# Proper Financial Strategies for the Multinational Firms against the Global Economic Crisis

Global Ekonomik Krize Karşı Çok Uluslu Şirketler İçin Uygun Finansal Stratejiler

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## **ABSTRACT**

#### Keywords:

Multinational Firms, 2008 Crisis, Financial Strategies

## ÖZ

#### Anahtar Kelimeler:

Çok Uluslu Şirketler, 2008 Krizi, Finansal Stratejiler Bu makalenin amacı, 2008 yılı global ekonomik kriz ortamında finansal oranları inceleyerek, çok uluslu şirketler için uygun finansal politikaları ortaya çıkarmaktır. Bunun için, uluslar arası alanda faaliyet gösteren ve 2008 ekonomik krizinden en az ve en çok etkilenen çok uluslu şirketlerin finansal tablolarından elde edilen yıllık veriler kullanılmaktadır. Kriz sürecinde hangi finansal politikaların daha uygun olduğunu anlamak için, bu şirketlere ait yaygın olarak kullanılan finansal oranlardaki değişmeler 2007-2011 döneminde incelenmektedir. Araştırmanın sonuçları, krizden en az etkilenen başarılı çokuluslu şirketlerin finansal oranları ile krizden en çok etkilenen başarısız çokuluslu şirketlerin finansal oranları arasında farklılıklar olduğunu ortaya koymaktadır. Dolayısıyla, bu analizde kullanılan finansal oranların, analizin

The purpose of this article is to find out suitable financial strategies for the multinational firms by analyzing

financial ratios during the 2008 global economic crisis term. In order to achieve this goal, yearly data calculated from financial statements of the most and the least affected multinational firms from the 2008

global economic crises are used. For the purpose of understanding which financial policy is better during the

economic crisis, the changes of common financial ratios of the multinational firms are analyzed for the term

of 2007-2011. The results of the study show that since there are differences between the financial ratios of the least and most affected multinational firms from the economic crisis, the financial ratios used in this analysis

can be used as convenient financial strategies for the sector in which the analysis was applied.

## 1. INTRODUCTION

As a result of free market economies, borders between the countries stood up and global financial markets have emerged. Thus, economic events in a country may affect another country and unfavorable situations of economic crisis may arise. And so, new financial strategies for the multinational companies are tried to implement before, after and during the crisis.

yapıldığı sektör için uygun birer finansal strateji oldukları ifade edilebilir.

The world's economic and financial systems converge at an increasing extent due to rapid international developments in the goods, services and financial assets. The trade linkage of goods and services emerges from the increase of national consumptions based on imports and national productions for exports. While this reel form of the international integration is occurring, both the level and the speed of the international financial integration are also increased (Kearney and Lucey, 2004: 571-583).

Recently, the importance of multinational corporations has increased rapidly due to increase in economic integration on a global scale and movement in liberalization of international trade and financial activities. Since multinational companies determine the level of international trade flows and investment in capital and technology intensive sectors, these companies also determine the competitiveness and welfare of the region or countries.

Capital flows to these companies from banks and other financial institutions during the 2008 global crises has declined dramatically. Economic system significantly has been disrupted on a global scale. And also, the cooperation between enterprises extremely has been damaged at micro-and macro-level. Because of these effects of the global economic crisis, multinational companies have needed to take new measures to achieve their objectives.

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Besides, changes have occurred in the condition of liquidity, borrowing, assets quality and net profits of these companies during the global economic crisis. Since it is important to know about the level and direction of the changes in these conditions to protect companies from the crises, many research have been done to determine the level and direction of these changes before, after and during the crisis.

Monitoring of warning signs of economic crisis, liquidity maximization, debt restructuring, business risk minimization and the use of risk reduction, financial instruments are the main measures for the management of companies to protect themselves from an economic crisis (Dalina et al., 2011: 626-629). Therefore, determination of warning signs of the companies considering financial ratios are important part of the protective action against the economic crisis.

In this study, the financial ratios of the least and the most affected multinational firms from the 2008 global economic crisis are examined by using the data of financial statements of these firms. Appropriate financial strategies are tried to be determined by examining the changes in these ratios.

#### 2. LITERATURE REVIEW

In this part, some researches about the multinational firms and their financial strategies against the economic crisis are reviewed.

In general, multinational firms (MNF) can be defined as follow; Multinational company which has asset values or controls them in one or more country through foreign direct investments and produces goods and services outside the country is an international firm. Another definition is that multi-national company is a whole with the corporate headquarters and branches which are affiliated to the headquarters and makes production in the other countries (Akademi İktisat, 2011: 1).

The increased importance of multinational corporations is changing radically the structure and function of the global economy. Multinational firms determine the level of international trade flows and the places where economic activities are concentrated. These companies are the most important actors of technology transfer among the countries (Aktan and Vural, 2011: 6-7).

Since MNFs are the most important actors of the foreign trade, they are affected more from the global economic crisis. So, it is important to examine these effects in order to make preparation for the future global crisis.

Chkir and Cosset (2001) investigate the relationship between diversification strategy of multinational corporations and their capital structures by using various statistical methods. These researchers identify that both the international market and product diversification increase leverage. In addition, they also conclude that bankruptcy risk is decreased by the combination of both kinds of diversification. Another result they find is that profitability and bankruptcy risk are related inversely with the debt ratio of multinational companies.

Desai et al. (2004) examine sensibilities of multinational affiliates in the United States and the local companies in emerging markets against the currency crises. They find that multinational affiliates increase their sales, assets and investments more than local firms do during and after the economic crisis.

Severe devaluation might be useful to local multinational firms, because it increases import prices of locally produced goods and provides cost advantage in export markets. Krueger and Tornell achieve empirical evidence of this competitive impact at the sectorial level. Besides, Aguiar and Forbes find evidence at firm level. Especially, Forbes shows that higher growth is possible in sales, net profit, market value and assets value after the devaluation for the companies which have more foreign sales (Desai et al., 2004: 1-29).

Tennant (2009) analyzes the factors causing firms show different sensitivity against to the crisis. Quarterly data of 284 companies in Jamaica and logistic regression technique are applied. In this study, international communication mechanism, basic operating characteristics, expectations of managers, changing conditions in the financial perspectives and input and output markets are used as explanatory variables. As a conclusion of this study, it is stated that awareness of companies to economic and financial crisis is an important determinant on the property of individuals. In addition, it is stated that enterprises which have not protection plan for crisis will be more severely and adversely affected in terms of loss of income and lay off than the enterprises which have protection plan for the crisis.

Aydeniz (2008) examines the position of the German firms operating in the manufacturing industry of Turkey in the term of 1993-2005 to see whether they have successful financial management by looking their financial structure during the crisis and after the crisis. It is found that debt levels of German firms increase financially during the 1994, 2000 and 2001 crises and the growth rates of their exports are higher. In addition, while debt levels of these companies are increasing in 2005, the growth rates of sales and exports based on production are decreased.

Forbes (2002), in his study examines how the performance of 13.500 companies in the world was affected from the 12 major devaluations during the 1997-2000 terms. According to the results, it is seen that after devaluation, companies have higher market value; but in terms of national currency they have lower growth rate in their net profits. It is determined that after devaluation, companies with larger foreign sales show better performance based on used variables. Besides, it is seen

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that firms which have higher leverage ratios have lower net profit growth. Finally, it is expressed that large firms usually have poorer performance than the smaller firms have.

In the study of Salman and Qamar (2010), in which they make ratio analysis of two multinational firms called GlaxoSmithKline and SanofiAventis and both are operating in the pharmaceutical industry, they do variance and t test analysis with the data of 2005-2009 period using liquidity, activity, profitability, leverage, market value and growth rates of the enterprises. It is stated that both of the companies show development during the observed period. It is also expressed that in general, GlaxoSmithKline firm due to its large volume of work shows better performance than SanofiAventis firm.

Alvarez and Gorg (2007) comparatively examine sensitivities of local and multinational firms against economic crisis by using statistical findings expressed as a good description of the economic decline in Chile. It is reported in the study that the reaction of multinational firms to the economic crisis is not different from the local firms. However, the results of the statistical analyzes are also revealed that multinational firms are less affected from the economic crisis.

Orr (2010) aims to reveal the differences in international strategic behaviors of firms which are in countries where there is economically deep decline, shallow or no decline as a result of global financial crisis in his research. It is determined in this study that the international strategy determinants during and after financial crisis are the country's market strength, protective management behavior in foreign markets and local levels of the competitors. Also, it is stated that these findings are supported by the international strategic theories.

McGowan (2007) makes research to determine financial characteristics that distinguish multinational firms from local firms. As a result of the study, it is found that multinational firms have higher net profit margin, active turnover rate and leverage. However, it is also found that the retention rates of the profits of these two group firms are not significantly different.

## 3. DATA AND METHOD

In this study, trend analysis method and financial ratios are used to determine the appropriate financial strategies for multinational firms against the global economic crises. The term of 2007-2011 is chosen as the analysis period to see the changes before, after and during the 2008 global economic crisis. Financial ratios used in this analysis are as follow; Current ratio, total dept/total assets, short term dept/total assets, current assets/total assets, account receivables/total assets, inventories/total assets, cash and cash equivalents/total assets, net income/net sales.

In the analysis, one firm from Japan (Toyota), one firm from US (General Motors) and two firms from Turkey (Ford Otosan and Anadolu Isuzu are used. These companies operate in the automotive industry and their earnings in 2009 are taken into account to choose them from the whole firms. Since 2008 global economic crisis emerged in September 2008, the actual effect of this crisis emerged in 2009. Therefore, firms are chosen by taking into account their profits in 2009.

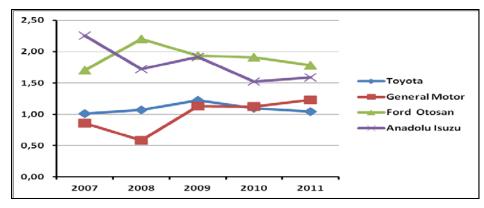
Two foreign firms of which one of them has the highest profit and the other one has the lowest profit in 2009 are included in the analysis in order to see the difference between their financial ratios and also their financial policies. For the same purpose, two Turkish firms of which one of them has the highest profit and the other one has the lowest profit in 2009 are included in the analysis.

While Toyota is one of the ten top firms, General Motors is one of the ten bottom firms in terms of their profitability in 2009. Also, while Ford Otosan is one of the ten top firms, Anadolu Isuzu is one of the ten bottom firms in terms of their profitability in 2009.

Foreign companies' data are obtained from MSN Money and CNN Money websites and Turkey companies' data are obtained from the Borsa Istanbul and Deniz Yatırım websites.

## 4. ANALYSIS

Financial ratios of the four firms between 2007-2011 are analyzed by using trend analysis method with the aim of determining appropriate financial strategies for domestic and foreign multinational firms against the economic crisis. The changes of the financial ratios during the term as follow.



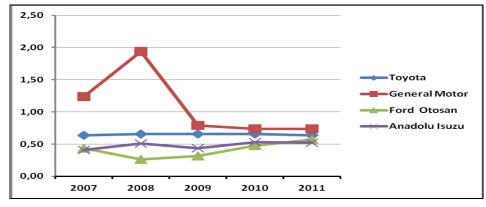
**Graph 1: Current Ratio** 

Source: MSN Money, CNN Money, Borsa Istanbul and Deniz Yatırım

When the current ratios which indicates the liquidity position of the firms are examined, as they are shown in the Graph 1, before the 2008 global economic crisis while there is increase at liquidity rates of the successful firms which are less affected from the crisis, there is decrease at liquidity rates of unsuccessful firms which are much affected from the crisis. This situation is valid for both foreign and domestic multinational firms.

While the current ratio of foreign successful firm (Toyota) is about 2,2 during the crisis, same ratio of foreign unsuccessful firm (General Motors) is about 1.5. Also, the current ratio of successful local firm (Ford Otosan) is about 1,1, the current ratio of unsuccessful local firm (Anadolu Isuzu) is 0,5. While the current ratio of successful foreign firm is 2.2, the same ratio of successful local firm is 1,1 and this indicates that current ratio varies between countries.

Since there is a relation between current ratio and 2008 global economic crisis, the appropriate liquidity strategy in terms of preparation for crisis is that the current ratio should be optimum level based on the conditions of the countries. It can be said that current ratio for the automotive sector of Turkey should be around 2 as a suitable financial strategy.



**Graph 2: Total Debt/Total Assets** 

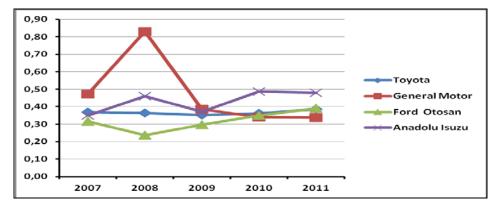
Source: MSN Money, CNN Money, Borsa Istanbul and Deniz Yatırım

When total debt/total assets ratios which indicate the risk situation of the firms are examined, as they are shown in the Graph 2, while there are decreases or no change in the rate of the successful companies, there are increase in the rate of unsuccessful companies in the year of 2008. This situation is valid for both foreign and local multinational firms.

The successful foreign firm's total debt/total asset ratio is around 0.60 and the same ratio of unsuccessful foreign firm is around 1.8 during the crisis period. Also, the same ratio of the successful local firm during the crisis period is around 0.30 and the same ratio of the unsuccessful local firm is 0,5. While the current ratio of successful foreign firm is 0,60, the same ratio of successful local firm is 0,30 and this indicates that current ratio varies between countries.

Since there is a relation between total debt/total assets ratio and 2008 global economic crisis, the appropriate total debt/total assets financial strategy in terms of preparation for crises is that total debt/total assets ratio should be optimum level based on the conditions of the countries. It can be said that total debt/total assets ratio for the automotive sector of Turkey should be around 0,40 as a suitable financial strategy.

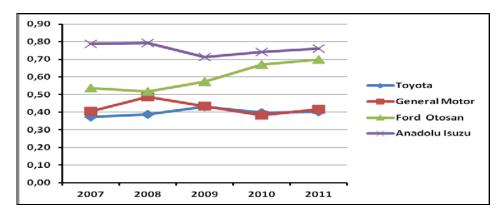
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**Graph 3: Short Term Debt/Total Assets** 

Source: MSN Money, CNN Money, Borsa Istanbul and Deniz Yatırım

When short term debt/total assets ratios which indicate the risk situation of the firms are examined, as they are shown in the Graph 3, these ratios have almost same trend as the previous total debt/total assets ratios. Therefore, comments about the Graph 2 are also valid for this ratio. It can be said that short term debt/total assets ratio for the automotive sector of Turkey should be around 0,25 as a suitable financial strategy.



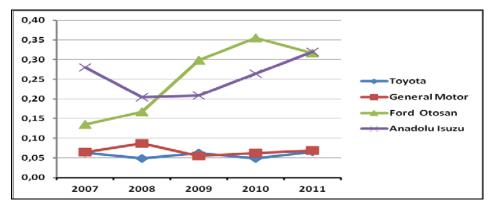
**Graph 4: Current Assets/Total Assets** 

Source: MSN Money, CNN Money, Borsa Istanbul and Deniz Yatırım

When current assets/total assets ratio are examined, as they are shown in the Graph 4, it is seen that successful firms have less current assets and unsuccessful firms have more current assets during the crisis. This situation is valid for both foreign and local multinational firms.

Since there is a relation between current assets/total assets ratio and 2008 global economic crisis, the appropriate current assets/total assets financial strategy in terms of preparation for crises is that current asset/total asset ratio should be optimum level based on the conditions of the countries. It can be said that current assets/total assets ratio for the automotive sector of Turkey should be around 0,25 as a suitable financial strategy.

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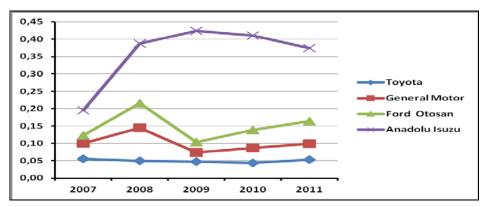


**Graph 5: Account Receivables/Total Assets** 

Source: MSN Money, CNN Money, Borsa Istanbul and Deniz Yatırım

When firms' account receivables/total assets ratios are examined, as they are shown in the Graph 5, the ratios of successful firms are lower but the same ratios of unsuccessful firms are higher during the crisis. This situation is valid for both foreign and local multinational firms.

Since there is a relation between account receivables/total assets ratio and 2008 global economic crisis, the appropriate account receivables/total assets financial strategy in terms of preparation for crises is that account receivables/total assets ratio should be optimum level based on the conditions of the countries. It can be said that account receivables/total assets ratio for the automotive sector of Turkey should be around 0,15 as a suitable financial strategy.



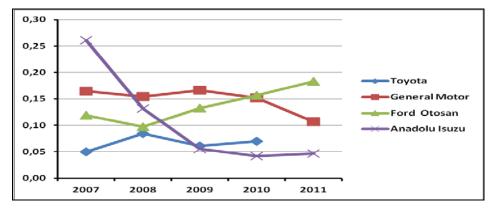
**Graph 6: Inventories/Total Asset** 

Source: MSN Money, CNN Money, Borsa Istanbul and Deniz Yatırım

When the firms' inventories/total assets ratios are examined, as shown in the Graph 6, the ratios of successful firms are lower but the same ratios of unsuccessful firms are higher during the crisis. This situation is valid for both foreign and local multinational firms.

Since there is a relation between inventories/total assets ratio and 2008 global economic crisis, the appropriate inventories/total assets financial strategy in terms of preparation for crises is that inventories/total assets ratio should be optimum level based on the conditions of the countries. It can be said that inventories/total assets ratio for the automotive sector of Turkey should be around 0,15 as a suitable financial strategy.

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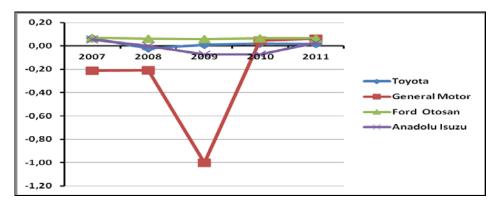


Graph 7: Cash and Cash Equivalents/Total Assets

Source: MSN Money, CNN Money, Borsa Istanbul and Deniz Yatırım

When the firms' cash and cash equivalents/total assets ratios are examined, as they are shown in the Graph 7, the ratios of successful firms are lower but the same ratios of unsuccessful firms are higher during the crisis. This situation is valid for both foreign and local multinational firms.

Since there is a relation between cash and cash equivalents/total assets ratio and 2008 global economic crisis, the appropriate cash and cash equivalents/total assets financial strategy in terms of preparation for crises is that cash and cash equivalents/total assets ratio should be optimum level based on the conditions of the countries. It can be said that cash and cash equivalents/total assets ratio for the automotive sector of Turkey should be around 0,10 as a suitable financial strategy.



**Graph 8: Net Income/Sales** 

Source: MSN Money, CNN Money, Borsa Istanbul and Deniz Yatırım

When the firms' net income/sales ratios are examined, as they are shown in the Graph 8, the ratios of successful firms are lower but the same ratios of unsuccessful firms are higher during the crisis. This situation is valid for both foreign and domestic multinational firms.

Since there is a relation between net income/sales ratio and 2008 global economic crisis, the appropriate net income/sales financial strategy in terms of preparation for crises is that net income/sales ratio should be optimum level based on the conditions of the countries. It can be said that net income/sales ratio for the automotive sector of Turkey should be around 0,07 as a suitable financial strategy.

## 5. CONCLUSION

With this study, it is intended to determine appropriate financial strategies for multinational firms by analyzing data of two foreign and two local automotive firms which are most and least affected from the global economic crisis in 2008. In the study, trend analysis method and the annual financial ratios as a data for the period of 2007-2011 are used. As a result of the analysis; the ratios of current assets/short-term debt, total debt/total assets, short-term debt/total assets, current assets/total assets, trade receivables/total assets, inventory/total assets, liquid assets/total assets and net profit/net sales are

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found as important to determine financial strategies of multinational firms, since there are changes in these ratios during the crisis.

Besides, understanding that these financial ratios are effective in determining financial strategies of both foreign and local multinational firms, it can be said that these ratios vary between countries. In addition, the ratio values of a successful foreign firm and the ratio values of an unsuccessful firm of Turkey are close to each other. Therefore, it can be stated that firm evaluation should be based on the country conditions and competitive environments.

When the current ratios which indicate the liquidity position of the firms are examined, it is seen that the liquidity ratios of the successful firms which are less affected from the crisis increase and the liquidity ratios of the unsuccessful firms which are more affected from the crisis decrease during the crisis. This situation is valid for both foreign and local multinational firms.

In order to be prepared against the economic crisis, appropriate financial ratio strategies for the multinational firms are that financial ratios should be optimum level concerning with the conditions of the countries in which the firms operate.

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