Impact of Environmental, Social and Governance Standards Compliance on the Foreign Investment in India

Dr. Chanchal Chopra
Associate Professor
Janki Devi Memorial College
University of Delhi
Delhi

Abstract

The role of Environmental, Social and Governance (ESG) Standards in protecting the interests of investors has been recognised more than ever before, especially after the world-wide corporate financial failures like World com, Enron, Tyco, Parmalat and Satyam Computers. Good ESG standards are necessary for the integrity of corporations, financial institutions, and markets; and they contribute to the growth and stability of the economy. The present paper attempts to gauge the relationship between Environmental, Social and Governance standards compliance and the foreign institutional investtment (FII) in Indian industry. The study shows that the compliance of Environment, Social and Governance standards has contributed to the foreign institutional inflows, in debt and equity portfolios both, during 2005-2013, in Indian companies. The competitive prices of portfolios, the trade based exchange rate and higher interest rates are also important to attract more FII inflows.

Keywords

Corporate Governance, Foreign Institutional Investment, India, Portfolio, Returns, Risk.

Section 1- Introduction

These days it is obligatory for all companies listed on the main stock exchanges in the world to make the disclosure of financial information. This information generally provides a good overview of the financial performance of the companies. However, a company's sustainability depends on the operational and financial stability and this information is not sufficient to make a decision about the company's sustainability. Even the companies making good returns and having low level of debt may be subject to risks from factors like environment, social and

governance. (ESG criteria). For example, companies which do not incorporate human rights in their corporate culture, can have less productivity and more chances of strikes, which can bring additional risks to investors. Likewise, a company may have problems, if it does not follow strict environmental and governance standards.

Due to rising concern among investors, about the ESG issues, many companies have started giving information about their ESG related indicators in the form of additions to their annual reports, social reports, special sections on websites and press releases, etc. It is easy for investors to evaluate companies' risks through this information and find ways to mitigate them.

All Investors, domestic or foreign, primarily take into account two factors to make their investment decisions- the rate of return on investment and the risk associated with the investment. Over the last few years, the attractiveness of developing countries as a destination for foreign investment has increased, mainly because of the possibility of making good returns and secondly, because of the decreasing attractiveness of developed countries as a destination for foreign investment. The possibility of making good returns, by itself, cannot attract large amount of foreign investment. The associated risk is equally important in the investment decisions. Good compliance with environmental, social and governance standards reduces this risk by establishing more transparency and accountability.

The foreign investment helps the countries and the companies to enhance their liquidity and reduce the cost of capital and compete with other countries and companies strongly, though the foreign portfolio flows are considered to be fickle, not associating much with economic fundamentals. During the recent past, ESG standards have become the subject of interest to the foreign direct investors and portfolio investors, both. Therefore, the host countries seeking access to the foreign capital find it important to maintain their companies' ESG standards.

Availability of foreign capital depends on many factors which are specific to the companies and also related to the economic development of the country. ESG standards can impact the companies' financial performance and strategic positioning. On the other hand, the chronic or multiple ESG problems could signal management issues. As such, a typical foreign investor looks forward to maximize financial

returns subject to specific risk tolerances. He does not have in mind a specific social agenda. However, this orientation is changing and investors are increasingly realizing that ESG factors can be a business risk for companies operations in the short as well as medium to long run. Therefore, companies have to maintain positive and constructive relations with important non-financial stakeholders like employyees, customers, communities and the government to maximize sustainable competitive advantage and minimize operational risks.

Section II - Objective of the Study and Research Methodology

In this paper, an attempt has been made to see the relationship between the inflow of foreign institutional investment, in debt and equity portfolios, and the ESG INDEX. Since the variations in FII investment can be controlled by other variables also, the study takes into account the other control variables also. The factors have been put into two categories: the Companies Specific Factors and the Country Specific Factors. The Companies Specific Factors are: ESG India Index by National Stock Exchange of India and total returns index, P/E ratio, P/B ratio, dividend yield and the stock market capitalization of top 50 companies my market capitalization at the National Stock Exchange of India. The country specific factors are: the Index of Industrial Production, the Real Effective Exchange Rate and the ratio of interest in US treasury bills to interest in Indian government bonds. The time period for the study is January 2005 to May 2013.The Stepwise Ordinary Least Square Equation Method has been used for the analysis. The study takes into account one year lag period between the dependent variables and the explanatory variables.

ESG INDIA INDEX was launched by Standard and Poors in 2005 to measure companies' environmental, social and governance responsibility. This index comprises of 50 companies whose business strategies and performance demonstrate a high level of commitment to meeting environmental, social and governance standards. These 50 companies are drawn from top 500 companies by market capitalization, listed on the National Stock Exchange, which are subjected to a screening process and yield a score based on company's ESG disclosure related practices in the public domain. This INDEX promises investors that the portfolio of these

50 companies are consciously balancing the interest of all stakeholders, and thereby, create a platform for strong long term performance.

One can objectively measure certain factors which can be taken as evidence to measure companies' ESG performance. The ESG INDIA Index takes into account 127 corporate governance indicators to identify mainly shareholders rights, audit process, financial and operational indicators, board and management profile, ownership structure and business ethics. It considers 70 environmental and social indicators to identify environment, employees, community and customers related standards. The composite ESG score incorporates 50% Governance (G) score and 50% Environment and Social (ES) score. The companies are ranked in descending order of ESG scores and 50 highest scoring companies are selected each year, provided they have traded a minimum of Rs. 20 billion in the last 12 months. The weight of the company in the index is a product of its float adjusted market capitalization and its score adjusted weight factor score.

Section III-Literature Review

Many researchers have proved that the economic growth of a country is the main factor that attracts foreign investment in India. It is only after the Asian Financial Crisis that the importance of corporate governance as a factor important to attract foreign investment has been considered because corporate governance failure has been the main cause of Asian Financial Crisis. Stringent ESG practices have been followed in almost all the countries around the globe. In India also Amendments have been brought in clause 49 of the Companies act 2013. The companies have to constantly demonstrate their intent and conduct for the better to remain relevant.

Alka Banerjee, Subir Gokaran, Manoranjan Patnayak, Sunil K. Sinha (2010)[1]-In their paper they prove that the corporate governance is a risk that neither the investors nor the government or regulations can ignore. They test the hypothesis that firms with better corporate governance practices receive better market valuations. They use corporate governance from ESG India index as proxy for firm level governance quality, return on net worth, return on capital, profitability ratio and interest coverage ratio and Tobin's Q as measure of firm level performance. They also use regression analysis to test the nature of relationship between governance score and market value as measured

by Tobin's Q. The results show a positive and significant relationship between the corporate governance score and firm level performance. Better governed firms not only command a higher market valuation but are also less leveraged and have higher interest coverage ratio. They also provide a higher return on net worth and capital employed, and their profit margins are relatively more stable. Finally, their price earnings ratio and yield are also higher in comparison to the firms whose corporate governance score is lower.

B. V. Phani, V N Reddy, N Ramachandran, Ashish Bhattacharyya (2006)[2]-The paper attempts to examine the role of insider ownership on the performance of the firm in the Indian context. The data pertains to all manufacturing companies listed and traded on the BSE for the period 1989-2000. A multiple linear regression model has been used to examine validity of the various hypotheses on the basis of equation:

Performance = a+ b size +c insider +d age

The results show that insider ownership in the Indian context has no influence on the performance of the firm in a majority of industries irrespective of the period of the study.

Diganta Mukherjee, Tejamoy Ghosh (2003)[3] prove that the investor community is not interested in investing in companies with high asset base but in those which are able to churn the assets efficiently. Companies performing corporate social responsibility activities have been repaid off with the augmentation in their performance measures. The event study methodology reveals that the investors' community had appreciated the adoption of clause 49 and that's why there were abnormal returns on announcement.

Dr. Mamta Brahmbhatt, Dr. Sarika Srivastava(2014)[4]-This paper studies the compliance of banking sector in India with respect to corporate governance guidelines followed by private and public sector banks. A survey of investors and financial advisors was done. Corporate governance card was prepared on the basis of seventeen parameters including board committee, disclosure and transparency, compliance of corporate governance and auditors certificate and disclosure of stakeholders interests. Score card and Microsoft Excel have been used to analyze and interpret data. Descriptive statistics and comparative score card have been employed for data analysis, findings and analysis. The study shows that the major mandatory

clauses have been met with but non mandatory parameters are not integrated into the corporate system or not disclosed. The score card shows different levels of adherence to the corporate governance norms by banks and therefore they rank on differently average score. Study includes only banks listed on stock exchanges in India and does not include MNC banks and banks not listed on the Indian Stock Exchanges. James Gordon and Poonam Gupta (2003)[5] This paper analyzes the determinants of FII Equity flows into India by taking domestic, regional and global factors in the model. The regression results show that a combination of global, regional and domestic macro-economic factors are important in determining FII flows to India. The principal global factor to be significant is the London interbank offered rate (LIBOR) which is negatively associated with FII flows in the regressions. The domestic variables of significance include the return on domestic stocks, rating downgrades and exchange rate depreciation. Among the regional variables, the paper includes the return on the Morgan Stanley Capital International (MSCI) index and a dummy for currency crisis in major emerging markets and industrial production growth in emerging markets. The results show that the emerging market stocks positively influence the FII flows to India.

M. M. Goel and Khushboo Aggarwal (2014)[6] show that ESG stock portfolio is highly correlated to blue chip and market portfolios in Indian stock market. They show that ESG stock portfolio generated higher return than the blue chip and market portfolio. Using sharpe ratio and Treynor and Jensen ratio, they show that ESG stock portfolio is most aggressive portfolio as it has higher systematic risk than the other two portfolios.

Manoranjan Patnayak, Manoj Pant (2010)[7] - This paper analyses the impact of corporate governance mechanisms like ownership type and concentration group affiliation capital structure and product market competition and productivity. Using the panel data of more than 1833 firms for the period 2000-01 to 2003-04 the study finds that ownership has a positive impact on productivity. It concludes that the higher amount of insider stake in Indian firms enhances firm's efficiency and productivity which is beneficial for the whole economy. The paper also evidences that countries with weak legal enforcement can have better firms performance with moderate concentrated ownership. However it finds out

firms with higher amount of insider stake are more productive only when competition in firm's product market is intense. A negative correlation exists between debt intensity and productivity. The study shows domestic financial institutions do not play a significant role in improving firm productivity. On the other hand corporate shareholding and foreign institutional investors' shareholding results in higher firm productivity.

Reena Aggarwal, Leora Klapper, Peter D Wysocki (2005)[8]. This paper examines the investment allocation choices of US mutual funds in emerging market equities after the market crises of the 1990's. An analysis is made of country and firm level disclosure and institutional policies that influence mutual funds's allocation choices relative to major stock market indices. The paper takes US mutual funds holdings of 2002 as dependent variable. The sample consists of funds which are primarily equity funds with more than 90% of investments in equities. It consists of 74 diversified emerging funds, 25 Asia Japan Funds and 15 Latin American Funds. The Percentage Relative Spread method is used that measures the over and under investment of funds by calculating the difference between the firms' allocated weight and the MSCI Index Weight for each country. The macroeconomic control variables include log GDP per capita, market capitalization as a percentage of GDP, market returns and market turnover. A dummy is used to capture exchange rate float. To investigate the impact of country level investor protection policies, the paper uses three measures of corporate governance: legality, shareholders rights and accounting quality. The regression analyses shows that the shareholder rights and accounting quality are positively and significantly related to foreign investment after controlling for other country level attributes. The interaction of shareholders rights and accounting quality is negative and significant indicating that high quality accounting and disclosure practices matter more in countries with weak shareholder protection. The interaction of legality and accounting quality is positive and significant. In the firm-level analysis, the variables included are firm size, measured by natural log of total assets, the stock return for 12 month period, dividend yield leverage, defined by total debt/ total capital and performance, measured alternatively as return on equity and price to book ratio and Analysts reported by I/B/E/S. It also includes ADR listing as proxy for disclosure quality and firm level accounting quality.

The regression analysis shows that firm size and analysts are the strongest determinants of US funds' investment decisions. In the second equation, the results show that ADR and firm accounting quality also are positive and significant after controlling for other firm level characteristics and country fixed effects.

Marisetty & Vedpuriswar (2003)[9]: This paper shows that share mispricing is an effective measure of corporate governance. The governance is defined as a mechanism which involves effective allocation of resources to maximize social welfare. The hypotheses are built on the premise that market reactions provide the best measure of governance and stock impricing is the core information that reflects corporate governance.

The study finds out that good governance companies are less mispriced compared to bad governance companies. However good governance companies are more mispriced during event announcements compared to bad governance companies. For identifying good and bad governance companies, the paper uses standard and poor's corporate governance rating of Indian companies. The proven database has been used for firm specific information and for the event dates the period of the study is 1996 to 2003. For the period under study 31(13) events for the sale of assets 24 (26) events for preferential allotments 13(11) events for dividend announcements and 14 (11) events for merger announcements for bad (good) governance companies. Daily price data has been used to calculate returns for each event for a period of 90 days before and 30 days after the event covariances of the returns, Methodology has been used to measure the information content of different time periods. The results show that volatility in the private information during the sale of assets period is higher for good governance companies than in the bad governance companies. The paper concludes that while ranking companies on the basis of corporate governance different weights should be given to different variables based on the sensitivity of the variable which is determined by the market reactions.

Sinha(2012)[10]:This study shows that of 279 firms in the sample, category 3 firms, which scored 55 or more in corporate governance, had more stable gross profit margin. Their return on capital employed was also higher and debt equity ratio lower. He also showed that CG score and firms' value are positively related. Category 3 firms also command higher market valuation.

Section IV - Data Analysis

The Foreign Institutional Investors invest in most profitable and less risky portfolios. To verify this, this paper considers variables which are proxies for returns and risk in the analysis, considering both, the companies specific variables and the country specific variables. The data sources are the Reserve Bank of India and National Stock Exchange. The period of the study is January 2005 to May 2013. The variables considered for the analysis are the following:

FII_DEBT- FII investment in India in Debt instruments in Nifty 50 companies.

FII_EQUITY- FII investment in India in Equity instruments Nifty 50 companies.

ESG_INDEX- ESG India Index by National Stock Exchange of India.

INTEREST_RATIO-Ratio of interest in US treasury bills to interest in Indian Government Bonds.

NIFTY_50-Index of top 50 companies by market capitalization at the National Stock exchange.

P_E- P/E ratio of top 50 companies by market capitalization at the National Stock exchange.

P_B- P/B ratio of top 50 companies by market capitalization at the National Stock exchange.

REER- Real Effective exchange Rate of Indian Rupee (Thirty Six Countries Bilateral Weights)

IIP- Index of Industrial Production

YIELD- Dividend Yield of top 50 companies by market capitalization at the National Stock exchange.

SMCAP-Stock Market Capitalization of top 50 companies by market capitalization at the National Stock Exchange.

The unit root test was performed on all the variables (TABLE-1).The FII_DEBT, FII_EQUITY, P_E and YIELD series were found to be stationery. However, unit root existed in all other variables. The first difference series was put to unit root test and the series were found to be stationery except SMCAP for which second difference series was tested and found to be stationery.

The correlation and variance test was performed on all the variables (TABLE- 2 and 3). The variables which were found to be highly correlated with FII-EQUITY are D(ESG_INDEX), D(NIFTY_50), D(REER) and (SMCAP) and the variables which were found to be highly correlated to FII-DEBT are D(ESG-INDEX), D(IIP), D(REER) and D(SMCAP). The variables having high correlation with the dependent variables have been used in the regression analysis. If there existed multicolinearity between the expla-

natory variables, such variables were not included in the regression analysis.

The regression analysis was performed taking the explanatory variables which are the proxies for return and risk for the FII portfolios. The method used is Stepwise Regression. The two equations taking FII_DEBT and FII_EQUITY as dependent variables are as follows.

FII_DEBT(t)=a+bD(ESG-INDEX)(t-1)+cD(INTEREST_RATIO)(t-1)+dD(P_E)(t-1)+eD(REER)(t-1)+fYIELD(t-1)+gD(P_B)(t-1)+hD(SMCAP)(t-1)+iD(NIFTY_50)(t-1).....(1)

FII_EQUITY(t)=a+bD(ESG-INDEX)(t-1)+cD(INTEREST_RATIO)(t-1)+dD(P_E)(t-1)+eD(REER)(t-1)+fYIELD(t-1)+gD(P_B)(t-1)+hD(SMCAP)(t-1)+iD(NIFTY_50)(t-1).....(2)

The regression results (Table 4-5) show that ESG_INDEX, and DP_B are significant factors which have influenced the FII_DEBT inflow during the period under study. With regard to FII_EQUITY flows also ESG_INDEX is a significant factor explaining the variations. P_E and DREER also are significant in explaining the variations. The DINTEREST_RATIO also has taken the expected negative sign though it is not significant explanatory variable.

Section V- Conclusions

The compliance with Environment, Social and Governance standards has contributed to the FII inflows. The stringent compliance with the rules will bring in desired levels of FII inflows. The competitive prices of portfolios, the trade based exchange rate and higher interest rates are also important to attract more FII inflows.

References

- Alka Banerjee, Subir Gokaran, Manoranjan Patnayak, Sunil K. Sinha,(2010) "Corporate Governance and Market Value: Preliminary Evidence from Indian Companies" Corporate Governance and Emerging Scenario, National Stock Exchange, ed. N. Balasubramanian and D. M. Satwalekar, Ch 7, Pages 166-179.
- B. V. Phani, V N Reddy, N Ramachandran, Ashish Bhattacharyya,(2006) "Insider Owner-

ship, Corporate Governance and Corporate Performance" SSRN Journal, Available at http://www/ssrn.com [Accessed 30June2015]

- Diganta Mukherjee, Tejamoy Ghosh, (2003) "An Analysis of Corporate Performance and Governance in India: Study of Some Selected Industries", Indian Statistical Institute, Delhi, Discussion Paper 04-19. Available at http://www/isid.ac.in/pu/dispapers/dp04-19.[Accessed 5 July2015]
- Dr Mamta Brahmbhatt, Dr Sarika Srivastava(2014) "Corporate Governance in Public and Private Banks: An Empirical Investigation."Corporate Governance: Contemporary Issues and Challenges in Indian Economic Environment, Gujarat Technological University, Pages 547-558.
- James Gordon and Poonam Gupta,(2003) "Portfolio Flows into India: Do Domestic Fundamentals Matter" IMF Working Paper, WP/03/20.
- M. M. Goel and Khushboo Aggarwal(2014) "ESG Index is Good for Socially Responsible Investor in India" Asian Journal of Multidisciplinary Studies, Vol 2, Issue 11, Pages 92-96.
- Manoranjan Patnayak, Manoj Pant(2010) "Corporate governance. Competition and Firm Performance: Evidence from India" School of International Studies, JNU, Pages 1-26.
- Reena Aggarwal, Leora Klapper, Peter D Wysocki(2005) "Portfolio Preferences of Foreign Institutional Investors, Journal of Banking and Finance. Available at http://ssrn.com/abstract=424262[Accessed 10 January 2015].
- Vijay B Marisetty and A.V. Vedpuriswar,(2003)"Corporate Governance and Market Reactions" National Stock Exchange. Available at http://www/nse.com/content/research/comppaper91.[Accessed 14 February 2016]
- K. Sinha(2012)," CSR: An Evolving Perspective and S&P ESG India Index" CRISIL India Ltd., Available at http://www/tatapowers.com/sustainability/pdf/ESG-by-Mr-Sunil-Sinha.pdf.[Accessed 12 February 2015]

Table 1

UNIT ROOT TEST OF DEPENDENT AND INDEPENDENT VARIABLES

VARIABLE	AUGMENTED DICKEY FULLER	P VALUE
FII_DEBT	-5.95	0.00
FII EQUITY	-6.6	0.00
D(ESG_INDEX)	-7.58	0.00
D(INTEREST_RATIO)	-15.98	0.00
D(NIFTY_50)	-7.41	0.00
D(P_B)	-4.45	0.00
P_E	-3.12	0.02
D(REER)	-8.13	0.00
YIELD	-2.81	0.05
D(SMCAP)	-10.3	0.00

Table 2

Covariance Analysis: Ordinary
Date: 02/11/16 Time: 18:55
Sample: 1 102
Included observations: 102

Covariance Correlation	DET01	DDSMCAP	DESG_INDEX	DIIP	DINTEREST_RA...	DNIFTY_50	DP_B	DREER	P_E	YIELD
DET01	28065306									
	1.000000									
DDSMCAP	20466906	3.19E+08								
	0.216388	1.000000								
DESG_INDEX	1325459.	15683669	1002704.							
	0.249859	0.877257	1.000000							
DIIP	34677.09	346678.4	21388.47	578.5108						
	0.272146	0.807303	0.888050	1.000000						
DINTEREST_RATIO	1222.327	8985.202	728.2144	20.45341	2.207822					
	0.155282	0.338697	0.489430	0.572305	1.000000					
DNIFTY_50	1037844.	16741187	939576.6	19904.39	591.5276	1278628.				
	0.173251	0.829239	0.829800	0.731848	0.352063	1.000000				
DP_B	-448.0076	-2094.928	-291.1230	-9.349682	-0.623638	188.3268	0.851190			
	-0.091662	-0.127181	-0.315121	-0.421335	-0.454922	0.180521	1.000000			
DREER	7956.421	82287.61	4915.287	94.20290	2.316657	5129.043	-0.428724	35.82597		
	0.250919	0.770018	0.820094	0.654349	0.260484	0.757819	-0.077636	1.000000		
P_E	2697.500	35453.10	1777.426	28.01081	-0.660850	2786.389	1.483631	10.86944	9.732961	
	0.163213	0.636498	0.568961	0.373291	-0.142560	0.789855	0.515454	0.582084	1.000000	
YIELD	-248.9256	-3400.785	-166.7317	-2.842769	0.085005	-263.9011	-0.147793	-1.003842	-0.902421	0.095963
	-0.151682	-0.614885	-0.537503	-0.381536	0.184676	-0.753387	-0.517117	-0.541397	-0.933761	1.000000

Table 3

Covariance Analysis: Ordinary
Date: 02/11/16 Time: 00:02
Sample: 1 102
Included observations: 102

Covariance Correlation	DDSMCAP	DESG_INDE...	DIIP	DINTEREST_...	DNIFTY_50	DP_B	DREER	ETY01	P_E	YIELD
DDSMCAP	3.19E+08									
	1.000000									
DESG_INDEX	15683669	1002704.								
	0.877257	1.000000								
DIIP	346678.4	21388.47	578.5108							
	0.807303	0.888050	1.000000							
DINTEREST_RATIO...	8985.202	728.2144	20.45341	2.207822						
	0.338697	0.489430	0.572305	1.000000						
DNIFTY_50	16741187	939576.6	19904.39	591.5276	1278628.					
	0.829239	0.829800	0.731848	0.352063	1.000000					
DP_B	-2094.928	-291.1230	-9.349682	-0.623638	188.3268	0.851190				
	-0.127181	-0.315121	-0.421335	-0.454922	0.180521	1.000000				
DREER	82287.61	4915.287	94.20290	2.316657	5129.043	-0.428724	35.82597			
	0.770018	0.820094	0.654349	0.260484	0.757819	-0.077636	1.000000			
ETY01	45256687	3091675.	47363.93	1177.270	3052852.	-737.7896	16317.65	84134476		
	0.276351	0.336605	0.214687	0.086379	0.294338	-0.087183	0.297216	1.000000		
P_E	35453.10	1777.426	28.01081	-0.660850	2786.389	1.483631	10.86944	6732.005	9.732961	
	0.636498	0.568961	0.373291	-0.142560	0.789855	0.515454	0.582084	0.235253	1.000000	
YIELD	-3400.785	-166.7317	-2.842769	0.085005	-263.9011	-0.147793	-1.003842	-516.4964	-0.902421	0.095963
	-0.614885	-0.537503	-0.381536	0.184676	-0.753387	-0.517117	-0.541397	-0.181773	-0.933761	1.000000

Table 4

Dependent Variable: DET01
Method: Stepwise Regression
Date: 03/08/16 Time: 18:42
Sample: 1 102
Included observations: 102
Number of always included regressors: 2
Number of search regressors: 6
Selection method: Stepwise forwards
Stopping criterion: p-value forwards/backwards = 0.5/0.5
Note: final equation sample is larger than stepwise sample (rejected regressors contain missing values)

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
DESG_INDEX	1.115419	0.391194	2.851317	0.0053
DP_B	-336.7888	272.2042	-1.237266	0.2189

R-squared	0.060362	Mean dependent var	1535.906
Adjusted R-squared	0.050966	S.D. dependent var	5323.831
S.E. of regression	5186.391	Akaike info criterion	19.96488
Sum squared resid	2.69E+09	Schwarz criterion	20.01635
Log likelihood	-1016.209	Hannan-Quinn criter.	19.98572
Durbin-Watson stat	1.393327		

Selection Summary

No regressors were chosen by the stepwise routine

*Note: p-values and subsequent tests do not account for stepwise selection.

Table 5

Dependent Variable: ETY01
Method: Stepwise Regression
Date: 03/08/16 Time: 18:29
Sample (adjusted): 1 101
Included observations: 101 after adjustments
Number of always included regressors: 2
Number of search regressors: 5
Selection method: Stepwise forwards
Stopping criterion: p-value forwards/backwards = 0.5/0.5

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
DESG_INDEX	5.735735	2.090568	2.743624	0.0073
P_E	-546.8788	441.5647	-1.238502	0.2185
DDSMCAP	-0.163716	0.109992	-1.488438	0.1399
DREER	91.78846	72.72469	1.262136	0.2100
DINTEREST_RATIO	-678.1304	815.2571	-0.831799	0.4076

R-squared	0.099787	Mean dependent var	5179.318
Adjusted R-squared	0.062278	S.D. dependent var	9247.803
S.E. of regression	8955.205	Akaike info criterion	21.08610
Sum squared resid	7.70E+09	Schwarz criterion	21.21556
Log likelihood	-1059.848	Hannan-Quinn criter.	21.13850
Durbin-Watson stat	1.381270		

Selection Summary

Added DDSMCAP
Added DREER
Added DINTEREST_RATIO

*Note: p-values and subsequent tests do not account for stepwise selection.