed to investigate the effect of liquidity ratios and profitability ratios on solvency ratios. In addition, the extent to which each of the independent variables affects the affordability ratio was investigated. Because Iran is one of the countries that has made good progress in the field of pharmaceuticals, has this progress affected its solvency, liquidity, and profitability?

Overall, the study is divided into five sections. That is an introduction to the subject, part one. The second section discusses the research literature. While Section 3 describes the research methodology, The results are discussed in the penultimate section, and the conclusions and recommendations are discussed in the final section.

2. Bibliography: Profitability changes dramatically when based on a multinational arrangement taking into account international trade. Therefore, all international business theories on profitability emphasize that multinationalism has a positive effect, but on the contrary, no-good results have been shown in empirical research (Pathan, 2022: 67). Profit from sales, total assets and ownership of corporate capital. This ratio can help a company’s board of directors and investors identify the extent to which a company’s asset investment can be well managed for income (Abbas & Khalaf, 2022: 468). The higher the return on assets, the better it is for the company as it meets the debt faster, which affects the company’s viability (Bon et al., 2022). Evaluating a company’s profitability based on its revenue, assets, or stock is done through the use of one of the financial ratios, the profitability ratio. (Muhamad & Muhammad, 2018: 198). The returns on equity (ROE), return on asset (ROA), and Gross Profit Margin are all common profitability ratios. High profitability ratios indicate that a company's resources are being used efficiently to generate profits (M. A. Ahmed, 2023: 207).

The financial capacity of the company to meet its long-term obligations is referred to as “solvency”. It refers to the long-term ability of the entity to meet all of its financial obligations, including loans and interest on loans. In other words, solvency is seen as a representation of the financial structure of the institution (Robinson & Sensoy, 2016: 4). The solvency ratio It provides an overview of how the structures within the company have built capital. One of the most important components of capital is debt. Plus, cash flow from the company can secure interest on loans and alternative costs such as rent and leases. Therefore, internal and external financing is often used to secure the firm's financial resources, including savings, contracts, equity, and bank loans. (San & Heng, 2011: 29). In order to assess the ability of the company to cover its obligations in the long run, the solvency ratio is used. Cash flow ratios are useful for measuring a company's strength over time (Kajananthan & Velnampy, 2014: 163). solvency ratio that measures a company's ability to meet long-term obligations is the solvency ratio. It is calculated by dividing the total liabilities of the company by the total assets. A high solvency ratio indicates that a company has a low debt-to-asset ratio and is less likely to default on long-term obligations. In summary, these ratios provide important information about a company’s liquidity, profitability, and solvency, which is crucial for assessing financial health and making sound investment decisions.

3. **Literature Review:** The company's capacity to make a profit from sales, total assets, and own capital is measured by the profitability ratio (A. M. Ahmed, 2022: 146). (Odero, 2017: 57) Investors can use this ratio to help them determine the extent to which management can demonstrate that the company's financial performance is good enough to make the investment in its assets profitable. Because it will be better for the company, the return on assets will be higher. That will enable the company to pay off the accumulated debt in a short period of time. A higher return on assets is better for the business and will affect its bond rating. Study (Saleem & Ramiz, 2011) The results show that ROA is only significantly affected by liquidity ratio, while this effect is lower for ROE and ROI, while the results show that all three current ratios, quick ratio, and liquidity ratio do not significantly affect ROE but do on ROI. The study's main results show that the financial condition of oil and gas enterprises in Pakistan is significantly affected by each of the variables, especially the liquidity ratio, which ranks first. The financial condition of enterprises is also directly affected by profit margins. Also, the Study (Amanda, 2019) This study's goal is to examine the way modifications in cash, accounts receivable, inventory, current ratios, and debt-to-equity ratios affect profitability. The basic chemical industry sector on the Indonesian Stock Exchange IDX serves as the study's sample. financial report which is taken by some criteria. The results show that cash trading, receivables, inventory changes, and credit ratios have no impact on profitability, while the current ratio positively impacts profitability. Whereas the Study (Svitlík & Poutník, 2016: 22) Liquidity ratio is relatively strongly correlated in all three ratios, the selected current ratio (CR), selected quick ratio (QR), and selected working capital turnover (WCT). While the weak correlation between liquidity ratio and return on assets (ROA) and return on equity (ROE) as an indicator for profitability according to the results of the main findings of the study.

According to a study by (Öztürk & Karabulut, 2018: 109), the results are similar for stock returns on the Istanbul Stock Exchange, where price yields and yield rates have an important effect on these returns, while current rates do not have this effect. Stocks that generate higher returns in future periods show higher E/P ratios and earnings ratios. According to an empirical

analysis study to determine the relationship between profit-to-price, and the current ratio on the Istanbul Stock Exchange. Study (Ajanthan, 2013) of business companies listed on the Sri Lanka Stock Exchange. According to the results of correlation and regression analysis and descriptive statistics were obtained. It shows that firm liquidity has a significant positive relationship with profitability in Sri Lankan firms (Ajanthan, 2013: 221).
According to (Mulyadi & Sinaga, 2020) This study of transportation companies in terms of service infrastructure listed on the Indonesian Stock Exchange analyzed the current ratio, net profit margin, and appropriate management of the companies to show the impact on the company's capacity. The results also show that corporate capacity falls partially influenced the by current rate (CR), net profit margin (NPM), and optimal corporate governance (GCG).

A study of (Victor Chukwunweike, 2014) used companies' financial statement analysis (FSA) to determine the extent of liquidity's impact on profitability. The results showed that return on equity (ROE) significantly affects the relationship between the current ratio and profitability in certain firms.

According to the results of (A. M. Ahmed, 2022) research, the list of commercial banks that have been listed on the Iraqi Stock Exchange (ISX) for the years 2011 to 2014 has been used. The results show the conclusion that there is a strong positive relationship between total assets, number of employees, and return on assets. This is despite the fact that return on assets and total sales are negatively correlated.

3-1. Hypotheses Development

3-1-1. Relationship Between Current Ratio and Solvency Ratio: A study by (Victor Chukwunweike, 2014) examines the performance over the last five years of Dialog Axiata PLC and Sri Lanka Telecom PLC using traditional financial ratios and cash flow ratios. The benefit was drawn from the financial reports posted on the website of the Colombo Stock Exchange (CSE) and was analyzed using measures of liquidity, solvency, and operating efficiency were measured. The results differed was explained that the traditional ratio of cash flow ratios in liquidity, solvency, and profitability achieved. The obtained results reveal that Sri Lanka Telecom PLC has a higher solvency ratio as compared to Dialog Axiata PLC. This suggests that there is an imbalance in Dialog Axiata PLC, which may be due to the

Doi: www.doi.org/10.25130/tjaes.20.65.1.18

ownership structure style and working capital management technique. (Yenni et al., 2018: 35) also examined the impact of solvency and working capital on profitability the results of this study concluded that solvency and working capital have a great impact on profitability in companies, so to have big profitability you have to have good cash flow and working capital. In the case of good working capital management, cash flow, and working capital will be high and affect profitability. In this case, a lack of good working capital management creates problems for profitability as expenses increase. The company does not increase sales significantly in covering the increase in expenses such as increased inventory and increased interest costs. Because the firm cannot significantly raise the selling price in the labor market, the working capital to cash ratio of earnings decreases. to affect company profitability, company should reduce its liabilities and should use less foreign and bank debt to create expenses, you should avoid stopping investing in unproductive assets. Study (Madushanka, 2018: 161) Results from Sri Lankan listed companies operating in manufacturing show that liquidity ratio (quick ratio) positively and significantly affects solvency ratio. (Pathan, 2022: 71) found that solvency and liquidity have an impact on increasing profitability then. It can reduce their income on total asset investment if it is invested in a lot of multilateralism.

H1: The Current ratio has a significant positive effect on the solvency ratio.

3-1-2. Relationship Between Profitability Ratio and Solvency Ratio: In the study of (Dahiyat, 2016: 36) The effectiveness of liquidity measurement, debt ratio to measure solvency, and return on assets ratio for measuring profitability were calculated. They analyzed the profitability of banks to demonstrate their solvency. Using direct regression analysis to investigate the relationships, the findings showed that profitability does not affect solvency, but at the same time, profitability has a negative effect on liquidity. All the banks in Amman are listed on the stock exchange. Whereas the Study (Syarifah, 2021: 97) The study's findings demonstrate that solvency ratio, liquidity ratio, and earnings management, and earnings ratio simultaneously influence bond ratings. Earnings management, solvency rates, and profitability ratios have a negative impact, and Bond ratings are positively and significantly impacted by the liquidity ratio, for all real estate sector companies listed on the Indonesian Stock Exchange.

Doi: www.doi.org/10.25130/tjaes.20.65.1.18

According to the results of a study (Aziz & Rahman, 2017) of food industry companies listed on the Oman Stock Exchange to determine the relationship between liquidity and income. It shows that there is no relationship between part of a firm's ability to meet its long-term financial obligations such as (debt divided by asset ratio, proportion of debt-to-equity ratio, long-term debt to asset ratio, long-term debt divided by equity ratio, and interest coverage) with There is no (operational cash flow margin and gross profit margin). On the other hand, some of the results show that there is a negative relationship between (the debt/assets ratio, and debt/equity ratio) and (operating profit margin [OPM], net profit margin [NPM], and return on equity [ROE].) There is.

In the study (Refni, 2021) the Liquidity ratio is significantly related to profitability, so as the liquidity ratio increases profitability increases. Because profitability depends on the solvency of companies operating in the Indonesian agricultural sector listed on the Indonesian Stock Exchange.

This study by Bin (Waqas Bin Khidmat, 2016) was conducted to show the impact of liquidity and treatment on profitability. The findings indicated that the relationship between solvency and profitability is inverted, so when profitability increases solvency decreases, and vice versa in the companies operating in the chemical sector of Pakistan. According to (Yenni et al., 2018: 35) the results of this study, there is a relationship between solvency and profitability in CV Masindi Based on electricity, Medan the T-test, which partially explains the significant effect of solvency on profitability. The Fount value is further expressed by the F test.

H2: The profitability ratio has a significant negative effect on solvency.

4. Research Methodology

4-1. Data Collection and Research Designed: This study aims to evaluate the impact of the liquidity ratio and earnings ratio on the solvency ratio using the descriptive research technique, which explains all major components of the study. The data of this study rely on secondary data from audited financial statements of ten listed pharmaceutical industry companies listed in Tehran (TSETMC), which were obtained for seven years from 2011 to 2017).

4-2. Definition of variables:

Table (1): Description of the variables

Variable	Description
Dependent variable:	
Solvency Ratio.	Total Debts divided by Total Assets.
Independent variables:	
Liquidity Ratio.	Current Assets divided by Current Liabilities.
Profitability Ratio.	Net income divided by shareholders' equity.

The independent variables of this study are liquidity ratio and profitability ratio, where the liquidity ratio is used to calculate the firm's ability to meet its short-term obligations at maturity. and the profitability ratio used to measure how well the company's level of profitability has been achieved by the company. And the dependent variable is the solvency ratio, which has been used to assess whether the firm has sufficient assets to meet all its obligations, including both short-term and long-term debt. This correlation described below is based on the Pearson correlation to show how the independent variables jointly influence the dependent variable. Simple linear regression methods were used to calculate the results of the study variables. (Baraja & Yosya, 2018: 10), and (A. M. Ahmed, 2022b: 150) used the same model in their studies. The simple linear regression technique was developed as follows:

$$SL = \beta 0 + \beta 1\, LR + \beta 2\, PR + E$$

Where:

SR= Solvency Ratio.

LR= Liquidity Ratio.

PR= Profitability Ratio.

β_0*= Constant.*

β_1 *to* β_2*= Coefficients of concerned explanatory variable.*

E=Erorr Term.

5. Research model

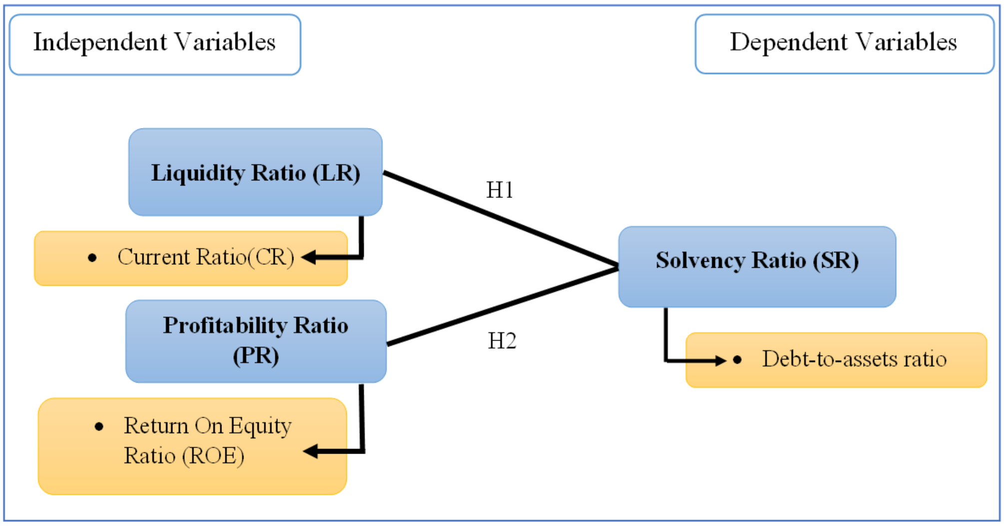

Figure (1): Relations among variables

6. Results and Discussion:

6-1. Description Statistics

Table (2): Description Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Solvency Ratio	70	.01	1.14	.5887	.24798
Current Ratio	70	.06	11.37	.6330	1.31592
Profitability Ratio	70	.06	30.78	2.7896	5.14975
Valid N (leastwise)	70				

Source: the researcher's compilation of SPSS22 outputs.

Table 2 Illuminates the descriptive statistical results regarding the independent and dependent variables. That the mean (SR) indicating total debt to total assets of 10 pharmaceutical companies from 2011-2017 is (.5887), with maximum (1.14) and minimum (.01) for (SR). The mean (CR) assigning current assets to current liabilities is (.6330), with a range of (11.37) to (.06). While the mean (PR) of the mentioned companies is the measured net profit per share (2.7896) with a maximum (30.78) and a minimum (.06), the standard deviation has undoubtedly been defined as a measure that sheds light on how much data is around the mean It has been published. Thus, the standard deviation presented in Table 2 makes it clear that the deviation for both SR and CR is (.24798) and (1.31592), while the standard deviation of PR is 5.14975, indicating that the standard deviation is greater than zero, i.e., a correlation There is a positive relationship between the independent variables of current ratio and profitability ratio with solvency ratio of pharmaceutical companies listed on Tehran Stock Exchange for 2011-2017.

6-2. Analysis of Correlations

Tabil (3): Correlations

		Solvency Ratio	Liquidity Ratio	Profitability Ratio
Solvency Ratio	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	70		
Liquidity Ratio	Pearson Correlation	.275*	1	
	Sig. (2-tailed)	.021		
	N	70	70	
Profitability Ratio	Pearson Correlation	-.647**	-.068	1
	Sig. (2-tailed)	.000	.574	
	N	70	70	70

*. Correlation is significant at the 0.05 level (2- tailed).
**. Correlation is significant at the 0.01 level (2- tailed).
Source: the researcher's compilation of SPSS22 outputs.

Table (3) illustrates how closely dependent and independent variables were related, and they are examined to see if there is already has an association between variables, the results show that solvency ratio positively linked with liquidity ratio which measured by dividing current asset by current liabilities (CR) and negatively correlated with profitability which measured by dividing net income by shareholders equity (PR) with a rate of 0.275 or (27.5%) and -0.647 or (-64.7%) respectively, this clearly note that the solvency ratio of the 10 Iranian pharmaceutical companies have a weak positive relationship with its liquidity ratio an strong negative relationship with its profitability ratio, findings also demonstrated a weak negative relationship between liquidity ratio and profitability ratio with a rate of -0.068 or (-06.8%).

Moreover, the Pearson correlation coefficient between solvency ratio, liquidity ratio, and profitability is significant at 0.275 and -0.647, which indicates a strong relationship between dependent and independent variables of the study. It also revealed that variables go in different directions, hence the findings explain that relationship. In LR and SR, there was a very low and statistically significant positive correlation (R = 0.275, P > 0.05), hence H1 was supported. This shows that the increased capacity of ten Iranian pharmaceutical industry firms to fulfill their short-term mandates leads to slightly increased capacity for implementing their long-term commitments from 2011 to 2017. Moreover, the Pearson product correlation of PR and SR was found to be a moderately negative and statistically significant correlation (R = -0.647, P > 0.05), hence H2 was supported, showing that an increase The ability of Iranian pharmaceutical industry companies to earn profits relative to their revenue or investment during 2011–2017 will result in a moderate decrease in their ability to meet long-term commitments.

6-3. Regression Analysis:

Table (4): Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.687[a]	.472	.456	.18285

a. Predictors: (Constant), Profitability Ratio, Current Ratio
b. Dependent Variable: Solvency Ratio

Source: the researcher's compilation of SPSS22 outputs.

From Table 4, the value of R is 68.7%, which indicates the strength of the correlation between dependent and independent variables in this study. R square shows a result of 47.2%, which displays that the independent variables have an impact of 47.2% on the dependent variables. While the remaining 52.8% is illustrated by other variables outside the mentioned independent variable in this study, this indubitably elucidates that there are various contributors that can be used to explain solvency.

6-4. Analyze of Variance:

Table (5): Variance Analysis ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	2.003	2	1.001	29.954	0.0000
Residual	2.240	67	.033		
Total	4.243	69			

a. Dependent Variable: Solvency Ratio
b. Predictors: (Constant), Profitability Ratio, Current Ratio.
Source: the researcher's compilation of SPSS22 outputs.

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From Table 5, F value of 29.954 and significance of 0.000, this determines that the statistical significance of the regression model run is less than 0.05, so it is very significant and any change in the independent variable will fully affect the dependent variable (SR). With this result, the null hypothesis is rejected and the alternative hypothesis is accepted.

6-5. Coefficient Model

Table (6): Coefficient Model

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	**Std. Error**	**Beta**		
1	(Constant)	.646	.027		23.574	.000
	Liquidity Ratio	.044	.017	.232	2.608	.011
	Profitability Ratio	-.030	.004	-.631	-7.092	.000

a. Dependent Variable: SR.

Source: the researcher's compilation of SPSS22 outputs.

This study aims to investigate the impact of liquidity ratio and profitability ratio on solvency ratio in the Iranian pharmaceutical sector. The regression equation was developed by the researcher. which is shown below:

$SR = 0.646 + 0.044 + (-0.030) + E$

7. Discussion: The regression analysis of solvency ratios using liquidity ratios and profitability ratios is presented in Table 6. Based on the ratio of debt to assets used as the measure of the dependent variable. The results in Table 6 show a statistically significant and favorable relationship between the solvency ratio and the liquidity ratio, with a coefficient of.646. This basically suggests that, assuming other factors remain constant, with a 1% increase in the liquidity ratio, it is the debt-to-assets ratio used as the solvency ratio index that will go up by 64.6%. This result is different from the results of (Aziz & Rahman, 2017) and (Waqas Bin Khidmat, 2016), who found a negative relationship between the liquidity ratio and the solvency ratio. While the results agree with those of (Refni, 2021) and (Pathan, 2022). This result shows that the first hypothesis that liquidity ratio has a significant and positive effect on solvency ratio in the Iranian pharmaceutical sector is accepted.

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Furthermore, a statistically significant and negative relationship between profitability ratio and debt-to-assets ratio, which is used as a solvency ratio measure, estimates the value of its coefficient (-.030), respectively. This indicates that a 1% increase in the profit margin results in a −3% decrease in the solvency rate, assuming all other variables remain constant. This result is the same as the results of the studies of (Aziz & Rahman, 2017), (DAHIYAT, 2016), and (Waqas Bin Khidmat, 2016). While this result is contrary to the result of the study (Refni, 2021), Thus, the second hypothesis that Profitability Ratio has a significant negative effect on solvency is accepted.

Conclusion and Recommendation:

A. Conclusion: The objective of this paper is an evaluation of the effect of liquidity ratio (LR) and profitability ratio (PR) on solvency ratio (SR). The dependent variable is the solvency ratio, which was measured as the ratio of debt to assets. While each liquidity ratio (LR) and profitability ratio (PR) were specified as independent variables, each was measured by the current ratio and stock return. Ten pharmaceutical companies listed on the Tehran Stock Exchange for the years 2011–2017 provided the secondary data used in this study based on their audited annual financial reports. Using multiple linear regression, a single econometric model for measurement was advanced to quantify and determine the impact of liquidity ratio (LR) and profitability ratio (PR) on solvency ratio (SR).

Based on the results obtained in the study, it shows that the liquidity ratio measured at the current rate has a statistically significant positive and favourable relationship between the solvency ratio and the liquidity ratio. It is possible for pharmaceutical companies in Iran to try to increase their liquidity ratio at the current rate. At the same time, the results of this study are different from those of (Aziz & Rahman, 2017). and (Waqas Bin Khidmat, 2016), who found a negative relationship between the liquidity ratio and the solvency ratio. However, the results of the study agree with those of (Refni, 2021) and (Pathan, 2022).

While the results for the independent variable of profitability ratio are opposite to the result of solvency ratio, because private sector entities operate for profit, profitability ratios and solvency ratios must be correlated. Moreover, the findings show a statistically significant negative relationship between liquidity ratio and profitability ratio as assessed by return on assets

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and return on equity. This result is the same as that of the studies of (Aziz & Rahman, 2017), (DAHIYAT, 2016), and (Waqas Bin Khidmat, 2016). While this result contradicts the result of the study (Refni, 2021).

B. Recommendation: The paper suggests that future research should examine the impact of other sectors and various industrial institutions, which are listed on the Tehran Stock Exchange (TSX), to determine and evaluate the impact of the relationship between the liquidity ratio and the profitability ratio on the solvency ratio. It may also be important to compare Iranian firms with firms in other developing countries in similar financial situations.

References:

1. Abbas, K. J., & Khalaf, H. H. (2022). The impact of monetary policy on the profitability of commercial banks in Iraq a selected sample for the period (2006-2020) Researcher: Tikrit Journal of Administration and Economics Sciences, 18(59), 465–483.
2. Ahmed, A. M. (2022a). The Relationship Between Firm Size and Profitability "Evidence from the Commercial Banks in Iraq." The Scientific Journal of Cihan University – Sulaimaniya, 6(1), 145–156.
3. Ahmed, A. M. (2022b). The Relationship Between Firm Size and Profitability "Evidence from the Commercial Banks in Iraq" Amanj. The Scientific Journal of Cihan University – Sulaimaniya, 6(1), 145–156.
4. Ahmed, M. A. (2023). The impact of securitization in enhancing the banking profitability index: An applied study on a sample of US banks for the period (2012-2022). Tikrit Journal of Administrative and Economic Sciences, 19(62), 200–220.
5. Ajanthan, A. (2013). A Nexus Between Liquidity & Profitability: A Study of Trading Companies in Sri Lanka. European Journal of Business and Management, 5(7), 221–237.
6. Akaer, Z. S. (2019). Managing liquidity risk in Islamic banks An Empirical Study in Jordanian Islamic Banks for the Period (2010-2017). Tikrit Journal of Administrative and Economic Sciences, 15(48), 127–148.
7. Amanda, R. I. (2019). The Impact of Cash Turnover, Receivable Turnover, Inventory Turnover, Current Ratio and Debt to Equity Ratio on Profitability. Journal of Research in Management, 2(2), 14–22.
8. Aziz, A., & Rahman, A. A. (2017). International Journal of Economics and Financial Issues the Relationship between Solvency Ratios and Profitability Ratios: Analytical Study in Food Industrial Companies listed in Amman Bursa. International Journal of Economics and Financial Issues, 7(2), 86–93.
9. Baraja, L., & Yosya, E. A. (2018). Indonesian Management and. Indonesian Management and Accounting Research, 17(01), 1–17.
10. Bon, A. T., Lusiana, M., Haat, M. H. C., Saputra, J., Yusliza, M. Y., & Muhammad, Z. (2021). A review of green accounting, corporate social responsibility disclosure, financial performance and firm value literature. Proceedings of the International Conference on Industrial Engineering and Operations Management, March 7-11, 5622–5640.

11. DAHIYAT, A. (2016). Does Liquidity and Solvency Affect Banks Profitability? Evidence from Listed Banks in Jordan. International Journal of Academic Research in Accounting, Finance and Management Sciences, 6(1), 35–40. https://doi.org/10.6007/ijarafms/v6-i1/1954
12. K. H. I. Madushanka, M. J. (2018). The Impact of Liquidity Ratios on Profitability (With special reference to Listed Manufacturing Companies in Sri Lanka). International Research Journal of Advanced Engineering and Science, 3(4), 157–161.
13. Kajananthan, & Velnampy. (2014). Liquidity, Solvency and Profitability Analysis Using Cash Flow Ratios and Traditional Ratios: The Telecommunication Sector in. Research Journal of Finance and Accounting, 5(23), 163–171.
14. Muhamad, J. hadash, & Muhammad, L. A. K. (2018). The Role of Finance Function in Evaluating the Performance of the Islamic Bank Using the Profitability Index, Analytical study in Faisal Islamic Bank for the period 2011-2016. Tikrit Journal of Administrative and Economic Sciences, 14(41), 190–208.
15. Mulyadi, D., & Sinaga, O. (2020). Analysis of Current Ratio, Net Profit Margin, and Good Corporate Governance against Company Value. Sys Rev Pharm 2020, 11(1), 588–600. https://doi.org/10.5530/srp.2020.1.74
16. Odero, E. E. (2017). Analysing the Financial Performance at the Municipality of Karibib. European Journal of Research and Reflection in Management Sciences, 5(2), 56–73.
17. Öztürk, H., & Karabulut, T. A. (2018). The Relationship Between Earnings-to-Price, Current Ratio, Profit Margin and Return: An Empirical Analysis on Istanbul Stock Exchange the Relationship between Earnings-to-Price, Current Ratio, Profit Margin and Return: An Empirical Analysis on Istan. Accounting and Finance Research, 7(1), 109–115. https://doi.org/10.5430/afr.v7n1p109
18. Pathan, D. M. A. G. (2022). The Impact of Multinationalism and Solvency on Profitability of Fast-Moving Consumer Goods (FMCG) Multinational Enterprises. International Research Journal of Management and Social Sciences, III(1), 67–84.
19. Qader, A. B., & Fakhr, S. M. (2016). Banking profitability in light of the shift from financial repression to financial liberalization policy Policy in Iraq for the period (1998-2011). Tikrit Journal of Administration and Economics Sciences, 12(34), 363–393.
20. Refni, S. D. S. M. R. M. D. S. (2021). HBR Husnayain Business Review the Effect of Liquidity Ratio and Solvency Ratio on the Profitability of Plantation Subsector Companies Listed on the Indonesian Stock Exchange. Husnayain Business Review, 1(1), 69–77.
21. Robinson, D. T., & Sensoy, B. A. (2016). Cyclicality. Journal of Financial Economics, 122(3), 521–543.
22. Saleem, Q., & Ramiz, R. (2011). Impacts of liquidity ratios on profitability (Case of oil and gas companies of Pakistan. Interdisciplinary Journal of Research in Business, 1(7), 95–98.
23. San, O. T., & Heng, T. B. (2011). Capital Structure and Corporate Performance of Malaysian Construction Sector. Centre for Promoting Ideas, 1(2), 28–36.
24. Svitlík, J., & Poutník, L. (2016). Relationship between liquidity and profitability:

Doi: www.doi.org/10.25130/tjaes.20.65.1.18

Empirical study from the Czech Republic Relationship between Liquidity and Profitability: Empirical Study from the Czech Republic. European Financial and Accounting Journal Provided, 11(3), 7–24.

25. Syarifah. (2021). Effect of Earnings Management, Liquidity Ratio, Solvency Ratio and Ratio Profitability of Bond Ratings in Manufacturing: (Case Study Sub-Sector Property and Real Estate Sector Companies listed on the IDX Indonesian). International Journal of Business, Economics and Social Development, 2(2), 89–97.
26. Victor Chukwunweike, E. (2014). The Impact of Liquidity on Profitability of Some Selected Companies: The Financial Statement Analysis (FSA) Approach. Research Journal of Finance and Accounting, 5(5), 81–90.
27. Wali, A. Q., & Akkar, D. Z. shallal. (2021). The effect of the universal banking strategy on improving financial performance using profitability and liquidity indicators Applied study in Rafidain and Rasheed Banks, Basra Branch. Tikrit Journal of Administration and Economics Sciences, 17(56), 222–238.
28. Waqas Bin Khidmat, M. U. R. (2016). Impact of Liquidity & Solvency on Profitability Chemical Sector Impact of Liquidity & Solvency on Profitability Chemical Sector of Pakistan Comsats Institute of Information Technology, Islamabad, Pakistan. Economics Managemen Innovation, 6(3, 2014), 3–13.
29. Yenni, Arifin, Gunawan, E., Pakpahan, L., & Siregar, H. (2018). The Impact of Solvency and Working Capital on Profitability. Journal of Industrial Engineering & Management Research, 2(4), 15–38.