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# Impact of Operating Cash Flows on Capital Spending and Dividends

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# **Impact of Operating Cash Flows on Capital Spending and Dividends**

# Table of Contents

1.0 INTRODUCTION .....	1
1.1 Background of the study .....	1
1.1.1 Overview of the Industry .....	2
1.1.2 Area of Research and Motivation.....	2
1.2 The Problem Statement.....	3
1.3 Objective of the Study .....	4
1.4 Significance of the Study .....	4
1.5 Justification of the Study .....	5
1.6 Scope of the Research.....	5
1.7 Limitations of the Study .....	6
1.8 Basic Assumptions of the Study .....	6
2.0 REVIEW OF RELATED LITERATURE .....	8
2.1 Introduction .....	8
2.1.1 Operating Cash Flow.....	9
2.1.2 Capital Spending.....	10
2.2 Historical Perspective .....	11
2.3 Current Perspective .....	14
2.4 Research Gap Filled by This Research .....	16
2.5 Area for Further Research.....	16
3.0 RESEARCH METHODOLOGY .....	17
3.1 Research Design.....	17
3.1.1 Research Philosophy .....	17
3.1.2 Research Approach .....	17
3.1.3 Research Strategy.....	18

3.1.4 Research Choice .....	18
3.1.5 Research Time Horizon .....	18
3.1.6 Research Technique .....	18
3.1.7 Research Procedure.....	19
3.2 Research Structure.....	19
3.2.1 Statement of the Problem .....	19
3.2.2 Research Question .....	19
3.2.3 Research Objective .....	20
3.2.4 Conceptual Framework .....	20
3.2.5 Research Variable .....	21
3.2.6 Hypothesis .....	21
3.3 Research Tools and Techniques .....	22
3.3.1 Justification for selected tools and techniques .....	22
3.3.2 Population and Target Population .....	22
3.3.3 Sample Size .....	22
3.3.4 Method of Sampling selected and its justification .....	23
4.0 DATA ANALYSIS & INTERPRETATION.....	24
4.1 Descriptive Statistics .....	24
4.2 Test of Hypotheses .....	25
4.2.1 Correlation between Operating cash flow and Capital spending .....	25
4.2.2 Correlation between Operating cash flow and Dividends .....	26
5.0 CONCLUSION AND RECOMMENDATIONS .....	27
REFERENCES.....	<b>Error! Bookmark not defined.</b>
APPENDIX.....	<b>Error! Bookmark not defined.</b>
List of Companies .....	<b>Error! Bookmark not defined.</b>
Data Table .....	30



# 1.0 INTRODUCTION

## 1.1 Background of the study

Over the decades, the studies in the field of finance emphasize on the two major finance decisions. Every finance manager has the responsibility to take the financial decision, which should be in the favor of the company or the firm. Those two decisions are the decisions of investment and decision of financing. Decision of Investment is define as the purchasing of the new non-current assets. Non-current assets are plant, land, and equipment, which help the company or the firm in order to run business operations smoothly. On the other hand, the decision of finance is define as the act of borrowing of funds from different financial institutions or from different companies. After acquiring those funds, these funds will become helpful, when the companies going for the purchase of new capital assets. In addition, there is another important decision, which is also an obligation for the finance manager. In this type of decisions, companies want to make revenues by enhancing or retaining the stock price of the company. This main purpose of this decisions it to preserve and spread the profits of corporate to improve or sustain the value of company's share. Finance managers has the responsibility to make sure that every decision in the corporate, which is taken by him must contribute in the progress of the company in order to attain the goal of growth in the wealth of the shareholders. Consequently, at the time of decision whether the profit rates is retain and distribute, managers of the finance only focusing on the requirement of future investment of the company, but also keeps in mind that at what extent the decisions will affect the share price of the company (Afza, 2014).

### *1.1.1 Overview of the Industry*

Cement Industry is one of the biggest industries in Pakistan. Over the time, it has been grown steadily. At the time of independence, there were only four factories of cement operating and they were producing nearly half million tons of cement. In 1972, the total number of cement factories was 14 and their total output was increase to two and half million tons. Cement Industry was nationalizing in 1972. The general body named ‘State Cement Corporation of Pakistan (SCCP)’ was established and its responsibility is to regulate the production of cement in the country. As the market demand of cement was increased compared to the supply, import of cement was allowed in the fiscal year of 1976 – 77, and it was continued till 1994 – 95. Due to the change in the strategy of government, the nationalized industry was presented for the privatization. As a result of it, SCCP lost their importance and currently they hold only four factories, from which two of them are closed down, because of the low productivity and effectiveness (Introduction of Cement Industry in Pakistan, 2010).

According to the (Global Cement Report, 2014), nowadays the cement industry of Pakistan has considered as the key indicator of a country’s economy. Recently, there are number of mega projects started by the government that helps local producer, who are doing such a great expansions in their production plants. On the other hand, there are several challenges in this industry, which are precise estimation of output surpluses, classifying new markets for exports, and bearing high cost of energy.

### *1.1.2 Area of Research and Motivation*

The area of this research study is Finance. The term finance can defined as to use or acquire money from a person or an organization, which is capable enough to facilitate others. (Brigham & Houston, Fundament of Financial Management, 2004) explains that as we all know that

finance is a vast field and it has divided into three sub areas, which are Financial Management, Financial Intermediaries and Markets, and Investment.

The motivation factor behind this research study is to understand the investment nature of the companies. In the cement sector of Pakistan, different companies behave differently from each other. By conducting this research in the cement sector of Pakistan, researcher will find that whether the companies give preference to the shareholder or they give preference to the capital spending.

## **1.2 The Problem Statement**

In the recent time, the managers of the companies have the propensity to embrace the assets of the firms in the cash form or which is equivalent of the cash with the intention of reinvest it in other physical assets, paid dividends to the stockholders, and to reserve cash inside the business (Almeida, Campello, & Weisbach, 2004).

(Chen & Liao, 2012) suggest that problem regarding the cash flow starts, when companies are interested in holding the cash, which is generate from the business operations, to work for making their manager's life better. Companies provide benefits to the employees in the form of bonuses, and invest the operating cash in the firm or company's internal project. Instead of provide benefits to the shareholders in the form of dividends by investing the operating cash flows of the company. The main problem that is why the researcher is going to conduct this research is to analyze what companies think about the investment of operating cash flow, whether they prefer to invest it in the capital assets or they pay the dividends to the shareholders of the company.



### **1.3 Objective of the Study**

The objectives of this research study are:

- To identify the relationship between operating cash flows and capital spending
- To analyze the relationship between operating cash flows and dividends
- To find the company's preference in the investment of operating cash flows

The objectives of this research study can be interpreted as whether there is any significant effect of operating cash flows on capital spending and dividends. This research study will become helpful for the investors, who invest in the cement sector of Pakistan in order to understand the nature of the companies of this sector. In addition, this research will answer the question that on what basis the companies behave differently from each other.

### **1.4 Significance of the Study**

(Almeida, Campello, & Weisbach, 2004) argue that nowadays there are number of companies do prefer to invest the operating cash flow in the capital assets of the company to make their managers life easier. On the other hand, several companies paid dividends to their shareholders and recognized that their shareholders are important for their company. Moreover, this is important for all the companies of the cement industry to study that whether the companies are concerned with the investment in the capital assets or they are involved in paying the dividends. In addition, these two relationships are influencing the investor's behavior towards investment in the cement industry or not.

## **1.5 Justification of the Study**

The reason why the researcher is going to choose the cement industry of Pakistan to conduct this research is the Pakistan cement industry is still in the developing stage. This industry has the power to drive Pakistan's economy. If the cement industry will grow, the whole economy of the country is also growing. In this industry, some investors have the tendency to get yearly dividends by the company. On the other hand, some of them think that the dividends are not as good as the investment in the capital assets by the company. In addition, if the company assets will grow, the profitability of the company is also increases, which automatically increases the market share of the company (Global Cement Report, 2014). Furthermore, this research study will gather the point of view of the cement companies about the investment of the operating cash flows. Can they identify between the investments in the capital assets of the company or paying the dividends to the shareholders, which alternative of investment is better for the company. In addition, the intention of the investors towards investment affects by these two relationships, which are operating cash flow – capital spending and operating cash flow – dividends relationship.

## **1.6 Scope of the Research**

This research is mainly focusing the area of investment, which is a sub area of finance. This research study is taking place in the construction and material (cement) sector of Pakistan. Mainly the top twenty eight companies of the cement sector, which has listed in the Karachi stock exchange to analyze the relationship of the operating cash flows with the capital spending and dividends. This research will be useful for other companies of this sector, as well as guiding them that whether it is better to invest the operating cash flows of the company in the capital assets of the company or it is good to pay dividends to the shareholders of the company.

## **1.7 Limitations of the Study**

There are few limitations in this study, which affect the interpretations of the results:

- Financial statements of the selected companies are the only source of data.
- The results of the research can improve by using more variables or taking large number of sample size.

## **1.8 Basic Assumptions of the Study**

In this study, the researcher is going to analyze the relation of operating cash flows with the capital spending and dividend. There are two aspects, which comes into the mind. Whether the company has enough amount of cash flow to pay the dividend or there is an alternative for the company to raise the capital structure of the company from operating cash flows. The two basic assumptions of this research study, which are the ability of a company to pay the dividends and the opportunities of investment (Liu & Hu, 2005).

Here the first assumption of this research study is the ability of paying the dividends to the shareholders. The payment of dividends is calculated by the dividend payout ratio. This is true that EPS is not the only cause of cash dividend although it is measured from the EPS. Generally, cash flows are the source of cash dividends. If the amount of cash dividends is not so high, than the shareholders think that company wants to increase the storage of cash. On the other hand, if the amount of cash dividend is high, it means that the company wants to issue new share to fulfill the obligation of paying cash dividend (Liu & Hu, 2005).

Moreover, the second assumption is that the opportunities to invest in the capital structure of the company. Instead of paying the cash dividend to shareholders, companies prefer to invest the cash flows in the capital structure of their companies. Companies will reduce the amount of cash dividend, if they find good investment opportunities. On the other hand, if the

companies find that there are not such investment opportunities, they will increase the amount cash dividends (Liu & Hu, 2005).

## **2.0 REVIEW OF RELATED LITERATURE**

### **2.1 Introduction**

In theory, the level of investment does not concern with the cash flows, which is generate inside the company (Modigliani & Miller, 1958). On the other hand, the earlier researches, who works on similar type of studies proves that there is a significant relationship between the investment in the capital assets and the cash flows (Hubbard, 1998). There are number of researchers (Stulz, 1990) (Richardson, 2006), who took experimental researches on the cash flows and the behavior of the companies while investing and proposed the hypothesis. The results of that study shows that if the company finds the excess of cash inside the company then the managers start to think about themselves irrespective of that what the requirements of the shareholders. Managers start to invest that excessive amount of cash in the capital assets of the company without knowing the fact that investment level is crossed their limits. In addition, sometime managers invest that amount of cash flows in the internal projects of the company, and the net present value of those projects is less than the value of zero, that will hurt the investment motive of the shareholders, which restrict the investors to invest in the company's stock.

The theory of cash flow suggests that mostly the managers are interested in making their life easier or better in a manner to expand the size of the company. They purchase new machine or equipment for the company by investing the cash flow, which is remained in the financial statement of the company at the end of the year (Griffith, 2001).

However, the famous theory related with the dividend payments is “the bird in the hand argument”. This theory suggests that paying dividends to the shareholders reduce the risk level of the firm. This can be occur, because cash inflows forward to the shareholders and it reduces the risk factor, which associates with the cash flows comes in the future. Another theory related

to the dividend policy, which named “the signaling theory”. This theory concerned with the announcement of the payments of dividends. The announcement of increase in the dividends indicates the good performance of the firm and it will raise the confidence of the shareholders on the managers. On the other hand, the announcement of decrease in the dividend shows the poor performance of the firm and it will shattered the confidence of the investors on the managers and firms (Manos, 2001).

There are numerous studied, which have been found on operating cash flows, capital spending and dividends. The researchers have done remarkable work in the area of investment and put their great efforts to justify their work. Most of the researchers have studied all those variables with some other important variables that are financial flexibility, financial performance, etc. However, few of them, using the combination of two variables that is operating cash flow with capital spending and operating cash flows with dividends in one study to find out the relationship between them (Griffith, 2001) (M, Meliala, Widiанти, & Maria, 2013) (Hong, Shuting, & Meng, 2012).

### *2.1.1 Operating Cash Flow*

(Fernandez, 2006) define operating cash flow (OCF), a cash flow, which is come from operating activities, is the measures of the amount of the cash, which a company can earn by the operations of their businesses. Operating cash flow is a good measure of the profits of a company as it provides help to the financial analysts in defining the value of the company’s earning (Operating Cash Flow, 2014).

Now days, most of the companies or firms are used accrual method of accounting, which is the method of recording the business transaction. In this method, companies recorded all the sales

and expenses of the business at the time when they occurred, regardless when the cash is come in and out from the business (Operating Cash Flow, 2014).

Many financial analysts favor operating cash flows information instead of using earning/revenue. Furthermore, it is difficult to deploy operating cash flow information. If a company or firm has declared, the positive operating cash flow information in their financial books then the company will be consider as a good company in the market. On the other hand, negative information of the operating cashflow indicates that there is some problem in the cash flows (Operating Cash Flow, 2014).The formula to calculate the operating cash flow of the business is:

$$\textit{“Operating Cash Flow = EBIT + Non-Cash charges – Incomes Taxes”}$$

Operating cash flow can be calculated as earning of the company or business before paying the interest and taxes, then add non-cash charges, which are depreciation, amortization and marketable securities, and at the end subtracted the incomes taxes (Operating Cash Flow, 2014).

### *2.1.2 Capital Spending*

Capital spending can be defining as the amount of money invested in the fixed assets by a firm or a company to run their operations (Poterba, 1995).

It can also define as the money, which is used to buy, renovate, upgrade, or prolong the life of the long-term assets. Long-term assets involves machine, equipment, land, infrastructure, whose working life are more than one year (Capital Expenditure, 2014).

(Capital Expenditure, 2014) explains that there are two major forms of the capital spending. First is the maintenance expenditure and the second one is expansion expenditure. Maintenance expenditure is the company buys those assets, which lengthen the working life of the long-term assets of the company. Whereas, the expansion expenditure is the company invest their money in order to acquire new assets, which helps in the expansion of the business.

Moreover, one thing is important here to understand that the amount of cash or the money, which a firm can invest in repairing of assets, which helps them to run the business is not considered as the capital spending of the company. However, it should be record as the expense in the income statement of the company, whenever it was incurred (Capital Expenditure, 2014).

In this research study, dependent variable is capital spending, which is actually a net capital spending of a company. The formula by which we can easily calculate the net capital spending of the company is:

$$\text{“Net Capital Spending} = \text{Ending fixed assets} - \text{Beginning fixed assets} + \text{Depreciation} \text{”}$$

(Lane, 2014) explains the formula of the net capital spending that we can take the value of the fixed assets, which has reported in the financial statement of a company at the end of the year, then the beginning value of the assets subtracted from it, then we can add depreciation in it. After doing that, we can easily find out the value of the net capital spending.

## **2.2 Historical Perspective**

In the start of 1990s, the relationship between the financial performance of the business and cash flows comes into the discussion. According to the study of Baskin (Baskin, 1989), it is



prove that the profitability of the business was inversely related to the ratio of debt. In the Baskin's research, he said that if the profitability of the business or company is increases than the level of the debt is decreasing. This will result the attraction of the investors towards the company.

(McLaughlin, Safieddine, & Vasudevan, 1996) they explains that the issuance of common stock by the company will result the decline in the operating cash flows and it will affect the performance of the business for several years.

In the research of (Harford, 1999), he measured the opportunities of investment. He argues that the companies, who have higher amount of cash flows their manager have low efficiency level and company will perform better.

Freund mentions in his study that if the company purchases new assets for the company from cash flows, the return on assets and assets turnover ratio will decline after the purchase of new assets. He has proved in his study that there is a negative relationship between the amount of cash flows and the market response (S. Freund, 2003).

(Chung, Firth, & Kim, 2005), they discovered that the agency costs of the cash flows are the main cause, which motivate the managers to deploy the earnings of the company. In addition, he said that the companies, which have a management who have huge amount of cash flows, they would have destructed the value of the firm or the company by doing manipulations in the earnings of the company.

There are three types of financials decisions in corporations and the dividend policy is one of them. It has been the point of concerned for scholars and consultants. (Lintner, 1956) introduced the adjustment dividend model. In this dividend model, currently the company,

which is paying the dividend to the shareholders based on dividend per share, which has the target payout ratio of dividends, then the rate of dividend will adjust by subtracting the changes in earning per share.

(Miller & Modiglian, 1961) argues that the dividend policy does not have any concerned with the wealth of the shareholders. The price of stock of the company or the cost of capital, neither of them cannot affect by the policy of the dividends. This scheme has set the compact grounds for the policy of the dividends. After sometime, the economists come in this field of study and present the dividend policy in a descriptive manner. They also present different ways of about the payment of dividends. For examples the taxes effect, signaling of dividends, issues of agency cost and the cost of transactions. However, not all the economists, who works on the dividend policy, do not agreed upon the same points after so many decades. In addition, (Fischer, 1976) assigns the name of “dividend puzzle” for the adjustable dividend model.

(Vogt, 1994) presents some proofs in his study that the cash flows and decisions of the managers on the cash flows that how the cash flows will use or where the company will invest it, have some significance impact of on the value of shareholders in the long run.

(Titman, 1993) conclude their research that increase in the growth of sales is due to cash flows and growth in sales increases the performance of the company. Standardize governance is also affect the performance of the company and increase in the growth of the sales in number of ways.

In the research of Larry and others, they explains that if the companies, which have own higher amount of cash flows announces the takeover of different firms or companies, it will decrease the wealth of the shareholders. It has happened due to the price, which is pay for the result and it highlights the interactions, which is available only for those bidders, who are in competition

or probably the undesirable information will disclose by the acquisitions about the management of the bidders or opportunities of investment (Lang, Stulz, & Walking, 1991).

### **2.3 Current Perspective**

In the recent time, the researchers from China (Zhang & Wu, 2003) conduct some researches in the area of investment. Zhang and Wu, the two researchers used the model of cash flows in order to analyze the indexes, which is related to the cash flows and understand that the results are not positive about the feasibility and he saw unjustly high amount of investment. Qing and Gan in their study find the relationship between the performance of the company and the amount of free cash flows. In this research study, they used the correlation analysis technique and proved that the optional expenditure by which the company can generate the profits have positively related with the amount of free cash flows. However, the voluntary expenditures are negatively correlated with the amount of cash, which is generated by the operations of the company (Qing & Gan, 2007).

(Xiaoqiang, 2009), they have studied the sensitivity of cash flows and the investment. After completed the research, they discovered that yes, there is a significant effect of cash flow, which generate inside the company, on the expenditure of investment. For finding the evidence that, cash flows are in a position to dictate the sensitivity of cash flow-investment. They both studied the incentives programs of the management to inspect that whether there is a significant effect of performance of pay on cash flow and investment sensitivity, but they concluded that there is a negative relationship between the performance-pay of managements and cash flow-investment sensitivity.

(Hovakimian, 2009) explains that in the years, when the companies have the lower amount of cash flow so the companies, which are more cash flow sensitive in a nature, invest less amount

of cash flows. On the other hand, the companies, which are less cash flow sensitive in a nature, can invest more amounts of cash flows in the years, when the companies have the higher amount of cash flows. They also summarize their research study that, in the years when the company reported a low cash flow in their financial statements, managers of the company intentionally invested in those investment projects, which required large amount of financing from the other sources. By seeing that there is a funds deficit for doing the investment in the capital assets, the firm or company uses his networking capability and contact with other companies for financing. Companies also demands for the borrowing from other companies or financial institutions to match the required cash flow for the investment project. On the other hand, in the years when the companies report the high amount of cash flow in their financial statements, managers of the companies can invest fewer amounts of cash flows than the amount, which is permit by the financing sources. However, the companies start to gather all those excessive amount of cash, which is permit by the financing sources, in order to fulfill the funds shortage in the near future.

(Liu & Hu, 2005) in his study explains that there are many different theories of dividend policy, which is analyze by the analyzers. The analyzers can also analyzed the causes of dividends policy, and put their utmost effort in order to find out the influence of forcible factors, which are profitability, growing ability, repayment ability, assets size, problem of agencies and preferences of consumers, etc. and the level of impact on firm's dividend policy. There are few more researches on dividend policy, which argue different important assumptions. In the research of (Yang, Wang, & Bai, 2000), the conclusion shows that there is a positive relationship between the balance of the currency and retained earnings of the company. In the research of (Yang, Wang, & Bai, 2000) (Zhang & Wu, 2003), they argues that the pattern of the dividends is based on the size of the company. The companies choose different types of dividend patterns according to their size. There is a tendency that the firms or companies, which

are small in nature, have a habit to choose dividends in terms of stock. On the other hand, the firms or the companies, which are big in nature, have a tendency to announce cash dividends for the shareholders. The firms or the companies, which issued higher amount of stock dividends and lower amount of dividends payments in terms of cash, have the high self-growth, fewer amounts of corporate and holding state shares and the firm is developing.

#### **2.4 Research Gap Filled by This Research**

The research gap filled by the researcher in this research study is what companies think about the spending of operating cash flows in the cement sector of Pakistan. (Global Cement Report, 2014) In the cement sector, where the large amount of capital spending is required. In addition, at what extent the investment decisions of the companies affect the behavior of investors towards investment.

#### **2.5 Area for Further Research**

This research study is only focusing the nature of cement companies whether they are interested in spending the operating cash flows in the capital assets or they preferred to pay the dividends to the shareholders. However, the investor's perspectives about the investment decisions of companies are not discuss in this study. Therefore, the result of this study can improve by knowing the perspective of the investors. In addition, by taking the large sample size and extend the time period will predict better result of this study. One more way, which improves the result of this study, is to take more independent and dependent variables (Sindhu, 2014).

## **3.0 RESEARCH METHODOLOGY**

The basic purpose of this research study is to find the relationship between the variables, which are operating cash flows, capital spending, and dividends. In this research, the researcher is observing the financial statements of different companies in the construction and material (cement) sector of Pakistan. In addition, these companies have already listed in the Karachi stock exchange. It is a quantitative study and random sampling technique is used. The correlational analysis method is used in this research to analyze the strength of the relationship between research variables.

### **3.1 Research Design**

#### *3.1.1 Research Philosophy*

The philosophy of the research, which is used in this research, is positivism. The reason behind to select this type of research philosophy is it deals with the factual knowledge. In this research philosophy, positive information is gathered from observable experiences then it will be analyzed by testing the hypothesis (Saunders, Lewis, & Thornhill, 2009).

#### *3.1.2 Research Approach*

Quantitative-Deductive research approach is used in this research. There are numerous stages in this research approach. According to the (Saunders, Lewis, & Thornhill, 2009), they list down five stages of the deductive research approach. First, is the construction of a theory, second is the formulation of a hypothesis, third is the testing of a hypothesis, fourth is the evaluation of a theory, and in the last, the modification, if necessary, of the theory in the light of the results.

### *3.1.3 Research Strategy*

There are five major categories of the research strategy. One of the categories of the research strategy is correlational, which is use in this research study. In this research strategy, researcher can find the relationship between the two variables without describing the cause of the relationship between independent and dependent variables (Saunders, Lewis, & Thornhill, 2009).

### *3.1.4 Research Choice*

There are three types of research choices, which are mono, multi and mixed method. The research choice of this research study, by which the researcher collects the data, is mono method. In this research choice, the researcher is going to collect data by using only one method whether it is quantitative or qualitative. (Saunders, Lewis, & Thornhill, 2009).

### *3.1.5 Research Time Horizon*

(Saunders, Lewis, & Thornhill, 2009) explain that there are two types of time horizons, which are Longitudinal and Cross sectional. Time horizon of this research study is cross sectional. In this type of time horizon, the researcher will conduct a research in a short span of time or he has a limited period to complete it.

### *3.1.6 Research Technique*

The research technique of this research study is scientific. This research technique is discussed in (Saunders, Lewis, & Thornhill, 2009), it is comprises on eight steps. Steps of this research technique are formulating the question of the research, hypothesis, conceptual definition, operational definition, collection of data, analyzing, testing, and conclusion.

### *3.1.7 Research Procedure*

The research procedure of this research study is as follow:

- Background of the study
- Literature review of the study
- Formulation of the hypothesis
- Gathering the data from financial statements
- Analyzing and interpretation of the data
- Conclusion and recommendations of the study

## **3.2 Research Structure**

### *3.2.1 Statement of the Problem*

The problem statement of this research study is that whether the companies are interested to spend the operating cash flows or they want to pay the dividends to the shareholders from operating cash flows.

### *3.2.2 Research Question*

The research questions of this research study are as follows:

**Research question # 1:** Does operating cash flow have the significant effect on the capital spending?

**Research question # 2:** Does operating cash flow have the significant effect on dividend?

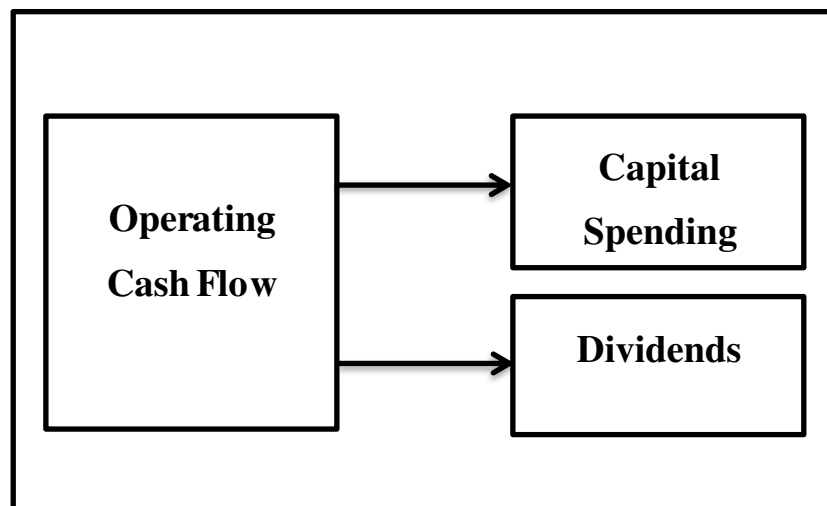


### 3.2.3 Research Objective

The objectives of this research study are:

- To identify the relationship between operating cash flows and capital spending
- To analyze the relationship between operating cash flows and dividends
- To find the company's preference in the investment of operating cash flows

### 3.2.4 Conceptual Framework



### 3.2.5 Research Variable

There are three variables used in this research study. Research variables are as follows:

- Operating Cash Flow
- Capital Spending
- Dividends

Operating cash flows are the amount of cash that is produce by the operations of a business (Fernandez, 2006).

Capital spending can be defining as the amount of money invested in the fixed assets by a firm or a company to run their operations (Poterba, 1995).

Dividend is defined by the (Wyatt, 2013) in his research that the company announced the sum of money for the shareholders is called dividend. Ordinarily, it is consider as the distribution of the profits between the company and shareholders.

### 3.2.6 Hypothesis

H<sub>1</sub>: Operating cash flow is positively related with the capital spending.

In this hypothesis, operating cash flow is an independent variable and capital spending is a dependent variable.

H<sub>2</sub>: Operating cash flow is positively related with the dividends.

In this hypothesis, operating cash flow is an independent variable and dividend is a dependent variable.

### **3.3 Research Tools and Techniques**

#### *3.3.1 Justification for selected tools and techniques*

In this research study, researcher use correlational analysis to find the relationship of operating cash flow with capital spending and the relationship of operating cash flow with dividends. (Saunders, Lewis, & Thornhill, 2009) define the correlational analysis is a technique to assess the strength of the relationships between the variables.

#### *3.3.2 Population and Target Population*

Population and Target population is defined by the (Cooper, 2014), the set of all the elements by which we want to make some conclusions is called Population. On the other hand, Target population is define as the process of selecting some of the elements from the population in order to draw the conclusion about the entire population.

The population of this research study is the construction and material sector (cement) of Pakistan. The target population is all the cement companies of Pakistan, which are listed in the Karachi stock exchange.

#### *3.3.3 Sample Size*

(Saunders, Lewis, & Thornhill, 2009) discuss in their study that sample size is the total number of observations used, which is use by the researcher, to draw the conclusion about the given population.

The sample size of this research study is eighteen (18) cement companies of the construction and materials (cement) sector of Pakistan. This sample size is select according to the sample size table. It has mentioned in the sample size table that if you have the population size of 19

with a confidence level of 95% and the margin of error is 5%, so at this level the sample size is should be of 18. For the purpose of data collection, the researcher is going to analyze the financial statements of the companies, from the year 2010 to 2014 (Advisors, 2006).

#### *3.3.4 Method of Sampling selected and its justification*

According to the (Saunders, Lewis, & Thornhill, 2009), Sampling methods are of two types, which are probability and non-probability. Random sampling technique is use in this research study, which is a part of probability sampling. In this sampling method, researcher can select those elements for the study, which are easily accessible.

## **4.0 DATA ANALYSIS & INTERPRETATION**

For this research study, audited financial statements of companies including balance sheets and cash flow statements analyzed for the purpose of data collection. In addition, the financial statements are available on the different financial securities companies website are examined (Darabi, M.Adeli, & M.Torkamani, 2012).

### **4.1 Descriptive Statistics**

In the descriptive statistics, analysis of the data is conduct by calculating the central indexes (mean, median and mode) and dispersion indexes (standard deviation, skewness, and kurtosis) for all the industries. Subsequently, correlation is use to evaluate the strength of the relationship between two variables (Darabi, M.Adeli, & M.Torkamani, 2012).

In this research study, numerical data of eighteen (18) cement companies for five years (from 2010 to 2014) extracts from financial statements, which is then examine by SPSS in order to test the hypothesis.

## 4.2 Test of Hypotheses

### 4.2.1 Correlation between Operating cash flow and Capital spending

#### Correlations

		Operating Cash Flow Mean	Net Fixed Assets Mean
Operating Cash Flow Mean	Pearson Correlation	1	.946**
	Sig. (2-tailed)		.000
	N	18	18
Net Fixed Assets Mean	Pearson Correlation	.946**	1
	Sig. (2-tailed)	.000	
	N	18	18

\*\* . Correlation is significant at the 0.01 level (2-tailed).

#### Interpretation:

First hypothesis is the correlation between independent variable operating cash flow and dependent variable capital spending. It shows that Pearson correlation between both the variables .946, that is a very strong relation and the significance level is .000, which is acceptable.

#### 4.2.2 Correlation between Operating cash flow and Dividends

##### Correlations

		Operating Cash Flow Mean	Dividends
Operating Cash Flow Mean	Pearson Correlation	1	.907**
	Sig. (2-tailed)		.000
	N	18	18
Dividends	Pearson Correlation	.907**	1
	Sig. (2-tailed)	.000	
	N	18	18

\*\* . Correlation is significant at the 0.01 level (2-tailed).

#### Interpretation:

Second hypothesis is the correlation between independent variable operating cash flow and dependent variable dividends. It indicates that Pearson correlation between both the variables .907, which is a very strong relation. The significance level is .000, which is acceptable.

## 5.0 CONCLUSION AND RECOMMENDATIONS

Nature of the companies are different in terms of financial position from each other. The research study which named “Impact of Operating cash flow on Capital spending and Dividends” discover that how the companies deal with the excessive cash generated through the operational activities. The main purpose of this study is to understand how a company uses their excessive cash flows produce from the operations of the company. Most of the time, a company spend the surplus cash in the capital spending in order to reduce the borrowing. Alternatively, payment of dividends made by the company to the shareholders in order to share the profits (Darabi, M.Adeli, & M.Torkamani, 2012).

This research study contain two hypotheses and both of them are accepted. Based on the results both the hypotheses favor the criteria, which have established for this study. After the testing of hypotheses, it is prove that there is a correlation of operating cash flows with capital spending and dividends in the cement companies of Pakistan. In other words, results confirm that the strength of the relationship between the variables is very strong and positive.

In the end, this research study sum up as the results of both the hypotheses are accepted. The results support one of the theory of dividend policy known as Residual dividend policy theory. This theory proposed that when a company have a cash surplus in the cash flows, first they use it to fulfill the necessary requirement, which include capital spending or other expenditures. Subsequently, the remaining amount left over in the equity issued to the shareholders in the form of the dividends.

Furthermore, this study predicts that the construction and material (cement) sector of Pakistan strongly emphasized on practicing the residual dividend policy theory because most of the



companies of this sector first give priority to the company then they think about their shareholders.

Cash flow statement shows the financial condition of the company. Positive operating cash flows considered as the backbone of the company. Most of the companies still have negative operating cash flows. I can recommend that the companies should focus on maintaining the positive operating cash flows, because it strongly predicts the investment decision of capital spending and dividends.



**Data Table**

<b>Attock Cement</b>					
	2010	2011	2012	2013	2014
Operating Cash Flow	1,362,311	305,498	1,760,520	3,129,055	2,582,949
Net Fixed Assets	11,037	877,852	252,233	3,365,783	1,252,772
Dividend Paid	0	0	0	2,944	275,489

<b>Bestway Cement</b>					
	2010	2011	2012	2013	2014
Operating Cash Flow	(1,127,365)	(4,050)	4,359,112	7,595,994	3,390,405
Net Fixed Assets	1,191,896	877,852	252,233	3,365,783	(1,252,772)
Dividend Paid	0	0	0	880,038	275,489

<b>Cherat Cement</b>					
	2010	2011	2012	2013	2014
Operating Cash Flow	175,092	214,410	1,934,601	1,930,576	1,757,030
Net Fixed Assets	217,857	(56,511)	(225,402)	108,501	(5,066)
Dividend Paid	157	9	70	277,102	233,516

<b>DGK Cement</b>					
	2010	2011	2012	2013	2014
Operating Cash Flow	842,005	340,188	4,011,634	6,519,982	8,724,257
Net Fixed Assets	1,127,170	705,511	676,534	5,317,115	3,476,713
Dividend Paid	25	1	0	657,179	1,314,357

<b>Dandot Cement</b>					
	2010	2011	2012	2013	2014
Operating Cash Flow	(7,037)	(111,034)	27,357	(120,570)	284,337
Net Fixed Assets	(83,607)	(256,013)	(79,764)	(68,807)	6,262
Dividend Paid	0	0	0	0	0

<b>Dadabhoj Cement</b>					
	2010	2011	2012	2013	2014
Operating Cash Flow	(1,310)	(2,688)	6	6	6
Net Fixed Assets	(2,518)	88,553	(13,320)	1,530	(615)
Dividend Paid	0	0	0	0	0

<b>Deewan Cement</b>					
	2010	2011	2012	2013	2014
Operating Cash Flow	(10,874)	5,747	620,956	451,468	439,763
Net Fixed Assets	(350,130)	(424,792)	181,444	(53,523)	1,263,483
Dividend Paid	0	0	2	0	0

<b>Fauji Cement</b>					
	2010	2011	2012	2013	2014
Operating Cash Flow	378,916	736,268	4,305,499	5,994,240	5,853,907
Net Fixed Assets	4,916,794	2,709,422	124,944	(1,277,688)	(1,072,984)
Dividend Paid	16,728	33,441	66,885	175,573	2,865,398

<b>Fecto Cement</b>					
	2010	2011	2012	2013	2014
Operating Cash Flow	86,198	333,774	503,872	727,826	232,769
Net Fixed Assets	622,728	19,983	(30,097)	(89,986)	(80,596)
Dividend Paid	2	33,907	35,563	58,020	80,038

<b>Flying Cement</b>					
	2010	2011	2012	2013	2014
Operating Cash Flow	82,438	553	257,141	266,162	376,336
Net Fixed Assets	101,272	45,088	38,367	93,056	200,836
Dividend Paid	0	0	0	0	0

<b>Gharibwal Cement</b>					
	2010	2011	2012	2013	2014
Operating Cash Flow	(137,747)	(104,609)	319,495	313,759	1,827,204
Net Fixed Assets	2,310,942	(520,636)	(66,724)	140,791	1,507,337
Dividend Paid	0	0	0	0	0

<b>Kohat Cement</b>					
	2010	2011	2012	2013	2014
Operating Cash Flow	128,334	223,826	2,488,940	3,633,928	4,836,154
Net Fixed Assets	286,993	(95,429)	(276,287)	(226,071)	493,283
Dividend Paid	0	0	0	365,299	614,849

<b>Lafarge Cement</b>					
	2010	2011	2012	2013	2014
Operating Cash Flow	723,746	279,669	1,966,349	1,853,535	1,325,681
Net Fixed Assets	(413,243)	(454,011)	(94,153)	208,803	(3,962,073)
Dividend Paid	0	0	0	314,516	474,245

<b>Lucky Cement</b>					
	2010	2011	2012	2013	2014
Operating Cash Flow	5,267,006	4,073,582	9,374,917	12,245,845	13,494,630
Net Fixed Assets	904,360	326,609	699,795	19,861,012	3,008,450
Dividend Paid	1,281,045	1,285,056	1,283,607	1,925,165	2,567,107

<b>Maple Leaf Cement</b>					
	2010	2011	2012	2013	2014
Operating Cash Flow	1,740,158	1,621,937	3,693,090	5,042,545	6,217,668
Net Fixed Assets	646,247	7,183,543	(1,433,863)	(1,151,704)	(924,324)
Dividend Paid	28,881	1	1	179,253	20

<b>Pioneer Cement</b>					
	2010	2011	2012	2013	2014
Operating Cash Flow	(82,389)	895,756	1,189,127	2,801,561	2,267,285
Net Fixed Assets	(335,691)	(328,297)	(493,424)	(269,087)	(285,343)
Dividend Paid	0	5	8	237,380	1,065,169

<b>Power Cement</b>					
	2010	2011	2012	2013	2014
Operating Cash Flow	(353,154)	(515,906)	120,287	59,792	26,756
Net Fixed Assets	39,448	(232,732)	(148,473)	45,563	88,272
Dividend Paid	0	0	0	0	0

<b>Thatta Cement</b>					
	2010	2011	2012	2013	2014
Operating Cash Flow	75,239	(125,496)	70,626	106,861	350,058
Net Fixed Assets	27,132	82,570	288,519	100,834	483,809
Dividend Paid	0	0	0	0	0