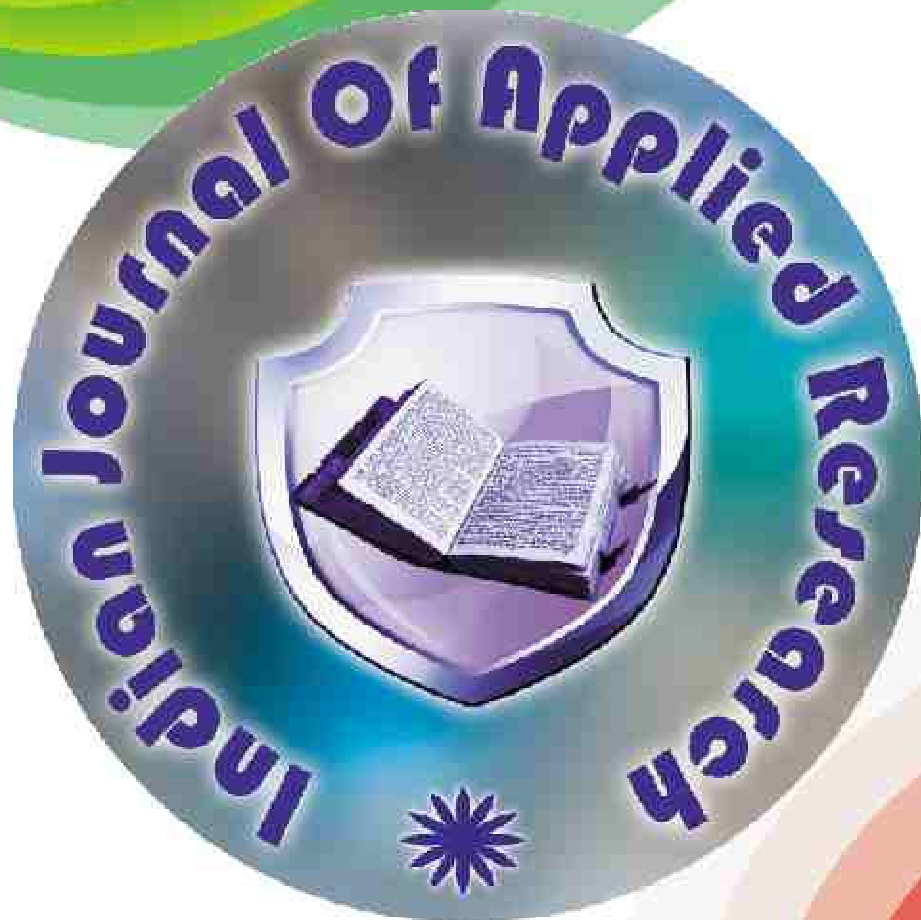
₹ 100 ISSN - 2249-555X

Volume : 1 Issue : 4 January 2012



Journal for All Subjects

www.ijar.in

Listed in International ISSN Directory, Paris.

ISSN - 2249-555X

Indian Journal of Applied Research

Journal for All Subjects

Editor-In-Chief

Dr A Kumar
Director, College Development Council (CDC)
Director, Internal Quality Assurance Cell (IQAC)
Professor in Management,
Department of Business Administration, Faculty of Management,
Bhavnagar University,

Editorial Advisory Board

Dr. S. N. Pathan Maharastra
Dr. SM. Ramasamy Gandhigram
Dr. M. M. Goel Kurukshetra
Dr. S. Ramesh Tamil Nadu
Dr Ramesh Kumar Miryala Nalgonda.
Dr. B. Rajasekaran Tirunelveli
Dr. A. R. Saravankumar Tamilnadu
Dr. Roy M. Thomas Cochin
Dr. G. Selvakumar Salem
Dr. Apurba Ratan Ghosh Burdwan
Dr. Shrawan K Sharma Uttarakhand
Dr. Sudhanshu Joshi Uttarakhand
Prof. (Dr.) B Anandampilai Pudhukottai

Advertisement Details

Position	B/W (Single Color)	Fore Color
Full Inside Cover	₹ 6000	₹ 12500
Full Page (Inside)	₹ 5000	-

Subscription Details

Period	Rate	Discount	Amount Payable
One Year (12 Issues)	₹ 2400	Nil	₹ 2400
Two Year (24 issues)	₹ 4800	₹ 200	₹ 4600
Three Year (36 issues)	₹ 7200	₹ 300	₹ 6900
Five Year (60 issues)	₹ 12000	₹ 600	₹ 11400

You can download the Advertisement / Subscription Form from website www.ijar.in. You will require to print the form. Please fill the form completely and send it to the **Editor, INDIAN JOURNAL OF APPLIED RESEARCH** along with the payment in the form of Demand Draft/Cheque at Par drawn in favour of **INDIAN JOURNAL OF APPLIED RESEARCH** payable at Ahmedabad.

1. Thoughts, language vision and example in published research paper are entirely of author of research paper. It is not necessary that both editor and editorial board are satisfied by the research paper. The responsibility of the matter of research paper/article is entirely of author.
2. Editing of the Indian Journal of Applied Research is processed without any remittance. The selection and publication is done after recommendations of atleast two subject expert referees.
3. In any condition if any National/International University denies accepting the research paper published in IJAR, then it is not the responsibility of Editor, Publisher and Management.
4. Only the first author is entitle to receive the copies of all co-authors
5. Before re-use of published research paper in any manner, it is compulsory to take written permission from the Editor-IJAR, unless it will be assumed as disobedience of copyright rules.
5. All the legal undertaking related to Indian Journal of Applied Research is subject to Ahmedabad Jurisdiction.
7. The research journal will be send by normal post. If the journal is not received by the author of research papers then it will not be the responsibility of the Editor and publisher. The amount for registered post should be borne by author of the research paper in case of second copy of the journal.

Editor,
Indian Journal Of Applied Research
8-A, Banans, Opp. SLU Girls College, New Congres Bhavan, Paldi,
Ahmedabad-380006, Gujarat, INDIA
Contact.: +91-9824097643 E-mail : editor@ijar.in

INDEX

Sr. No	Title	Author	Subject	Page. No.
1.	Statistical Optimization Of Ferulic Acid Esterase Production In Aspergillus Niger Isolate Using Response Surface Methodology	Baljinder Kaur , Neena Garg	Biotechnology	1-6
2.	Development Of Forest Area In Tropics: The Urgency Of People's Participation In The Indian Context	Dr. M. P. Naik	Commerce	7-8
3.	Opportunity For International Corporations At Bop Segments Of Emerging Markets (Focus : India)	Bhudhar Ranjan Chatterjee , Sukanya Chatterjee.	Commerce	9-11
4.	Retail Trade	Viram. J. Vala , Dr. (Prof.) Vijay Kumar Soni	Commerce	12-15
5.	Determinants Of Market Value Added Some Empirical Evidence From Indian Automobile Industry	Dr. A. Vijayakumar	Commerce	16-20
6.	The Welfare Facilities Available To The Workers In Paper Mills In Madurai	Dr. M. Sumathy , A. Vijayalekshmi	Commerce	21-24
7.	Green Marketing - New Hopes And Challenges	Dr. Prashant M. Joshi	Commerce	25-27
8.	A Study On Employee Welfare Measures In Maharashtra State Transport Corporation With Special Reference To Kolhapur District.	Dr. H. M. Thakar , Prof. Urmila Kisan Dubal	Commerce	28-30
9.	Business Environment In South Korea An International Perspective	Dr. M. Kamalun Nabi , Dr. M. Saeed	Commerce	31-35
10.	Market Timing - Implications Of Market Valuation On Share Issues By Indian Companies	L. Ganesamoorthy , Dr. H. Shankar	Commerce	36-38
11.	The Conceptual Framework Of Corporate Social Accounting	Rechanna , Dr. B. Mahadevappa	Commerce	39-50
12.	Labour Welfare Measures And The Extent Of Satisfaction Of Tirupur Garment Employees	Mr. S. Hariharan , Mr. N. Selvakumar, Dr .H. Balakrishnan	Commerce	51-53
13.	Mahila Savsth Aur Jacha-Bacha Ko Bachane Ko Chunoti	Dr. Anup Chaturvedi	Community Science	54-55
14.	Mapping Of Existing Waste Dumping Sites And Newly Proposed Waste Dumping Sites In And Around Chitradurga Taluk, Karnataka State, Using Remote Sensing And GIS Techniques.	Sunil Kumar R. K Chinnaiah , Suresh Kumar B.V	Earth Science	56-58
15.	A Role Of Municipal Council And Corporation Of Financial Problems In Nanded District (Maharashtra)	Dr. A. S. Pawar	Economics	59
16.	Impact Of Institutional Credit On Weaker Section In Akola District	Dr. Devyanee K Nemade, Dr. Vanita K Khobarkar	Economics	60-62
17.	Right To Education In India	Dr. Pawar A. S.	Economics	63-65
18.	Gramin Ayam Adivasi Mahilo Ke Arthik Shakti : Sukhma Virti (Adipur Jila Ke Gramin Ayam Adivasi Mahilao Ka Ek Ayaktik Adhiyan Shobha Gupta	Shobha Gupta	Economics	66-67

19.	Knowledge On Food Security Education Among Higher Secondary Students	Dr. P. Paul Devanesan , Dr. A. Selvan	Education	68-69
20.	Family Environment As A Determinant of Academic Anxiety And Academic Achievement	Dr. RajKumari Kalra , Ms. Preeti Manani	Education	70-71
21.	Awareness On Man-Made Disaster In Environmental Education Among High School Students	Dr. A. Selvan , Dr. P. Paul Devanesan	Education	72-73
22.	Teaching Strategies For Simplifying Fractions In Mathematics	M. Kavitha , Dr. A R. Saravanakumar	Education	74-76
23.	Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGA): A Boon to Tribal Women	Dr. Sherly Thomas	Education	77-78
24.	Sports as a Tool for Interest Oriented Learning	E. Baby Sumanna	Education	79-80
25.	Balanced Scorecard for Higher Education	Jyoti D JoshI	Education	81-83
26.	A Study Of The Interactive Influence Of CAI Package On Academic Achievement	Kunal D. Jadhav	Education	84-85
27.	Reduction Of Fault Current Using SFCL At The Suitable Location In The Smartgrid	Pudi Sekhar , K .Venkateswara Rao , M. Ebraheem , P. Nageswara Rao	Electronics	86-88
28.	HRD Climate in Private Manufacturing Sector: An Appraisal	Dr. Sukhwinder Singh Jolly	Engineering	89-90
29.	Wireless Speed Measurement And Control Of Universal Motor	G. Prasad , G. Ramya Swathi, Dr. P. V. N. Prasad , A. Muneiah	Engineering	91-94
30.	Design Of Decentralized Load-Frequency Controller For Deregulated Hydro-Thermal Power Systems With Non-Linearities	M. Vinothkumar , Dr. C. Kumar , Dr. S. Velusami	Engineering	95-99
31.	Optimization Of Process Parameters For Gas Tungsten Arc Welding Aluminum Alloy A6061 By Taguchi Method	P. Hema , K. Allama Prabhu , Prof. K. Ravindranath	Engineering	100-103
32.	Numerical Approach To Predict The Thermal Performance Of Parallel And Counter Flow Packed Bed Solar Air Heaters	Satyender Singha , Prashant Dhiman , Ritika Kondal	Engineering	104-108
33.	Institute For Entrepreneurship Development Amongst Farmers- Especially Small And Marginal Land Holders.	Sweta Sanjog Metha	Entrepreneurship Development	109-111
34.	Phytoplankton Diversity From Godavari River Water (Maharashtra)	Satish.S.Patil , Ishwar.B.Ghorade	Environmental Science	11-114
35.	Nutrient Adequacy Among Selected Tribal Adolescent Girls Of Kattunayakan Tribes In Tamil Nadu	Somishon Keishing , Saranya .R	Home Science	115-116
36.	Vaigyanic Sacharata Aur Arthik- Samajik Vikas	Dr. Sudobh Kumar	Humanities	117-118
37.	E-Pharmacy In India For Reducing Inter-State Accessibility Dispersion	Satinder Bhatia	Information Technology	119-121
38.	Impact Of Intermediaries' Service Delivery In Insurance Sector	Dr. P. Anbuoli , R. Meikanda Ganesh Kumar	Insurance Sector	122-124

39.	Fate And Human Endeavour In The Mahabharata	Dr Maneeta Kahlon	Literature	125-127
40.	Facets of Hunger in Bhabani Bhattacharya's So Many Hungers and Kamala Markandaya's Nectar in a Sieve	Dr. Paramleen Kaur Syali , Ruchee Aggarwal	Literature	128-129
41.	Business Financial Strategy In Small And Medium Scale Brick Industries In Kolar District, Karnataka State.	Muninarayanappa , Dr. S. Muralidhar	Management	130-132
42.	A Study On Brand Equity Analysis Foreign Global Brands Vs Domestic Popular Brands Of Adult Consumer's Perspective In Coimbatore City	A.Pughazhendi, , S. Susendiran, , R. Thirunavukkarasu	Management	133-135
43.	Comparative Analysis of Cellular Phone Usage Outline of Undergraduate Students.	Atul Patel	Management	136-138
44.	A Study On Management Practices Of Entrepreneurs In Informal Sector	Dr. P. Vikkraman , Mr. S. Baskaran	Management	139-142
45.	E-commerce: Emerging Channel for Marketing in India	Dr Mahalaxmi Krishnan	Management	143-144
46.	The Role Of Educational Institutions In Imparting Entrepreneurship Qualities Among Student Community	Dr. N. Ramanjaneyalu	Management	145-147
47.	Impulsive buying and In-store shopping environment	Dr. Surekha Rana , Jyoti Tirthani	Management	148-149
48.	A Study On Management Practices Of Entrepreneurs In Informal Sector	Dr. P. Vikkraman , S. Baskaran	Management	150-153
49.	Risk Management Processes And Techniques For Resolving Customer - Supplier Relationship Issues	Pramod Kumar , Prof (Dr.) S.L.Gupta	Management	154-160
50.	Risk Management Processes & Techniques For The Successful Delivery Of Web Based Software Projects	Pramod Kumar , Prof (Dr.) S. L. Gupta	Management	161-166
51.	Effect Of Brand Equity On Consumer Purchasing Behaviour On Car: Evidence From Car Owners In Madurai District	R. Suganya	Management	167-169
52.	Relationship Management Model For Global It Industry.	Rishi Mohan Bhatnagar , Prof (Dr.) S. L. Gupta	Management	170-173
53.	It's A Myth That Kirana Stores Will Be Wiped Out If FDI Is Allowed In Multi Brand Retail Sector In India	Shweta Patel , M R Brahmachari	Management	174-176
54.	Learning Organization	Sitheswaran K , Dr. K. Balanaga Gurunathan	Management	177-178
55.	Behavior Management: A Ready-made Soup For Indian Managers	Winnie Jasraj Joshi	Management	179-180
56.	Customer Relationship Management In Public Sector Banks	Dr. P. Anbuoli , T. R. Thiruven Kat Raj	Marketing	181-182
57.	Nifedipine Compared With Isoxuprine In Treatment Of Preterm Labor	Dr. Santosh Khajotia	Medical Science	183-184

58.	Single Intraoperative Dose of Tranexamic Acid In Orthopedic Surgery (A Study of Bipolar Modular Prosthesis and Dynamic Hip Screw fixation)	Dr. B. L. Khajotia , Dr. S. K. Agarwal, Dr. Prasant Gadwal	Medical Science	185-187
59.	MVA - A Simple & Safe Surgical Procedure For First Trimester Abortion / Medical Termination Of Pregnancy (MTP)	Dr. Priyamvada Shah , Dr. Sameer Darawade	Medical Science	188-190
60.	Pneumococcal Septic Arthritis in an Infant A Case Report	Dr. Vrishali A Muley , Dr. Dnyaneshwari P Ghadage, . Dr. Arvind V Bhore	Medical Science	191-192
61.	A Clear CSF may not be a Normal CSF A Case Report	Dr. Dnyaneshwari P Ghadage , Dr. Vrishali A. Muley , Dr. Arvind V. Bhore	Medical Science	193-194
62.	Neurectomy For Tic How Much Reliable?	Dr. Monali H. Ghodke , Dr. Seemit V. Shah , Dr. Smita A. Kamtane	Medical Science	195-198
63.	To Assess Acceptability Of Female Condom As A Method Of Temporary Contraception Among Indian Women	Dr Priyanka Shekhawat , Dr. Col (Retd) Gulab Singh, Dr Vidula Kulkarni Joshi	Medical Science	199-200
64.	A Study To Evaluate The Efficacy Of Teaching Intervention On Reduction Of Pediatric Immunization Pain Among Nursing Students	Dr. Ramachandra , Dr. S. Valliammal, Mr. Raja Sudhakar	Nursing	201-202
65.	Screening Of Antenatal Patients For Thalassemia	Dr Mukta Rayate , Dr Durga Karne , Dr Shilpa Bhat, Dr Hemant Damle , Dr Sameer Darawade, Varsha Gogavale	Obstetrics & Gynaecology	203-204
66.	Reservoir Rock Quality of the Lakadong Member in the Eastern Part of Upper Assam Basin, India	Dr. Pradip Borgohain	Petroleum Geology	205-207
67.	Study Of Refractive Index And Excess Parameters For Different Liquid Mixtures At Different Temperatures	Sheeraz Akbar , Mahendra Kumar	Physics	208-210
68.	Refractometric And Excess Parameter Study For Liquid Mixtures Containing High Order Alkanes (C17) And 1-alkanols At Different Temperatures	Sheeraz Akbar , Mahendra Kumar	Physics	211-213
69.	Assessment Of Knowledge About Health Services Available At Subcentre Level Among Village Inhabitants	Balpreet Singh , Jayanti Dutta	Public Health	214-215
70.	Effect Of Yogic, Aerobic And Laughter Exercises On Body Composition (An experimental study)	Dr. Manjappa. P, , Dr. Shivarama Reddy. M	Sports	216-220
71.	Age At Menarche In Physically Active And Non Active Urban Girls Of Patiala District	Jyoti Sharma , Dr. Ajita	Sports Science	221-222
72.	Use Of Ranks For Analysis Of Groups Of Experiments	Dr. Vanita K Khobarkar , Dr. S. W. Jahagirdar, Dr. N. A. Chaube	Statistics	223-225

Volume : 1 | Issue : 4 | January 2012 ISSN - 2249-555X

Research Paper Commerce

Market Timing - Implications Of Market Valuation On Share Issues By Indian Companies

* L. Ganesamoorthy ** Dr. H. Shankar

* Assistant professor in Commerce, Annamalai University, Chidambaram

** Professor in Commerce, Annamalai University, Chidambaram

ABSTRACT

Change in capital structure occurs due to financing decisions of the firm. Managers are expected choose either debt or equity by considering the respective costs of capital so as to attain an optimum cost. Various theories have been propounded to explain capital structure over a period of time. Among them market timing theory is recent one. According to this theory, managers of firms tend to issue equity when the market valuation of their stocks is high, otherwise they opt for debt. The present study has made an attempt to test the prevalence of market timing factor in the equity issues of Indian companies. Theoretically market timing considered is an important determinant for capital issues. But the results of the study show that for companies in India its application could not be substantiated. The reasons may be the time lag involved in issue decision since there have been instances where a public offer being deferred.

Keywords : Market timing, Market value, Equity issue and Debt issue.

Introduction

Finance is the lifeblood of any business organization. Firms require finance not only at the time of their establishment but also continuously for their operating purposes, extension activities and so on. Financial requirements of a firm are either permanent or temporary. Permanent capital is needed for the establishment, for purchase of fixed assets such as land and buildings, machinery and equipments during extension activities. Temporary capital required for their operations termed as working capital, is to meet current obligations and debts. These financial obligations of firms are fulfilled by various sources of finance. Firms could access both internal and external sources of finance. Internal sources are their own source, in other words utilisation of their retained earnings (reserves and surpluses). Firms also obtain finance from external source by issuing equity shares, preference shares and debentures and also borrowings from banks and financial institutions. These sources of finance can be broadly categorised as equity and debt.

Every firm has both equity and debt in their capital. The combination of equity and debt finance in the capital is called "Capital Structure" of the firm. The capital structure of firms is unique and is not identical to all firms and at all periods of time. Change in capital structure occurs due to financing decisions of the firm. If a manager decides to raise capital by issue of equity shares the proportion of equity increases in the capital structure. If he decides to raise by debt issue the debt proportion increases in the capital structure of the firm. So capital structure of a firm changes due to financing decisions like issue of equity, repurchase of equity, issue of debt and redemption of debt. Managers of firms take financing decision by considering various factors. Generally managers are expected choose either debt or equity by considering the respective costs of capital so as to attain an optimum cost.

Over the course of time, various theories were developed to explain capital structure.

Theories of Capital structure

Various theories have been propounded to explain capital structure over a period of time. Relevant and important theories of capital structure are:

Net income approach

Net income approach was the initial attempt to explain capital structure. It argued that the increase of debt finance in capital structure to the possible extent might minimise the weighted average of cost of capital and it would increase market valuation of equity.

Net operating income approach

Net operating income approach of capital structure was propounded by David Durand, according to which the overall capitalisation rate and the cost of debt is independent of the degree of leverage in capital structure. It was theorised that the changes of capital structure did not affect the firm value.

MM theory

Modigliani and Miller (1958) introduced a theory of capital structure. This theory was identical to net operating income approach and argued that the capital structure was irrelevant to firm value. They gave an operational justification for the theory by the "Arbitrage Process". In 1963 they included corporate taxes and made corrections to their theory. They theorised that the capital structure did not affect the cost of capital and value of the firm, even if the tax free assumption, made earlier, is removed.

Trade-off theory

Trade-off theory of capital structure referred to the idea that a company chooses the quantum of equity and debt finance to balance between cost and benefit. Here they referred to cost as cost of bankruptcy and benefits as the benefits of tax savings by using debt finance in the capital structure.

Pecking order theory

This theory was developed by Myers and Majluf (1984) who explained the preferential order of financing of a firm. According to this theory firms prefer internal sources first (retained earnings) and next move to safe debt and then risky debt. If they are not in a position to rise finance either from internal sources or debt then they move to equity. As per this theory firms choose equity as the last option of financing.

Market timing theory

In 2002 Baker and Wurgler propounded a new theory of capital structure in a new dimension called market timing theory. This theory explains the timing attempts of equity issues. According to this theory, managers of firms tend to issue equity when the market valuation of their stocks is high. Otherwise they opt for debt to finance their requirements. It was also argued that the capital structure is the cumulative outcome of past attempts of market timing.

Firms tend to take advantage of high market valuation of equity. When equity shares are overvalued in the market, the issuing company could utilise the opportunity to obtain higher inflow through equity by charging higher premium, thereby reducing the cost of equity. In other words, they choose equity or debt as their financing mode when the respective cost of capital is low. They also found in their study that market timing attempts have long lasting effect on firms' capital structure. The present study examines the market timing attempts of share issues of Indian companies.

Various studies have been undertaken to explain capital structure and some studies tested the existing theories of capital structure. The market timing theory of capital structure also has been tested by several researchers. Most relevant and important studies are presented in the following section.

Review of literature

Studies by Taggart (1977), Marsh (1982), Jalilvand and Harris (1984) and Rajan and Zingales (1995) were some of the important earlier attempts to investigate debt-equity choice of firms. In 2002 Baker and Wurgler propounded the Market Timing theory of capital structure and it was examined by many researchers.

Aydoyan Alti (2006) found supportive evidences to the market timing theory. He found that the firms went to public when market was hot, which means high initial public offerings during the period. He also found that the past security issues had a long lasting effect on capital structure. William B Elliott et. al. (2007) found positive relationship between degree of over valuation of equity and the proportion of the firms financing their need by equity issue. Rongbing Huang and Jay R Ritter (2005) had robust evidences to support market timing theory. They found long lasting effect of timing attempts of equity on capital structure.

Arvind Mahajan and Semih Tartaroglu (2008) Tijs De Bie and Leo De Haan (2007) and Usha R Mittoo and Zhou Zhang (2007) found partial support to market timing theory. They found that the firms tend to issue equity when their market valuations were high. They argued that firms use short term misevaluations of equity but these studies did not find supportive evidences on long term effect of timing attempts on capital structure of firms.

On the contrary, Armen Hovakimian (2006) did not find strong evidence for market timing theory. He found positive relationship between market-to-book ratio and the leverage of the firm. He argued that the effects of market-to-book ratio on leverage were not due to timing attempts of equity. Harry De Angelo et. al. (2007) argued that the market timing was not a primary motive for issuance of securities. They also opined that financing decisions were not the outcome of market timing. In India Paritosh Chandra Sinha and Santanu Kumar Ghosh (2009) made a study in the aspect of market timing and they fond that firms which followed pecking order theory dynamically moved to follow market timing strategy when equity market is misvalued.

The present study is made to investigate the relevance of market timing theory in the Indian scenario.

Statement of the problem

Capital structure decisions are an important one having its impact in the earnings per share and hence value of the respective stocks in the market. An understanding of the applicability of a theory and factors would be of immense use, among others to check whether the management is taking care of the interests of the investors. Over a period of time various theories were propounded to explain capital structure of firms. The main aspect of these theories is the factors that determine the capital structure of the firms. The common thought is that no single theory can explain capital structure fully in all periods of time. So it is pertinent to explain the relevance and importance of theories of capital structure with regard to Indian corporate sector. Market timing has been considered an important factor in the capital structure decision in theory, and research is in early stage as far as its applicability in the Indian context. The theory has been tested in many countries and the present study attempts to test the same in Indian context.

Objectives of the study

1. To give an overview of theories of capital structure chronologically and
2. To test the prevalence of market timing factor in the equity issues of Indian companies.

Methodology

The study has been undertaken with 236 Indian companies which made initial public offerings of equity, during the period from April, 2001 to March, 2010. The study required quantitative information relating to financial results, which were collected from financial statements obtained from "Capital line" database of Centre for Monitoring Indian Economy (CMIE). Market valuation of equity shares of sample companies were collected from the official website of National Stock Exchange.

Tools of analysis

The study used ratio analysis, mean, standard deviation and correlation to analyse and interpret the data relating to Net equity issue, Net debt issue, Increase in retained earnings and market-to-book ratio. They are defined as follows.

Net equity issue = $(E_t - E_{t-1}) - (RE_t - RE_{t-1})$

Net debt issue = $(D_t - D_{t-1})$

Market Valuation = $(E_{mt} - E_{mt-1})$

Where, E refers to Book equity, RE to Retained earnings, D to External debt, Em to Market value of equity, t refers to current year and t-1 refers to previous year.

Analysis and discussion

As per market timing theory a company prefers equity issue whenever the market value of the company's share is high. This is due to the fact that when the market value is high, the shares may be issued at a relatively high price. This aspect was verified with regard to the sample companies selected for this study. Market to book ratio is used as a proxy of market value which would signify the relative value of the share in the market compared to its book value.

Table 1 Number of Companies which made Equity Issue under Different Market Value Changes

Particulars	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	All 10 years	Mean	SD
MV + EI +	4	3	2	9	20	55	78	77	9	103	360 (75%)	36.00	38.41
MV - EI +	4	1	1	1	1	3	23	37	43	5	119 (25%)	11.90	16.28
Total	8	4	3	10	21	58	101	114	52	108	479 (100%)	47.90	45.48

Source: Compiled from CAPITALINE PLUS from Capitaline database

MV = Market value, EI = Equity Issue, + and is positive or negative change and SD = Standard Deviation

Table 1 shows the number of companies which had registered a positive and negative market valuation over the previous year during the study period together with changes in equity issue for each year for the study period. During the ten years of the study period from 2001 to 2010, a total of 479 fresh issues have been made of which 360 issues were made at the time when there was an increase in the market values during the issue.

That is, 75% of the issues coincided with an increase in market values. But it is also seen from the Table that equity issues had been made even when there was a decrease in the market value, with 119 of the total issues (25%) falling under this category. During 2001, 8 companies had gone for equity issue and 4 among them had an increase in market value over the previous year while 4 saw fall in the market value. During 2002 out of 4 companies which had gone for equity issue for 3 companies the market value increased while for 1 the market value decreased. During 2003, of the total 3 companies which had issued equity, for 2 the market value showed an increase whereas for 1 there was a fall in the market value. For 2004, a total of 10 companies had made a fresh issue of which 9 companies had an increase in market value, for one company the market value decreased. During 2005 out of 21 companies which had gone for an equity issue, market value had increased for 20 companies, while for 1 company the market value decreased. During 2006, a total of 58 companies had made a fresh equity issue of which 55 companies had an increase in market value, for 3 companies market value decreased. During 2007, out of 101 companies which had made an equity issue 78 had an increase in market value while 23 companies had shown decrease in market value.

During 2008, a total of 114 companies had made fresh equity issue out of which 77 companies had an increase in market value, whereas 37 companies had a decrease in market value. During 2009, 52 companies made equity issue and from among them only 9 companies had an increase in market value over the previous year while 43 companies had decrease in market value. During 2010, a total of 108 companies had made equity issue out of which 103 companies had increase in market value while for 5 companies market value decreased.

The standard deviation in all the instances had been very high which shows that the distribution had not been even.

Even though for most years the number of companies under the category of issue of shares when there was a reduction in market value had been very limited, the instance of decrease in market value coinciding with fresh equity issue has been very large in 2009. Out of 52 companies which had made a fresh equity issue, 80% fall under this category. But 2009, is considered an abnormal year for the market due to the impact of economic crisis, slump in trade and an instance of crisis in the stock market (Sathyam fiasco) which had substantially affected the sentiments of the investors and business negatively. Obviously capital market issues had been substantially lesser compared to other years, but some companies did resort to equity issue. One reason which can be advanced for this unusual phenomenon is that, may be these companies decided on the equity issue earlier and by the time they approached the market, the values turned negative. It may have also been due to the fact that some of them might have exhausted their debt capacity, compelling them to go in for equity. In effect it can be broadly concluded that for majority of the issues, market timing has been a consideration in equity issue decision.

A similar attempt was made with reference to debt issues. A converse to the above situation is that a company would prefer debt capital whenever the market value is not favourable.

Table 2 : Number of Companies which Issued Debt under Different Market Value Changes

Particulars	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	All 10 years	Mean	SD
MV + DI +	2	3	0	11	14	37	58	83	4	153	365 (45%)	36.50	49.50
MV - DI +	2	1	7	1	5	7	39	60	162	7	291 35%)	29.10	50.64
MV + DI -	2	1	1	5	9	28	22	26	6	60	160 (20%)	16.00	18.66
Total	6	5	8	17	28	72	119	169	172	220	816 (100%)	65.60	68.72

Source: Compiled from CAPITALINE PLUS from Capitaline database

MV = Market value, DI = Debt Issue, + and is positive or negative change and SD = Standard Deviation

Table 2 shows the change in market values along with the change in debt capital. During the study period a total of 816 debt issues have been made by the select companies of which, for 451 issues accounting for 55% of the total, the increase in debt capital coincides with decrease in market value and decrease in debt capital with increase in market value. 365 (45%) companies issued debt when there was an increase in market values. Debt capital raised during times of increase in market valuation has been relatively high during the period from 2004 to 2008.

The above two Tables show that, the market timing has been considered while deciding on equity as the source of capital, but not extensively by companies considered for the study. For debt issue this has not been an important consideration.

The above discussion related to the number of equity issues and debt issues made by the companies. A further analysis was made to assess the relationship of equity issue with changes in market valuation through establishing the correlation. Absolute values of fresh equity issues by companies were correlated with change in market values over the previous years for those companies and also the amount of debt issue and change in market values with regard to companies which had issued debt capital during the years from 2001 to 2010. The results are shown in Table 3.

Table 3 : Correlation of Equity and Debt Issues with changes in Market Value

Particulars	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	All 10 years
MV + EI +	0.944	0.999	-1	-0.0291	0.412	0.223	0.0446	0.889	-0.283	0.168	0.346
MV - EI +	0.655	0	0	0	0	-0.360	-0.0041	0.137	-0.457	-0.0025	-0.563
MV + DI +	1	1	-	0.603	0.635	0.744	0.203	0.594	-0.416	0.310	0.359
MV – DI +	-1	0	0.0528	0	-0.457	-0.993	-0.752	0.00539	-0.273	-0.515	-0.485
MV + DI -	-1	0	0	0.102	0.0156	-0.604	-0.0252	-0.927	-0.820	-0.167	-0.225

Source: Computed from CAPITALINE PLUS from Capitaline database

MV = Market value, EI = Equity Issue, DI = Debt Issue, + and is positive or negative change and SD = Standard Deviation

It is observed from the Table that a very high positive correlation was found during 2001, 2002 and 2008, a very low correlation during 2005, 2006 and 2010; and near nil correlation during 2004 and 2007. During 2009 there was low but negative correlation. What is of interest is that, there was perfect negative correlation during 2003. Hence correlation analysis does not support relation between positive changes in market value and equity issues.

Conclusion

Overall it could be stated that, even though theoretically market timing is an important determinant for capital issues, for companies in India its application could not be substantiated. One important reason may be the time lag involved. Normally it takes a few months between the date of decision for issue and actual issue, due to the legal and procedural aspects involved in finalising the issue. On the other hand the market keeps on changing constantly. There have been instances where a public offer being deferred probably due to this situation. But the companies would be out of options to choose the desirable source of financing decided upon earlier, especially when finance is direly needed to keep the business activities in track. Since the time lag is beyond the control of the finance manager little could be done in this regard except to keep the capital structure maneuverable. Whether this had had any impact on the returns to the shareholders is another aspect which can be explored.

REFERENCES

Armen Hovakimian. (2006). Are Observed Capital Structure Determined by Equity Market Timing?, Journal of Financial and Quantitative Analysis, 41(1), 221-243. | Baker M and Wurgler J. (2002). Market Timing and Capital Structure. Journal of Finance, 57(1), 1 32. | Harry De Angelo, Linda De Angelo and Reney Stulz. (2007). Fundamentals, Market Timing and Seasoned Equity Offerings, Working paper 13285, National Bureau of Economic Research, Cambridge, http//www.nber.org/papers/w13285 | Jalilvand A and Harris R S. (1984). Corporate Behavior in Adjusting to Capital Structure and Dividend Targets: An Econometric Study, The Journal of Finance, 39(1), 127 145. | Paritosh Chandra Sinha and Santanu Kumar Ghosh. (2009). Theory of Market Timing and Asymmetric Information: Empirical Evidence with Dynamic Views, icfai Journal of Applied Finance, 15(4), 5-27. | Marsh P. (1982). The Choice between Equity and Debt, The Journal of Finance, 37(1), 121-144. | Arvind Mahajan and Semih Tartaroglu. (2008). Market to Book Ratios, Equity Market Timing and Capital Structure: International Evidence, Journal of Banking and Finance, 32(5), 754-766 | Aydogan Alti. (2006). How Persistent is the Impact of Market Timing on Capital Structure, The Journal of Finance, 61(4), 1681-1710, | Rajan and Zingales. (1995). What do We Know about Capital Structure? Some Evidence from International Data, The Journal of Finance, 2(5), 1421 1460. | Rongbing Huang and Jay R. Ritter. (2005). Testing the market Timing of Capital Structure, Working paper, University of Florida. | Taggart R A. (1977). A Model of Corporate Financing Decisions, The Journal of Finance, 32(5), 1467 1484. | Tijs De Bie and Leo De Haan. (2007). Market Timing and Capital Structure: Evidence for Dutch Firms, De Economist, 155(2), 183-206. | Usha R. Mittoo and Zhou Zhang. (2007). Market Timing, Capital Structure and Cross Listing: Canadian Evidence, Working Paper, FMA. | William B. Elliott, Johanna Koeter-kant and Richard S.Warr. (2007). A valuation-based test of Market Timing, Journal of Corporate Finance, 13(1), 112-128.

Sara Publishing Academy
Indian Journal Of Applied Research
Journal for All Subjects

Editor,
Indian Journal Of Applied Research
8-A, Banans, Opp. SLU Girls College,
New Congres Bhavan, Paldi, Ahmedabad-380006.
Contact.: +91-9824097643 E-mail : editor@ijar.in

Printed at Unique Offset, Novatsing Rupam Estate, Opp. Abhay Estate, Tavdipura, Shahibaug, Ahmedabad