Free Cash Flow as a Determinant of Performance and Stock Price Movement in Multinational Energy Companies

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Abstract. We used the Free Cash Flow (FCF) formula to test and determine the performance of these firms, along with testing the correlation with price movement. Previous Studies showed that Free Cash flow has positive correlation with taking investment opportunities, while negative Free Cash flow represent distressed period for the firm. Questions addressed in the article is (1) whether FCF can determine the energy firm's performance and stock price movement, (2) whether high FCF triggers investing in high return investments, and (3) whether low or negative FCF leads to financially distressed period. The results are consistent with high Free Cash flow will result in greater investment opportunity while low or negative Free Cash flow will result in distressed period for the firm. In addition, the results showed positive relation between Free Cash flow and share price movement.

Keywords: Free Cash Flows, Stock Price, Energy Sector

1 Introduction

In the current market situation, lots of multinational companies, global banks, SMEs, local companies and banks, are following different strategies to improve their performance and market share, obtain market dominance, or just do what it takes to survive. In addition, there is an aggressive competition coming from the large multinational firms, medium sized firms, and local firms within a country to take their fair share within the market, along with entrance of new competitors. This left the firms with consistent focus on growth and taking many opportunities to keep up their share, along with keeping up their margins with different strategies. Some are focusing on improving or modifying their quality of service and products, others by expanding their exposure to other countries, and others by lowering the cost of their products and services to maintain their customer base.

Analysts, bankers, and investors have expressed the need for financial statements which would help them to assess the financial performance of companies. The income statement, which reflects the economic performance of a company, may not be enough to provide complete insight or an indication of its financial activity to consider and to take decisions. It is generally recognized that having adequate liquidity is crucial to any company to survive. The statement of cash flow is an indicative of the ability of a firm to generate cash and cash equivalents. This is highly used by the shareholders, creditors, potential investors and others to better assess the amounts, dates and the likelihood of future Cash flows in the form of payments of dividends or interest and the proceeds from the sale, redemption or the maturity of securities or loans; and generally they use it to judge the firm's ability to meet its financial obligations on time.

1.1 Free Cash Flow

To address the idea of Free Cash Flow (FCF), a highlight should be addressed that Cash flow is not EBITDA (earnings before interest, taxes, depreciation and amortization). EBITDA is normally used as an alternative for Cash flow in finance transactions; however, it is not the exact substitute as it includes non-cash expenses and omits cash needed for investments in working capital and long term investments. Therefore, EBITDA will not give the full picture of the financial operations which details are only available to the persons within the organization making it difficult for an outsider to about the firm's Cash flow or either other firm's Cash flow.

This statement provides additional information not given in the income statement or the balance sheet. However, the GAAP rules give the firm huge leeway in classifying the operating, investing and financing sections. This enables the firm for example to exclude the financing of new machine in this statement while just disclosing it in footnote. Another example is to reclassify the activity from one block to another, from investing to financing or to operating. Therefore, Cash flow is only reconciling the change of cash shown in the comprehensive balance sheet.

Lots of arguments were raised regarding using the FCF as an essential tool to determine the health of the firm, especially when there is some big fluctuation in the level of available cash from one period to another. This is normally determined by the potential investment opportunities in the market, the current market condition, the level of experience within management, and the shareholders level of control on a firm's decision.

1.2 Overview of Energy Industry

The energy industry involves in the production and sale of energy, includes manufacturing, automation, distribution, refining, and fuel extraction. Energy industry is considered an essential part for the growth of all the industries around the world. It comprises of petroleum industry, gas industry, electrical power industry, coal industry, nuclear power industry, renewable energy industry, and traditional energy industry. Energy Industry has been key part in transportation, information technology, agriculture, and housing, which makes it crucial for the development of the society by helping to control and maintain the surrounding demand.

The energy industry is growing with unparalleled speed. New opportunities are rising, along with increased infrastructure to climate and environmental change and increased regulations. This puts the energy firms in a position to handle the big wave of demands from governments and private institutions tackled by continuous challenges. In addition, energy firms are competing with each other taking into the consideration the rising commodity prices and fierce competition. This can be very difficult when it comes to accepting projects in remote location where the operation can be challenging. On the other hands, they are witnessing margin pressure and competition at the corporate level.

Due to that, management or analyst finds it complex to analyze the performance of the firm by viewing the traditional financial statements - balance sheet and profit and loss statements - as there is lot of estimates and accruals involved in it and relying heavily on accounting principles such as revenue recognition or cost to completion.

The firms selected for the research are top key players in energy sector based on their balance sheet size, operations and profitability. These firms are Alstom, General Electric, Siemens, ABB and Schneider who represent the G5 group in the power industry.

Alstom is a large French conglomerate headquartered in Paris. It provides products and services in the power generation and transmission markets through its thermal power, renewable power and grid sectors. Alstom plans, supplies, and provides a comprehensive range of products and systems that are technologically advanced for its customers, and holds an exclusive

experience in integrating systems and after sale, maintenance and services. The firm operates in over 100 countries and has approximately 96,000 employees.

General Electric (GE) is an American conglomerate headquartered in New York. It operates in the energy, technology infrastructure, consumer, industrial segments and capital finance. GE produces and provides services linked to Aircraft engines, water processing, media content, consumer and business financing, industrial products, medical imaging, and security technology. GE was ranked # 26 in term of revenue and ranked #14 most profitable firm in United States, and was considered the 4th largest firm in the world back in 2012. It operates in over 100 countries and has 307,000 employees worldwide. GE has 8 segments; Power & Water, HealthCare, Energy management, Oil & Gas, Aviation, Appliances & Lighting, Transportation and GE capital.

Siemens is a large German conglomerate headquartered in Berlin and Munich. It operates in 190 countries and has 343,000 employees worldwide. It mainly operates in energy, healthcare, industry, infrastructure & cities. It includes 9 segments linked to Automation, Building Technologies, Drive Technology, Healthcare, Mobility, Energy, Financial Solutions and Consumer Products & Services. In Automation, Siemens is considered the world's leader for engineering and manufacturing automation technology products for all industrial sectors. This includes Operator controls, identification systems, industrial controls, sensor system, power supplies, process control systems, logistics systems, and instrumentation, controls &electrical for power generation.

ABB is one of the largest conglomerate corporations headquartered in Zurich, Switzerland. They are the largest builder of electricity grid and involved in power and automation areas. It is ranked 158th in the Forbes Ranking. ABB operates in around 100 countries and has 140,000 employees worldwide. ABB has 8 segments which power generation, power transmission, power distribution, mining and mineral processing industry, railways and transportation, oil, gas and petrochemicals, wind power and channel partners.ABB is considered a leading provider in power generation for conventional and renewable power generation plants due to its comprehensive range of portfolio such as high current system and circuit breakers, instrument transformers and hybrid technologies.

Schneider Electric is a European corporation headquartered in Rueil-Malmaison, France. They are involved in automation management and electricity distribution and also produce installation components for energy management. Schneider operates in around 130 countries and has approximately 130,000 employees around the world.Schneider business segments includes electrical energy, water, marine, oil and gas, mining, mineral and metal, hotels, hospitality and energy efficiency. Schneider business products and applications focuses mainly on Automation and Control, Security, Building Management, Critical Power, Electrical Distribution, Cooling Services, Installation Systems and Control, Energy Automation & Distribution, Smart Grid and Solar. These products ranges up to 300 products designed to the needs of the customer.

2. Literature Review

An article prepared by Gregory & Wang (2009) about the relation between FCF, Shareholder Monitoring, and Shareholder Returns. The study was conducted to determine whether the high FCF available will result in low firm value and negative returns when merger takes place especially at period between announcement period and subsequent period. The argument about the low value was done previously on US firm. The paper is done to verify whether this statement is valid in UK firms as well or not. Therefore, the analysis was done on 152 UK firms listed in London Stock Exchange using the Financial Statement as a base and taking the period of bid along with subsequent periods. The paper concludes that there is less support to the hypotheses conducted in the previous researches and that high FCF will lead to better value in the market. The FCF formula indicated that firms with large FCF and un-utilized borrowings are less likely to take low return projects or value destroying mergers. Also, shareholders will gain more control and power and mitigate any agency problem although; UK is known to be a low protection environment. In addition, the FCF hypothesis results provided that acquirers with low FCF, and not high FCF, are more involved with shareholders damage on wealth.

A paper was done on the relation between FCF and Over-investment and effect of independent director (Shouming Chen & Zhiguo Liao). The researchers wanted to validate the previous studies which demonstrated that positive relation between FCF and over-investment are actually leading to management decision on investing on projects with NPV less than zero which will damage shareholders and company's development. In addition, they wanted to identify the

effect of the characteristics on the independent directors on this relation. The sample used for this study represents all companies listed in Shanghai exchange which continued to publish their financial reports from 2007 to 2009. The paper confirmed that there is a positive correlation between FCF and over investment in China firms. Also, it was concluded that independent directors play an important role in limiting the level of over-investment which varies based on the characteristics of the independent directors. The level of over investment is not significant in relation to directors' salary payment. Finally, it was noticed that when education levels and directors attendance to board meeting is high, then the investment level is weaker of the free cash flow.

A paper was published on the moderating effect of ownership and its effect on FCF and asset utilization, Iskandar, Bukit, and Sanusi, (2012). The paper was done to address the issue that the presence of FCF will lead to inefficient assets utilization as it will allow manager to invest the available resources on activities that will reduce shareholder's interest. Also, the research aims to understand whether the FCF and asset utilization relationships are moderated by types of ownership such as government, managerial and foreign ownership leading to different behaviors. A model was developed to calculate the relationship and the moderate effect of ownership. The study was conducted on companies listed in Malaysian Bourse. The results showed and confirmed that there is a negative relationship between FCF and asset utilization. The finding indicated that FCF may be invested unproductively which will lead to negative use of the assets. Also, the results found that high managerial ownership in high free cash flow firms will lead to more effective monitoring of over asset utilization.

Moreover, an article was published by Howell. R (2002) on using FCF as a market valuation tool. The study was done to determine if company's health can be solely be considered by just viewing the net profit of the period and whether FCF gives another option.The researcher analyzed the profit and FCF for Xerox Corporation for three consecutive years. The article showed that Xerox, although had 3 profitable periods, had negative FCF for the same period which almost led to bankruptcy on the third year which resulted in CEO being ousted. The article concluded that FCF analysis is of very high importance as it directly relates to the market valuations to determine firm's market values and determine the sustainability of the firm. Also,

the research concluded that FCF can be used as a guide to management and investors to find out new insights into their business and create real value for their shareholders.

Moreover, a research was conducted to determine whether stock prices represent information about future earning based on accrual and Cash flow components in the current earnings, Sloan (1996). The reason of the study is to validate whether accruals and Cashflow can be used to predict future earnings. The analysis is conducted using all firms with data available in the annual industrial database and research files and the CRSP monthly stock returns file. The paper concluded that companies with high accruals had negative abnormal returns as if investors failed to reflect on the information given on the accruals and Cash flow earning. Therefore, Cash flow and accruals cannot be used to predict the future earnings of the firm.

Moreover, Lang.L, Stulz.R & Walkling.R (1991), conducted a case study to test the free cash flow and impact on investment decision by analyzing a sample of large investments done by firms, mainly investments to acquire control on other firms. Data were collected from Rochester Merc data base on tendering offers covering periods between 1968 and 1980, and Austin Tender base from periods of 1980 to 1986 with meeting the following criteria; the bidding and target firms are both included in the CRSP daily returns tape, the bidder already have acquires some shares, and the tendering offer occurred after 1968. The paper concluded that the corporate managers and decision makers with substantial FCF are more likely to invest in projects even if they will yield negative net present value, regardless if paying out cash to shareholders is better for the firm.

A paper prepared by Brush.T, Bromiley P. and Hendrickx (2000) to investigate the sales growth with FCF is less profitable than firms with no FCF. In addition, it also tested whether strong governance improves the performance with FCF and limits investing in unprofitable sales growth. The sample covers the years of 1988 to 1995 using Compustat taking into account 1,570 firms to observe and using data on firm profitability, industry sales, industry profitability, cash flow, market returns, and corporate ownership to finding the results. The paper concluded that firms with Free Cash flow gets less growth in sales than firms without free cash flow. Also, different governance control affects sales growth in different ways. The paper highlighted that high management ownership mitigated the effect of FCF on performance, despite having or allowing higher sales growth.

Another paper prepared by Al-Zararee.A& Al Azzawi.A (Sep 2014) to investigate the relationship of FCF to market value of firms in the pharmaceutical sector in Jordan by using a valuation technique, taking into consideration the Free Cash flow to Equity, net income, CAPEX, debt and working capital. The study used panel data for period from 2004 to 2010. The company used for the analysis was Al Hikma pharmaceutical manufacturing firm for the specified period. The paper concluded that the Free Cash flow to Equity can be used to assess the firm's market value with matches with the hypothesis used in the paper. In addition, the concepts of projected growth, Required Rate of Return on equity, equity valuation, and anticipated growth used to determine the long-term value of the firm used in the study.

A paper prepared by Richardson (2006) to examine the relationship of over-investment of free cash flow. The study tested the financial statements from Compustat annual database covering the period from 1988 to 2002 with 58,053 firm observations. Also, the study used accounting based framework to measure the relationship of free cash flow and over-investment. The paper concluded that over-investment is evidenced in firms having high level of free cash flow. Also, the paper highlighted that over-investment is a common problem for publicly traded firms in the US. Furthermore, the paper suggested that certain governance structures, which include activist shareholders, normally mitigate over-investment of free cash flow.

3. Research Hypotheses

Based on above researches, the following hypotheses will be tested in this research:

H1: Test whether highly positive FCF is likely to lead managers to low-benefit investment decisions or bad acquisition (agency problem).

H2: Test whether negative FCF will lead to financially distressed periods.

H3: Test Whether FCF can give an indication of the stock price movement. The hypothesis will be testing whether the high, low, and negative Cashflow is a real reflection of the share price.

4. Data Sources and Research Methodology

Since the target of this research is to determine the impact of FCF in energy sector, the selection will be multinational energy firms which have the most existence globally and show sound financial performance and high number of employees in the sector. The companies

selected will be limited to Alstom, General Electric, Siemens, ABB and Schneider. Also, data will be gathered from the latest published financial statement for these three companies (2011-2014) along with available press releases and news related to the new directions of these companies to support the findings in this research.

There are many ways to calculate the FCF, and many of these calculations referred to as the FCF calculation which adds to the confusion. Therefore, the formula to be used is the net Cashflow from operating activities minus CAPEX which represent the addition of intangible assets, PPE, investment assets plus any proceeds from sale of intangible assets, PPE, and sale of investment assets.

FCF = Net Operating Cash flow - New Invested Capital (CAPEX)

The reason for using this formula is due to the simplicity of getting the inputs from one statement which is the statement of Cash flow. Also, for consistency, this formula will be applied on all the firms' financial results. Moreover, the share price will be collected directly from the company's website if available or from Google Finance portal or Bloomberg. The share price to be collected is the price at results publication date. Alstom share price will be at 31st march, General Electric, ABB and Schneider will be at 31st December, and Siemens will be at 30th of September.

5. Financial Information

The financial information for the five firms are gathered from the published annual reports for the periods of 2011, 2012, 2013 and 2014. Due to the different financial presentation, the extraction of the information is done to fit the purpose of getting the FCF. In addition, the share price extracted for the period that matches the time of declaration of the results as shown in table 5.1:-

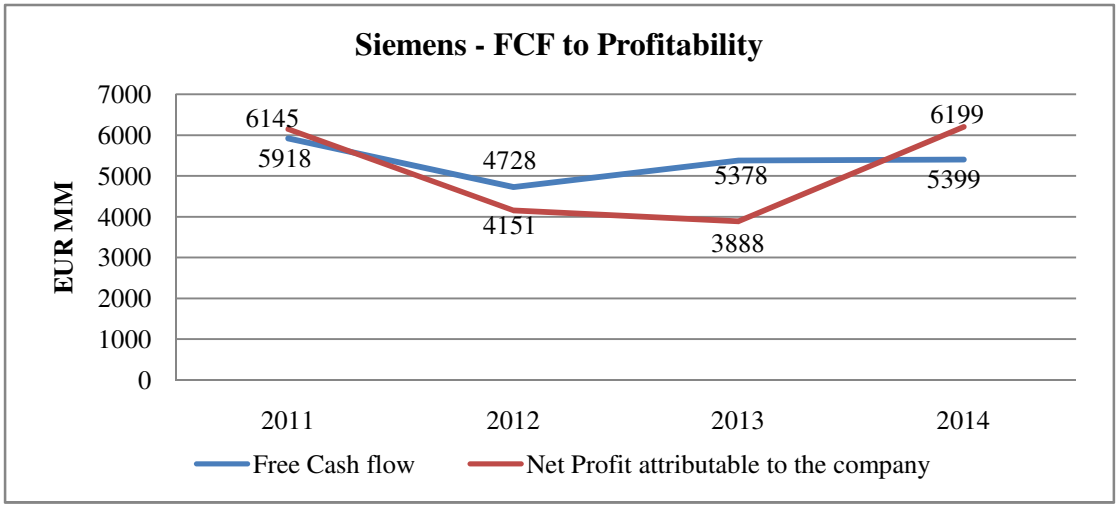
Publication Date of the Financial Results				
Company	2011	2012	2013	2014
Alstom	4-May-12	7-May-13	7-May-14	6-May-15
GE	20-Jan-12	18-Jan-13	17-Jan-14	23-Jan-15
Siemens	10-Nov-11	8-Nov-12	7-Nov-13	6-Nov-14
ABB	16-Feb-12	14-Feb-13	13-Feb-14	5-Feb-15
Schneider	22-Feb-12	21-Feb-13	20-Feb-14	19-Feb-15

Table 5.1: **Share Price on Date of Results Publication.**

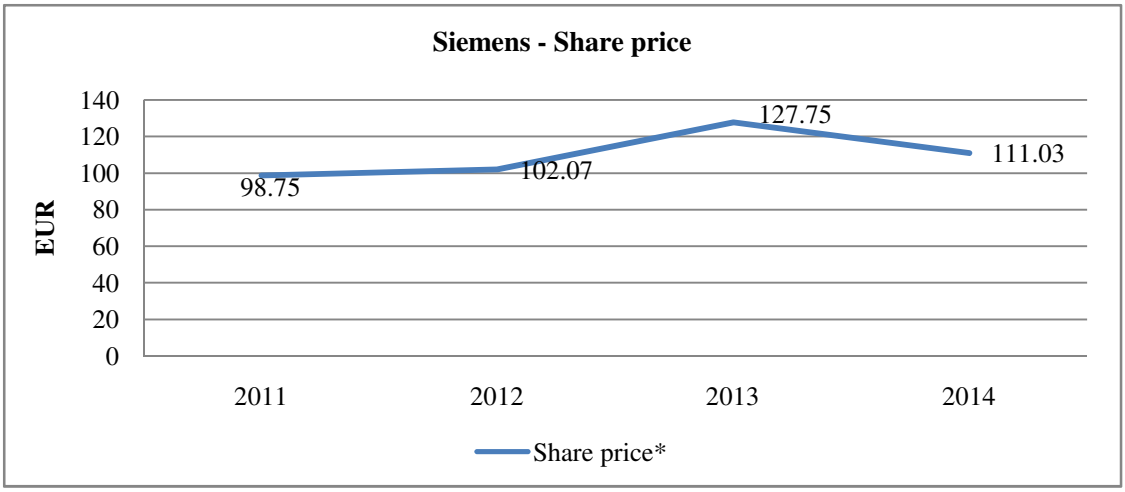
Financial Data				
Siemens (EUR Million)	**2011**	**2012**	**2013**	**2014**
Cash flows from operating activities – continuing operations	8081	6923	7186	7230
Sale or Purchase of PPE and other investment assets	-2163	-2195	-1808	-1831
Free Cash flow	**5918**	**4728**	**5378**	**5399**
Net Profit attributable to the company	6145	4151	3888	6199
Share price*	98.75	102.07	127.75	111.03
General Electric (USD in Millions)	**2011**	**2012**	**2013**	**2014**
Cash flows from operating activities – continuing operations	33359	31331	28579	27710
Sale or Purchase of PPE and other investment assets	-12637	-15119	-13458	-13727
Free Cash flow	**20722**	**16212**	**15121**	**13983**
Net Profit attributable to the company	14151	13641	13057	15233
Share price*	19.15	22.04	26.58	24.48
Alstom (EUR in Million)	**2011**	**2012**	**2013**	**2014**
Cash flows from operating activities – continuing operations	216	1089	639	305
Sale or Purchase of PPE and other investment assets	24	57	34	22
CAPEX (including capitalized R&D costs)	-813	-738	-844	-756
Free Cash flow	-573	408	-171	-429
Net Profit attributable to the company	473	611	285	-954
Share price*	26.28	28.4	28.92	28.27
ABB (USD Million)	**2011**	**2012**	**2013**	**2014**
Cash flows from operating activities – continuing operations	3612	3779	3653	3845
Sale or Purchase of PPE and other investment assets	-1019	-1224	-1021	-988
Free Cash flow	**2593**	**2555**	**2632**	**2857**
Net Profit attributable to the company	3168	2704	2787	2594
Share price*	21.67	22.64	25.15	20.36
Schneider (EUR Million)	**2011**	**2012**	**2013**	**2014**
Cash flows from operating activities – continuing operations	2252	2801	2866	2533
Sale or Purchase of PPE and other investment assets	-746	-719	-706	-829
Free Cash flow	**1506**	**2082**	**2160**	**1704**
Net Profit attributable to the company	1667	1422	1888	1941
Share price*	50.7	56.67	65.39	71.42
* Results publication date				

For Siemens, the FCF dropped slightly in 2012 and increased again in 2013 while remained at almost same level in 2014, however, remained high and positive for the four selected years. Similarly, the net profit showed a similar pattern to the FCF as it dropped in 2012 compared to 2011, while showered some signs of a slight increase in 2013, while Profitability rose due to the productivity improvement program resulted in securing high profits from Industry, Infrastructure and Cities sectors (Graph 1.1). The Share price showed some consistent growth on year to year basis. Similar to GE, Share price is in positive relation with the FCF as long as the FCF remains high and strong witnessed in 3 consecutive growth periods except for 2014 due to drop in oil prices (Graph 1.2).

Graph 1.1: Siemens FCF & Profitability

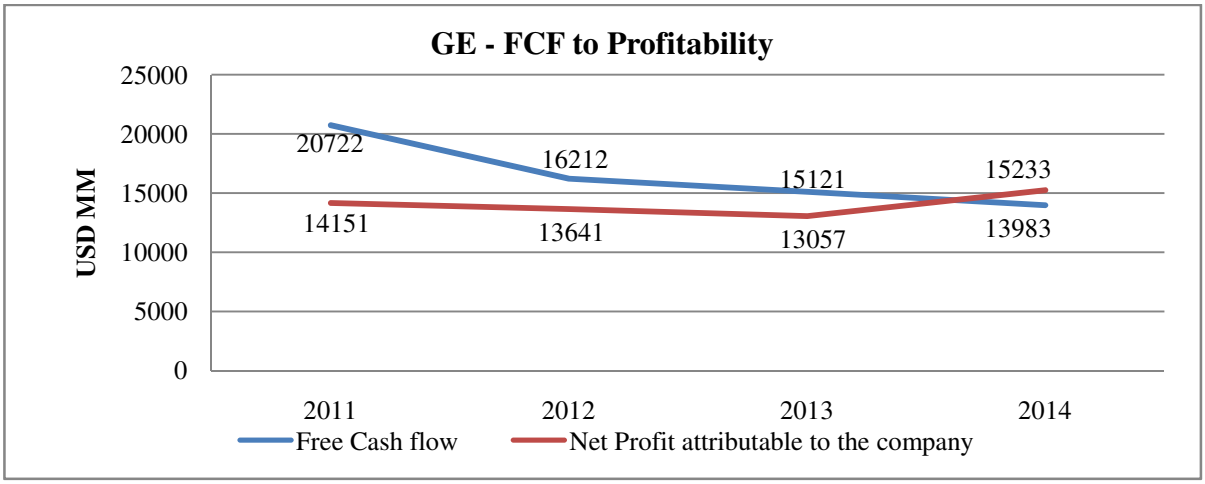


Graph 1.2: Siemens Share price

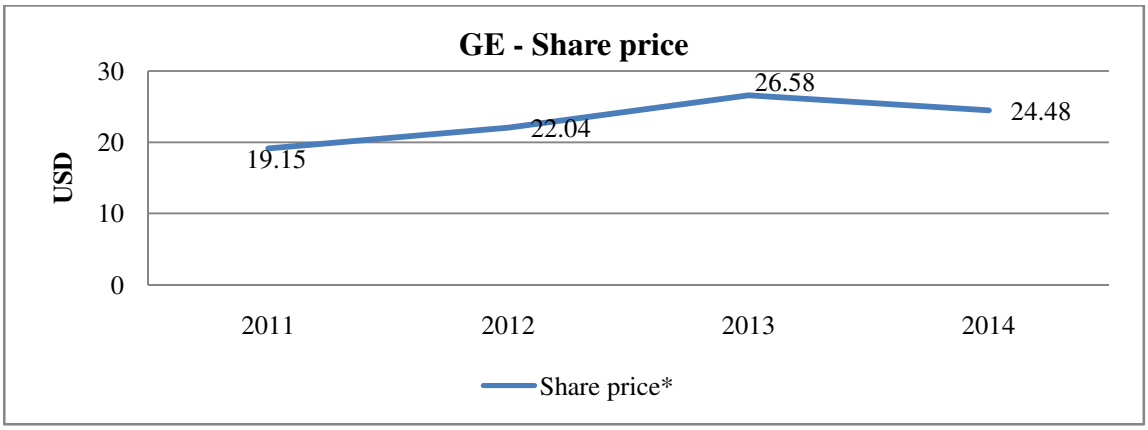


For General Electric, regardless of showing some decline in the available cash in year to year basis, the FCF remained high and positive in the four years span which had similar consistent levels of profitability (Graph 2.1). In addition, the share price showed some consistent growth during the first three years while showed a drop in 2014 due to drop in oil prices (Graph 2.2).The high positive cash plays a favor for the firm as it improves the share price and performance of the firm. In addition, the high level of cash allowed the firm to launch a bid to acquire the power leg of Alstom.

Graph 2.1: GE FCF & Profitability



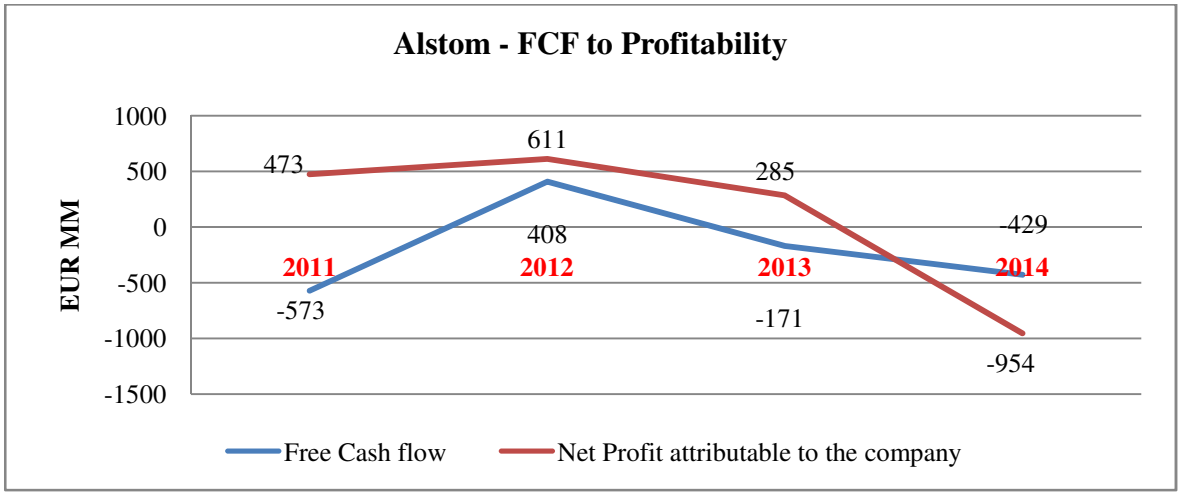
Graph 2.2: GE Share Price



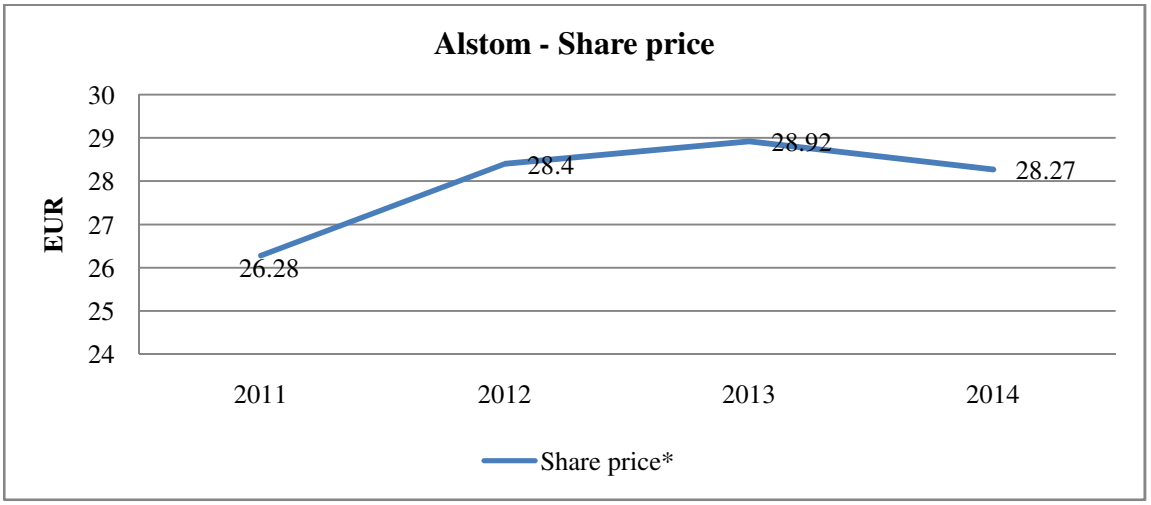
For Alstom, the company showed negative FCF for the period of 2011 and 2012, while turned positive in 2013 (Graph 3.1). The data is supported by efficient working capital management which is witnessed by an improved FCF by almost one billion Euros in 2013, while there was a sharp drop to negative in 2014. The Profitability showed same movement as of the

FCF during the 4 years results as the higher the FCF, the higher is the profitability, while the less or negative is the cash flow, the less is the profitability. On the other hand, the company continued to make profits for selected period with a witnessed growth in every year. Finally, the share price showed some correlation with the FCF. The accelerated negative drop in FCF in 2012 showed a fall in the share price, and the increase and positive FCF in 2013 showed an increase in the share price by some margin. The final year showed a drop in profitability which lowest of the selected years In term of share price (Graph 3.2), it has been witnessed a gradual year to year increase in price for first three years while a drop in last year linked to two scenarios; the drop in price of oil and the bidding deal done by General Electric to acquire the power leg of Alstom which was accepted and going on for approval by the European Commission.

Graph 3.1: Alstom FCF & Profitability

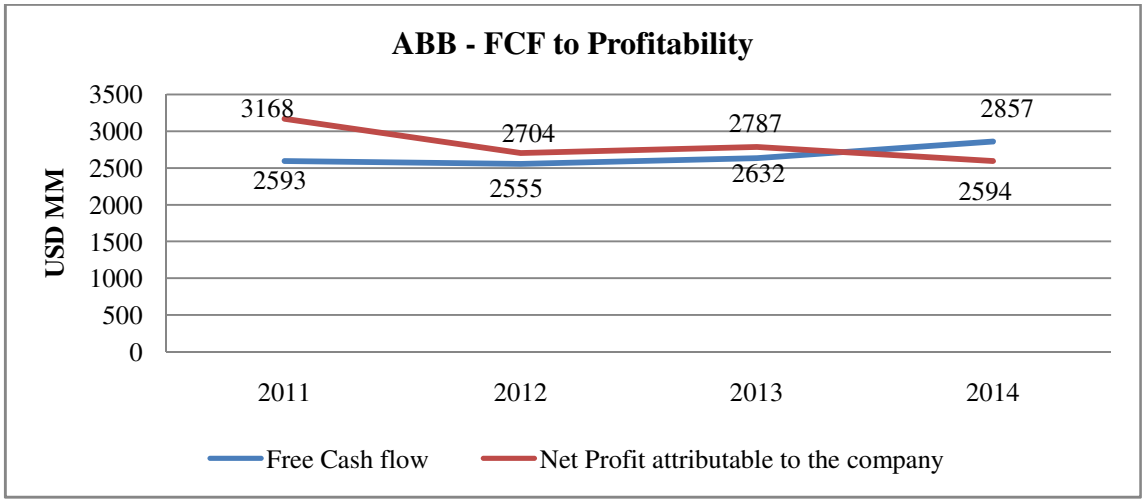


Graph 3.2: Alstom Share price

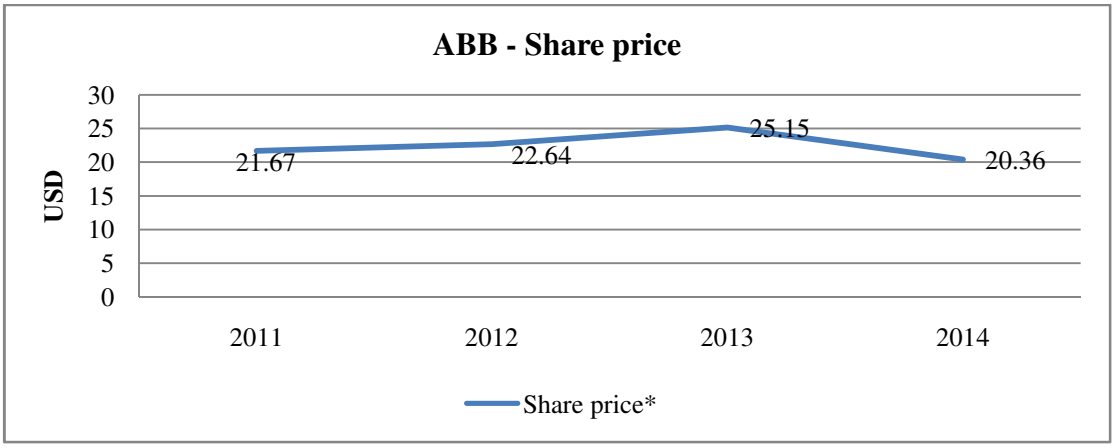


For ABB, FCF and profitability showed almost consistent movement as both remained in the same ranges during the 4 selected years. The FCF showed consistent stability and growth in its FCF while it showed a slight jump in 2014. On the other hand, share price was more consistent with the levels of FCF as it was growing and increasing consistent with the increase in FCF with the exception of 2014 which was linked to drop in oil prices.

Graph 4.1: ABB FCF & Profitability

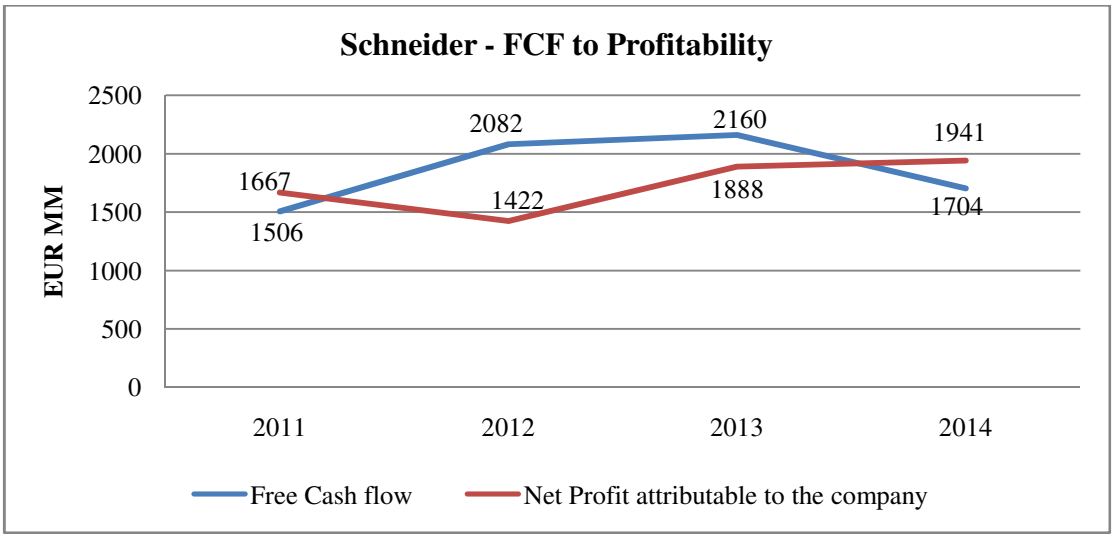


Graph 4.2: ABB Share price

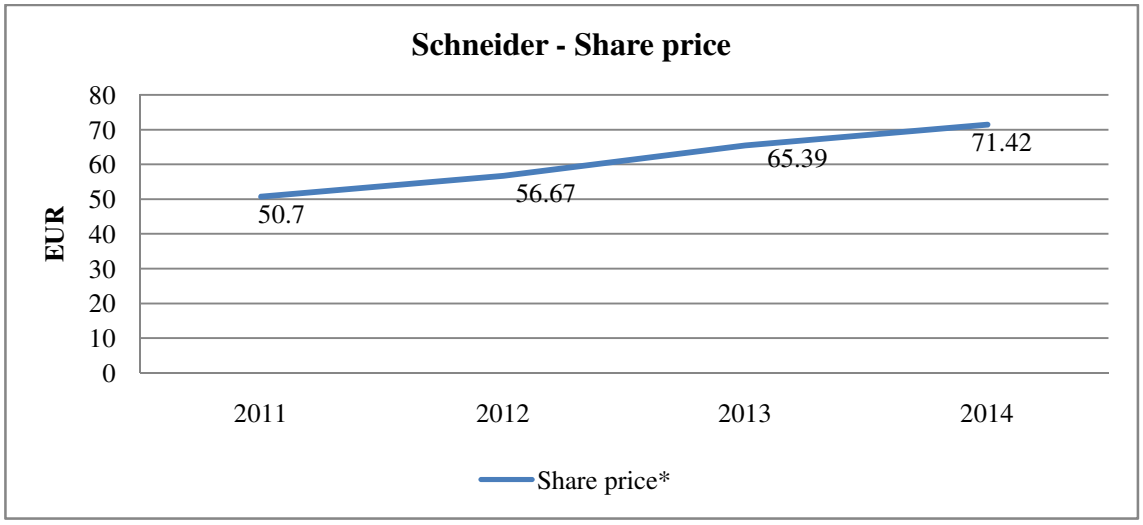


Schneider's FCF and profitability are not directly correlated. The FCF was showing positive growth in first three years and a drop in 2014, while profitability was moving in the opposite direction except for 2013. Share price was moving in positive relation with movement in FCF. The upward movement in FCF has the same impact on share price, while a drop in FCF shows a drop in share price. The only exception was the share price increase in 2014 which was associated also with an increase in profitability due to less raw material cost.

Graph 5.1: Schneider Electric FCF & Profitability



Graph 5.5.2: Schneider Electric Share price



G5 Analysis

For GE, Siemens, ABB and Schneider, the FCF kept showing positive relation to the share price as the share price will continue growing as long as the FCF remains high and strong. Similarly, the FCF showed positive relation with the net profit movement. That role is applied for the three first three years as 2014 was impacted by the drop in oil prices affecting all firms. Alstom was the only firm among the other firms which showed negative FCF. The FCF was aligned with profitability movement they were moving in the same direction, while the share price was not reflected by the negative FCF level. However, these levels kept Alstom under lots

of pressure from takeover bids from Siemens, GE and Mitsubishi due to the financial distressed periods and negative levels of FCF.

In the news dated 21st of June 2014, Alstom accepted GE offer of acquiring the Power and Grid business of the company at $16.9 billion as a joint venture. Therefore, the three years profitability of the firm did not secure it from being acquired by GE as shown by Alstom board of directors' acceptance of the offer. The profitability did not truly reflect the security and strength of the firm to consistency competing and challenging in the market, resulting in accepting the option granted by GE to take-over the energy and Grid part of Alstom. However, the FCF was reflecting the true image of struggling faced by Alstom to compete in the market. The company's 2 years negative Cashflow means the company had financially distressed periods and made lots of arrangement to manage the cost properly. As a result, many bids were received by Alstom in 2014 and GE bid was accepted as it is considered the best option to remain in the business.

Based on the analysis, we found out that positive FCF can determine the level of the share price movement. Any positive increase in the FCF will demonstrate some positive growth in the net profit, while decrease in FCF will demonstrate some decline in the share price. In addition, the positive FCF can determine the levels of profitability growth. This positive increase in FCF will have, to a certain extent, a growth in firm's profitability, while a drop in FCF will show less profitability for that period. Moreover, it we witnessed that negative FCF cannot determine the level of share price movement. Any improvement or deterioration in the negative FCF cannot indicate the share price movement. However, the negative FCF can determine the net profit growth movement as improvement or deterioration of the negative FCF can interpret the profitability growth of the firm. Also it was noticed that negative FCF of one company can easily trigger some bids of takeover by other competitors and bigger firms. The negative FCF is looked as a sign of weakness regardless of the projects entered by the firm as showed in the case of GE bidding to acquire Alstom. This indicated that positive FCF of one company allows the firm to take advantage of opportunities in the market by talking more projects, or even acquiring other companies

6. Conclusion

The FCF can be used as a determinant of the performance of energy firms. The FCF movement can interpret and indicate the direction of the share price and profitability of the firm as long as the FCF is positive and high. On the other hand, negative FCF cannot interpret either the profitability nor share price direction. Moreover, negative FCF can indicate a weakness and financially distressed period, which will triggers bids from other companies for mergers and takeover, while positive FCF will allow the firm to capitalize on opportunities within the market for investing or acquisition.

References

ABB Webpage, http://www.abb.com/

ACCA, (2011), *Economic value added versus profit-based measures of performance*, Relevant to ACCA Qualification Paper P5.

Alstom Webpage, http://www.alstom.com

Al Zararee.A& Al Azzawi.A (Sep 2014), *The Impact of Free Cash Flow on Market Value of Firm*, Global Review of Accounting and Finance Vol. 5. No. 2. September 2014. Pp. 56 – 63

AS plus (2013), *IFRS 7 — Financial Instruments: Disclosures*, available at http://www.iasplus.com/en/standards/ifrs/ifrs7

Brush.T, Bromiley.P&Hendrickx. M (2000), *The free cash flow hypothesis for sales growth and firm performance*, Strategic Management Journal, 21: 455–472

Damodaran, A (2009), *Valuing Financial Service Firms,* www.stern.nyu.edu

European Commission staff consolidated version, (2010), *International Accounting Standard 7 Statement of cash flows,* ec.europa.eu/internal_market/accounting/docs/consolidated/ias7_en.pdf

Feldman. M, (2011), *EBITDA vs cash flows from operations vs free cash flows,*Wallstreet Preps.

Gardiner. J, (1995), Provoking Agents: Gender and Agency in Theory and Practice, University of Illinois press

General Electric Webpage, http://www.ge.com

Gregory A. and Wang Y., (2010), *Cash Acquirers: Free Cash Flow, Shareholder Monitoring, and Shareholder Returns*. Xfi Centre for Finance and Investment, University of Exeter, Discussion Paper No. 10/07. Available at SSRN: http://ssrn.com/abstract=1736585

Howell. R (2002) *Tying Free CashflowsTo Market Valuation, Financial Executive, May 2002*, pp. 17-20. © 2002 by Financial Executives International, 10 Madison Avenue,Morristown, NJ 07962.

Iskandar, Bukit, and Sanusi, (2012), *The moderating effect of ownership structure on the relationship between Free Cashflow and asset utilization*, AAMJAF, Vol. 8, No. 1, 69–89, 2012

IHS CERA & World Economic Forum, (2013), *Energy Vision 2013 Energy transitions: Past and Future*, http://www3.weforum.org/docs/WEF_EN_EnergyVision_Report_2013.pdf

Lang.L, Stulz.R&Walkling.R (1991), *A test of the free cash flow hypothesis*, Journal of Financial Economics 29 (1991) 315-335. North-Holland.

Mcgraw Hill Higher Education,(2009), *Financial Statement Analysis*, 10th edition.

Mojtahedzadeh, Vida and Nahavandi.N, (2011) *FCF Agency Cost, Earnings Management, and Investor Monitoring*. Available at: http://dx.doi.org/10.2139/ssrn.1883103

NettedAutomation GmbH, (2014*), FMTP Power &NettedAutomation,* http://www.nettedautomation.com/news/Press-Release_NetteAutomation-FMTP-Power_2014-09-16.pdf

Oppel.R, DorkinA (2001), *Enron's Collapse: The overview*, November 29, 2001

PR Newswire, (2013), *ABB, Alstom Grid, GE, Siemens and Schneider Electric Big Players in the U.S. Transformer Monitoring Market*, http://acquisitions.ulitzer.com/node/2537338

Press Release, 2010, *Alstom creates a third Sector, Alstom Grid, with the acquisition of the transmission business of Areva*". www.alstom.com (Press release). Alstom. 8 June 2010. http://www.alstom.com/uk/news/Grid-acquisition/

Press Release, 2014, *Alstom Board Chooses GE Offer*, http://www.genewsroom.com/Press-Releases/Alstom-Board-Chooses-GE-Offer-97422

Richardson (2006), *Over-investment of free cash flow*, Published online: 23 June 2006, Springer Science+Business Media, LLC 2006, Rev Acc Stud (2006) 11:159–189

Schneider Webpage, http://www.schneider-electric.com/site/home/index.cfm/ae/

Shouming Chen, Zhiguo Liao (Feb 2012), *Free Cashflow and Over-investment the Moderating Role Characteristics of Independent Director*, Advances in information Sciences and Service Sciences(AISS), Volume4, Number3, February 2012

Siemens Webpage, http://www.siemens.com/entry/cc/en/

Sloan. R (1996), *Do Stock Prices Fully Reflect Information in Accruals and Cash Flows aboutFuture Earnings?*, The Accounting Review, Vol. 71, No. 3, pp. 289-315.

Stahlberg. P, (2006), *P/E and EV/EBITDA Investment Strategies,* Linkoping University, School of Management, International Business Program

Stephan M, (2013*), Growth Strategies of Multinational Corporations: An Empirical Analysis of Corporate Growth in the 1983-1997 period*, Discussion paper 03-02 Stuttgart, December 2003, ISSN 1433-531X.

Wachowicz. J (2001), *Free Cash flow (FCF), Economic Value Added (EVA)m and Net Present Value (NPV), A reconciliation of variations of discounted cash flow valuation,* The Engineering Economist: A Journal Devoted to the Problems of Capital Investment Volume 46, Issue 1, DOI:10.1080/00137910108967561RONALD E. SHRIEVES a & JOHN M. WACHOWICZ JR.b pages 33-52

Walters. S (2012), *Importance of Cash Flow Statement*, Shepard Schwartz & Harris LLP, CPAs & Business Advisors, http://www.ssh-cpa.com.

World Energy Council, (2014), *2014 World Energy Issues Monitor*, London, www.Worldenergy.org