

FINANCIAL CONSTRAINTS AND GROWTH OF THE FIRM

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Anahtar Kelimeler (Türkçe)

- 1) Finansman
- 2) Sermaye yapısı
- 3) Karlılık
- 4) Karar verme
- 5) Büyüme oranı

Anahtar Kelimeler (İngilizce)

- 1) Financing
- 2) Capital structure
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ABSTRACT

This thesis is prepared to investigate the effects of financial constraints on the growth of the firm. The objective of this study is to discover whether there is a competitive advantage of firms' using equity financing compared to the ones using debt financing. Another objective of the thesis is to analyze how the firms' decision taking mechanism is constructed and how it is affected in an economy with high level of financial constraints.

After an introductory, the thesis includes a literature review. The next part contains an investigation of financial constraints for Turkish corporations and a qualitative analysis on the food sector. The thesis ends with a conclusion and implications about further research.

ÖZET

Bu tezin hazırlanma amacı finansal kısıtların firma büyümesi üzerindeki etkilerini incelemektir. Çalışmada hedeflenen, öz kaynaklarını kullanarak finansman sağlayan firmaların borçlanma yoluyla fon elde eden firmalara göre rekabet açısından avantajı olup olmadığını araştırmaktır. Ayrıca firmaların karar alma mekanizmasının nasıl yapılandığını ve yüksek finansal kısıtlarının olduğu bir ekonomik sistemde nasıl etkilendiğini de incelenmektedir.

Tezin içeriği; teorik özet, Türk firmaları açısından finansal kısıtların incelenmesi ve gıda sektörü üzerine sayısal bir analiz ve sonuç kısmıyla birlikte ileriki araştırmalar için çıkarımlar şeklindedir.

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1. INTRODUCTION

The main objective of a firm is to grow and the outstanding indicator of the growth is the profit of the firm. In the concept of profit maximization deriving “economic profit” is a matter of considerable importance. In this context capital structure and the cost of capital of the firms needs to be considered. A firm is said to be making an economic profit when its revenue exceeds the opportunity cost of its inputs. When firms calculate income, they start with revenues and then deduct costs. To judge the net contribution to value, the cost of capital needs to be contributed.

Under the competitive conditions, if high cost of capital can not be compensated for sufficient revenue, the firm performance would not show improvement and the growth rate would rule at low levels. To maximize profit, the cost of producing a given level of output should be minimized. In this consequence, the asset return that the firm had gained should be compensated for the cost of capital.

The cost of capital concept is tightly related to the opportunities of getting the financial resources. In the means of competition there is a relevant difference between the firms using debt financing and the firms using equity financing; the firms providing funds with lower cost have a competitive advantage compared to the firms providing funds under the financial constraints. The firms facing the financial constraints will overcome this disadvantage through gaining high revenue or departing from long-run profit maximization target.

Companies can achieve maximum profit by decreasing costs and applying cost minimization policies as well as increasing their productivity. Here both technology and organizational effectiveness plays an important role. In this context more than the nature of financing, i.e. debt financing and equity financing, how this financing is transformed into profitable business operations which gives a better return to the company stock holders than the overall average rate of return in the sector. Hence, profit maximization will depend on the firm’s policies which are mostly independent of the financing structure and policy of the company but are closely related to its business policies, philosophy and organization.

2. LITERATURE REVIEW

2.1 ECONOMICS OF PROFIT MAXIMIZATION

Profit maximization defines the relation between the output of a good and its price that will end up with the maximum profit. This is important to profit based enterprises as logically all commercial activities need maximum profit for the continuity and progress of the operation. There are some factors that contribute or affect the maximization of profit. Since the term concentrates mainly on the price of the good; the subject will be evaluated below within the context of pricing dynamics.

One of the basic features of the capitalist system is profit maximization in manufacture. The profit maximization is done through competition. Here, production cost is a constraint of profit and this is tried to overcome by lowering manufacturing costs. In the manufacturing process, it is important to have profit maximization over the average, which is also possible by using high technology in the manufacturing process. Especially small firms, who can not compete with this maximization, will be closed. (Özüğurlu, , 2007)

Here, pricing of the product has an important place for profit maximization. It is important to have the right pricing in the mid and long term. Some questions to help setting the price of a product may be if a low pricing may increase the demand to the product; how demand is affected by price differences or whether selling a cheap product at higher amounts will have more profit maximization, compared to selling at a higher price with less amounts. Some firms may base their strategies on a high price so as to have a profit in short term. The rationale is to target the customers with high income. This may result in profit maximization in a shorter term. If the target is profit maximization in long term, then the pricing may be lower. This will give a higher market share in long term. This is cited by Ashley as that the improvement in the living standards specially in Western Europe and North America as well as state interventions in education, health, social security, etc., has resulted in a decrease in the importance of profit maximization and haggling about prices is limited with people with low income (1961, p.92).

Competition is another feature of price setting and profit maximization. It was mentioned that the firms could settle their product prices according to the demand in the market. Still, in markets with though competition, the firm should have a cheap pricing policy or be innovative. For the latter, the firm should have an efficient R&D. This means to say that in competitive markets, firms should not only compete with price but also with new investments. It should be underlined that this is effective in competitive markets; otherwise, each new investment will mean a decrease in profit. So, it is not rationale to invest in R&D in noncompetitive markets.

One of the constraints of profit maximization is the production costs. In competitive markets, the trend is to keep the prices low but to increase production. Low costs and thus low prices are thought to increase social welfare. The main rationale behind privatization is the cost of government enterprises. Governments defending privatization defend that government enterprises have high expenses compared to their efficiency and profit (DPT, 2000, p.31), and should be replaced with private enterprises that will supply the consumer with lower product prices. It is underlined that in the UK, privatization in competitive industries has led to significant increases in the profits and efficiencies of firms (DPT, 2000, p.31). Privatization seems to be further discussed in many countries worldwide. Long term results may show whether privatization is the alternative of government enterprises. The main result to be drawn out of this discussion is that product costs are significant constraints for profit maximization.

Sanlı (2000, pp. 82-83) evaluates the competitive market from a different perspective. The following table defines perfect competition market. In such a market, many firms operate and all goods can be substituted by others. So, the firms do not have the power of determining the price and supply. Production is determined by the market price, so profit margins go down. Production is done by marginal costs (MC). The price becomes equal to the marginal revenue (MR) of the firm. Profit maximization then means that production is increased at the point where marginal cost equals to marginal revenue. This is the firm balance (A).

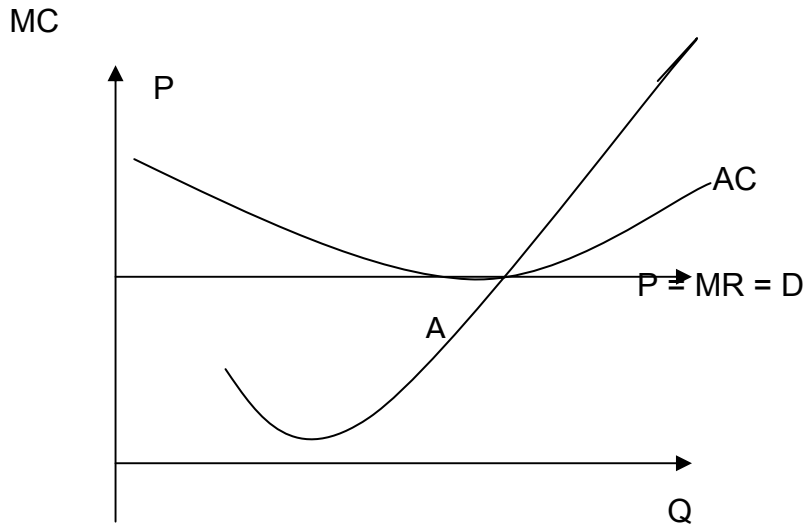


Figure 2.1 Profit Maximization

On the contrary, in high monopoly markets, due to the lack of substitution products, the monopoly can direct the supply; that is to say, when the monopoly decreases the price, demand increases and vice versa. In such markets the monopoly tends to behave unwillingly to decrease costs resulting in inefficient use of the sources and technology and decrease in product quality (Sanlı, 2000, p.86).

Human factor is also another point to be evaluated in profit maximization. As firms are operated by humans, their efficiency will be influential in the increase or decrease of the profit. Koplin adds the human factor to the profit maximization of a firm. He claims that in a firm, maximization of profit means ordering the relationship between individual (workers, managers, suppliers of capital, etc.) powers so as to maximize the residual gain (Koplin, 1963, p.131). The objective of the employees and managers are maximizing their utilities; this will lead to profit maximization of the firm. Koplin (1963, p.135) states that “the profits of the corporation will be maximized if it is so managed as to maximize the excess revenues over costs, including in costs the supply price of all factors, entrepreneurial and other”.

Considering a recently founded firm, there will be two phases of development. In the *Growth Maximization Phase*, the firm uses all of its operational profit for the accumulation of new capital, without paying any dividends to the stockholders. Here, the sales and revenues are maximized. When there is sufficient accumulation, the firm progresses to the *Golden Stage* or the *Quasi-Profit-Maximizing Phase* where it behaves similar to the classical profit maximizing phase. Wong cites that during this phase the operating profits are paid to the stockholders and thus investment is limited to replacement capital (Wong, 1975, p.693).

In the neo-classic definition of profit maximization, the frame of the business done in a firm is drawn by the owners. The consumers will tend to maximize their utilities and workers to increase their wages and the shareholders will tend to maximize their gains from the firm. Although the main motive of a firm is to maximize its profit, this is not always the case. Neo-classical economists say that the firm will continue production in short term to cover its variable costs, as cited by Anderton (2000, p.325). Even the company does not cover its total costs, it will continue production. It will only shut down in case its total variable cost exceeds its total revenue.

“Neo-Keynesian economists believe that firms maximize their long run rather than their short run profit” (Anderton, 2000, p.326). Normally, pricing of a product is determined by the overall costs plus profit. In case of long term assessments, the profit will be based on the long term costs. In short term plans, in accordance with the market conditions, the firm will adjust its production and price. But, Neo-Keynesians say that this rapid adjustment of price may damage the firm as consumers hate frequent price changes (Anderton, 2000, p.326). So, firms try to keep prices at stable levels and adjust production accordingly.

2.2 FINANCIAL CONSTRAINTS AND THE FIRM

2.2.1 Capital Structure and Cost of Capital

In a free market economy economic activities are realised by private companies and the businessmen who are the professional managers and owners of the companies. Companies are formed and operated by entrepreneurs. There are different company types. Incorporated company is one of these and is the most developed ones. It can issue shares and its shares can be freely bought and sold in the stock market. Different people can become shareholders of the company. To raise capital the company can issue different kinds of stock; common stocks and preferred stock. These actions led to a wide and strong company structure because the free market economy entails competition and in order to be able to compete with your rivals in the market your company has to be strong. Hence, the strength of the company lies in its internal structure. This internal structure is an indication of the company's position in the market.

The strength of a company is measured by its capital strength and capital structure. In the short term the company can be in a good situation, but the more the company gets bigger the more there will be a need to arrange a good capital structure to guarantee its long term operations and to finance its activities. The company basically finances its long term activities through the shareholders support by their becoming shareholders and also through getting debt. The ratio of debt to equity establishes the company's capital structure and it determines the amount of financial leverage. This financing by debt or by the equity is called the weighted average cost of capital and it is the weighted average of marginal after-tax costs of its sources of capital. These sources of capital are either the debt obtaining or raising the required capital through the shareholders' equity (Weston and Copeland, 1986; pp. 19-20).

Capital structure shows us the sources of a company's long-term debt. The capital structure is determined by the numbers and types of shares the company issues and its dependence on fixed-interest debt. The choice among sources of financing is the most important financial decision of the company. The costs of obtaining debt and acquiring new shareholders have to be analysed and the decisions must be made based on this comparative cost analyses between these alternatives. So, the choice of alternative will be depending on the cost, the type of business of the company, the asset and the expected future earnings, taxation and some other criterion. After analysing these factors the company then establishes a target capital structure. This target capital structure will be a guide for the company to establish a balance between risk and the return of the company (Westen, Besley and Brigham, 1996; 608). From this target capital structure we arrive at the optimal capital structure. Companies try to establish a balance between the risks taken by using one financial tool and also calculation its returns. The aim in doing this comparison is to maximise the price of its stocks (Westen, Besley and Brigham, 1996).

Since the companies in a free market act in a competitive and uncertain environment it has always been an important issue to determine the optimal capital structure. Many researchers and academicians have worked on this subject thoroughly. Among these the most widely known ones are Modigliani and Miller (MM). According to their proposition I, "the value of a firm was independent of its choice of capital structures" when there is equilibrium in the market and when there is a perfect capital market without taxes. MM concluded that capital structure has no impact on the value of the firm (Ryen, Vasconcellos and Kish, 1997). This situation seems to be coming ahead. As technology develop and as globalization increases

we are entering into a market situation where the capital markets are becoming more perfect and tax equalisation and decreases are becoming the case throughout the world.

Capital structure theory has been discussed so much since the companies in the market need to find answers to questions like “is there really an optimal capital structure for any individual firm or industry? Does that ratio stay constant over time? ... No, one theory has emerged to explain all these phenomena” (Ryen, et. al., 1997).

Financial Distress results from the inability of the company to meet its obligations on time. This is due to the variability of cash flows of the company. Since there is not uniform and well structured cash flow in many industries today the actual obligations can not be planned well. If a company has a steadier cash flow it can support higher debt levels than many other firms. Arrangement of the cash flow is dependent on the policies of the management and their reliance on the shareholders to bear the costs of adjusting the company’s level of risk when a risky debt is issued (Ryen, et. al., 1997). This means that there should be a consistent policy to cope with volatility in the market. Besides the emphasis given to cash flow there is another important element to take into consideration. This is the government’s tax claim on the firm. At low level debts, increases in business risk will increase a company’s tax liability (Ryen, et. al., 1997).

When we look at the company’s tangible and intangible assets we see that there is a relationship between asset intangibility / liquidation costs and financial leverage. Generally “leverage increases with fixed assets and non-debt tax shields, and decreases with advertising expenditures” (Ryen, et. al., 1997). This may explain why the investors are thinking of the tangible value of the company and why a large amount of the company value may comprise future investment opportunities. But while investments are made many things are taken into consideration and debt is among these. The increased leverage increases the possibility of bankruptcy. This creates a counterbalance to the tax advantage of debt (Ryen, et. al., 1997) for the company.

The other important conflict arises from the agency costs in the organisations. The agency cost stems from two main things: the conflict of interest between managers and the stockholders and the conflict between stockholders and bondholders. These also create problems in the financing of the company. For example, when a bond is used and sold, stockholders try to maximise their wealth at the expense of the debt-holders by increasing the dividend rate, by issuing new debt with a higher priority than the old one, by under

investment and by assets substitution (Ryen, et. al., 1997). All of these conflicts of interest create a negative situation for the company and its financial position.

In addition to these internal factors affecting the capital structure of the company there are other external factors like the strategy of the competitors and its impact on the company's capital structure. Here in a study done by Chevalier (1995; cited in (Ryen, et. al., 1997) shows that a "company's choice of capital structure influences the strategy of its competitors. Capital structure has also impact on the customer/supplier relations, on the corporate control and the distribution of voting rights as well as the distribution of cash flows. When all of these factors are in interaction with each other and when there is volatility in the market it becomes quite difficult to set up a pre-fixed and rigid capital structure.

Due to the increased volatility in the national and international markets and due to the financial cycles the capital structure and optimum allocation of financing for debt and equity becomes an important decisive factor for the companies today. The article by Chu (1996) explores the practical problems of raising capital by analysing the determinants of optimal capital structure and the different issues and stakeholders in the determination.

Chu gives a brief development of different debt and equity financing methods throughout 1980s and early 1990s and says that the market has changed a lot in these last twenty years. One important thing he mentions is the variety of financial instruments that developed in this period and the change of debt to equity. The equity and debt obtaining structures have increased in type and numbers. These changes were said to be due to the persistent volatility in business cycles and securities markets and the companies' desires to create a balance between "current required interest payments, equity dilution, and the market's valuation of its securities and future financial flexibility". After the increase in the number and type of financial instruments for company use Chu(1996) claims that corporations and financiers no longer think to act according to an optimal capital structure by itself alone, but also think of creating a "flexible capitalisation" to take maximum advantage of a firm's changing and increasing financial requirements. One of the important elements mentioned by the author is the development of comparative differences between the markets which gives opportunities in the areas of "taxation, accounting convention, debt maturates and covenants, and relative levels of acceptable risk" (Chu, 1996; 2). The result of this is the change in the decision-making process for financing the company long term financial needs. These new alternatives give rise to raise funds at lower costs, on more attractive terms and better future adaptability. So on the one hand there is an increased volatility increasing the

risk but at the same time there is the increased opportunity of taking advantage of different financial tools and differentiated markets. This may mean that the risk taking can be reduced if a professional management of capital structure by taking the real situation into consideration is done. I think that the changes in the capital and financial markets increases the business risk all around the world since it becomes more and more difficult to plan the long term of the company due to increased competition world-wide. In this sense, What Chu (1996) offers in his articles as applying different types of financing seems to show that the business risk in general has increased in the world. To cope with this many companies engage in mergers and acquisitions. Some try to take advantage of tax differences and increase the earning per share (EPS) of their stocks so that their companies become more attractive for normal shareholders.

Chu gives a short analyses of the changes seen in debt and equity between 1973 and early 1990s and his main stress is on the abolition of gold standard and the corresponding volatility seen in the markets. This created distrust in the western markets for most of the companies stocks and the stock prices have in turn decreased. So when the companies could not increase their financial needs through stock purchase and sales they once more increasingly applied to external debts. In this period “the principal value of corporate debt exceeded the stock market value of corporate equities by an astounding \$20 billion” (Chu, 1996; p.3). This is a quite big number and shows that the investors are disillusioned with equities and long term financing of the companies began to rely more on debt in this period. This is indeed a very good example for the change in the capital structure of the firm and its impact on the stock prices. With the expectation of a decrease in the EPS stock prices fell down and the companies began to use external debt. Under normal conditions the internal equity should be the first and the external equity should follow (Westen, Besley and Brigham, 1996; 620), but in this period it was the opposite. However, heavy reliance on market borrowing, mergers, acquisitions of companies below their book values, etc.. has led to a recession and credit crunch in the early 1990s. As a result of this contraction in the early 1990s more than 20 companies, “each with liabilities of more than \$1 billion, entered bankruptcy, propelled by excess leverage, increasing global competition, deregulation, and a lingering recession” (Chu, 1996; p.5). So the balance between debt and equity is a very sensitive thing and it must be followed up continuously in order to be a victim of using excess debt. The reason given by Chu (1996) for such bankrupts is that the companies used debt to acquire overpriced assets, “particularly when the cost of capital is in double digits”. In these cases the high interest paid for debt could not be covered by the increases in the share prices and/or by the operations leading to bankruptcies.

In today's very volatile markets the correct use of debt, equity and other alternatives of financing is becoming a crucial way to determine the right capital structure. Today the equity, bank debt, subordinated debt, convertible debt, and preferred stock have all become part of the equation. It is important to note that the capital structure and the policies offered in the 1990s are not valid any more. In the 1990s many companies went to public to raise funds and sold stocks to repay their debt because there was a rising equity market. Now the choices are different. There are other alternatives to use to obtain fixed-income returns. Among these we can count floating-rate securities, securities with puts, and securities with other protective contingencies (Chu, 1996).

In profitable times using debt to finance the long term needs of the company is a good policy, but when the periods of tight money policies come then the situation changes. Companies with high debt ratios may have difficult to raise funds on acceptable terms. High levels of leverages prevent the companies to engage in attractive investments to remain competitive in the market. Sometimes they are forced to sell assets or issue equity in bad times. Chu again argues that it is not always a negative thing to issue equity to finance itself. The prices of stocks do even rise when equity is issued. This is called the application of re-equitation and has been an important theme in the capital markets in the 1990s (Chu, 1996).

Companies have to use the financial leverage policies to straighten their capital structures rather than making speculations because the businessmen and the companies are like artists trying to make the best use of scarce capital. The credibility of the management to lead the company in volatile market conditions becomes very important. Managers are the people who will optimise the trade-off between maximising the long-term value of the firm and minimising the cost of capital.

The most important thing to be obtained from this article is that we are living in an extraordinarily unpredictable global market and there is not a predetermined optimum capital structure and an optimum ratio between risk and return. As the unpredictability of the business cycles and securities markets continues the best thing for companies to do would be to use the flexible capitalisation to cope with uncertainty.

2.2.2 Capital Structure and Stock Valuation

The organization is seen from the point of view of the shareholder or other stakeholders. These stakeholders are often called the institutional investors. The investors and shareholders look at the company and its operations in the short and long run. Generally potential growth of the company's capital or return and its relation to the current market valuation of the organization's share price are the criteria (Mabberly, 1997: 37). Here the need for more and accurate information becomes important because many investors use this information to value their organization. The accounting methods are different for different aims and they want to have cash-based measures and then the net growth in cash flow becomes important for them. So if the manager wants to develop the share prices of the company stocks then they must manage the business to maximize the shareholder value. This value is defined as "the total return to the shareholder, both in terms of dividends and share price growth." This value is calculated as "*the present value of the future free cash flows of the business discounted for the weighted average cost of capital*" (Mabberly, 1997: 37).

Shareholders are the investors into the company for long term return. On the other hand the creditors and speculators who give credit and who invest into the company look for returns for the short term. This is a big difference. So capital structure and valuation are related to the firm's long-term financial position. Capital structure is determined by the mixture of long-term debt and equity used by the firm to finance its operations.

Why is stock valuation important? The creditors want to know the value of the firm, the investors want to know it and also if some other company wants to merge with the company or to acquire it, it needs to know the actual and the market value of the company. Therefore, valuation techniques are important. The value of the company is a key aspect of its profitability and its future. To increase this profitability the company gets debts to have more production or service. But because the company must pay back the debt and must also pay interest it is difficult to decide on the amount of debt. So companies try to have an optimum level of debt to equity ratio. This ratio and the related capital structure affects company's financial leverage and therefore the financial risk of it. The degree of financial leverage, operating leverage are all different ways of looking at the relation between the financial and the business risk. We have the debt-equity ratio, the debt-to-total-capitalization ratio, times interest earned ratio, etc...(Weston, et. al., 1996:pp.624-629)

To give money and to award the stock holders the stock repurchases are done. Usually stock buybacks (repurchases) are done by the firms which are in a very liquid position like the Cola

case of “generating as much as \$1.5 billion of excess cash every year for the next decade” (Ruthledge, 1994, p.3). It is a way of doing things like giving dividends to the stock-holders. When the tax rates is high, companies use such a way of engaging in stock buybacks programs “return cash to the shareholders”.

The article by John Ruthledge is about the stock buybacks. It begins by an interesting anecdote of someone going into a restaurant to eat. This person wants to know what the chief cook eats, and he orders the same thing for himself as a customer. From this story the author tells us that “the same thing is true in the stock market” (p.1). This is what he offers to the big company managers. If the main trend of the big and influence managers is to buy their company’s stock then the ordinary shareholders will not hesitate to buy the stocks of that company. They will look at what the “Chef Eats” as the title of the article and they will behave like the big managers.

One reason for this change in the trend is given as the “sharp jump in long-term interest rates” in the earlier part of 1994. This change “pushed down many stock prices and attracted attention of value buyers”. I think the changes in the financial sector created different ways of stock valuation and stock purchase. The one mentioned in the article as “Eating What the Chef Eats” is one of these methods. This method of stock evaluation and stock purchase is rather a primitive, may be a simple way but it is also an effective strategy because the big managers of the company when they repurchase the stocks assure the ordinary investments and give them confidence on the company. The reason behind this behavior seems to lie in the fact that the managers are the persons who know their company the best because they have every sort of information including the details of company performance. So their behavior is a good signal for the ordinary investments. This is quite related to the “Signalling Theory” (Weston, et. al., 1996:pp.632). According to the signalling theory, “... in fact managers often have better information about their firms than do outside investors. This is called as “asymmetric information” (p.632). Due to this asymmetry the action of the upper management is a good signal for the ordinary investors in the company’s stocks. There are two examples on the behavior of the managers in favorable (Firm F) and unfavorable (Firm U) situations. Then it is concluded that “... one would expect a firm with very favorable prospects to try to avoid selling stock and, rather, to raise any required new capital by other means, including using debt beyond the normal target capital structure” (pp. 632-33). The companies mentioned in the article, however, do not engage in using debt. They even buyback their company stocks from their shareholders and use this as a way of giving their shareholders money like

dividends and avoiding taxation. This shows that the company is in an extra liquid situation in terms of its cash flow and gives bonuses to its shareholders.

Stock buybacks is applied by big companies to “return capital to owners through capital gains rather than through dividends”. The reason seems to avoid taxes since there is tax on dividend income. The low stock prices help to apply this method of fund transfer. The article gives us clues on the reason of such a program and it is said that “a bad company with a repurchase plan is still a bad company. But a buyback for a great company with undervalued stock will make it even better”. So, if the company is undervalued, by stock buybacks is good for the company because it becomes a good tool for cheaper fund raising. But the author has two criteria for a strong company: a. Sustainable cash flow and b. exceptional returns on capital for investors”. (p. 2). Coke was said to have more than \$1 billion excess cash flow and it will find ways to return cash to shareholders¹ With the total excess cash (something like \$15 billion) the author says that Cola can purchase more than 21% of its shares (230 million shares) and it can create a situation where the shares become scarce and very valuable. Everyone would then like to hold Cola shares. He says that other companies like Kelloggs, McDonalds and Merrill Lynch are either doing it or announcing such programs. So the confidence in the high value of company is confirmed in the market by stock repurchases and it is used as a tool to increase financial capability of the company. And when the managers “show their faith in the company’s future by buying shares” others buy more shares since it is a signal that “company’s stock is selling for less than intrinsic value”. The author makes the joke he made at the beginning of the article and says that the managers of the company “are willing to eat their own cooking” and he invites us to join them at the table. But we have to think on the other theory of capital structure: Trade-off Theory. The role played by interest rates makes it important. If the interest rates rise up then the debt obtained from outside creditors may be a better way of raising capital and obtaining a better balance between debt and equity. The article by Rutledge does not mention of this. It only tells us the positive sides of the approach of “eating what the chef eats” in stock buybacks, but the situation of the taxes and other similar external environmental factors affect the stock price too.

The article by Jamal Munshi (1995) looks at the determinants of debt. He is trying to analyze why some firms use more debt than the others under almost the same macro conditions of taxation and interest rates. In other words he wants to find some basic reasons why certain

¹ Of course, this was before the recent poisoning thing about Cola. After this event the situation seems to change a lot.

firms use more debt than the others even though the capital structure is the same for both. He also mentions that the lack of a good financial theoretical explanation of this led Miller (1977) to develop his “irrelevancy” theory in this area.

The discussions led to Miller to do a detailed theoretical research on debt and equity proportions and their impact on company capital structure. Merton and Miller’s theory made some restrictive assumptions like constant interest rates, no personal taxes, etc. Given these conditions they asserted that “a firm’s value rises continuously as it uses more debt, and hence its value will be maximized by financing almost entirely with debt” (Weston, et. al., 1996:pp.630-31). The conventional understanding is that it is better to base the financing on equity. But it seems that using debt is an important determinant of financing the company. In this sense the author, Mr. Jamal Munshi concludes from his interpretation of Miller’s irrelevancy theory that the total amount of debt used by the companies must be related to the macroeconomic variables like the taxation rate. He says that according to the theory the distribution of debt ratios of the companies should be random. Munshi later tells us that this is not so. Debt ratios in the different sectors gave evidences against such a random distribution. He gives examples of studies by researches like Kim and Sorenson (1986) and Daley, and Huber (1982). These studies have found other variables like agency costs that explain the differences. So the writer questions the validity of the old theory. In this sense he is not for a rigid theory of “optimal capital structure”.

Munshi’s study aims to find the contradictory and similar parts of the studies done by various researches on subjects related to debt and equity, the relationship between the debt givers and the equity holders and the relationship between tax shields (protection) and the borrowing. He mentions of the Black-Scholes model. Here it is said that the equity holders are the risk takers of the credits given by the debt holders. According to their views the “firm with higher operating risk would use more debt.” (p.1). But the author says that some studies support his view and some studies do not support it. The tax advantage of using debt and relying on equity financing brings different tax shields according to the different studies. The role of depreciation and the percentage of assets in plant and equipment become important determinants.

Munshi tells that the attitude of shareholders and the debtholders are quite different; while the shareholders look at the value of the firm as the present value of future earnings from investments debtholders on the other hand look at the value of the firm “in terms of tangible assets in place”. Munshi agrees with the view that “assets in place are financed with debt

and growth opportunities are financed with equity". I think that according to Munshi the financiers give credit and take the guarantee for their credits and for them the actual assets like the plants and machineries of the company are important for them. They want to collect their money back. They do not take any risk. On the other hand investors take the financial risk of getting debt and this is reflected in the company's growth opportunities. This risk is financed by the equity holders. I agree with him. So by looking at the actual market situation of the company various financial planning are made for assessing the risk. Leverages like (DOL) and (DTL) are ways to see the relations between the company operations, its costs and the profitability of its operations and these become indicators of the shareholders' risk taking.

Later Munshi tells about the empirical studies done and the methodology used to build up a model to measure the risks. He says that one important methodological contribution of his study is on the subject of measuring a company's volatility. He says that the volatility is very important in determining debt levels. He discussed the different ways and methods used to find a direct measure of operating risk. He does not agree with the studies done by Mandelker and Rhee (1984) when they used degree of operating leverage (DOL) in isolation. He was against these types of assumptions since they all looked at the situation from one-side. He gives a good example by saying that "a firm with a steadily and predictably rising earnings could be considered to be just as volatile as one with wide swings in earnings". To overcome this he offers a new measure of volatility where the time series is not autocorrelated. This is something technical. I could not understand how it is done, but he says that this is used as a "surrogate for volatility". He also tells of other relevant and important variables like P/E, EBITH and Tau= total assets utilization ratio as sales over book value of assets.

The findings of his study showed that growth in size was a dynamic variable and its correlation with debt was positive. Companies increasing in size are found to have a higher debt ratio. This was against the findings of Kim and Sorenson (1986) who reported an inverse relationship. For P/E and P/E growth rate Munshi's study has found out a positive correlation with the percentage of the company size in plant and equipment and the growth rate in this ratio.

One other important thing that the research study of Munshi says is related to the relationship between operating earnings and debt. He says that the earlier researches did not look at this relationship. Munshi's research has found out a strong negative correlation

between the earnings from operations and the use of debt. This is very important because it means that the way the company operates and finances itself is important and the role of debt is not always very important. It is against the general understanding that debt using is a good way of raising company value, but the risks increase more with debt because the money taken is some one else's money. Other relationships have been found for company volatility and risks. However, the important thing about this study is that "the relationships within different industries are not parallel to each other". It is concluded that the industry effect on the risk and the composition of company stock values is more complex. This is natural because in every sector there are different factors and we can not easily model these factors. I think this study tells us that the capital structure of a company has very different aspects. When we look at it from different perspective we get different feelings. The attitude of actors is different. The CEO looks at the company in a different way then the shareholders, the debt-holders look differently and so on. This is very important. The company has to do interactive with different actors in different ways. That is why we need different modeling to understand the impact of different factors. In his sense one model is not enough. So what can be concluded is that "we have to eat what each different actor eats" when we evaluate the capital structure of the company.

2.2.3 Debt versus Equity Financing

There are two ways of financing for firms that are aiming to grow. These two ways are debt financing and equity financing. Making this financial decision is important for firms and especially for firms that are small. Debt financing is less costly compared to equity financing but it has several drawbacks. First of all debt is not the permanent capital of the firm and must be repaid in time. The lender of debt will not take a significant role in managing the company but this is true under special conditions. If the debt is not paid back then the lender may take a significant role in the company management. So, the debtor should be consistent with his or her obligations (Chung, 2006, p. 15). There are various forms of debt as mentioned by Chung (2006). These are senior debt in the form of term loan or a revolving line of credit. Both of these forms are secured by the assets of the company. There is also subordinated debt which is unsecured. In recent times other types of instruments have also emerged in the market.

In order to make debt financing an application should be made to a commercial bank or credit union and this debt financing process begins after the approval of this application. In equity financing and investment is made in the ownership of the undergoing business. But

government grants and the economic value of assets like land and equipment are also considered as equity (Coker, 2007, p. 23). As said in order to make debt financing an application should be made to a bank, credit union or savings institution. These institutions have different features. Here it is necessary to mention briefly the basic distinctions between these institutions. As stated by Coker (2007) banks emphasize business and consumer accounts. Credit unions emphasize consumer deposit and loan services and saving institutions emphasize real estate financing (p. 23).

Chung (2006) mentioned other types of instruments that have emerged recently. Venture debt is one of these new types. This is a form of senior debt that is provided to borrowers who are riskier and less creditworthy. Another new type is second-lien which is also a senior debt (p. 15)

Financing decisions are not easily taken by firms. In a theoretical world where symmetric information is available and where there is complete contracting there are neither agency conflicts nor control problems for firms. In such an atmosphere the taxes determine the optimum choice of financing mode. If there are no taxes the financing decisions would be insignificant to the value of the firm. But reality is a bit different than this. In reality there is asymmetric information because there is both indefinite number of future states and abundant unverifiable information. Besides this contracts are incomplete. For this reason in such an environment financing decisions matter a lot (Schaefer et al., 2004, p. 227). The repayment of the debt mainly relies on the exposure risk of the investor. So, risk is an important determinant of the financial contract being offered as stated by Schaefer et al. (2004), p. 227). This exposure risk of the investor is a function of several other things such as the intrinsic project risk, the implied financial risk and the availability of risk mitigating devices. Schaefer et al. (2004) further state that project including high risk are mostly equity financed and safer projects are financed by loans. The authors further add that venture capitalists are much informed on projects than money loaning banks. So, there is less probability of success and higher cash flow in the case of venture or equity financing where there is sufficient information. The reverse is true for debt financing. In venture capital higher profits are gained associated with higher risk. But there are also opposite ideas and as Schaefer et al. (2004) mentions theories that claim that debt is the preferred mode for any entrepreneur (228). According to these theories the dilution costs are big for high-risk entrepreneurs and for this reason banks don't accept to give them loans and they have one option and that is equity financing. Again, according to these theories high-risk equity

segment is seen as the last resort that venture capital firms offer their services (Schaefer et al., 2004, p. 228).

2.2.4 Firm's Growth and Financial Constraints

If the financial markets in a given economy are assumed to be perfect, firms become able to finance their projects. In such an economy if the investment costs are higher than the internal resources of the firm or if internal funds are used to pay dividends firms can raise the needed funds in the capital market or they can borrow from the banks. So, it can be stated that if the finance market is perfect than there are not any financial constraints on firms that would hinder their investments. So, firm growth is not constrained in that case. But in reality or in real financial markets the situation is a bit different than this. The above mentioned situation is the idealized financial market that has been studied by Modigliani and Miller (1958) and which has been cited by Demirgüç-Kunt and Maksimoviç (1996, p. 7).

In actual markets there are several imperfections and firms that obtain outside investments have several costs associated with these imperfections. Demirgüç-Kunt and Maksimoviç (1996) state that "Many of these imperfections are rooted in conflicts of interest between investors and the firms' insiders" (p.7). The aim of the firm insiders is to exploit the investors that are outside the firm and in many cases the insiders may lower the value of the outsiders'. But the outside investors and creditors have to protect their investments and for this aim they have several options. First of these options is to use mechanisms in which the actions of the firms are monitored. Besides this the outside investors and creditors may also constrain firms contractually in order to overcome opportunistic behavior. But these measures have several costs. On the other hand these measures may not become effective and in that case the investors should take into account the expected opportunistic behavior. This would increase the external cost of capital of the firm. Such firms may not be able to obtain investment capital (Demirgüç-Kunt and Maksimoviç, 1996, p. 7-8).

From these considerations we can deduce that there may be some certain categories of investment expenditures which are easier to be funded by outside investors. For example, it may be easier to fund liquid assets than specialized equipment since the value of such assets is readily ascertainable and these liquid assets can be readily repossessed. If certain conditions such as securing loans by such assets separately or securitizing these assets are fulfilled then investment in this category of assets can be financed from outside investors or

creditors at a low cost. There are differences between different countries in terms of the availability of external capital to fund long-term investment. The main reason of this is the dependence of the costs of monitoring and legal enforcement on the sophistication of the financial markets within each country.

Demirgüç-Kunt and Maksimoviç (1996) differentiate between three types of assets which are used by firms in operations. These are the current assets, fixed assets and third category of assets which have maturity longer than one year but are not fixed assets themselves. Current assets are cash holdings, inventories and short-term credit extended to the firm's customers. Plant and equipment used in production are fixed assets and patents and trademarks purchased by the firm are among the third category of assets (p. 8).

In the same study Demirgüç-Kunt and Maksimoviç (1996) take into account four sources of financing for investment. First of all there is internal financing. This can be done by retaining the earning and not paying them out as dividends. Capital can also be obtained by firms by increasing the short-term and long-term liabilities to suppliers and to financial intermediaries. Another way of financing is to issue equity. This can be done directly to the public investors, indirectly by the conversion of convertible debt or privately in exchange for assets (p. 9).

Demirgüç-Kunt and Maksimoviç (1996) analyze several firms from different countries. While making their analysis they develop and use an equation. In this equation short-term investment is measured by changes in the current assets of the firms. This is given as ΔCA . I is investment in fixed assets and is measured as the sum of change in the firms net fixed assets and depreciation. ΔRA is the net investment in residual assets and this is measured by the change in the total assets of the firm less changes in the value of fixed assets and current assets. According to these definitions the following equation is suggested by the authors.

$$\Delta CA + I + \Delta RA = \Delta STL + \Delta LTL + \Delta CAPITAL + OCF \quad (\text{Demirgüç-Kunt and Maksimoviç, 1996, p. 9}).$$

In this equation ΔSTL is the change in current liabilities, ΔLTL is the change in long-term liabilities, $\Delta CAPITAL$ is the change in issued equity and OCF is the cash flow from operations. This operating cash flow is given as the sum of earnings after taxes, less dividends and plus depreciation.

Firms that have been analyzed by Demirgüç-Kunt and Maksimoviç (1996) mainly use internal funds to finance fixed investment and external funds to finance short-term investment. Such a pattern of financing is found to be valid both for the firms in developed countries and in developing countries. Looking at this financing pattern the authors have suggested that there are more severe conflicts of interest between creditors and borrowers especially if the external funds are used to fund long-term assets (Demirgüç-Kunt and Maksimoviç, 1996, p. 33). The authors further state that both stock market and the development of legal institutions are crucial factors in firm growth. In this respect it is found out that “firms in countries which have active stock markets and high ratings for compliance with legal norms were able to obtain external funds and grow faster.” (Demirgüç-Kunt and Maksimoviç, 1996, p. 33). If there is high compliance with the legal norms then the firms were able to use long-term credit. Hence it can be stated that the development of financial markets and institutions facilitates economic growth of firms. Government subsidies are found not to promote the economic environments where firms obtain resources for financing growth from financial markets (Demirgüç-Kunt and Maksimoviç, 1996, p. 34).

2.2.5 Firm Size and Liquidity Impacts on Firm Growth

There are several factors that affect the ability of a business to grow and among these the availability and cost of finance can also be mentioned. For small and young firms the available internally generated finance is a major constraint over firm growth. In the literature it is mentioned that it is difficult for small firms to find external capital on reasonably favorable terms (Oliviera and Fortunato, 2006, p. 139). For this reason most of the small firms finance their growth through retained earnings. So, access to finance affects many things in firms such as formation, survival and growth. In firms financial constraints are a significant determinant of firm's investment decisions. Hence it can be stated that the available cash flow in a firm determines the investment rate in this firm. Besides this it is stated in the literature that the Gibrat's Law is applicable to firm growth. According to Gibrat's Law the growth of a firm is independent of its size (Oliviera and Fortunato, 2006, p. 140). But in reality there are deviations from this law and the size of firms determines many things. It is further stated that capital constraints may be the explanation of many things such why small firms pay lower dividends, are more highly levered, have higher Tobin's q and have investments that are more sensitive to cash flows (Oliviera and Fortunato, 2006, p. 140).

Firm growth depends on investments and access to capital and capital constraints have a significant importance on firm growth. In addition to this firm size also affects the growth of

firms. For small firms with good investment opportunities these opportunities cannot be utilized periodically because they will be unable to raise the necessary resources. So, smaller firms may underinvest and for this reason their growth will be slower than that of the larger firms which can find internal funds for their projects. It should be mentioned that not all small firms are small because they want to be so. Most of them are small because there are capital constraints that hinder their growth. For younger firms capital constraints are higher and for this reason they cannot find the necessary funds to invest in new project and to grow.

But if we turn back to theoretical models of Oliviera and Fortunato (2006) we notice that this model suggest that growth rates are independent of firm size, above or below the average firm growth does not persist between different periods and the variability of growth is independent of firm size (Oliviera and Fortunato, 2006, p. 143). But the theoretical explanation and equations to which these explanations are based do not take into account the financial constraints that firms have. For this reason these equations and explanations are seen lacking and cannot properly explain firm growth. Case studies mentioned by Oliviera and Fortunato (2006) have pointed out that firm growth is dependent on several financial constraints as well as other factors. For example it is found out that firm growth is dependent on the age of the firm and aged firms grow less than the young firms (Oliviera and Fortunato, 2006, p. 144). An important financial constraint is liquidity in firms. Liquidity influences real firm decisions e.g. investment in capital or labor and for this reason if firm growth I measured with respect to these variables then liquidity also influences growth of firms. In that case smaller and younger firms are more influenced because they have not enough access to capital markets and for this reason cannot finance themselves and their projects. So, we can conclude that cash flow and size effects are especially important for small firms. Smaller firms are more risky and for this reason the cost of external capital is higher for them. There are many young firms among small firms and for this reason it is harder for investors to find out which firm performs well and which one bad. So, there is not enough information on small firms as there is for larger firms. Besides this smaller firms have no sufficient access to external financial markets and there are not enough assets in these firms which can be used for obtaining outside loans. In this respect the results of the case study of Oliviera and Fortunato (2006) is significant. According to the result of the case study conducted among the Portuguese firms it is found out that smaller and younger firms grow more in comparison to bigger firms and as they experience more volatile growth patterns. The condition for this is that these smaller firms should control for liquidity constraints. Besides this growth-cash flow sensitivity is positive and statistically significant for these firms (Oliviera and Fortunato, 2006, p. 147). Another result of the study is that smaller firms grow

faster than larger ones and firms with a fast growth rate history continue to grow faster. This is explained as growth encourages growth. In firms with less than 50 employees it is found that growth is more sensitive to cash flow than in medium sized and larger firms. Hence smaller firms encounter more financing constraints and “are more sensitive to the availability of internal finance to grow more than the larger ones” (Oliviera and Fortunato, 2006, p. 149). There is also difference in cash flows between the younger and older firms. So, as mentioned earlier there is more financing constraints for younger and smaller firms than the larger and older ones. For this reason these firms depend more on internal earnings than the older firms.

Beck and colleagues (2005) analyze firms of different size in 54 countries. They mainly analyze the relations of the development of the financial and legal systems and the extent to which firms are constrained by different obstacles. Their aim is to analyze whether firms of different size encounter different obstacles. Their analysis shows that the constraints like financial and legal development and corruption and their impact on firm growth is dependent on the size of the firm. It is stated by the authors that firms of small size are more adversely affected by all kinds of obstacles (Beck et al., 2005, p. 28). When a comparison between firms in different countries is made it is found that firms and especially small firms in underdeveloped countries and in countries where there is high degree of corruption are more affected by obstacles. Mostly the small and medium sized firms are constrained and it is seen that developments in financial and legal systems and reduction in corruption levels relaxed mostly small and medium sized firms. While analyzing the effect of firm size and financial constraints the authors analyze three kinds of constraints which are the financial, legal and corruption and state that these constraints have different degrees of importance. Among the financial constraints difficulties in dealing with banks in paperwork and bureaucracies and the need to have special connection with these banks constrain firm growth. Besides this collateral requirements and certain access issues also have a constraining impact. In addition to this high interest rates and lack of money in the banks also reduced growth. But another financial obstacle which is very widely mentioned by firms themselves does not effect growth as it is thought and this is access to long-term loans.

Among the legal and corruption obstacles the following have an adverse impact on the growth of the firms: the amount of bribes paid, the percentage of senior management’s time spent with regulators, and corruption of bank officials. But besides these obstacles firms have mentioned others like the speed with which the courts work and the need to make additional payments have no significant impact on the growth of firms (Beck et al., 2005, p.

29). The authors state that the corruption of bank officials particularly affects the growth of small firms adversely. Since the small firms are those that most adversely affected by the financial, legal and corruption constraints and development in the financial and legal systems and reduction in the corruption they are the one's that benefit the most from such improvements (Beck et al., 2005, p. 30).

In his analysis of small firms in Southern Italy Sarno (2005) states that smaller firms are more sensitive to monetary stance and change in the business cycle (p. 134). There are two main reasons of this. One is the direct influence of the monetary policy and the other the indirect impact of working through the imperfections in capital market. The investment decisions and activities in firms are highly dependent on cash flows. The firms in southern Italy have two basic characteristics. One is the inadequate dynamics of productivity in these firms and the other is the excessive requirements of external resources to finance current production. Besides these two factors there is the scale effect "related to undersized activity that ends up amplifying the consequences caused from the linking of these two factors" (Sarno, 2005, p. 136). This makes the constraints of correspondence between the productive structure of the company and the financial dimension of the company more rigid. This puts a limiting margin for financial management. Due to this there happens bottlenecks in liquidity flows and the firms in the mentioned region try to gain liquidity back and reduce their dependence on the credit system. If we look closely to the financial structure of these firms we see that they have relative advantage of labor cost which is balanced by their debt burden. Due to increasing debt the profitability ratios of these firms also falls. These firms have a need to protect their financial equilibrium and this jeopardizes the physical capital accumulation of these firms. These firms have to finance their project from their own resources even though there are sufficient amount of subsidies. An analysis of these firms shows that liquidity constraints are more severe in smaller firms when compared to medium-sized and larger firms. There are capital market imperfections in this region and for this reason firms have financial constraints.

The growth of these firms is much impacted by the availability of external resources necessary to fund production. There are two important constraints on firms: first of these is due to the environment risk, of a systemic nature and the second one is because of the degree of risk specific to the company (Sarno, 2005, p. 138). In this region some firms operate well below their optimal scale and for this reason the provision of liquidity flows to finance the current production and investment projects is a major problem for these firms and occurs frequently and harshly. This problem hardens in the negative phases of the economic cycle and there appears great imbalance between the real and financial structure of the

companies. Since there are financial constraints this increases uncertainty and reduces the productivity of the company and renders them weak in terms of productivity. In this environment growth opportunities of firms becomes a major problem and becomes dependent on the availability of internal sources as well as the flow of public resources available to the company as capital subsidies.

2.2.6 Financial Constraints and Decision Making

2.2.6.1 Decision Making Mechanism

There are various factors affecting the decision making of a firm. Before, some aspects of entry and exit need explanation. Entry and exit features have great impact in the structuring of the industry. Entry and exit equilibrate the excess profit in the market while they accelerate entrepreneurship and innovation, as concluded by Kaya and Üçdoğruk (2002, 24). Both entrepreneurship and survival of the firm trigger each other for the acceleration of the innovation process. Entry of a firm is highly influenced by profit margin, capital size, and growth rate; and exit is mostly dominated by the same factors, including entry and excluding profit margin (Kaya and Üçdoğruk, 2002, p.24).

Firm growth is closely linked with the economy. Fluctuations or changes in the economy are to effect the production, stock and pricing policy of the firm, as well as its investments. On international basis, the world's economical conjuncture will also influence the balances within the firm. If the economy is in a growth trend, the firm's activities will also grow and its market value will increase. Before entering a market, the firm should make a good economical analysis. Here, developments in the local and external economy, developments in the related market and the situation of the capital market and taxation system should all be analyzed. It is important to predict the direction of the general economy and so evaluate its possible effects on the firm growth.

Along with the many influencers in the market for price determination; a firm's decision making is determined by some key factors. Here, it is important to understand who the decision makers are. Basically, there is the owner or shareholder and the employees. The first group manages the firm and the second makes the production. Shareholders are the first

step of control in the firm. It is clear that as the number of shareholders increase, it will be more difficult to take decisions. In a rather big size company, there are managers or directors who rank between the shareholders and the workers. In such firms, the shareholders do not have a direct influence in decision making and the managers do this. The only way the shareholders influence decision making is the Annual General Meetings (Anderton, 2000, p.325). The success of the company may well be related to the performance of the managers.

Workers are core factors for production in a firm. They may not have a direct influence in decision making. However, pressure through wages, working rights and labor organizations may force the managers to take certain decisions about the firm.

The state is also another factor in the decision making of the firm. The firm should act in accordance with work legislations such as taxation, consumer rights, protection of the environment, working conditions of the workers, etc. Behaving against these legislations may well result in the closing of the firm.

Consumers are the elements where the firm makes its profit through the sales of its goods. Consumer organizations or various trade organizations can put enough pressure on the companies in an attempt to make them change their policies (Anderton, 2000, p.325). Also today, due to high competition, many firms have market researches to have an idea on the consumption trends. Especially new products are investigated through consumers before they are introduced to the market. Based on the outcome, the firm makes the decision of not launching the product, lowering the price, selling it in a different package, etc. Thus, the end-user who consumes the product may have an influence on the decision making of the firm.

Competition is a hard task all firms have to deal with and firms' decisions may vary accordingly. The competitive environment is very variable; so, the firms require continuous follow-up of the market. All decisions may have to be revised according to the competitive conditions. For example, if a competitor decreases the price of a certain good; the firm with a similar product may have to take decisions to lower the price accordingly. So, competition is also important in shaping the decision making of the firms.

2.2.6.2 How Financial Constraint Affects Decision Making

A firm's ability to invest on new projects is highly related to market conditions. The financial and legal systems are to decelerate the growth of the firms. This is also reflected to the external flow of foreign capital to the country. The continuity of a firm is also related to its productivity and profitability. There is significant amount of resources flown to the small and medium-size firms. The World Bank alone has approved more than \$10 billion to such firms in the last years, as given by Beck et al. (p. 2). As the financial market develops, small firms may benefit from it. Also, such a development may also reduce the obstacles for big firms. The rate a firm is to be affected by the financial and legal underdevelopment depends more on the firm size. As also shown by Beck et al., (p. 28) it is the small firms that are mostly affected by all financial constraints.

The systems in the countries that are not well developed and have high levels of corruption, the firms will have more constraints. On the contrary, firms in countries with more development and less corruption, the obstacles will be much less for the firms. Beck et al. state that as financial obstacles, there will be difficulties with the firms in dealing with banks in terms of paperwork and bureaucracies and the need of special connections (Beck et al., p. 28). This is an obstacle for firm growth together with collateral requirements and access issues such as financing the leasing equipment.

Blazenko (1987) claims that the managerial preferences dominate the firms' financing decisions. The Modigliani-Miller Model is based on perfect market setting. This framework should be developed by taking into consideration the advantages or disadvantages of debt financing to obtain an optimal capital structure. The debt course is determined mainly by the total present and future cash flows available for distribution to suppliers of capital.

The moral hazard problem and the asymmetric information between the firm and the investors should also be considered referring to the fact the informational asymmetry would affect the capital structure of the firm. Leland and Pyle (1977) show that the fractional ownership of a firm retained by an entrepreneur increases the value of the firm correspondingly increases. This affects additionally the link between the firm value and firm borrowing.

Results show that with the symmetric information the managerial preference is on the side of equity financing. This preference affect the whole economical structure .Even the Modigliani-Miller Model claiming that the information between insiders and investors is symmetric and

managerial preference has no influence on financial policy verifies the fact that the managers prefer equity over debt.

Geroski, Machin and Walters (1997) analyze the reflections of corporate growth rates on the expectations about the long run profitability of a firm. The corporate growth rates vary by the time across the firms. This study states that the for-profit models provide a relationship between the current growth rates and the current expectations of future profitability. In case of rational expectations about the future prospects building the output choices as the changes in expectations will be impossible such a relation would be irrelevant related to the factor that it would not be possible to predict the growth rates. Taking into consideration the fact that the data is not reliable in the means of systematic and being predictable it is concluded that the growth rates are very nearly random. It is clearly obvious that the firm would expand and/or persist among the fluctuations both positive and negative and adjust its cost management according to the situation.

Blazenko (1987) also refers to the studies of Myers and Majluf (1984) revealing that the firms use debt or equity financing. This decision is bound up with the managers' preferences and the valuation of investors. At this point it is significantly important that the investors are well-informed so that adopting to make this investment.

Stanbacka and Tombak (2002) propose a theory for how the optimal combination of debt and equity financing depends on the firm's internal funds. The research made in a variety of fields of economy states that the financial constraints and the impact of financial market imperfections have a significant influence in determining the behavior of investors. This paper suggests a model such as at the beginning when it is small the firm should developed by debt financing and then by the time it debt and equity financing should be applied simultaneously which is to be called the investment-based growth of financially constrained firms with access to both debt and equity markets. The role of activities of banks and also the industrial policy makers are also considered in this suggested study.

The Modigliani-Miller Theorem claims that the financial constraints are not effective on the investment program of the firm. The later studies established point out that the theorem is inadequate in defining the effects of financial constraints and the asymmetric information on the investment decisions of both shareholders and investors. "In the presence of capital market imperfections, the complementarities between debt and new equity as instruments of external finance are particularly important for small firms facing sever financial constraints in relationship to their available investment projects." Stanbacka and Tombak (2002, pp. 252-

272) point out that it would be more efficient considering both credit and equity markets together rather than focusing on one type of financial market. Imperfect competition and insufficient level of internal funds taken as financial constraints it is stated empirically that the different constraints show different effects on the marginal cost of debt finance and in this consequence on the investment behavior.

Fazzari and Athey (1987) review the theory that as result of asymmetric information the financial variables affect capital spending. The earlier works not taking the financial constraints into consideration were bordered just by optimal capital perspective. However, revising these studies with the financial constraints approach developed the analyses in this area. The cash flow and other financial variables need to be taken as a matter of considerable importance and be placed in the investment function. The internal financing generated by the firm and also the interest expenses as an external factor both has a significant influence on the financial conditions of the firm.

Greenwald and Stiglitz (1990) mention that the new theory of the firm is based on the foundations that the imperfections in the market affect the firm both internally and externally. It is stated that for the firm the development of the financial structure is priority and relatively the structure determines the investment spectrum. The change in the worthiness of the firm would definitely have consequences and this will effect the relations with labor, capital and product markets. The dynamics of firm and economy-wide growth differ in the finance-constrained firms.

Modigliani and Miller claims that the firms' decisions in investment and consequently in debt financing are independent from their financial structures and nominal changes in the economy. However, it is proved by empirical evidence that the imperfections in the market and the financial positions of the firms under the competitive conditions play an important role in taking financing decisions. At this point, analyzing the credit lending conditions and the financial structures of borrowers would lead us the way to understand the affect of financial constraints on the firms' possible scenarios.

The main factors determining the sensitivity levels of the corporations are the capital structure, the currency composition/level of the debt and maturity of their debt. In the case of financial crisis and the interest rate shocks the firms with the position of high of amount of debts and poor collateral base are affected deeply compared to the firms with short-term indebtedness position.

The institutional structure and the level of financial intermediation of the country the firm performed in have a significant role on the corporate governance of the firm. It is expected that the firms in a country with relatively weak financial intermediation rely more on internal funds and bank lending than those of in a country with developed financial markets. Due to the asymmetric information factor in less efficient economies tend to use trade credits is higher. The finance constraint, the magnitude of which can be more severe with a lower level of financial intermediation, may be varying across firm groupings with different size. Beside the level of financial deepening, the public sector domestic debt finance via the domestic banking system can lead a decrease in the banking system preference to finance corporate sector (financial crowding-out) and thus can make the non-financial firms to be severely bank-credit constraint.

The capital structure literature often focuses on the liability side of corporate sector balance sheets and ignores the possibility that firms also can hedge themselves. Furthermore, non-financial firms can even behave as financial intermediaries under a low level of financial development, macroeconomic instability and the consequent uncertainty. Examples for the financial intermediation of non financial firms may include their heavy reliance on trade credits and holdings of financial assets including government debt instruments and foreign exchange denominated assets to hedge against interest rate and exchange rate shocks respectively.

3. AN INVESTIGATION OF FINANCIAL CONSTRAINTS FOR TURKISH CORPORATIONS

The Turkish corporations can be considered as highly indebted on average relying least on bond or bank finance and most on trade credits among. On the other hand, the Turkish corporations have the lowest asset tangibility and the highest debt ratio potentially suggesting a corporate finance puzzle. Profitability of the Turkish firms, which declined sharply with the financial crisis of 2001, appears to be somewhat between that of the developed and emerging market countries. It is implied that the firms in developed countries are expected generally to be less financially constrained and less likely subject to informational problems and agency costs. These firms prefer mostly retained earnings and direct finance that are cheaper than bank finance to satisfy a large portion of their financial needs.

Non-financial firms hold financial assets including government securities to hedge themselves against liquidity and interest rate risks and maturity mismatches. In the conventional Modigliani and Miller (1958) world with perfect complete markets firms can raise funds instantaneously to finance their profitable projects and thus they may have no uncertainty induced precautionary demand for liquidity. However, the presence of credit rationing, informational constraints and moral hazard may increase a demand for liquidity. The most liquid financial asset in the firms' portfolio is their cash balances the demand for which can be explained by the conventional transactions and precautionary (motives).

Given the fact that the maturity of financial contracts, including government securities and banking system time deposits, has been extremely short in Turkey (non-financial firms tend to hold interest bearing FA also for satisfying their liquidity needs. The Turkish banking system is heavily dollarised with FX denominated deposits constituting around a half of the total deposits during the period). Consequently, non-financial firms in Turkey have been able to hedge themselves against currency risk to a certain extent and to remain relatively liquid by holding FX deposits with the banking system.

Table 3.1 Turkish Corporations

ALL CORPORATIONS
STRUCTURAL ANALYSIS (*)

	2003		2004		2005	
	THOUSAND YTL	(%)	THOUSAND YTL	(%)	THOUSAND YTL	(%)
<u>ASSETS</u>	<u>219.162.017,6</u>	<u>100,0</u>	<u>331.783.010,6</u>	<u>100,0</u>	<u>364.194.582,9</u>	<u>100,0</u>
Current Assets	112.220.160,0	51,2	159.925.091,4	48,2	181.285.629,5	49,8
Non-current Assets	106.941.857,6	48,8	171.857.919,2	51,8	182.908.953,4	50,2
<u>LIABILITIES</u>	<u>219.162.017,6</u>	<u>100,0</u>	<u>331.783.010,6</u>	<u>100,0</u>	<u>364.194.582,9</u>	<u>100,0</u>
Short Term Liabilities	84.070.422,0	38,4	115.774.904,7	34,9	131.284.696,2	36,0
Long Term Liabilities	41.855.469,2	19,1	43.570.171,9	13,1	50.588.507,4	13,9
Shareholders' Equity	93.236.126,4	42,5	172.437.934,0	52,0	182.321.379,3	50,1
<u>SHAREHOLDERS' EQUITY</u>	<u>93.236.126,4</u>	<u>100,0</u>	<u>172.437.934,0</u>	<u>100,0</u>	<u>182.321.379,3</u>	<u>100,0</u>
Paid-in Capital	49.527.544,0	53,1	156.771.950,6	90,9	141.772.281,1	77,8
Capital Reserves	36.637.022,3	39,3	7.598.076,7	4,4	9.635.510,8	5,3
Profit Reserves	9.823.055,0	10,5	33.029.153,4	19,2	35.018.431,1	19,2
Retained Earnings	2.428.889,1	2,6	22.872.350,2	13,3	22.274.539,0	12,2
Losses From Previous Years (-)	(17.325.612,3)	(18,6)	(61.843.331,8)	(35,9)	(37.007.473,2)	(20,3)
Net Profit/Loss For The Period	12.145.228,3	13,0	14.009.734,8	8,1	10.628.090,6	5,8
Profit For The Period	15.067.013,1		18.359.758,1		18.261.143,6	
Loss For The Period	(2.921.784,8)		(4.350.023,3)		(7.633.053,0)	
Net Profit/Loss For The Period	12.145.228,3		14.009.734,8		10.628.090,6	
Number of Corporations	7.103		7.103		7.103	

(*) Data/2004 is inflation adjusted.

Contrary to financially developed countries, trade credits and credits from subsidiaries or parents constitute a very large portion of corporate sector's external finance. The share of bank loans in total liabilities in Turkey is almost the same that of other emerging markets that have a substantial amount of bond finance. This may imply that potential bank dependent firms which are generally made of small sized companies, are less likely to have access to bank finance in Turkey, that is, they are more financially constrained consistent with low degree of financial deepening in Turkey. In fact, the share of bank finance for small firms is lower than that of large and medium sized firms and the share of small firms declines further when economy contracts. In general, small firms rely heavily on trade credits especially during the recessions while large firms tend to use more bank loans and internal funds. Trade credits are expected to mute the fluctuations of small firms' activity especially in bad times. Extensive use of trade credits by small firms allows large firms as intermediary

institutions. In fact, heavily investing in liquid assets, relatively easy access to bank finance and operating with high profit margins in relatively less competitive market conditions allow large firms to provide finance to their sub-contractors or small firms in trade activity in form of trade credit.

4. A QUALITATIVE ANALYSIS ON FINANCIAL CONSTRAINTS IN TURKISH FOOD SECTOR

The main purpose of the study is to analyze the effects of financial constraints on the growth of the firm. In this sense, the volatility in profitability, the growth, the liquidity and the leverage of the companies are analyzed in order to observe the behavior of the firms under financial constraints.

The analysis is done using SPSS, a statistical program used for the analytical data management, analysis and reporting. The study consists of two main parts. First, different clustering methods are used in order to identify the groups showing the similar behavior under certain conditions. This analysis is repeated for each year respectively.

Then, in order to provide the general view of the main effects of financial constraints on the development of the companies binary logistics regression is applied to the data for all years. In the last referred study, the data is also classified according to the existence of financial institutions in the groups which the companies belong to. The aim of this grouping is to observe if the companies with financial institutions in their group have a competitive advantage on the others in financial funding means.

Clustering is a classification method partitioning a data set into subsets so that the each subset shares some common trait. In this study, it will be helpful to group the firms according to the financial ratios determined for each year and to view a perspective of general behavior in their structural formations. The clustering methods are applied to develop the main categories of behavior for each year respectively.

The first clustering method used in this study is the hierarchical clustering which is a simple method of discovering structures in data without explaining how and why the outcomes exist. It is aimed to build or divisive a hierarchy of clusters. By this method, the clusters are taken from a single record and groups are formed until all clusters are merged. So, that the companies are clustered hierarchically in order to group the ones showing similar behavior into respective categories.

Another feature of the hierarchical clustering is that it allows analyzing raw variables or choosing from a variety of standardizing transformations. This way, as being standardized it is possible to compare and comment on the data even not formed in the similar concept.

Therefore, in the next step, *k*-Means clustering is used as an approach to identify homogenous groups based on selected ratios to reach at comparable findings.

Finally, a regression model is used to examine the relationship between certain variables. In our case, the chosen financial data is considered as the explanatory variables and the existence of financial institutions in the group of the firm as the response variable. By applying binary logistics regression, the general view of the main effects of financial constraints on the development of the companies is obtained. Differing from the clustering studies the regression method is applied to the data of all years at once.

The financial data used in the analysis to compare the financial structures and the behavior related to this structure are gross profit margin for profitability, capital growth ratio for growth, current ratio for liquidity and the leverage:

$$\text{Gross Profit Margin} = \text{Gross Profit/Net Sales}$$

$$\text{Capital Growth Ratio} = (\text{Paid-in-Capital (t)} - \text{Paid-in-Capital (t-1)}) - 1$$

$$\text{Current Ratio} = \text{Current Assets/Current Liabilities}$$

$$\text{Leverage} = \text{Total Liabilities/ (Total Liabilities + Market Cap)}$$

The gross profit margin is important as it defines the profitability gained through the major activities of the firm excluding the fixed costs, depreciation, foreign exchange gain/loss etc. The higher the gross profit margin is the more possibility for the company to make profit as long as the fixed costs are managed effectively and kept under control.

Capital growth is one of the main indicators in this analysis as the basic objective of the study is to display the relation between the financial constraints and growth of the firm. The general perspective observed in this ratio will make it possible to comment on the effects of constraints on firms' growth and also on decision making on which financial resources should be preferred in order to supply an efficient rate of growth and a strong financial structure/position.

The current ratio indicates the capability of the firm to pay its debts in the recent year. It shows whether the firm has sufficient resources to cover its liabilities in short term. The current ratio is one of the measures of the firms' liquidity, an important aspect for the company showing whether company is able to meet its obligations whenever it is due to.

Managing the financial leverage is a significant quality in the business environment as it determines the outcome according to the sources given/used and utilizes the borrowed money. There are different applications of financial leverage. In this study it is preferred to be identified as the ratio of total liabilities to the sum of total liabilities and the market cap as the data is used is Istanbul Stock Exchange (ISE) quoted. Highly leveraged companies are under the risk of bankruptcy in case of not satisfying the payments of the debt in the due time. This situation will also affect the potential lenders in making decision to finance this enterprise. On the other hand, the well managed leverage will provide shareholders' return on their investments.

The primary data used was the recently quoted stocks in the last five years. However, the analysis did not provide a satisfying result for this data set as the companies belonged to a variety of sectors, the size of the firms and their performance in the market were in a widespread and it was not possible to gather them under certain features effectively. Also, it was important that the data did not contain a period of economic crisis which is a regular situation in the nearby history of the Turkish economy. Another constraint in choosing the data to be worked on was that obtaining a healthy information before 1997 was not possible as the data is collected from the web site www.imkb.gov.tr on which only the financials after this date is provided.

Finally the ISE quoted stocks of food sector between years 2004-2006 is chosen to be analyzed in this study. In the chosen period, there is not a specific case of economic crisis which is helpful for the study to come out with meaningful results. Also, the analysis is narrowed down to one unique sector instead of working with stocks performing in very different sectors which is also another factor providing efficiency in getting the homogenous findings.

The reason for preferring the food sector is that it is easier working with small number of companies which mainly shows good performance in the market. Another point of view in this preference is that the some of the companies have financial institutions in the group they belong to which makes it possible to apply the regression method to the data set. A

disadvantage of this data set is that there are three companies which belong to the same group. PETUN, PINSU, PNSUT are the members of Yaşar Group. This should be considered as a constraint for this study.

The securities and the list of the companies in the analysis are as follows:

Table 4.1 List of Companies

NUMBER	STOCK	COMPANY NAME
1	ALYAG	ALTINYAĞ
2	AEFES	ANADOLU EFES
3	BANVT	BANVİT
4	COLA	COCA COLA İÇECEK
5	DARDL	DARDANEL
6	FRIGO	FRİGO PAK GIDA
7	KENT	KENT GIDA
8	KERT	KEREVİTAŞ GIDA
9	KNFRT	KONFRUT GIDA
10	MERKO	MERKO GIDA
11	PENGD	PENGUEN GIDA
12	PETUN	PINAR ET VE UN
13	PINSU	PINAR SU
14	PNSUT	PINAR SÜT
15	SELGD	SELÇUK GIDA
16	SKPLC	ŞEKER PİLİÇ
17	TBORG	T.TUBORG
18	TATKS	TAT KONSERVE
19	TUKAS	TUKAŞ
20	ULKER	ÜLKER BİSKÜVİ
21	VANET	VANET

*Ersu and Kristal are discarded for not contributing to general behavior in the hierarchical cluster.

5. FINDINGS

The analysis begins with the method of clustering the data hierarchically for each year respectively. Clustering analysis does not require a priori information for defining the groups; the groups are suggested only by the data used.

Our clustering process started with 23 stocks. However, ERSU and KRSTL are discarded from the study as the specified data -the financial ratios- of these companies did not emerge with any of the clusters composed at the first level

In order to identify the stages at which significant types emerge the Agglomeration Schedule is observed. In agglomerative clustering, the coefficients column is inspected to determine the similarities and the proximities in the data. Besides this, the dendogram tree helps for grouping as a visual classification of similarity.

The following schedules and tables show the results of clustering analyzes for each year respectively.

Agglomeration Schedule -2004-

Stage	Cluster Combined		Coefficients	Stage Cluster First Appears		Next Stage
	Cluster 1	Cluster 2		Cluster 1	Cluster 2	
1	16	18	,020	0	0	3
2	6	21	,036	0	0	4
3	11	16	,047	0	1	9
4	3	6	,070	0	2	12
5	8	14	,072	0	0	8
6	9	12	,104	0	0	8
7	5	10	,109	0	0	11
8	8	9	,164	5	6	9
9	8	11	,206	8	3	13
10	7	20	,220	0	0	12
11	5	13	,224	7	0	14
12	3	7	,232	4	10	16
13	8	17	,337	9	0	14
14	5	8	,483	11	13	17
15	2	15	,493	0	0	18
16	3	4	,497	12	0	17
17	3	5	,792	16	14	19
18	2	19	1,531	15	0	19
19	2	3	2,448	18	17	20
20	1	2	4,504	0	19	0

k-Means / Number of Cases in each Cluster

Cluster	1	12,000
	2	9,000
Valid		21,000
Missing		,000

k-Means / Final Cluster Centers

	Cluster	
	1	2
gpm	,144372088091	,226283283294
cg	-,217591115941	,198034242042
cr	,767236895543	1,775266564477
l	,610638586453	,443857820629

Agglomeration Schedule -2005-

Stage	Cluster Combined		Coefficients	Stage Cluster First Appears		Next Stage
	Cluster 1	Cluster 2		Cluster 1	Cluster 2	
1	9	18	,003	0	0	6
2	14	20	,010	0	0	3
3	3	14	,027	0	2	7
4	12	16	,043	0	0	6
5	7	21	,088	0	0	9
6	9	12	,101	1	4	11
7	3	15	,114	3	0	11
8	4	5	,162	0	0	14
9	7	19	,219	5	0	15
10	2	13	,257	0	0	13
11	3	9	,266	7	6	13
12	8	10	,399	0	0	15
13	2	3	,399	10	11	14
14	2	4	,754	13	8	16
15	7	8	,839	9	12	17
16	2	17	,871	14	0	17
17	2	7	1,156	16	15	19
18	6	11	1,488	0	0	19
19	2	6	5,402	17	18	20
20	1	2	46,617	0	19	0

k-Means / Number of Cases in each Cluster

Cluster	1	1,000
	2	20,000
Valid		21,000
Missing		,000

k-Means / Final Cluster Centers

	Cluster	
	1	2
gpm	-,008056492056	,228258207527
cg	-6,496991090774	,202421023153
cr	,355404524857	1,276692273459
l	,264514817536	,473178982263

Agglomeration Schedule -2006-

Stage	Cluster Combined		Coefficients	Stage Cluster First Appears		Next Stage
	Cluster 1	Cluster 2		Cluster 1	Cluster 2	
1	12	14	,012	0	0	2
2	12	20	,020	1	0	8
3	4	13	,022	0	0	11
4	3	9	,034	0	0	6
5	6	19	,039	0	0	10
6	3	16	,071	4	0	12
7	11	18	,083	0	0	16
8	7	12	,095	0	2	9
9	7	21	,118	8	0	13
10	6	10	,155	5	0	15
11	2	4	,165	0	3	12
12	2	3	,202	11	6	16
13	7	15	,210	9	0	15
14	1	5	,256	0	0	19
15	6	7	,265	10	13	17
16	2	11	,413	12	7	18
17	6	8	,600	15	0	18
18	2	6	,664	16	17	19
19	1	2	1,348	14	18	20
20	1	17	2,259	19	0	0

k-Means / Number of Cases in each Cluster

Cluster	1	5,000
	2	16,000
Valid		21,000
Missing		,000

k-Means / Final Cluster Centers

	Cluster	
	1	2
gpm	,206283279933	,239721860786
cg	-	,113602128629
cr	,206730337367	1,463749835429
l	,628447562570	,433697025926

Analyzing the data for the year 2004, observing the agglomerative schedule we see that there are significant coefficient jump ups for the cases 1, 2, 3, 19. The following distance measures are found to be lower, meaning that the cases are alike. There are also recognizable differences in cases 8 to 7. Investigating the dendrogram determined using average linkage between groups supports this similar point of view as the clusters are combined densely in small groups and a slight range of less dense groups. Observing the groups combined, it is seen that AFES and TUKAS, two companies with financial institutions in their group tend to form a group. However, the companies KENT and ALYAG or PINSU and SELGD show a similar behavior even though not carrying a similar feature.

The *k*-Means clustering analysis results show that the capital growth and the current ratio are significant determinants for the year 2004. The liquidity structure of the financial basis of the company significantly affects the combining of the group even the ones performing in the same sector.

In year 2005, the similarity measures signifies a dominant view except the case 1 with a high level of coefficient determining a big increment theoretically at an important level. This case is ALYAG which shows a similar behavior in the previous year. Besides this, TUKAS draws the attention in the combined group proximities.

The capital growth ratio is still a significant factor in grouping the stocks for the data of the year 2005 derived from the *k*-Means clustering. Additionally, the gross profit margin differs between clusters indicating that the profitability based on the basic activities of the company is an important factor in determining the combination of the groups.

The hierarchical clustering shows a widespread in 2006 compared to the previous years. The proximities of the groups are in a nearer linkage indicating high level of similarities. Observing the coefficients in agglomerative clustering cases 1 and 17 seem to form a group differing from the prevailing linkage. One of these companies is ALYAG as it has been in 2004 and 2005. The other one is TBORG which had been a stock stacked to the general behavior in the previous years. KERVT, KNFRT are significantly others between the clusters.

By means of *k*-Means clustering capital growth ratio is dominating in indicating the groups. Also there is a recognizable change in current ratio pointing out that the determinants of the final cluster centers do not vary by the years in wide range of financial status.

The second part of the analysis consists of a study applied for the data of three years aimed to provide a point-estimate, a panoptic view by means of financing of the analyzed companies. In this analysis binary logistics is used as a method of regression in SPSS.

Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)
Step 1(a)						
gpm	4,001	2,277	3,088	1	,079	54,668
cg	,461	,582	,628	1	,428	1,586
cr	-,227	,673	,114	1	,735	,797
l	,551	1,428	,149	1	,700	1,735
Constant	-2,110	1,485	2,018	1	,155	,121

a Variable(s) entered on step 1: gpm, cg, cr, l.

Case Processing Summary

Unweighted Cases(a)		N	Percent
Selected Cases	Included in Analysis	63	100,0
	Missing Cases	0	,0
	Total	63	100,0
Unselected Cases		0	,0
Total		63	100,0

a If weight is in effect, see classification table for the total number of cases.

Dependent Variable Encoding

Original Value	Internal Value
0	0
1	1

This study shows that the current ratio and the leverage are significantly effective on the analysis. The results are parallel with the clustering stage for the current ratio as a significant indicator of combining groups for each year.

In this case, besides the current ratio, leverage signifies the analysis supporting the theoretical outcomes.

6. CONCLUSION AND FURTHER RESEARCH

The main objective of a firm is to grow and the outstanding indicator of the growth is the profit of the firm. In this context capital structure and the cost of capital of the firms needs to be considered as showing the company's strength. Firm growth depends on investments and access to capital and capital constraints have a significant importance on firm growth. In addition to this firm size also affects the growth of firms.

Debt financing and equity financing are two ways of financing for firms that are aiming to grow. The company basically finances its long term activities through the shareholders support by their becoming shareholders and also through getting debt. The choice among sources of financing is the most important financial decision of the company. The costs of obtaining debt and acquiring new shareholders have to be analysed and the decisions must be made based on this comparative cost analyses between these alternatives.

Financial constraints like the production costs, the availability and cost of finance, several costs associated with the imperfections in the market and liquidity affect the firm's financing policy directly. Human factor is also another point to be evaluated in profit maximization. As firms are operated by humans, their efficiency will be influential in the increase or decrease of the profit. The frame of the business done in a firm is drawn by the consumers tending to maximize their utilities. The other important conflict arises from the agency costs stemming from the conflict of interest between managers and the stockholders and the conflict between stockholders and bondholders. These also create problems in the financing of the company.

In addition to these internal factors affecting the capital structure of the company there are other external factors like the strategy of the competitors and its impact on the company's capital structure. The valuation techniques are also important as the creditors, the investors and other companies want to know the actual and the market value of the company. In today's very volatile markets the correct use of debt, equity and other alternatives of financing is becoming a crucial way to determine the right capital structure. Generally potential growth of the company's capital or return and its relation to the current market valuation of the organization's share price are the criteria for the institutional investors.

There are various factors affecting the decision making of a firm. Entry of a firm is highly influenced by profit margin, capital size, and growth rate; and exit is mostly dominated by the

same factors, including entry and excluding profit margin. A firm's ability to invest on new projects is highly related to market conditions. The financial and legal systems are to decelerate the growth of the firms. This is also reflected to the external flow of foreign capital to the country. The continuity of a firm is also related to its productivity and profitability. The moral hazard problem and the asymmetric information between the firm and the investors should also be considered referring to the fact that the informational asymmetry would affect the capital structure of the firm.

By the analysis applied it is concluded that the leverage and the current ratio are main significant indicators in identifying the bounds of providing financial resources and accordingly the financial constraints met in providing and the capital structure which is directly related to the financial strength of the company. It is to be said that the capital structure should be definitely effective on the decision making mechanism of the firm. The leverage signifying both the position of the firm in the sector, between the other competitors and the importance of belonging to a group containing financial institutions should be well managed determining the borrowing policies and the potential future growth plans and investments made through these policies.

The existence of financial institutions did not occur as a significant feature in determining the improvement of the chosen financials of the companies which is a questionable case as logically it is considered as an important factor making it easier to get to the financial resources. This might be reasonable as we consider the unified case of the structure of Turkish banking system which has mainly changed after 2001 crisis. This point of view through banking system should be a matter of further research. The further research could also be investigating whether the financials for different sectors provided in a longer period of performance including a variety of economical conditions differ in certain ratios.

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