

Working Capital Management, Firm's Performance and Sustainable Growth of Firms in India: A Simultaneous Equation Approach

Journal of Development Economics and Management Research Studies (JDMS) A Peer Reviewed Open Access International Journal
ISSN: 2582 5119 (Online)

 Crossref Prefix No: 10.53422
10 (18), 64-75, October-December, 2023
@ Center for Development Economic Studies (CDES)

Reprints and permissions

<https://www.cdes.org.in/>

<https://www.cdes.org.in/about-journal/>

Working Capital Management, Firm's Performance and Sustainable Growth of Firms in India: A Simultaneous Equation Approach

Pritty Hazarika¹ and Dhritabrata Jyoti Bharadwaz²

Abstract

As a human body can't survive without blood, no firm can survive without working capital. Managing the working capital is very necessary for the smooth functioning of the organization. Working capital management is a way of accounting through which the organization utilizes its current assets and liabilities effectively and efficiently for the organization's smooth functioning. Working capital management aims at increasing the organization's profit with optimum utilization of current assets and current liabilities. When an organization effectively manages its cash, account receivable, account payables, and inventories then that will automatically increase its profitability, and when the organization effectively manages its working capital that will not only help in meeting its financial obligations but also help in increasing its earnings, which helps the organizations to attain the sustainable growth. Sustainable growth relates to a firm's ability to expand itself by relying on its internal source of finance without making external debt a major priority. This research aims to comprehend the connection between working capital management and a company's performance with sustainable growth. The study is analysed using an accounting measure and a market measure of firm's performance and thereby predicting the changes that may occur when both the measures are used. In order to assess the relationship between working capital management, firm performance, and sustainable growth in the firms listed in the S & P BSE 500 Index, the study takes into account a period of 10 years. A Simultaneous Equation Approach is used to analyse the data and thus, two models are used for the two measures of firm's performance. According to the study, working capital management significantly impacts on the firm's performance and also the sustainable growth of firms. The study shall help top management in understanding the importance of sustainable growth through effective management of working capital.

Keywords: Working Capital Management, Firms Performance, Sustainable Growth

¹ Student M. Com, 4th Semester, Tezpur University, Tezpur, Assam.

² Research Scholar, Dibrugarh University, Dibrugarh, Assam.

INTRODUCTION

Working capital is the lifeblood of every organization. It is the overall capital which the organisation uses to carry out its daily operation. Working capital is the that amount of capital that the organization have in their hand after paying the current liability from the current asset. Current asset refers to those assets which are converted into cash within a short period of time. It includes cash, account receivables, stock, short term investment, cash equivalent etc. Whereas, current liabilities are the company's short-term obligation that are payable within one year. It includes accounts payables, short term debt, interest payable, wages payable, income taxes etc.

Working capital management is an intrinsic factor of an organization which helps the organization to manage the current asset and current liabilities for the smooth functioning of the organization. The prime motive of working capital management is to ensure that the company has enough cash flow to cover its immediate obligations. It aids the organization in maintaining a smooth net operating cycle/ cash conversion cycle. The term "net operating cycle" refers to the amount of time that an organization needed to transfer its current asset and current liability into cash. With an effective use of the organization resources, the governance of a company's cash flow and earnings can be improved through working capital management, which aids in boosting the organization's profit and promote sustainable growth.

Performance of an organization can be studied through how well the organization earn profit from their operation. Managing the working capital helps the organization to face its uncertain circumstances. If the organization's working capital is not properly managed then it will adversely affect the company's liquidity position which have direct relation with the profitability. Depending on the size of the organization, working capital should be maintained at an adequate level so that it doesn't create any problem in their day-to-day activities. Excessive working capital leads to unnecessary purchases of materials which results in losses and wastages. On the other hand, when the organization have insufficient amount of working capital then they are not able to pay their short-term obligation which makes the organization inefficient and also reduces their profit. In order to generate enough profit to sustain the organization's smooth functioning, managing the working capital is essential.

When the organization effectively manage the working capital, it will not only increase the profitability of the firm but also the sustainable growth. The requirement of the working capital increases for a growing business because the necessity for it increases with the growth of the operation. The term sustainable growth refers to the rate at which a business can expand their operation by using only internal funds without taking out loans from outside sources. Working capital management enables the organization to deploy its resources in such a way that eliminates its need on outside resources. Organization depends their operation on sustainable growth. Organization that grows above the sustainable growth there is a chance of becoming financially distressed due to excessive financial leverage. On the other hand, the organization which are not able to attain sustainable growth there is risk of slow growth of the organization. Therefore, maintaining an adequate level of sustainable growth through proper working capital management helps the organization in attaining a position where they are neither in bankruptcy nor in stagnant growth.

Effective working capital management helps the organization in creating goodwill and also increases profitability and sustainable growth. Therefore, managing working capital is a crucial part of any organisation.

Objective of the Study

- ❖ To analyse the impact of working capital management and Sustainable Growth rate on firms' performance.
- ❖ To analyse the impact of working capital management and Firms' Performance on the Sustainable Growth of Firms.

LITERATURE REVIEW

Nastiti et al. (2019) analyse how working capital management affects the firm's profitability and how this factor relates to long term expansion of the firm. The study is carried out using 136 manufacturing companies as a sample which are listed on the Indonesian stock exchange and it covers data from 2010 to 2017. To analyze the data, data panel regression with fixed effect estimation is applied. Although the research doesn't show a significant direct effect, it does show that working capital has a significant indirect impact on firm profitability, which in turn has a significant indirect impact on sustainable growth. The research therefore suggests that in order to increase profit, which in turn aids in achieving sustainable growth, the organization needs to manage its working capital.

Altaf et al. (2018) examines how working capital management and firm's profitability are related. The study is conducted for a sample of 437 non-financial Indian companies. The research makes use of the secondary information gathered over a 10-year period from the capitaline database. To get the result, the research uses two step generalized method of moments techniques. The research discovered U- shape relationship between WCM and company profitability. The researchers also discovered Cash Conversion Cycle takes, on average, 63 days to finish.

Singhania et. al. (2017) uses a sample of non-financial companies of South East Asia, South Asia and East Asia to investigate the effect of working capital management on the firm's profitability. The mathematical model that is given in the paper has been tested using two step generalised method of moments in addition to analytical modelling for estimating the effect. The study found a nonlinear relationship between profitability of the firm and working capital management.

Afrifa et al. (2016) measures working capital level and attempt to look into the connection between that level and profitability of SMEs. The research uses panel data regression to examine the data gathered from a sample of 160 SMEs listed on Alternative Investment Markets between 2005 to 2010. The study's findings indicate an inverse relationship between working capital level and profitability, indicating that when there is an ideal working capital level, a firm can maximize its profit. The research also shows if working capital level is deviate from the ideal levels, an organization's profitability will suffer.

Shrivastava et. al. (2016) analyses how working capital affects profitability for business entities in India. Both classical and Bayesian methods of panel analysis are used to analyse the data. The result of the research revealed the crucial role of financial soundness indicator in estimating firm profitability. According to the research, longer Cash conversion period had a

negative effect on profitability, and Bayesian approach demonstrate that larger firms are more profitable and significant.

Deari et. al. (2022) investigate how working capital management and firm's profitability are related. Eight firms from European Union make up the study's group. The research is carried out between the years of 2006 to 2015. The data are analysed using the panel regression model. The ROA ratio is used to gauge a company's profitability, with the cash conversion cycle, financial debt, size, tangibility and cash flow ratio being used as independent variable. Working capital management and firm profitability are correlated in the research in an inverted U shape. According to the research, in order to maximize profitability, a company should run as closely as possible to the desired cash cycle length, and management should give working capital optimisation top priority.

Kwatiah et. al. (2020) examine the impact of working capital management on the profitability of listed industrial companies in Ghana. Data is gathered from 20 listed industrial companies from 2015-2019 for the analysis, quantitative research methodology is used. The research shows that while stock management, accounts receivable, accounts payable, CCC, current ratio and company size have a favourable effect on the ROA and ROE, debt has a negative impact.

Mathuva M. David (2010) investigates how working capital management elements affected business profitability. A sample of 30 companies listed on Nairobi stock exchange is used in the research. The data were gathered between 1993 to 2008. Pooled OLS and fixed effect regression model were employed for the study. The research reveals that profitable firm requires very little time to collect money, that there is a link between how quickly inventories are turned into sales and profitability, and that the longer it takes a business to pay its creditors, the more successful the business is.

Gill et. al. (2010) expands Lazaridis and Tryfonidis' findings about the connection between working capital management and profitability. As a sample for the study, 88 American companies with stock listed on the New York stock exchange are used. Data were gathered for the analysis over a 3 years span, from 2005 to 2007. The research discovered a statistically significant relationship between cash conversion cycle and profitability.

Bodhanwala et. al. (2018) examine whether corporate sustainability affects success in terms of profitability. The research uses data from Thomson Reuters Asset 4 ESG database on 58 Indian companies. To examine the study's objective, a multivariate panel data model is developed. The study also examines whether a firm with high-ranking sustainability parameters perform better than a firm with a low ranking. The parametric t- test is used to perform this test. The study demonstrates a positive link between sustainability and firm performance.

Hinayaafreen analyse how working capital management affects the sustainable performance of the firm. The sample of non-financial UAE companies listed on Abu Dhabi Stock Exchange for the period of 2014 to 2019 was used for the research. The data were analysed using the regression analysis technique. According to the research, working capital management and long-term firm performance are positively correlated.

Rahim Norfhadzilahwati (2017) the study looks into the relationship between company's performance and sustainable growth. The data for the research was gathered from the 226 companies from all industrial sectors of FBMKLCI Bursa Malaysia for over 11 years from 2005

to 2015, with the exception of financial sector. The data are analysed using multiple regression and the descriptive technique. According to the research, there is a strong relationship between firm performance and sustainable growth rate.

AtahuApriani in his study " Working Capital Management and its influence on the Profitability and Sustainable Growth"(2019) seeks to assess the impact of working capital management on corporate profitability and how this relationship affects sustainable growth. According to the research, working capital management significantly affects profitability because it minimises waste and ensures maximum utilisation.

Nastiti et al. (2020) identify the ways in which working capital management maximising asset use to promote sustainable development. Panel data regression was used to analyse the data. Companies that were listed on the Indonesian Stock Exchange between 2010 to 2017 are included in study's cohort. After adjusting for leverage, sales growth and company size, the study's results indicate that working capital management has a negative impact on a firm's asset utilisation. The research also shows that asset utilisation contributes to sustainable growth in a positive way. Finally, the research shows that asset utilisation mediates the relationship between working capital management and sustainable growth.

Onwumere et. al (2012) analyse the effects of Nigerian companies working capital policies on their profitability. The study's time frame is 4year from 2004 to 2008. In the study, return on asset is considered as a dependent variable, size and leverage as a controlling variable while aggressive working capital and financing policy considered as independent variable. The findings of the study indicates that business with aggressive working capital policies is vulnerable over time as profitability increases, business grows and become more dependent on contributions from outside sources. The result of the data analysis also shows that as the company expands and outside contributions increase, the implementation of an aggressive working capital policy lowers the profitability of the company.

METHODOLOGY

The objective of these study is to examine how working capital affects firm's performance and sustainable growth of companies which are listed in S & P BSE 500 Index. This section reveals the analytical framework of the study, which describes the source of data, variable used for study, the statistical techniques applied on the variable to analyse the relation between the variables.

Data Source: The financial data of the companies which are analysed in study are collected from ACE Equity.

Period of the Study: A period of 10 years from 2012 to 2022 is selected for the study.

Sample: The study considers the S & P BSE 500 Index. The sample comprises of 255 firms after excluding the firms under the finance sector and firms that did not have data for almost 10 years in most of the variables under study.

Variables used for the study

The **Independent Variable** of the study is Working Capital Management. For measuring WCM, the study uses **Cash Conversion Cycle, Accounts Payable Turnover,**

Accounts Receivable Turnover and **Inventory Turnover**. These variables are also used in hinaya and Shrivastava et al. (2017) study.

Variable	Notation	Measure
Cash Conversion Cycle	CCC	Days of inventory outstanding + Days sales outstanding-Days payable outstanding
Accounts Payable Turnover	APT	365/Payable Turnover Ratio
Accounts Receivable Turnover	ART	365/Receivable Turnover Ratio
Inventory Turnover	IT	Sales/Average inventory

The study uses firm's performance and sustainable growth rate as a **Dependent Variables**, for which **Tobin's Q** is used for firm performance and **ROE*Retention Rate** is used for sustainable growth (**SGR**). These variables are also applied in Afrifa et. al. (2016) and Altaf et. al. (2018) study and sustainability growth rate variables are applied in the previous study of Rahim Norfhadzilahwati(2017) and Nastiti et. al. (2019).

Variable	Notation	Measure
Tobin's Q	Tobin's Q	Market value of Equity+ Debt/Total Asset
Sustainability Growth Rate	SGR	Retention Rate* Return of Equity

The **Firm Size** and **Leverage** are considered as **Control Variable** for the study. These two variables are also used as a control variable in Kwatiah et. al. (2020) and Onwumereet. al. (2012) research study.

Variable	Notation	Measure
Firm Size	FS	Total Asset
Leverage	DE Ratio	Debt Equity Ratio

Cash Conversion Cycle: - It demonstrates the time required for a business to transform its current asset and current liabilities into cash. Companies with a shorter CCC are considered as financially stable, while those with a longer CCC are considered as they may not have enough cash in hand to cover their outstanding debt.

Accounts Payable Turnover: - The speed at which companies pays its suppliers and creditors who provide finance is evaluated by the APT. A high APT ratio generally means that company pay their obligations quickly which is a good sign for the company.

Accounts Receivable Turnover: - It is a measurement of how well company manages its financing process and collect outstanding debts from the debtors. An efficient company has a higher ART ratio whereas an inefficient company has a lower ART ratio.

Inventory Turnover: - It measures how efficiently company sells and replaces its inventory over a period of time. A high inventory turnover ratio indicates that a company is selling its inventory quickly, which is a sign of good sales performance and effective inventory management. A low inventory turnover ratio may suggest that a company is not selling its inventory efficiently, which could lead to excess inventory, storage cost, and potential write-offs.

Tobin's Q: - It is used to assess whether a company's market value is higher or lower than its book value. Tobin's Q is calculated by dividing a company's market value by its replacement cost or book value. A Q value greater than 1 indicates that market value of the company is higher than the replacement cost of its assets. This suggest that investors are optimistic about the company's future earnings potential. A Q value less than 1 indicates that the market value of the company is lower than replacement cost of its assets, which may indicate that the market has a negative outlook on the company's prospects.

Firm's Size: - Firms size refers to the measure of a company's scale, typically determined by the number of employees, revenue, market share and assets under management. Firm size can be significant for various reasons, such as access to financing, market competition, economics of scale and regulatory compliance.

Leverage: - Leverage is the term used to decide the use of borrowed money to improve an investment's prospective profits. Leverage can amplify both gains and losses, and therefore, it carries higher risk. If the investment does not generate a sufficient return, the borrower may not be able to pay back to borrower funds, which could lead to default. Additionally, if the value of the investment decreases, the borrower may be forced to sell the asset at a loss to repay the debt.

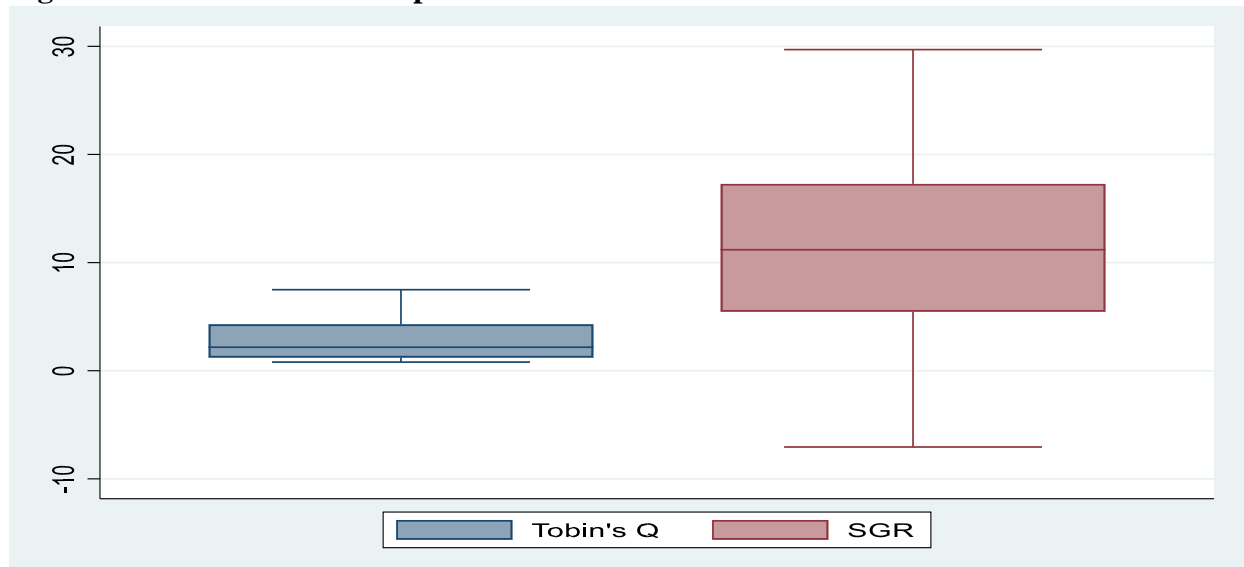
Tools used for study

The data so collected has been edited and converted into meaningful ratios and information with the help of MS Excel and SPSS and STATA 17 has been used for the purpose of evaluating Normal Distribution, Correlation and 3 Stage Least Square Analysis.

ANALYSIS AND DISCUSSION

The Box Plot of the dependent variable has been given below to determine the normal distribution.

Figure 4.1: Box Plot of the Dependent variables



(Source: Compiled by Authors)

Table 4.1: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
SGR	2550	11.367	9.165	-7.055	29.7
TOBINSQ	2550	3.002	2.188	.797	7.493
NSG	2550	15.728	82.623	-91.799	2963.56
DERATIO	2550	.636	.659	0	2.252
CCC	2550	-151.831	232.02	-569.203	35.87
ATR	2550	1.495	1.031	.24	4.182
DTR	2550	10.454	7.571	3.484	27.301
PTR	2550	2.94	2.501	.023	8.987
STR	2550	28.399	65.692	0	284.369

(Source: Compiled by Authors)

The analysis of the study is based on 2550 firms. The average sustainable growth rate can be seen to be 11.367%, while there are firms having negative growth rate as could be seen from the minimum values of the table 4.1. The mean of TobinsQ of the all the firms is 3.002% and that does not deviate much from the maximum and minimum values. The mean of net sales growth (NSG) is 15.728% that however seems to be much less than the maximum values of NSG. The mean of Debt Equity Ratio (DERATIO) is 0.636%. The DE Ratio is found to have a minimum value of zero and maximum of 2.252%. The mean Cash Conversion Cycle (CCC) has been found to be -151% and it significantly differs between firms, as the standard deviation has shown. It has discovered that the other working capital had rather equally distributed mean, minimum, and maximum values.

Table 4.2: Correlation Matrix

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(1) SGR	1.000									
(2) TobinsQ	0.322	1.000								
(3) NSG	0.114	0.015	1.000							
(4) DE Ratio	-	-	-	1.000						
(5) CCC	0.078	0.044	0.005	0.120	1.000					
(6) ATR	0.289	0.271	0.007	0.046	0.086	1.000				
(7) DTR	0.037	0.089	0.016	0.002	0.047	0.204	1.000			
(8) STR	0.007	-0.001	0.001	0.035	0.395	0.061	0.032	1.000		
(9) PTR	0.150	0.016	0.007	0.070	0.699	0.134	0.192	0.289	1.000	
(10) TA	0.187	-0.246	0.015	0.242	0.059	0.359	0.092	0.090	0.074	1.000

(Source: Compiled by Authors)

Table 4.2 describes the correlation among the variables under study. The Debt Equity Ratio and Total Assets were found to be negatively correlated with the Sustainable Growth Rate. Whereas Debt Equity Ratio, Total Assets and Stock Turnover Ratio were found to be negatively related to TobinsQ. The correlation among the variables were found be less than 4 in case of all other variables with SGR and TobinsQ.

Table 4.3: Three Stage Least Square Regression

TobinsQ	Coef.	St. Err.	t- value	p- value	[95% Conf	Interval	Sif
CCC	0.001	0	5.63	0	0.001	0.002	***
SGR	0.095	0.004	21.79	0	0.086	0.103	***
-	-	-	-	-	-	-	-
NSG	0.001	0	-1.56	0.118	-0.002	0	
TA	0	0	-4.18	0	0	0	***
-	-	-	-	-	-	-	-
DE RATIO	0.873	0.06	14.43	0	-0.992	-0.755	***
ATR	0.227	0.042	5.38	0	0.144	0.309	***
DTR	0.025	0.005	4.76	0	0.015	0.306	***
STR	0	0.001	-0.16	0.869	-0.001	0.001	
-	-	-	-	-	-	-	-
PTR	0.138	0.022	-6.36	0	-0.181	-0.096	***
Constant	2.706	0.136	19.97	0	2.44	2.971	***
SGR							
-	-	-	-	-	-	-	-
CCC	0.003	0.001	-2.91	0.004	-0.005	-0.001	***
TobinsQ	1.792	0.082	21.79	0	1.631	1.953	***
NSG	0.012	0.002	5.97	0	0.008	0.016	***
-	-	-	-	-	-	-	-
DE Ratio	0.587	0.274	-2.14	0.032	-1.125	-0.049	**
TA	0	0	0.17	0.862	0	0	
ATR	1.464	0.182	8.05	0	1.108	1.821	***
-	-	-	-	-	-	-	-
DTR	0.079	0.023	-3.44	0.001	-0.125	-0.034	***
STR	0.003	0.003	1.13	0.259	-0.002	0.008	
PTR	0.705	0.094	7.47	0	0.52	0.89	***
Constant	2.152	0.637	3.38	0.001	0.905	3.4	***
Mean dependent variable		11.367	SD dependent var			9.165	
Number of obs		2550.000	Akaike crit. (AIC)				

***p<.01, ** p<.05, *p<.1

(Source: Compiled by Authors)

Table 4.3 describes the 3 SLS regression of the variables under study. CCC that is one factor showing working capital management is found to be significantly associated with Sustainable Growth Rate and TobinsQ. The relationship of CCC with TobinsQ is positive while with SGR is negative. The relationship between firm performance and sustainable growth rate are consistent as both are associated positively and significant. Debt Equity Ratio has negative but significant association with SGR and TobinsQ. ATR and DTR has been found to have associated positively and being significant with SGR and TobinsQ. Whereas, PTR has also been found to have associated negatively but significant with SGR and TobinsQ. Thus, it can be said that working capital management significantly affects the firm's performance and thereby, the sustainable growth of the firms.

CONCLUSION

The study has been conducted to understand the relationship between firms' working capital management and firms' performance and sustainable growth of firms. The study was conducted upon the S&P BSE 255 firms out of 500 firms of the index. The findings show a strong correlation between working capital management and business success. Working capital management also has a substantial impact on sustainable growth through an organization's profitability. Since it demonstrates that profitability is a component that mediates the relationship between working capital management and sustainable growth, the study urges firms to focus on their working capital management in order to improve their profitability and, ultimately, their sustainable growth. Business can raise more money on the internal market more easily when their profitability increases, which eventually helps them achieve more sustainable growth. In such a scenario, business might grow without having to substantially rely on outside funding sources that would have higher financing costs for both their current and fixed asset investments. As a result, working capital management requires considerable attention from businesses.

References

1. Afrifa, G. A., & Padachi, K. (2016): Working capital level influence on SME profitability. *Journal of Small Business and Enterprise Development*, 23(1), pp 44–63. <https://doi.org/10.1108/JSBED-01-2014-0014>
2. Shrivastava, A., Kumar, N., & Kumar, P. (2017): Bayesian analysis of working capital management on corporate profitability: evidence from India. *Journal of Economic Studies*, 44(4), pp 568–584. <https://doi.org/10.1108/JES-11-2015-0207>
3. Altaf, N., & Shah, F. A. (2018): How does working capital management affect the profitability of Indian companies? *Journal of Advances in Management Research*, 15(3), pp 347–366. <https://doi.org/10.1108/JAMR-06-2017-0076>
4. Amponsah-Kwatiah, K., & Asiamah, M. (2020): Working capital management and profitability of listed manufacturing firms in Ghana. *International Journal of Productivity and Performance Management*, 70(7), pp 1751–1771. <https://doi.org/10.1108/IJPPM-02-2020-0043>
5. Singhania, M., & Mehta, P. (2017): Working capital management and firms' profitability: evidence from emerging Asian countries. *South Asian Journal of Business Studies*, 6(1), pp80–97. <https://doi.org/10.1108/SAJBS-09-2015-00606>.
6. Nastiti, P. K. Y., Atahau, A. D. R., & Supramono, S. (2019): Working capital management and its influence on profitability and sustainable growth. *Business: Theory and Practice*, 20, pp 61–68. <https://doi.org/10.3846/BTP.2019.06>
7. Bodhanwala, S., & Bodhanwala, R. (2018): Does corporate sustainability impact firm profitability? Evidence from India. *Management Decision*, 56(8), pp 1734–1747. <https://doi.org/10.1108/MD-04-2017-0381>

8. Onwumere, J. U. ., Ibe, I. G., & Ugbam, O. . (2012): The Impact of Working Capital Management on Profitability of Nigerian Firms: A Preliminary Investigation. *European Journal of Business and Management*, 4(15), pp 2222–2839.
9. Deari, F., Kukeli, A., Barbuta-Misu, N., & Virlanuta, F. O. (2022): Does working capital management affect firm profitability? Evidence from European Union countries. *Journal of Economic and Administrative Sciences*. <https://doi.org/10.1108/jeas-11-2021-0222>
10. Bakewell, K. G. B. (2001): Property Journals Index 1990-2000. *Structural Survey*, 19(3), pp 1–284. <https://doi.org/10.1108/0263080X200100001>
11. Alnuaimi, S., & Nobanee, H. (2020): Working Capital Management and Sustainability: A Mini-Review. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3539427>
12. Rahim, N. (2017): Sustainable Growth Rate and Firm Performance: a Case Study in Malaysia. *International Journal of Management, Innovation & Entrepreneurial Research*, 3(2), pp 48–60. <https://doi.org/10.18510/ijmier.2017.321>
13. Mathuva, D. M. (2010): The influence of working capital management components on corporate profitability: A survey on Kenyan listed firms. In *Research Journal of Business Management* (Vol. 4, Issue 1, pp. pp 1–11). <https://doi.org/10.3923/rjbm.2010.1.11>
14. Fonseka, M. M., Ramos, C. G., & Tian, G. L. (2012): The most appropriate sustainable growth rate model for managers and researchers. *Journal of Applied Business Research*, 28(3), pp 481–500. <https://doi.org/10.19030/jabr.v28i3.6963>
15. Nastiti, P. K. Y., Atahau, A. D. R., & Supramono, S. (2020): Does working Capital management able to increase sustainable growth through asset utilization?. *The European Journal of Applied Economics*, 17(2). <https://doi.org/10.5937/ejae17-26056>
16. Hinaya, A., & Ellili, N. O. D. (2021): Impact of Working Capital Management on Sustainable Performance of a Firm. Available at SSRN 3945889. <http://dx.doi.org/10.2139/ssrn.3945889>
17. Gill, A., Biger, N., & Mathur, N. (2010): The relationship between working capital management and profitability: Evidence from the United States. *Business and economics journal*, 10(1), pp 1-9.
