

Examining the impact of market share on cash policy of the listed companies in Tehran stock exchange

Seyyed Farhad Seyyed Hosseini^{1,*}, Roya Darabi²

¹*Department of Financial Management, Ayatollah Amoli Branch, Islamic Azad University, Amol, Iran*

²*Department of Accounting, Tehran South Branch, Islamic Azad University, Tehran, Iran*

Abstract: The main purpose of this thesis is to examine the impact of firms' market share on cash holdings by active firms in automotive industry, chemical products, petroleum products and cement in Tehran stock exchange. To do this, 83 firms selected between those which their information were available during financial period from 2007 to 2012, then the impact of firms' market value on cash holdings by firms using statistical techniques of multiple regression and Pearson correlation coefficient have been examined. The research's findings indicate that firm's market value significantly associated with cash holdings of all firms and cement industry, but no significant relation was observed with other industries.

Key words: Market share; Cash; Tehran Stock Exchange

1. Introduction

Recent studies have shown that European firms have specific amount of cash like U.S firms. According to records, there are several factors that can justify cash assets. Firstly, trading factor obviously demonstrates that firms can installment pay in place of general clearance using cash holdings. The second reason is about firms' cash assets based on an institution's landscape. Managers prefer to use cash because it decreases many risks and enhance their decisions-making ability, although several empirical evidences confirm the existence of trading and institutions' reasons for using cash, increased cash throughout the world is a preventive action toward experiencing possible loss. Firms tend to inhibit from decreased financial loss. It has been proved, as well, that this is an effective and important factor in preventing which would enhance competition in an industry. Since firms will want to prevent from underinvestment, increased risk of competition may results in increased cash assets to facilitate the preventive goals. This issue has highlighted the relation between firm's cash assets-as a preventive tool from losses in competition- and market dynamics. In an intense competition among firms in markets, they are eager to hold their cash. Firms consider the risks that their competitors may face with that which leads to the positive relation between cash balance and risk of loss. Furthermore, production market dynamics may significantly impacts on optimized level of fixed cash. Regarding the discussed literature, this article seeks out to examine the impact of market share on cash policy of the listed companies in Tehran stock exchange.

2. Research background

Garcia-Troel and Martinez and Solana (2008) in their examination about effective factors on cash holdings of small and medium firms concluded that firms try to achieve their desirable goal (cash ratio) and the ratio is higher for firm with better growth opportunities and higher cash-producing abilities than other firms.

In his research about financial ability and market behavior, Farsard (2010) concluded that firms with higher liquidity are able to increase their market share than the competitors. We can interpret this conclusion that market share itself should play an important role in an optimized liquidity policy of a firm. Although recent studies have shown significant impact of a firm's condition in a market on monetary structures decisions, impacts of financial assets have less been addressed.

Creating two measurement indices for changing market share, Sinaei et al, (2012) examines these two indices in the relation between current performance and future performance during 2009 to 2011 in Iranian firms. The results indicate that the relation between current and future performance significantly depended on market share changes and the relation continues to the next year.

Fredrick (2013) examined the relation between market share and cash policy of U.S companies during 2001 to 2011. He reached to a conclusion that firms with higher shares in market tend to have less cash assets.

3. Research methodology

3.1. Research method

* Corresponding Author.

Firms with higher shares in market tend to have less cash assets.

3.2. Research population and statistical sample

Regarding the above researches and measuring more accurate and reliability of current research, a 6 year period from 2007 to 2012 was selected as time domain of the research. All listed companies in automotive industry, chemical products, petroleum products and cement in Tehran stock exchange were selected as statistical population of the research during 2007 to 2012, if they have they have the following condition:

- 1-Their stocks should be traded in Tehran stock exchange during 2007 to 2012.
- 2-Their fiscal year ends in 19/3/...
- 3-Their fiscal year should not be changed during the research.
- 4-They should not be part of financial intermediary and investment companies.
- 5-Their information should be available.

Therefore, 30 automotive industry firms, 28 chemical and petroleum products firms and 28 cement industry firms.

3.3. Regression model

$$Cash_{it} = b_0 + b_1 MShare_{it} + b_2 Risk_{it} + b_3 Growth_{it} + b_4 Size_{it} + b_5 Leverage_{it} + b_6 CF_{it} + \epsilon_{it}$$

- Cash_{it}: liquidity of firm i for year t
- MShare_{it}: market share of firm i for year t
- Risk_{it}: instability of cash flow in firm i for year t
- Growth_{it}: growth of firm i in year t which is obtained from assets changes at the end of period toward beginning of the period.
- Size_{it}: size of firm i in year t is equal with natural logarithm of firm assets.
- Leverage_{it}: debt volume of firm i in year t which is obtained from dividing total debt into total assets.
- CF_{it}: cash flows of firm i for year t.

Since the research’s variables are kinds of spatial, the research method is correlative. To test statistical examinations, Pearson correlation coefficient, regression and Variance analysis (ANOVA) are used which have less standard error than other statistical methods.

4. Results

4.1. Examination of variables’ normality hypothesis

3.4. Data analysis method

Table 1: Kolmogorov–Smirnov test

Number	Mean	SD	Absolute value of maximum SD	Maximum positive deviation	Maximum negative deviation	Kolmogorov–Smirnov	Significance level
516	0.032	0.036	0.187	0.149	-0.187	4.238	0.887

Based on provided values in Table 1, since significance level is more than 5% in cash model (P-value or Sig.>0.05), H₀ (normality of variables) is not rejected

4.2. Research hypothesis test

One of regression assumptions is independence of error, if error independence assumptions are rejected and errors have correlation together, using regression is impossible. Durbin-Watson statistics are used for examining errors independence, and if Durbin-Watson statistic test value is determined among 1.5 to 2.5, lack of correlation between errors is not rejected and regression can be used. Durbin-Watson value is 2.11 regarding Table 2, indicating that the errors are independent and there is no correlation between errors, thus correlation assumption is rejected and regression can be used.

Regarding to the Table 3, market share coefficient of firm liquidity is 0.100, indicating that market share significantly and positively impacts on firm liquidity. It means that firms with more powerful shares in market have higher liquidity than other firms.

5. Conclusion and recommendation

Our findings indicate that there is a positive correlation coefficient among two variables of cash holdings by firms and firms’ market share which its value is 0.266. The Table 3 clearly shows the positive association between cash holdings by firms and market share with coefficient of determination 0.071. The performed study about this model during 2007 to 2012 demonstrates that market share can illustrate the firms’ cash holdings as a good criterion. Investigations confirm the above hypotheses and they demonstrate the positive relation between cash holdings by firms and market share which they are consistent with provided documents in the research’s theoretical framework and financial literature.

Table 2: correlation coefficient, coefficient of determination and Durbin-Watson test

Model	Correlation coefficient	Coefficient of determination	Adjusted coefficient of determination	Standard error of the estimate	Durbin-Watson
1	0.266	0.071	0.060	0.035	11.2

Table 3: regression equation coefficient

B	Std. Error	Beta	t	Sig
Constant	0.057	-	3.030	0.003
Market share	0.100	0.169	2.509	0.012
Risk	-1E-10	-0.035	-0.615	0.539
Growth	-2E-06	-0.009	-0.205	0.837
Size	-0.003	-0.113	-2.054	0.040
Financial leverage	0.000	0.001	0.015	0.988
Cash flow	0.052	0.014	3.727	0.000

This relation is consistent with Farsad’s research and Fredrick reaches to the significant relation among market share and cash holding which that relation is reverse. According to the research’s result, it is recommended to investors, shareholders and managers to inform about market share and its relation with liquidity and do their best to take more market share and enhance their cash holdings as a related factor.

References

Altman ,E.,1968,"Financial ratios,discriminant analysis and the prediction of the corporate bankruptcy",journal of finance23.

Bates, T. W., Kahle, K. M., & Stulz, R. M. (2009). Why do U.S. firms hold so much more cash than they used to?Journal of Finance, 64, 1985-2021. <http://dx.doi.org/10.1111/j.1540-6261.2009.01492.x>

Bhattacharya,N.,H.Desai,and K.Venkataraman,2007,"Earnings quality and information asymmetry :evidence from trading costs" ,working paper ,SSRN Working Paper Series.

Ditmar,A.,J.Mahrt Smith ,and H.Servaes,2003, "International corporate governance and corporate cash holdings", journal of financial and quantitative analysis 38,.

Easley ,d.,and M. O Hara,2004,"Information and the cost of capital",journal of finance 49.

Faulkender,M.,and R. Wang ,2006"Corporate financial policy and the value of cash",journal of finance 61.

Ferreira,M.A.,and A. Vilela,2004," Why do firms hold cash? Evidence from EMU countries", European financial Management 10.

Frederiek Schoubben & Cynthia Van Hulle, (2012). "Market Share and Cash Policy: Evidence from Western European Companies", International Journal of Economics and Finance; Vol. 4, No. 11;

Garcia-Teruel,P.J.,and P.Martinez-solano ,2008,"On the determinants of SME cash holdings:"evidence

from Spain,journal of business finance and Accounting 35.

Garcia-Teruel,P.J.,P. Martinez-Solano,J.P.Sanchez-Ballesta,2008,"Accruals quality and corporate cash holdings ",accounting and finance 49.

Kim, C.S.,D.Mauer, and A.E. Sherman, 1998,"The determinants of corporate liquidity: theory and evidence",journal of financial and quantitative analysis 33.

Morellec, E., & Nikolov, B. (2008). Cash holdings and competition. Working paper, Ecole PolytechniqueFédéral de Lausanne.

Myers,S.C.,and N.S.Majluf,1984,"Corporate financing and investment decisions when firms have information that investors do not have",journalof financial economics 20.

Opler,T.,L.Pinkowitz, R. Stulz, and R. Williamson, 1999," The determinants and implications of corporate cash holdings", journal of Financial Economics 52.