“How growth opportunities are related to corporate leverage decisions?”

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How growth opportunities are related to corporate leverage decisions?

Abstract

Growth opportunity has been considered as a significant determinant of capital structure. The literature generally favors the negative relationship between the growth opportunities and leverage of firms. However, another school of thought finding such a relationship to be positive also exists. The purpose of this study is to find out how growth opportunities in Pakistan are related to leverage decisions for the listed manufacturing corporate concerns. We use financial data from a sample of 110 manufacturing companies listed on Karachi Stock Exchange for 15 years (1982-1997) from 9 different sectors along with estimation of fixed-effects regression analysis to assess the subject relationship. We find a positive relationship between the growth opportunities and debt levels of the corporate firms. This positive relationship is highly significant for the segments of firms with 'low' and 'medium' growth opportunities. The reason for this finding may be that the owners of these firms view the available growth opportunities as unsustainable and more risky and intend to pass on that higher risk to the creditors. The socio-economic and political networks of such owners may help provide them easy access to credit market resulting in high debt level. Consequently, they might delay issuance of new common stocks to be issued at the future higher prices if the risky investment succeeds. We also observe a general tendency of the credit market, having limited options for profitable credit, to finance companies with little better future prospects. Moreover, unsustainable growth opportunities in economy, less developed capital markets, a high number of firms with low growth in Pakistan (in real terms) and their limited goodwill among the investors and general public (restricting them to issue shares of common stock) may also be the underlying reasons behind the corporate behavior causing such an overall positive relationship. Another important finding of this study is that industry type is also a relevant variable which affects the relationship between growth opportunities and leverage.

Keywords: growth opportunities, corporate leverage, capital structure, debt level, industry type.
JEL Classification: C53, F14, G28.

Introduction

Financial decisions related to an appropriate blend of debt and equity carry a lot of significance for business concerns. Development of an efficient mixture of debt and equity can cause a reduction in the price of capital that could lead to increased net economic returns and ultimately result in an increase in a firm's value. Since the classic paper by Modigliani and Miller (1958), which is the origin for the modern theory of capital structure, many researchers have worked on capital structure, its determinants and other related aspects (mainly in USA, UK, Germany, France, Japan and other G-7 countries). This study aims to assist the devising of policy guidelines for the business community and their financial decisions in developing economies such as Pakistan.

Capital structure has been broadly defined as "the relationship between company's debt and equity". A comprehensive definition by Stefan Eckert and Johann Engelhard (1999) entails that: "Capital structure is the combination of financing contracts, which a firm has chosen in order to finance its investments". In this definition financial contracts refer to the agreements in respect to the nature of returns paid (i.e. whether returns will be fixed or variable), the time period for which the financial resources are/will remain at the firm's disposal, and currency, in which financial resources are denominated (etc). Broadly speaking, there are two types of firms with respect to the capital structure. The first is *unlevered firms*, which raise the capital only from the sources like retained earnings and common stock etc., i.e. equity, whilst *levered firms* use a mix of equity/retained earnings and debt, whereby debt can take various forms (such as bank loans, term finance certificates, marketable bonds and debentures, etc).

There exists a trade off between risk and returns of a firm stemming from its selection of debt-equity mix. As level of debt goes up, chances of the magnification of earnings per share increases, whilst at the same time probability of default to meet the fixed financial obligations against debt also increases. This phenomenon is in most instances known as *Trade-off Model*, in which the ideal situation for a firm is to have an optimal capital structure utilizing, in which the firm can maximize its value and lower the cost of capital along with related costs of debt.

Leverage or Capital structure contains complex relationships with a number of factors in play. Hence, management must not only consider the target capital structure/leverage ratio, but also try to identify and analyze practical variables that may affect the management of leverage. Some major determinants of leverage, as devised by the previous

studies, are profitability, growth rate/opportunities, taxes, tangibility of assets, firm size, ownership structure and the pecking order theory.

1. This paper will examine how the debt policy of listed manufacturing firms operating in Pakistan has changed through 1982 to 1997, which is a period that represents the changes in growth opportunities. Growth opportunities were observed as low through 1982 to 1990, which was mainly representing Marshal Law of General Zia-ul-Haq, whilst high growth opportunities were observed from 1991 to 1997, a period which represented democracy, liberal policies and a number of trade and fiscal incentives. For example, tariff rationalization that gained momentum in 1990s, and easing the "restrictions" for attaining prior permission from the government in establishing large-scale industries. These "restrictions" also included investment licensing, import restrictions on capital and intermediate inputs, location-clearances and constraints on payments of technical fees and royalty.
2. The role of growth opportunities is significant in the theory of corporate finance for determining the composition of debt and equity for firms. Most empirical evidence favors the negative relationship between growth opportunities and leverage of firms, which will be covered in the next section of the literature review. This study, however, favors the existence of positive relationship between growth opportunities and leverage of manufacturing firms listed in Pakistan.

1. Literature review

This section comprises a review of the literature relating to growth and growth opportunities, through to capital structure choices. Most researchers agree that there exists a relationship between growth opportunities and capital structure preferences of firms, but rather treat growth opportunities as an important determinant of a firm's leverage or capital structure. The real policy issue is, however, to decide whether such a relation is positive or negative and how strong or weak it is in any particular economy.

In 1958, Modigliani and Miller (hereafter MM (1958)) found a positive relation between growth opportunities and a firm's preference for the debt, while making a capital structure decision. Modigliani and Miller asserted that after discovering a major growth opportunity, owners of firms may not prefer to finance it using common stock at the then ruling price, as this price may not succeed to make the most of new venture. Firms may finance the project initially with debt, and once the project has proved itself profitable by reflecting increased actual earnings, the debt could be paid back either by issuing equity at much better prices or through retained earnings. If owners have the logical expectation that even larger opportunities may come up in the near future (but with some danger that borrowing now will rule out more borrowing later) then for best protection of their stake, firms may split-off the current opportunity into a separate subsidiary through some independent financing arrangements.

Pandey (2001) provides evidence that firms who enjoy rapid growth in sales are often in need of expanding their fixed assets. High growth firms (considering sales growth as a proxy for growth opportunities) have greater future need for funds and tend to retain more earnings. Pandey relates this increase in retained earnings of high growth firms to issuance of more debt, so as to maintain the target debt ratio (as derived from trade-off theory). Thus, the positive relationship between debt ratio and growth is expected based on this line of argument. Using this 'pecking order theory' Pandey also derives the same relationship, suggesting that "growth causes firms to shift financing from new equity to debt, as they need more funds to reduce the agency problem".

Chen and Zhao (2006) document a non-monotonic and positive relationship between market-to-book ratio (a widely used proxy for growth opportunities) and leverage (for more than 88% of COMPUSTAT firms). Firms with higher market-to-book ratios are on average more profitable and face lower borrowing costs, whilst firms with low growth opportunities retire more debt. Chen and Zhao found previously documented negative relationships to be driven by a subset of firms with high market-to-book ratios, as in their findings, as debt financing increases when market-to-book ratio rises from low to medium and decreases when market-to-book ratio increases further from medium to high.

Billett et al. (2007) conclude that although growth opportunities directly affect the leverage in a negative direction, there is a positive relationship between leverage and growth opportunities because of covenant protection. Debt covenants may attenuate the negative effect of growth opportunities on leverage by mitigating the agency costs of debt for high growth firms.

The famous study by S.C. Myers (1977), however, reveals that "firms with valuable growth opportunities would never issue risky debt and the firm financed with risky debt will, in some states of nature, would pass up valuable investment opportunities, which could make a positive net contribution to the market value of the firm". Myers further suggests

that lenders do not receive any valuable security through growth opportunities as they are perishable by nature, making the equity option preferred than the finance a new growth opportunity. However, there can be an exception for real growth opportunities that are separable, objectively identifiable, and relatively long-lived and have reasonable security market – where debt can be in easy access of the organization. Examples of this can include patents, certain trademarks, franchises, and operating licenses.

Titman and Wessels (1988) also found a negative empirical relation between leverage, research and development expenses (R&D), where R&D expenses were frequently treated as a proxy for growth opportunities. Titma and Wessels regard growth opportunities as capital assets that add value to a firm but cannot be collateralized and do not generate current taxable income. Hence, the growth opportunities of such nature are likely to lower the debt levels.

Lucas and McDonald (1990) advocate that managers optimally decide to delay equity issues until they have an investment opportunity that causes a rise to, or above the true value of their stock price. As managers have private information about their company's value, so they can make it happen.

Goyal, Lehn and Racic (2002) found, when growth opportunities of firms decline these firms increase their use of debt financing. The following two reasons were expected for the negative relation between growth and debt levels in a firm's capital structure:

1. In a firm's growth, the agency costs related to the debt holder-stockholder conflict are expected to be rising. An underinvestment problem can be quoted as example in this situation, which was identified by Myers (1977) whereby organizations having risky debt intend to under invest in projects with positive 'Net Present Values' (NPVs), i.e. projects that increase value of the organization. This happens because shareholders who control investment decisions bear the whole cost of the projects, but return is shared with debt-holders which means that they receive only a fraction of the increase in value of the firm. Therefore, firms prefer equity over debt to finance future investment/growth opportunities as increases in growth opportunities are directly related to the cost of underinvestment problems. The desired amount of risk may be a source of conflict between shareholders and debt-holders, as shareholders can easily increase the risk whilst there is less preference for increasing risk on the part of the debt holders, as it will become expensive for them to monitor now in high growth firms, which means that assets are used by stockholders. High growth firms are characterized by relatively more intangible assets compared to firms with low growth, so it becomes difficult for debt holders to identify any increases in the risk of high growth firms. This is why growth opportunities are expected to be negatively associated with debt levels.
2. Generally, managers prefer to retain free cash flow (i.e. operating cash flow minus cash needed to fund value-increasing investments) within the firm. However, preference of stockholders differs from that of managers in this regard, as they are interested in receiving higher dividends payouts and sharing repurchases funded through free cash flow. Debt, as argued by Jensen (1986), is a means to resolve this tension. In case of low growth opportunities agency costs of free cash flow increase, so in this case, debt should be issued. In doing so, probability of overinvestment (wastage of free cash flow on investments with negative NPVs) by managers is reduced as firms commit to utilize future free cash flows for paying out investors. Hence, a negative relationship between growth opportunities and debt ratios can be safely predicted.

The study by Dasgupta and Sengupta (2002) presents the view that, it is the nature of improvement in future growth opportunities that can either cause an organization to increase or decrease its current leverage. Dasgupta and Sengupta observe that firms with good 'future investment opportunities' tend to invest more in order to preserve their debt capacity and financial slack or liquidity, with these firms maintaining low leverage. This way, the firms can attempt to protect themselves against being constrained in the future, and use equity financing to hold more cash for the future or pay down debt. It was observed, however, that the *disciplining effect* of good investment opportunities in the future favors increases in the usage of debt.

If a firm has to use debt financing and retains its gains from growth opportunities for stockholders (along with debt usage), there are different strategies a firm can use, namely using less debt financing or issuing debt with restrictive covenants (Myers, 1977); refinancing its long-term debt before exercising growth options (Barclay and Smith, 1995); issuing the debt equipped with call and sinking fund provisions (Barnea, Haugen and Senbet, 1980, 1985), and/or financing itself with short-term debt instead of long-term debt (i.e. debt that matures prior to the time it will exercise the growth options) (Myers, 1977; Barnea, Haugen and Senbet, 1980, 1985). Therefore, the debt having shorter maturity

should be issued by firms with higher growth opportunities if they need to utilize debt financing in future.

2. The data and the research methodology

2.1. The data. For this study, following two main sources of data were used to collect the relevant information:

1. For the data regarding 'year-end share prices' and 'paid up value per share', the daily national newspapers, the DAWN and the NEWS, were used, with these data items employed to calculate 'market value of equity'.
2. For all the Balance Sheet and Income Statement data-heads, the database compiled by State Bank of Pakistan (SBP) in the form of "Balance Sheet Analysis of Joint Stock Companies listed on the Karachi Stock Exchange" was utilized. This publication series by State Bank was based on published annual reports of companies, which excluded financial 'concerns' like, banks, modarabas (refer to Khan and Bhatti (2008) and Bhatti and Bhatti (2010) for detailed understanding of the concept in relation to Islamic Finance), insurance companies (see also, Sukuk, Bhatti (2007)), leasing companies and all other financial institutions. SBP standardized the data for all the companies to make the comparison expedient.

2.2. The financial measures. Capital ratio (i.e. Debt/Capital) has been used in this study for measuring leverage, whereby "debt" represents long-term liabilities (LTL) which include preferred shares, debentures and other fixed liabilities, whilst "capital" consists of long-term liabilities and equity (EQ), whereby equity consists of ordinary shares and surplus. This proxy for leverage has been selected because of its usage in related past studies and data availability, with this measure for leverage having already been applied by Rajan and Zingales (1995), Bevan and Danbolt (2000) and Booth et al. (2000) (though it may have been computed differently).

Growth opportunities were measured by using the proxy of market value of assets to book value of assets (MBA), whereby the market value of assets equals the book value of total liabilities plus market value of equity, whilst the market value of equity is obtained by multiplying number of outstanding shares (at year end) with the market price of shares (at year end). Most of the previous studies have used the "market to book value of assets" as their measure of growth opportunities. Although there is more than one proxy for each of these key research variables, as suggested by literature, we found changeable results by using the proxies other than these two.

2.3. The financial sector and the sample selection. For this study, a sample of firms listed on Karachi Stock Exchange (KSE) has been taken, for which the data regarding growth proxy inputs are available for the entire sample period of 1982 to 1997. The length of the sample period is considered adequate to check the relationship of growth opportunities with leverage in Pakistan. On the basis of data availability for key inputs (for the proxies of growth opportunities), 110 firms have been selected from nine manufacturing sectors listed on KSE in the following numbers:

Table 1. Sample composition

Sector	No. of firms in sample
Textile	45
Other textile	10
Banaspati	12
Sugar	12
Cement	05
Paper & board	03
Jute	03
Engineering	12
Chemicals	08
Total	110

In the first phase, using the proxy for growth opportunities, i.e. market-to-book value of assets, we have divided the sample firms into three groups, each representing different sectors and having been labeled as high, medium and low growth firms. Then, to measure the relationship between growth opportunities and leverage, fixed effects regression has been estimated for each of these groups. Similarly, for all the sectors collectively, regression has also been estimated to measure the direction and magnitude of subject relationship.

In the second phase, we have divided the sample into two growth periods, i.e. 1982-1990 and 1991-1997, using yearly average 'Market-to-book value' of assets. The former period has been categorized as a 'slow-growth' period as it depicts a steady pattern of growth opportunities, whilst the latter period represents increasing trend for market-to-book value of assets and has been marked as 'high-growth' period. We have estimated fixed-effects regression to assess the subject relationship with respect to industry type, high or low growth time-period and high, medium or low growth firms

3. Results and discussions

To examine how the growth opportunities brought change in capital structure of firms in Pakistan, at first fixed effects regressions have been estimated for all the sectors separately, with the dependent variable being capital ratio (LTL/LTL+EQ) and the independent variable being growth opportunities

(market-to-book value of assets). For each of the sub-groups (high, medium and low growth firms in the three sector groups) fixed effects regression has been estimated to measure the relationship between growth opportunities and leverage. Similarly, for all the sectors collectively, regression has been estimated to measure the direction and magnitude of the subject relationship. We found results as the following:

Table 2. Fixed-effects regression analysis with respect to industry type and high, medium or low growth firms

Sector	High-growth firms		Medium-growth firms		Low-growth firms		Whole sector	
	t-value	Sig.	t-value	Sig.	t-value	Sig.	t-value	Sig.
Textile	-0.999	0.320	1.629	0.105	4.887	0.000	1.524	0.128
Other textile			1.799	0.077	1.905	0.062	4.117	0.000
Banaspati	1.115	0.277	0.847	0.405	0.132	0.896	0.996	0.322
Sugar			0.604	0.548	0.759	0.449	2.254	0.025
Cement	-0.080	0.938	1.546	0.153	1.269	0.213	3.210	0.002
Paper & board	2.72	0.053	3.334	0.007	0.605	0.560	1.724	0.093
Jute					2.226	0.032	2.226	0.032
Engineering	-2.421	0.020	1.125	0.268	1.053	0.298	-2.584	0.011
Chemicals	-2.185	0.032	-0.132	0.898	-0.045	0.965	-0.924	0.358
All sectors	-1.047	0.296	3.030	0.003	5.413	0.000	2.155	0.031

A significant positive relationship is evident for all the sectors as a whole (along with other sectors like textile, sugar, cement, paper & board and jute separately), whilst this positive relation is not highly significant for the sectors like textile and banaspati. A negative relationship has been found for sectors like chemicals and engineering. This negative relationship is highly significant for engineering but lacks significance in chemical sector. We observed a significant positive relationship of corporate leverage and growth opportunities in medium and low growth firms. For medium growth segment, there was a significant positive relationship in other textile and paper & board sectors, whilst in the textile sector the positive relationship was relatively less significant. For all the other sectors included in this study, a positive relationship was found except for chemical (non-significant negative relationship) and jute sectors (no observation was found in medium growth segment), but a significance level was found in the low growth segment. Moreover, in low growth segment, textile, other textile and jute sectors exhibited a significant positive relationship whilst for all the other sectors included in the sample, a positive relationship was found. These findings are in conformity with MM (1958), Pandey (2001), Chen and Zhao (2006) etc., but conflict with Titman and Wessels (1988), and Goyal et al. (2002) results.

In high growth segment, the paper & board sector represented a significant positive relationship which lended support to MM (1958), Pandey (2001), Chen and Zhao (2006) etc., whilst the chemical and engineering sectors exhibited significant negative relationships. The engineering sector's negative relationship in high growth segment was so significant that it derives the overall relationship towards negative, although it was found to be positive for medium and low growth firms. For the chemical sector, the negative relationship is consistent for all three growth segments, but was significant only for high growth firms. The textile and cement sectors also exhibit a negative relationship but with very low significance. The negative relationship found in these sectors is in line with Titman and Wessels (1988), and Goyal et al. (2002). A non-significant positive relationship was, however, found for banaspati sector, whilst no observation was there for other textile, sugar and jute sectors, as no firm from these sectors qualified to be a high-growth one.

Based on the yearly average 'Market-to-book value' of assets, we have divided the sample period into two growth periods, i.e. 1982-1990 and 1991-1997, whereby growth opportunities exhibit a steady pattern during the first period for which it has been denoted as 'slow-growth period', whilst in latter period increasing trend can be observed for the proxy of growth opportunities, and has been classed as a 'high-growth' period.

Now, we have estimated fixed-effects regression for the relationship between growth opportunities and leverage taking into consideration the industry type, high/low growth time-period and high/medium/low growth firms, which has yielded the following results:

Table 3. Fixed-effects regression analysis with respect to industry type, growth period and high, medium or low growth firms

Sectors	GP	High growth firms			Medium growth firms			Low growth firms			All firms		
		β	T	Sig.	B	t	Sig.	B	t	Sig.	β	t	Sig.
All sectors	1		-.086	.931		2.273	.024		2.098	.037	.067	2.332	.020

Table 3 (cont.). Fixed-effects regression analysis with respect to industry type, growth period and high, medium or low growth firms

Sectors	GP	High growth firms			Medium growth firms			Low growth firms			All firms		
		β	T	Sig.	B	t	Sig.	B	t	Sig.	β	t	Sig.
	2		-.577	.569		1.116	.270		6.414	.000	.011	.578	.563
Textile	1		.770	.444		1.993	.048		5.583	.000		3.145	.002
	2		-.967	.338		.670	.504		2.204	.031		.152	.879
Other textile	1				1.011	3.375	.002	.377	3.008	.005	.922	6.543	.000
	2					1.765	.093		2.246	.039	.449	3.345	.002
Cement	1	.516	.212	.842	1.473	1.043	.356	-.097	-2.68	.014	-.128	-1.271	.211
	2		.002	.999		1.740	.440		.834	.428	.078	.863	.398
Sugar	1				-.002	-.017	.986	-.023	-.380	.705	-.007	-.135	.893
	2					.199	.844		2.196	.033	.194	2.551	.013
Paper & board	1	-.004	-.407	.705	.548	4.025	.016	.988	2.205	.098	.240	2.913	.008
	2					.184	.871				.074	.882	.397
Jute	1							.692	2.049	.053	.692	2.049	.053
	2								2.781	.016	.631	2.781	.016
Chemical	1	.001	.034	.973	-.218	-.396	.718	1.355	.352	.785	-.008	-.275	.785
	2		-1.630	.114		-1.436	.288		8.530	.074	-.019	-.597	.554
Engineering	1	-.110	-.735	.470	-.062	-.308	.761	-.035	-.187	.854	-.278	-2.739	.008
	2		-1.051	.314		2.172	.058		1.874	.082	-.037	-.620	.538
Banaspati	1	.241	1.187	.249	-.054	-2.014	.058	-.071	-.704	.495	.073	.653	.516
	2					1.414	.392		3.841	.062	.371	1.313	.222

Notes: GP = Growth period; 1 = Slow growth period; 2 = High growth period.

Overall, we found there to be a significant positive relationship between growth opportunities and leverage for the slow growth period, whilst this positive relationship was not significant for high growth period. Other textile and jute sectors exhibited a significant positive relationship in both the growth periods whereas no firms in high-growth segment were present in both these sectors. The textile and paper & board sectors represented a significant positive relationship in slow growth period whilst this positive relationship was not significant during the high-growth period. The subject relationship was positive for banaspati and negative for chemical sectors for both the growth periods, but was with a very low significance level. For engineering sector, a significant negative relationship was present during the slow growth period whilst a non-significant negative relationship was existing during the high-growth period. In both the cement and sugar sectors a non-significant negative relationship has been found during the slow growth period whilst in the high growth period evidence of a positive relationship was present and significant for sugar sector, but lacked significance for the cement sector.

For all the sectors the subject relationship was significantly positive for the low-growth firms during both the growth periods, whilst for medium-growth firms this relationship was significantly positive only in the slow growth period. A non-significant negative relationship was found for high-growth firms during both the growth periods.

For low-growth firms, during the slow growth period, a positive relationship existed for textile, other textile, paper & board, jute and chemical sectors, but it was not significant for the chemical sector. During the same period of growth a negative relationship existed for the cement, sugar, engineering and banaspati sector, with the negative relationship only being significant for the cement sector. For the same segment of firms, i.e. low-growth firms, during a high growth period, a positive relationship exists for all the sectors (except paper & board) for which no observations were available in this category, and the relationship was not significant for the cement sector.

For medium-growth firms, during the slow growth period, a positive relationship exists for textile, other textile, cement and paper & board sectors but it was not significant for cement sector. A negative relationship was present for the sugar, chemical, engineering and banaspati sectors, whereby it was significant only for banaspati sector. For the same segment of medium-growth firms, during the high growth period, positive relationship existed for all the sectors (except chemical and jute) with this relationship significant only for other textile and engineering sectors. From the jute sector, no sample firm qualified to be a medium or high growth firm, as we found results for this sector only in low-growth firms segment analysis.

For high-growth firms, during the slow growth period, a positive relationship existed for the textile, cement, chemical and banaspati, but it was not significant for any of these sectors, whilst non-significant negative relationship existed for paper & board and engineering sectors. For the same segment of high-growth firms, during the high growth period, a non-significant positive relationship existed only for the cement sector whilst for textile, chemical and engineering sectors a non-significant negative relationship was found.

Findings and conclusion

As far as existing literature is concerned, there are mixed evidences and conclusions regarding the relationship between growth opportunities and capital structure of the firms. According to Modigliani and Miller (1958) report, corporate owners do not prefer common stock for financing any newly discovered growth opportunity at the then ruling price, as this price may not be able to get the most out of the new venture. Pandey (2001) and Chen and Zhao (2006) also document such a positive relationship.

Bevan and Danbolt (2002), on the other hand, regard growth opportunities as largely intangible that offer very limited liquidation or collateral value, and thus cause a lower level of debt financing. Myers (1977) also found a similar negative relation between growth opportunities and debt level, from the perishable nature of growth opportunities. Bevan, Danbolt and Myers also expect firms with large expected investments to maintain low-risk debt capacity, so they avoid either foregoing future investments or financing them with new risky securities. Titman & Wessels (1988) also found this negative relationship between leverage and R&D expenses (also used as a proxy for growth opportunities), with Goyal et al. (2002) explaining such a negative relationship through a range of arguments.

In this study, we have found an overall significant positive relationship between growth opportunities and leverage that is greatly significant for sectors such as textile, sugar, cement, paper and jute. Based on these findings and our observations it can be concluded that the listed firms of these sectors, having higher growth opportunities, are expected to raise more debt. The possible explanation for such leverage behavior in these sectors could be that the owners of these firms, with a nominal foreigners' representation view the available growth opportunities as unsustainable and more risky, intend to pass on a higher risk to their creditors which would result in a high debt level. Consequently, this might delay issuance of new common stocks at the future higher prices, if such risky investment succeeds. It seems that the socio-economic and political networks of such owners help provide firms with easy access to credit market. It has also been observed that there is a general tendency of the credit market, having limited options for profitable credit, to finance companies with little better future prospects. Moreover, unsuitable growth opportunities in economy, less developed capital markets, a higher number of firms with lower growth and their limited goodwill among the investors and the general public may also be the underlying reasons behind the corporate behavior causing such an overall positive relationship.

A negative relationship was, however, found for sectors like chemicals and engineering, but it was only highly significant in engineering. These sectors are well organized and capital intensive, with higher extent of foreign ownership compared to other sectors, which means that they have general tendency to have equity-tilted capital structures. It was observed that the owners/managers of these firms considered their growth opportunities as low risk and sustainable, and intended to preserve with their financial slack. Moreover, such leverage behavior assists in the maintenance of an information asymmetry.

A non-significant negative relationship for the high growth firms, in both high and low growth periods, was found to exist, which can be interpreted in the following ways:

- There exists no relationship between growth opportunities and leverage for the high-growth firms segment (i.e. their capital structure decisions are not based upon the analysis of growth opportunities).
- No high growth firms (in real but not relative terms) are included in our selected sample of manufacturing organizations.
- Growth opportunities do not exist for high growth firms (or their extent is too low), which means that they are not related to capital structure decisions.

Our results are consistent with Chen and Zhao (2006) in the way that they have found a positive relationship between growth opportunities and leverage for the medium and low-growth firms, where it is significant as a whole. This paper contributes an alternative approach to the manner the relationship between leverage and a growth opportunity is theorized, countering the dominant discussions and perceptions in existing scholarship and literature. In addition, the paper has also found that industry type is a relevant variable, which greatly affects the relationship between growth opportunities and leverage.

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