The Effect of Working Capital Management on Small and Medium sized Enterprises (SMEs) Profitability in Egypt

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ABSTRACT

The aim of this paper is to study the relationship between working capital management (WCM) and Small and Medium sized enterprises (SMEs) profitability in Egypt. The study is applied on a sample of 29 firms listed in the Nile index (NILEX) of Egypt for the period from 2008 to 2017. The study uses Return on Sales (ROS) as proxy for the dependent variable, firm profitability. Cash conversion cycle (CCC), Number of days of Inventory (INV), Number of days of Accounts Receivables (AR), and Number of days of Accounts Payable (AP) are used as independent variables. In addition, the study uses firm size, firm age, firm sales growth, financial leverage, and assets tangibility as control variables. The results indicated that shortening the CCC improves an SME's profitability.

INTRODUCTIONN

In today's business dynamic environment, there is a great focus on Small and Medium sized enterprises (SMEs), that has drawn much attention in recent years and has gained much resonance in today's global economy as well as in the Egyptian environment. SMEs assets are mainly current assets and its sources of finance are mainly short term, because they face difficulties in dealing with long term finance (Banos-Caballero et al., 2010). Therefore, WCM is essential for SMEs existence and evolution. Mokhtar and Abdelwahab (2014) claimed that the most important challenge for SMEs in Egypt is the lack sources of finance.

WCM is considered as the main source of internal finance, and it is essential in measuring firms' liquidity because working capital includes all short term items in the balance sheet (Eljelly, 2004). By managing working capital effectively, firms could decrease their dependence on external financing and use the released cash for added investment and for improving the firm's financial flexibility (De Almeida and Eid, 2014). The main focus of this study is the effect of WCM, measured by CCC, and all of its components (inventory, accounts receivables and accounts payables) on firm's profitability of SMEs in Egypt.

METHODOLOGY

The researcher conducts an applied study on 29 Egyptian SMEs listed in the NILEX, throughout the years from 2008 till 2017.This research is quantitative and uses secondary data gathered using the annual reports from the companies' official websites and publications, and official financial reports available on the NILEX website. The model is based on data from the balance sheet and the income statement. The study uses ROS as dependent variable. Number of days of INV, Number of days of AR, and Number of days of AP were used as independent WCM variables. Moreover, CCC is used as comprehensive measure of WCM. In addition, the study uses firm size, firm age, firm sales growth, financial leverage, and assets tangibility as control variables.

The effect of WCM on firm profitability is measured by the following 4 models:

Model (1):

$$ROS_{it} = \beta_0 + \beta_1 CCC_{it} + \beta_2 AGE_{it} + \beta_3 GROWTH_{it} + \beta_4 SIZE_{it} + \beta_5 LEV_{it} + \beta_6 TAN_{it} + \varepsilon_{it}$$

Model (2):

$$ROS_{it} = \beta_0 + \beta_1 INV_{it} + \beta_2 AGE_{it} + \beta_3 GROWTH_{it} + \beta_4 SIZE_{it} + \beta_5 LEV_{it} + \beta_6 TAN_{it} + \varepsilon_{it}$$

Model (3):

$$ROS_{it} = \beta_0 + \beta_1 AR_{it} + \beta_2 AGE_{it} + \beta_3 GROWTH_{it} + \beta_4 SIZE_{it} + \beta_5 LEV_{it} + \beta_6 TAN_{it} + \varepsilon_{it}$$

Model (4):

$$ROS_{it} = \beta_0 + \beta_1 AP_{it} + \beta_2 AGE_{it} + \beta_3 GROWTH_{it} + \beta_4 SIZE_{it} + \beta_5 LEV_{it} + \beta_6 TAN_{it} + \varepsilon_{it}$$

These models test the following hypotheses:

H1 There is a significant relationship between managing cash conversion cycle and ROS in SMEs.
H2 There is a significant relationship between managing inventory and ROS in SMEs.
H3 There is a significant relationship between managing accounts receivable and ROS in SMEs.
H4 There is a significant relationship between managing accounts payable inventory and ROS in SMEs.

RESULTS

The results showed a significant negative relationship between CCC, INV & AR and profitability of firms measured as ROS. The results found a positive statistically insignificant relationship between AP and ROS. The analyses of number of days of inventory indicated that there is a negative significant relation between INV and firm's profitability. This means that the shorter the firm's inventory holding period, the higher the profitability and vice versa. The analyses of number of days of accounts receivables showed that there is a significant negative relationship between AR and firm's profitability. This means that shortening a firm's accounts receivable period increases the profitability and vice versa. The analyses of accounts payable period specified that there is a positive relationship between AP and firm's profitability, but statistically not significant. This means that lengthening a firm's accounts payable period raises the profitability and vice versa. The analyses of CCC reflected that there is a significant negative relationship between this cycle and firm's profitability. This can be described as, shortening a firm's CCC increases profitability and vice versa.

CONCLUSION

The negative association between CCC, INV, AR and ROS, and the positive association between AP and ROS; revealed that SMEs in Egypt follow the aggressive strategy in managing their working capital and its components. Panel data analysis results showed that the management of INV, CCC and AR are important for SMEs profitability measured as ROS. In terms of relative importance, INV management is most important, followed by CCC, AR and AP respectively. Panel data analysis results showed that the management of INV, CCC and AR are important for SMEs profitability measured as ROS. In terms of relative importance, INV management is most important, followed by CCC, AR and AP respectively.