Effect of Sales, Net Profit, Total Assets on Market Capitalization of a Company:

A Study of Various Companies across Industries in Indian Stock Market.

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Abstract

The study investigates the effect of sales, profit, total assets on market capitalization of company and hence wealth of equity investors. Company creates for its shareholders in stock market. A sample of 40 Indian companies across 5 sectors in investigated to understand effect of sales, net profit and total assets in market capitalization of companies across sectors. The sectors included are fast moving consumer goods, consumer durables, oil and gas, steel and information technology industry. The net profit was found to have significant influence on market capitalization of companies in fast moving consumer goods, consumer durables, and steel and information technology. The oil and gas industry market capitalization was influenced more by total assets of the companies and secondly by net profit. The sales of the companies had an influence on market capitalization only in case of information technology sector companies. Individual importance of factors across Industries was different. The data taken is for year October, 2010. The data is taken from moneycontrol.com.

Keywords - Sales, Net Profit, Total Assets, Market Capitalization.

1. Introduction

In stock markets many analysts have tried to identify factors that affect the market capitalization of companies, which in turn affects the capital gain to stock holders. Various tools of technical as well as fundamental analysis are used to understand factors affecting market capitalization of companies and pick up stocks that can gain in future and provide superior return to stockholders. The study considers three fundamental reported financial information of companies and investigates their influence on market capitalization of companies. The factors taken are net profit, sales, total assets and dependent variable is market capitalization.

2. Literature Review

John et al (1992) paper finds that similar variables, including the dividend-price ratio and interest rate variables help to forecast excess returns in each country

Marc R. Reinganum et al (1983) find the empirical tests indicate that the abnormally high returns witnessed at the very beginning of January appear to be consistent with tax-loss selling. However, tax-loss selling cannot explain the entire January seasonal effect. The small firms least likely to be sold for tax

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reasons (prior year 'winners') also exhibit large average January returns, although not unusually large returns during the first few days of January.

Rafael La Porta et al(1997), study stock price reactions around earnings announcements for value and glamour stocks over a 5-year period after portfolio formation. The announcement returns suggest that a significant portion of the return difference between value and glamour stocks is attributable to earnings surprises that are systematically more positive for value stocks. The evidence is inconsistent with a risk-based explanation for the return differential.

3. Methodology

The paper analyzed 40 companies from 4 sectors namely fast moving consumer goods (FMCG), consumer durables, oil and gas sector, and information technology companies. The market capitalization of companies is taken as dependent variables. The factors of sales, net profit, total assets of the firms were taken as dependent variables. Using stepwise regression the factors were checked for collinearity. The best factors affecting market cap of companies was chosen through stepwise regression. Through SPSS step wise regression the factors found to be collinear were removed from the regression models for respective industry groups. The factors of net income were taken as it indicates the income generation capability of company. The total assets factor was taken as it shows the total wealth of assets of the company. The sales were taken as indicators of capacity of company to turnover to generate sales using its assets. The data is taken from moneycontrol.com

4. Results and Conclusion

The FMCG Company's market capitalization was largely influenced by net income of the company. The model R2 for FMCG is .862. The factors found collinear were total sales and total assets and removed. Thus if we consider only net profit the model R2 was .988,

Market Cap = 3138.989+28.426 (Net Profit) (Considering only net profit R2 = .988)
p= .000
t=25.681

The consumer durables market capitalization was found to be explained only by net profit. The factors of total sales and total assets were found collinear and removed. The market capitalization of consumer durable is explained by net profit. The R2 of the model was .515. The equation for the model is:

Market Cap =1454.594+18.552(Net Profit)
p= .019
t= 2.916

In case of oil & gas industry, the net profit and total assets are found to affect the market capitalization of companies. The R2 of the model is .997. The excluded variable is sales. The equation of the model is:

Market Cap = 733.647+ 1.843 (Total assets) + 6.027(Net Profit)
p = .000 p=.001
t=10.349 t=5.295

For steel Industry, the net profit affects the market capitalization of companies the most. The R2 of the model is .988. The equation is:

Market Cap = 196.271+ 12.458(Net Profit)
p =.012
t = 8.996

For information technology companies' sales and net profit were significant determinant of market capitalization of companies. The R2 of the model is .966. The equation of the model is:

Market Cap = -6977.698+ 51.239(Net Profit) -5.410(Sales)
p= .000 p=.012
t=8.687 t=-3.828

We find the net profit is a significant factor affecting market capitalization of companies. The sales and total assets are not significant factors for Industry group consumer durables, FMCG, steel industry. The total assets are significant factor affecting market capitalization of oil and gas companies. In fact total assets are more significant factor than net profit in affecting market capitalization of oil and gas industries. The R2 of model explaining market capitalization by taking total assets as only factor in the model is .993. In case of Information technology companies, the factor that affects market capitalization is sales along with net profit. In conclusion we can invest in a company and look to earn through market capitalization increase by investing in higher net profit earning companies. In oil and gas companies we can choose companies with higher total assets along with higher net profit as second factor. In case of information technology companies we can choose companies that are high in net profit and high sales as second factor.

5. Limitations

The study is based on data at one point in time that is 18 October, 2010. The general condition of market will have an influence on conclusion of the study. The big events like 2007 financial crisis may not lead to same results as concluded in the study. Thus general market, economic political conditions will have a bearing on results investors can reap. The study is reported data from moneycontrol.com and data is taken as true as reported. In case of a company reporting data like Satyam Computers scandal, the result cannot hold in case the financial information reported by companies is not true. The market capitalization of companies fluctuates widely on day to day basis. Thus it is an indicative study and does not help investors to predict exact market capitalization of companies. The study only attempts to investigate and indicate factors affecting market capitalization of companies across various sectors.

Table 1: Market Capitalization, Total Sales, Net Profit, Total Asset of companies on 18 October 2010.

Company Name	Market Capitalization	Sales	Net Profit	Total Asset
FMCG				
HUL	65502	17725	2202	2584
Dabur India	17677	2875	433	855
Godrej Consumer	12395	1268	248	840
Colgate	11622	1771	290	331
Marico	7992	2031	235	949
Emami	7335	1007	165	874
Godrej Ind	6980	881	19	1570
P and G	6930	904	180	535
Gillette India	5979	852	137	491
Jyothy Labs	2368	580	80	399
Consumer Durables				
Videocon Indust	7428	9372	407	16385
Mirc Electronic	385	1503	18	389
Jindal Photo	241	379	15	220
BPL	189	85	0	513
MVL Industries	67	454	16	211
Salora Inter	45	521	-6	182
Oil & Gas				
ONGC	287240	64018	16126	103688
Cairn India	64219	4	54	33282
GAIL	63823	25103	3140	18279
Petronet LNG	9244	10649	405	4735
Guj State Petro	6548	1001	414	2820
Reliance Natura	6500	298	73	3322
Guj Gas	5049	1418	175	755
IndraprasthaGas	4486	857	172	825
Aban Offshore	3620	1182	280	5326
Steel				
SAIL	89712	41307	6754	49828
Tata Steel	56794	24316	5202	62408
JSW Steel	28583	18314	2023	21291
Visa Steel	436	1171	47	1457
IT COMPANIES				
TCS	191025	23044	5619	15152
Infosys	178066	21140	5803	22036
Wipro	114746	23178	4898	23222
HCL Tech	30024	5079	1057	4002
Oracle Financ	19924	2213	696	4178
Mphasis	13219	3405	837	2151
Tech Mahindra	9416	4484	743	5002
Patni Computer	5960	1751	543	3205
Financial Tech	5349	356	369	2455

Source: Moneycontrol.com, date 18 October 2010

Step Wise Regression

FMCG

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.994[a]	.988	.987	2138.04306

a. Predictors: (Constant), NetProfit

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3138.989	807.512		3.887	.005
	NetProfit	28.426	1.107	.994	25.681	.000

a. Dependent Variable: Marketcap

Excluded Variables[b]

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	Sales	.063[a]	.128	.902	.048	.007
	TotalAssets	.100[a]	1.659	.141	.531	.340

a. Predictors in the Model: (Constant), NetProfit

b. Dependent Variable: Marketcap

Consumer Durable

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.718[a]	.515	.455	2459.34037

a. Predictors: (Constant), NetProfit

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1454.594	953.100		1.526	.165
	NetProfit	18.552	6.362	.718	2.916	.019

a. Dependent Variable: Marketcap

Excluded Variables[b]

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	Sales	-.622[a]	-1.207	.267	-.415	.216
	TotalAssets	-.497[a]	-.986	.357	-.349	.239

a. Predictors in the Model: (Constant), NetProfit

b. Dependent Variable: Marketcap

Oil & Gas

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.993[a]	.985	.983	11375.36103
2	.999[b]	.997	.996	5435.55167

1. *Predictors: (Constant), TotalAssets*

b. Predictors: (Constant), TotalAssets, NetProfit

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2169.755	4140.611		-.524	.614
	TotalAssets	2.738	.118	.993	23.154	.000
2	(Constant)	733.647	2053.106		.357	.731
	TotalAssets	1.843	.178	.668	10.349	.000
	NetProfit	6.027	1.138	.342	5.295	.001

a. Dependent Variable: Marketcap

Excluded Variables[c]

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	Sales	.257[a]	5.286	.001	.894	.178
	NetProfit	.342[a]	5.295	.001	.895	.101
2	Sales	.139[b]	1.681	.144	.566	.049

a. Predictors in the Model: (Constant), TotalAssets

b. Predictors in the Model: (Constant), TotalAssets, NetProfit

c. Dependent Variable: Marketcap

Steel Industry

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.988[a]	.976	.964	7298.18451

a. Predictors: (Constant), NETPROFIT

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	196.271	6087.114		.032	.977
	NETPROFIT	12.458	1.389	.988	8.966	.012

a. Dependent Variable: MARKETCAP

Excluded Variables[b]

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	SALES	.494[a]	2.463	.246	.927	.085
	TOTALASSETS	-.372[a]	-2.474	.245	-.927	.151

a. Predictors in the Model: (Constant), NETPROFIT

b. Dependent Variable: MARKETCAP

Information Technology Companies

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.985[a]	.971	.966	11778.85036
2	.996[b]	.993	.990	6508.16592

a. Predictors: (Constant), NETPROFIT

b. Predictors: (Constant), NETPROFIT, SALES

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-7240.414	5657.281		-1.280	.248
	NETPROFIT	29.080	2.050	.985	14.188	.000
2	(Constant)	-6977.698	3126.570		-2.232	.076
	NETPROFIT	51.239	5.899	1.736	8.687	.000
	SALES	-5.410	1.413	-.765	-3.828	.012

a. Dependent Variable: MARKETCAP

Excluded Variables[c]

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	SALES	-.765[a]	-3.828	.012	-.863	.037
	TOTALASSETS	-.676[a]	-2.404	.061	-.732	.034
2	TOTALASSETS	-.214[b]	-.675	.537	-.320	.016

a. Predictors in the Model: (Constant), NETPROFIT

b. Predictors in the Model: (Constant), NETPROFIT, SALES

c. Dependent Variable: MARKETCAP

6. Reference

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