# American Journal of **Finance** (AJF)



WAS "YILMAZ CASH MANAGEMENT
MODEL" ACCEPTED BY THE THEORY OF
FINANCE

Assoc. Prof. Dr. Huseyin Yilmaz





## WAS "YILMAZ CASH MANAGEMENT MODEL" ACCEPTED BY THE THEORY OF FINANCE

Assoc. Prof. Dr. Huseyin Yilmaz
Faculty of Economics and Administrative Sciences Department of Business
Bilecik Şeyh Edebali University- Bilecik/Turkey
hyilmaz64@yahoo.com

#### **Abstract**

**Purpose:** The purpose of fullfilling this study was to fix the adoption and usage level of the "yilmaz cash management model" and its opinions in the theory of finance.

**Methodology:** An investigation on scholar google.com was fullfilled to fix the essays citing from the article "Another Perspective to Corporate Cash Management: A New Model and Definition". Then, their citations were found from the articles. After being sure, some of the articles were used for this study. The others were eliminated because their citations are not useful for this study.

**Results:** The investigation on the sources in financial science showed that Yılmaz Cash Management Model was accepted by financial theory partly.

Unique contribution to theory, practice and policy: The study brought a new model to the theory of finance. The new model about cash management can be used by corporations to manage their cash flows efficiently and effectively.

**Keywords:** Yilmaz cash management model, cash management, free cash flows, cash management models.

<sup>-</sup>

<sup>&</sup>lt;sup>1</sup> Yilmaz H.(2011). Another Perspective to Corporate Cash Management: A New Model and Definition. International Journal of Humanities and Social Science, 1(11-Special Issue), 284-289.



#### 1. INTRODUCTION

Cash management is very important study field in finance. Financial management in businesses covers cash management, too. It is a subfield of working capital management. Models are important vehicles for financial management of corporations. Yilmaz Cash Management Model was published in 2011 in the U.S.A. In this paper, the model will be rewiewed and reflections of the model to the finance theory will be explained. Doing this, the author will estimate if he did a useful study or not. For this reason, the author will fix the papers and thesis citating from the Yilmaz (2011) which explains the Yilmaz Cash Management Model. Then, the papers and thesis which cited the model were investigated. The investigation is about which parts of the model were used by the writers adopting the model. In this way, the level of usage of the model will be fixed.

#### 2. THE YILMAZ CASH MANAGEMENT MODEL

The Yilmaz Cash Management Model is seen and explained as below (Yilmaz 2011,285-288):



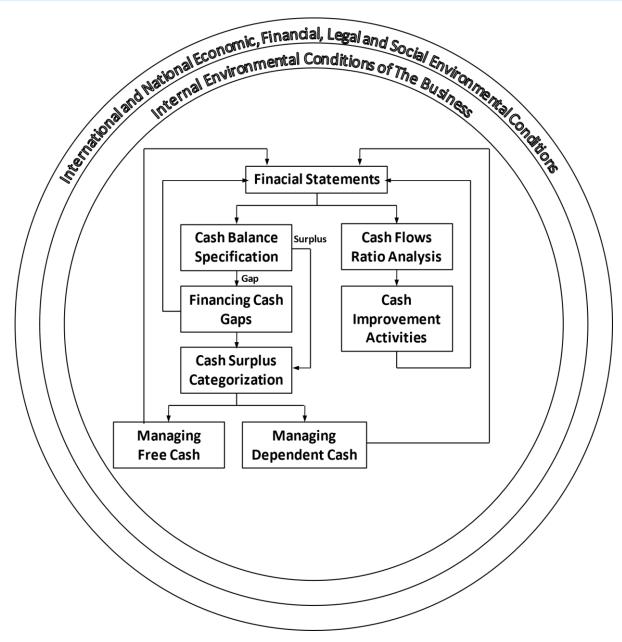


Figure 1: Yilmaz Cash Management Model

Source: Yilmaz, 2011:285

As it could be seen from the Figure 1, the model uses balance sheet, income statement and cash flow statement to analysis cash flows of the business. It calculates 28 cash flow ratios to study a business's cash flow problems to solve. The cash flow ratios Yilmaz used in the model are cash flow adequacy, dividend payout, reinvestment of cash, debt coverage, depreciation effect, return of sales to cash flows from operations (CFFO), operating index, CFFO to assets, CFFO to annual interest payments, overall cash flow, cash flow per share, return of sales to cash, cash debt coverage, current maturities of long term debt coverage, cash dividend coverage, capital acquisition, cash return on assets, internal generation of cash available to creditors and investors, return to stockholers, long term debt coverage, interest payment coverage, fixed charges coverage, operating cash flow, cash interest coverage, cash



current debt coverage, capital expenditure, total debt, and cash flow adequacy (with different context with the first ratio).

Fixing cash balance can be realized by checking "cash" balance of two years' balance sheets of the corporation. The first year amount is substracted from the second year amount. The difference is cash amount the company created. If the company creates excess cash it is managed effectively. The model offers managing excess cash by classifying it as free cash and dependent cash. The free cash is invested in physical investment, merger and acqusition, investment to itself such as technology, marketing, human reseources, research and development, buyback (stock repurchasing), and participation to other companies.

The dependent cash is invested in stocks, options, futures, treasury bill, government bond, certificate of deposit, commercial paper, bank acceptance, repurchasing agrrement (REPO), money market funds, and saving bonds. They are all short-term investment vehicles. A company can use dependent cash when it needs. It needs cash budgeting to use them without alternative cost. If a company has a cash gap, it needs financing it. It is financed by issuing securities or providing bank credits. The securities could be equity or debt securities. The reader could check all financing resources from finance textbooks. This study does not cover detailed information about all financing sources.

Businesses can improve their cash management doing activities such as decreasing cash cycle, improving cash dividends, fixing cash amount could be paid to claimers during financial restructuring, using new payment systems, improving payments to business's employees, managing its cash regarding for product life cycle, using cash management in inflationary periods differently, managing its foreign exchange effectively, improving good relations with banks, doing barter trade, using leasing method during acquisition its non-current assets, using subsidies efectively and timely, selecting true depreciation method, coordinating its cash flows from capital investments with its cash management, using cash break-event point calculation, and updating cash decision support system. Yilmaz (2011) covers more detailed information about this part of this paper.

### 3.USAGE OF THE YILMAZ CASH MANAGEMENT MODEL BY THE THEORY OF FINANCE

#### 3.1. Acceptation of Yilmaz Cash Management Model as a New Cash Management Model

Aravind (2017) thinks that Yilmaz (2011) has created a new model for cash management. According to him "The cash management model covers cash flow ratio analysis, cash improving activities, management of excessive cash by classifying as free cash flow and dependent cash flow, and financing cash gap. The financial statements are Balance Sheet,Income Statement, and Statement of Cash Flows. Cash flow ratio analysis covers some cash flows ratios such as cash flow adequacy, long term debt payout, dividend payout, reinvestment of cash, debt coverage, and depreciation effect. Cash improvement activities are decreasing cash cycle, improving cash dividend payout, new payment systems, managing cash in inflational environment, efficient currency management, barter trade, leasing, using subsidiaries, cash break even point, etc" (Aravind, 2017:58). As if, Aravind summarizes Yilmaz Cash Management model.



#### 3.2 Being Praised of the Model about Having Broader Perspective

According to Wölfing &Jürgen(2018), Yilmaz (2011) suggests an even broader view on cash management, as he also includes the company's attitude towards external conditions, such as aspects of the national and international environment. Indeed, this wide perspective is an essential part of corporate cash management today (Wölfing & Jürgen,2018:343). The writers support the wide perspective accepted by the model. It can be concluded that the other models settled before the Yilmaz Cash Management model are not enough about having wide perspective enough. They think that, it is necessary to use this kind of model nowadays. For this reason, in my opinion, the Yilmaz Cash management model has beed adopted by Wölfing and Jürgen exactly.

#### 3.3. Acceptation of the Definition of Cash Used By the Model

Chukwunwike, Ofoegbu, Okoroiwu & Okafor (2018) adoped definition of cash which was preferred by the yilmaz cash management model. The adopted cash definition is "Cash is the most liquid of all asset to an individual or company, representing the paper currency and coin, negotiable money orders, cheques and bank balances, and cash equivalent (i.e. all highly liquid securities with a known market value and a maturity of less than three months)" (Chukwunwike et.al, 2018:1592). The definition was actually cited from Downes and Goodman (1995:78) by Yilmaz (2011).

#### 3.4. Acceptation of the Content of Cash Management

Duncan, Njeru, Member & Ondabu (2015) adopts Yilmaz's (2011) insights that the specific task of a typical treasury function include cash management, risk management, hedging and insurance management, account receivable management, account payable management, bank relations and investor relations and cash balance management includes management of cash position, short-term borrowing, short term investing, cash forecasting. The writers adopts Yilmaz's (2011) classification of cash management as operating transactions and financial transactions. The writers explain the classification using the writer's opinions. According to this the operating transactions include accounting ledgers, invoicing, terms of sales, cash collection, cash control and processing, cash forecasting. The financial transactions include optimization of cash, short-term investments, short term borrowing, interest rate risk management, exchange rate risk management, payment systems, information systems and banking investor relations. (Duncan et. al.2015:4). The opinions was actually cited from Kytönen (2004:45) by Yilmaz (2011).

Matianyi & Ndirangu (2019) specified that Huseyin (2011) highlighted specific task of a typical treasury function such as: cash management, risk management, hedging and insurance management, account receivable management, account payable management, bank relations and investor relations.(Matianyi andNdirangu, 2019: 1998). The opinions was actually cited from Kytönen (2004:38-39) by Yilmaz (2011).

#### 3.5. Usage of the Yilmaz Cash Management Model in PhD and MBA Theses

Duncan (2016) used some opinions about cash management from (Yilmaz, 2011) in his PhD. thesis "Effect of Liquidity Management on Financial Performance of Deposit Taking Saving and Credit Co-operative Society in Kenya". The opinions are the specific task of a typical treasury function is such as cash management, risk management, hedging and insurance management, account receivable management, account payable management, bank relations and investor relations and cash balance management includes management of



cash position, short-term borrowing, short term investing, and cash forecasting (Duncan, 2016:22). The opinions were actually cited from Kytönen (2004:38-39) by Yilmaz (2011).

Githaka (2017) used some opinions from (Yilmaz, 2011) in his Master's thesis "Financial Factors Affecting Liquidity of Savings and Credit Co-operative Societies in Kirinyaga County". The opinions are about free cash flows . The sentences are "The free cash flow theory of liquidity argues that free cash flows should be paid out to investors in order to avoid poor use of funds by managers. Having cash available to invest, the manager does not need to raise external funds and to provide capital markets detailed information about the firm's investment projects" (Githaka, 2017:15).

Moraa (2017) used some opinions from (Yilmaz, 2011) in his Master's thesis "Effect of Cash Management Practices on Performance of Public Secondary Schools in Kisii County". He sentences that "Yilmaz (2011) cassifies cash management as financial transactions and operating transactions. According to the study, financial transactions include short term borrowing, exchange rate risk management, and optimization of cash, short-term investments, interest rate risk management, payment systems, information systems and banking investor relations. The operating transactions include cash forecasting, accounting ledgers, cash control and processing, invoicing and terms of sales - cash collection" (Moraa, 2017:22). The opinions were actually cited from Kytönen (2004:45) by Yilmaz (2011).

Masha (2018) used some opinions from (Yilmaz, 2011) in his Master's thesis "Effectiveness of Internal Control Systems in Management of Funds in Public Sector at National Sub- county Treasuries in Kenya". He sentences that" Yilmaz (2011) stresses that the specific roles of a typical treasury function include funds management, account receivable and payable management, risk management, investor relations and bank relations. The student points out that the fund management theory was relevant to this study (that is Yilmaz 2011) because it shed light on the purpose of managing cash balance so as to avoid unnecessary idle funds or deficits" (Masha, 2018:19). The opinions were actually cited from Kytönen (2004:38-39) by Yilmaz (2011).

#### 3.6. Usage of the Yilmaz Cash Management Model in References Lists

Nyhodo et.al. (2014), Githaka et.al. (2017), Gatimu et.al. (2018), Sylvie et. al. (2018), Muriungi et.al. (2018), Blaise et.al. (2018), Kennedy & Eshiwani (2018) used the Yilmaz (2011) in their References lists. In addition, in a Master's thesis, Omwamba (2017) used the Yilmaz (2011) in his reference list.

#### **4.CONCLUSION**

The Yilmaz Cash Management model was adopted by some writers in finance theory. It can not be thought that the finance theory did not accept the model. The finance theory has seen the model and some of the theoreticians in finance used it in their scientific studies.

The writers using the model in their papers and theses or showing the Yilmaz (2011) in their References lists are Aravind (2017), Wölfing & Jürgen(2018), Chukwunwike et.al (2018), Duncan et.al. (2015), Matianyi & Ndirangu (2019), Duncan (2016), Githaka (2017), Moraa (2017), Masha (2018), Nyhodo et.al. (2014), Githaka et.al. (2017), Gatimu et.al. (2018), Sylvie et. al. (2018), Muriungi et.al. (2018), Blaise et.al. (2018), Kennedy & Eshiwani (2018), and Omwamba (2017).

The Journals publishing the papers citating from the Yilmaz Cash Management Model are The Journal of Contemporary Management Research, International Journal of



Management and Commerce Innovations, Account and Financial Management Journal, International Journal of Scientific and Research Publications, Journal Of Humanities And Social Science, International Academic Journal of Economics and Finance, International Journal of Economics, Commerce, and Management, The Strategic Journal of Business and Change Management, International Journal Of Advanced Research in Engineering& Management, OIDA International Journal of Sustainable Development, and Journal of Payments Strategy & Systems.

As it could be seen from the writer and journal list, it could be concluded that the Yilmaz Cash Management Model has beed adopted by the theory of finance at a certain level. Some further studies could be done to complete the model. These are accounting dimension of the model, explanation of free cash flow- dependend cash seperation and their management differently, application of cash flow ratio analysis in different industries and different countries, explanation of the definition of the yilmaz cash management model etc.

#### **REFERENCES**

- Aravind. M. (2017). Divergence in Cash Position Metrics: An Appraisal of Metal Industry in India. The Journal of Contemporary Management Research, 11(1), 56 74.
- Blaise N. & Mulyungi P.(2018). Effect of Financial Derivatives use on Financial Performance of Commercial Banks in Rwanda: A Case of Commercial Banks in Rwanda. International Journal of Management and Commerce Innovations, 6(1), 474-480.
- Chukwunwike, O. D., Ofoegbu G. N., Okoroiwu K. L., & Okafor R.G.(2018). The Potency of Cash Flow in Predicting Corporate Performance. Account and Financial Management Journal, 3(6), 1591-1601.
- Downes J. & Goodman J.E.(1995). Dictionary of Finance and Investment Terms. New York: Barron's Educational Series.
- Duncan N. M., Njeru A., Member F., & Ondabu I. T. (2015). Effect of Cash Management on Financial Performance of Deposit Taking SACCOs in Mount Kenya Region. International Journal of Scientific and Research Publications, 5(2),1-6.
- Duncan, N.M. (2016). Effect of Liquidity Management on Financial Performance of Deposit Taking Saving and Credit Co-operative Society in Kenya (Unpublished PhD. Thesis). Jomo Kenyatta University of Agriculture and Technology, Nairobi, Kenya.
- Gatimu E. M., Muturi W., & Oluoch O. (2018). Effect of Non-Performing Loan Management Practices on Loan Recovery Performance of Deposit Taking Savings and Credit Cooperatives in Kenya. Journal Of Humanities And Social Science, 23(11-Ver.1),1-27.
- Githaka, J. M., Kimani, E. M. & Gachora, S (2017). Effect of liquidity management on liquidity of savings and credit co-operative societies in Kirinyaga County, Kenya. International Academic Journal of Economics and Finance, 2(3),57-73.
- Githaka J.M. (2017). Financial Factors Affecting Liquidity of Savings and Credit Cooperative Societies in Kirinyaga County (Unpublished MBA Thesis). University of EMBU, Embu, Kenya.
- Kennedy K. N. & Eshiwani W.(2018). Influence of Cost Structure on Interest Rate Level of Microfinance Banks in Nakuru County, Kenya. International Journal of Economics, Commerce, and Management, 6(5), 674-711.



- Kytönen, E.(2004). Oulu Cash Management Behavior of Firms and Its Structural change in an Emerging Money Market. Oulu, Finland: University Press.
- Masha, I.F.(2018). Effectiveness of Internal Control Systems in Management of Funds in Public Sector at National Sub- county Treasuries in Kenya (Unpublished MS in Finance thesis). KCA University, Naironbi, Kenya.
- Matianyi, B. J. & Ndirangu, A. W. (2019). Influence of Cash Management Practices on Financial Performance of Deposit Taking SACCO's in Kakamega County. The Strategic Journal of Business and Change Management, 6(2),1994 2005.
- Moraa, G.G. (2017). Effect of Cash Management Practices on Performance of Public Secondary Schools in Kisii County (Unpublished MBA thesis). Kisii University, Kisii, Kenya.
- Muriungi P.M., & Muturi W., (2018). Influence of Credit Appraisal on Loan Performance of Deposit Taking Saccos in Meru County. International Journal Of Advanced Research in Engineering& Management, 4(10), 39-65.
- Nyhodo B., Mmbengwa V. M., Balarane A., & Ngetu X. (2014). Formulating the Least Cost Feeding Strategy of A Custom Feeding Programme: A Linear Programming Approach. Nyhodo et al / OIDA International Journal of Sustainable Development, 7(10),85-92.
- Omwamba, K.W. (2017). An Evaluation of the Effect of Liquidity Management Practices on Growth of Public Secondary Schools in Kisii County (Unpublished MBA Thesis). Kisii University, Kisii, Kenya.
- Sylvie N., M., & Shukla P.J. (2018). Effect of Cash Management Practices on Financial Performance of Small Medium Enterprises in Rwanda: Case Study of SMEs in Kicukiro District. International Journal of Management and Commerce Innovations, 6(1), 940-949.
- Wölfing D. & Moormann J.(2018). Cash management in transition: From cash management to cash process management. Journal of Payments Strategy & Systems,11(4),343–354.
- Yilmaz H.(2011). Another Perspective to Corporate Cash Management: A New Model and Definition. International Journal of Humanities and Social Science, 1(11-Special Issue), 284-289.