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Real Options valuation frameworks and adoption issues

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Abstract

This paper reviews existing literature on real options valuation frameworks and refers to their main characteristics. It begins with basic overview on real options and proceeds to the valuation methods that have been proposed so far. Its main objective is to depict the plurality of the approaches which along with the complexity of the methods leads to increasing sophistication and thus reduces intuition among practitioners. It also highlights some of the criticism found in relevant literature against real options and as conclusion discusses possible remedies to assist real options' adoption.

Keywords: Real options; valuation modes

Overview

Financial options theory led to the initiation of real option theory as similarities were found between the two and theorists built real option models mostly upon financial options models. Myers was the one that introduced the term real options back in 1977 as an opportunity to buy real assets and pointed out the similarities between the financial options and real options (Myers, 1977). He introduced the concept that investment opportunities can be viewed as call options on real assets. Alternative definitions of real options are found in various authors since then, depending on the viewpoint of each author, however the common factor is that a real option models the future decision opportunities as flexibility. Following Myers, real options approach evolved and was further used for the study of investment under uncertainty by various authors. For the next decades the development of this new field resulted into a substantial body of literature which span across many domains in theory and practice. However, only after the influential contributions of Dixit and Pindyck, Tirgeorgis, and Amram and Kulatilaka, who actually established the initial theoretical framework for the application of real option theory and pricing of real options the field was accessible to the financial practitioners and the public (Dixit and Pindyck, 1977; Tirgeorgis, 1996; Amram and Kulatilaka, 1998; Copeland and Antikarov, 2003).

Following this, large corporations included the real options methodological framework to their investment valuation techniques resulting thus to further development of the domain (Leslie and Michaels, 1997; Mathews and Nakamoto, 2004; He, 2007). Theorists were also at the same time promoting the theoretical

superiority of real options theory against DCF methods for investment valuation and considered the approach as the tool to replace legacy DCF methods for capital planning and asset valuation. Real options applications can be found in a variety of sectors and settings. Research publications in real options applications are numerous and span across many diverse domains. To name a few, we can identify publications in the fields of strategic investment decisions, energy, competition and business strategy, real estate, environment, natural resources, production, research and development, advertising, corporate behavior, and mergers and acquisition (Lander and Pinches, 1998).

In the following years the adoption from theorists was quite extended resulting in a variety of approaches, while adoption in the field of practice was not so remarkable. From a more contemporary point of view it seems that the penetration of real options does not follow the theoretical hype. This paper reviews the literature on real options valuation approaches along with some basic overview on real options. Its main objective is to depict the plurality of the approaches which along with the complexity of the methods leads to increasing sophistication and thus reduces intuition among practitioners. It also highlights some of the criticism found in relevant literature against real options and discusses some remedies to assist their adoption.

Real options and financial options

In its roots real options analysis is the application of financial options theory to the evaluation of real assets (Trigeorgis, 2005; Miller and Park, 2002). A financial option is a security whose value changes along with the market value of some underlying assets, while a real option is a kind of derivative on a project or investment contingent upon time, uncertainty, costs and yield. A financial option provides the holder with the right, but not the obligation, to buy or sell a specified quantity of an asset at a fixed price (exercise price), at the expiration date of the option or before. In case the holder does not want to exercise the option, then it expires. The underlying asset can be stocks, indices, currencies, commodities, future contracts or debt instruments. On the other hand, a real option is the right, but not the obligation, to take an action on a project or an asset (expand, defer, contract, abandon etc.) at a predetermined cost (exercise price), for a predetermined period of time. A Real option models and expresses in general the flexibility value that exists for a real asset or investment project.

From the above definitions, a close analogy between the two is inferred, as an investment opportunity for example can be treated as a call option on the present value of expected future cash flows from the investment. The analogy is further depicted as a one to one relationship between their parameters, where the real options parameters are inferred by the more concrete definitions of financial options.

Table 1: Similarities between financial and real options

Financial option	Financial option on stock	Real option on a project	Real option Variable
------------------	---------------------------	--------------------------	----------------------

Variable			
S_0	Current stock price	Gross present value of expected cash flow	V_0
K	Exercise price	Investment cost	I
T	Time to maturity	Time until the opportunity expires	T
σ	Stock price volatility/ Standard deviation of stock returns	Project value uncertainty/ risk of project cash flows	σ
r	Risk-free interest rate	Risk-free interest rate/ Time value of maney	r

Valuation critiques

Valuation of real options is based on the assumption, that real options are in close analogy to financial options, and as such, methods used for financial options are also suitable for real options pricing. However there exist differences between the two which affect the one to one relationship and raise questions on the approach that is appropriate for real options valuation (Mun, 2002).

Table 2: Differences between financial and real options

Characteristic	Financial options	Real options
Maturity	Short, months	Long, years
Underlying asset	Tradable	Non tradable
Competition and markets effect	Do Not affect pricing	Affect value
Managerial effect	Does not affect pricing	Affect value

The valuation is also affected by a series of points of critique that have been raised during the previous years as the domain was evolving in both theory and practice. So, the subject is still open and several approaches exist. One major difference is the way the private risk is handled. For financial options the market risk is the major source of risk and private risk is treated as error. While real options do not have market risk, as they are not traded, and their private risk cannot be hedged. In addition, financial options are considered to be market efficient, as single transactions or managerial decisions do not affect the price. While, real options are unique and managerial decisions can affect the option value considerably. Another difference is that the real option underlying assets are not tradable. So the return that a real option may earn as non-tradable can be below the rate of return expected in the financial market and a dividend-like adjustment is necessary. Risk neutral valuation is usually used in option pricing by using either certainty-equivalent or risk-adjusted growth rate (actual growth rate minus an appropriate risk premium) (Yizhi He, 2007).

In addition, according to Brealey and Myers the covariance between real assets and financial assets has not been investigated in the way that has been done for financial assets and overall market so it is almost impossible to find a portfolio to diversify the risk of a project (Brealey and Myers 2000). Another fact is that many real options include more than one risk factor, unlike the Black and Scholes model, and many uncertainties do not follow Brownian motion with normal distribution or cannot be modeled in a simplified way. In addition, real investments can be considered as a nested American option which is harder to value by classic approach (Cortazar, 2001). Another issue is that the efficient market hypothesis is not valid for many investment projects since many factors are considered, such as socioeconomic, political etc., which are not aligned with the hypothesis that all investors aim to maximize their economic utility. For all the above reasons valuation of real options is still subject to debates (Borison, 2005).

Valuation frameworks

The methods that are used for real options valuation can be grouped in various categories and subcategories according to different criteria. The reason that the methods are of importance is that as Borison analyzes there exist different assumptions for every method which leads to different results and lead to different managerial decision thus. So it is imperative to have an understanding of underlying principles in order to apply the method and get valid results.

Borison classifies real options approaches in terms of assumptions, mechanics and applicability, in the following categories, which are also related to the method employed to price the real option (Borison, 2005):

1. *The classic approach.* It assumes that the capital market is complete and absent of arbitrage opportunities and there exists an identical twin asset or portfolio for every real asset under evaluation that perfectly tracks the underlying asset. This approach is based on the arguments and the assumptions, underlying the Black-Scholes model. In its practical application, it makes explicit use of the no-arbitrage argument and applies the Black-Sholes formula directly. The input data source is assumed to be the capital market.
2. *The subjective approach.* In overall, this approach relies on the classic assumptions and the Black-Sholes model as well, and it assumes, similar to the classic approach, that the capital market is complete. However the input data are subjective estimations. The main argument supporting the approach is that even if Black-Scholes assumptions hold, there exist some difficulties to implement it, such as the ability of the investors to continually adjust their portfolios, tradability and so forth. So even if the Black-Scholes still holds, the numbers are less reliable. So, it relies on subjective judgment for input, as opposed to the classic approach where data come from traded markets. This makes it an inconsistent approach, and limits it to qualitative result (Hubalek and Schachermayer, 1999).
3. *The Market Asset Disclaimer (MAD) approach.* It was introduced as a proposal against the flaws of traditional Black-Scholes methodology and its assumptions, especially the fact that in many cases real

assets and consequently real options are not traded so the no-arbitrage arguments do not provide any satisfactory answer about the value. This approach assumes that the capital market is not complete with respect to corporate investments. It relies on the estimate value of the asset without flexibility as the twin asset for the purpose of calculating the option value of the flexibility. The argument advocating the method is that best-correlated quantity with the real asset is the real asset itself, therefore for the real asset its NPV value is the best-unbiased estimator of the market value if the asset were traded. While DCF approach relies on valuating a twin security with the same beta.

Data is derived from traded markets if they are available and subjective judgment if not. In overall, this method is relied on subjective input data, the only objective input is the market-extracted cost of capital. Proponents of this approach justified this step explicitly: the same, weaker assumptions that are used to justify the applications of DCF can be used to justify the applications of option pricing to flexible corporate investment (Copeland and Antikarov, 2001). Copeland and Antikarov (2001) suggest a special form of stochastic process for asset prices, namely a Geometric Brownian motion (Georgiopoulos, 2004).

4. *The revised classic approach.* This method assumes that the capital market is partially complete and acknowledges the Black-Scholes assumptions' difficulties, especially that there isn't a replicating portfolio, but segregates real options as Amram and Kulatilaka do. The general approach for this method is that there are two types of risks, namely public risks, that can be hedged and private risks unable to be hedged.

For investments that have market equivalents, it applies the classic approach using market data; for investments that do not have market equivalents, it applies decision analysis using subjective judgment. So, options dominated by private risks are considered as strategic options and the real option framework is suitable for market-dominated risks as Black-Scholes approach is applicable. In the case of strategic options, where no replicating portfolio can be established, dynamic programming is more suitable, since it is imperative to make subjective assessments concerning probability distributions.

The method approach is to identify which kind of risks dominates. If private risks dominate, decision analysis with discounted rate the weight-adjusted cost of capital (WACC) is applied, reflecting shareholder's access to investments of comparable risk. If market risks dominate, Black-Scholes approach is applied. The data for the two uncertainties are based on subjective assessment. While Borison (2005) unlike Amram and Kulatilaka (1998) considers that quantity is a non-market triggered risk, thus he suggests a decision tree analysis.

5. *The integrated approach.* The integrated method combines traditional financial options techniques and decision analysis. The main idea is that private and market dominated risks should be incorporated in the real options framework. The integrated approach considers private risk as a factor for decision-making and each investment has different risk profiles. This approach recognizes that firms have a variety of shareholders and managers with aligned beliefs and preferences and the idea is to maximize the utility of managers and owners. This alignment can happen only in complete markets where investment decisions can be made solely on the basis of market information. While in

incomplete markets, individual assessments of risk and individual preferences are important. It also assumes that the capital market is partially complete. However, it uses capital market data for market risk and subjective judgment for private risk in an integrated model.

The above approaches differ in the way they handle private risk (Nga-Na, 2007). In the classic approach the private risk is ignored and real options are treated like financial options that all risks can be diversified away by constructing a hypothetical traded twin asset or portfolio. In the subjective approach private risk is handled by substituting market data by subjective assessment. The revised classic approach admits the limitations of direct application of option pricing theory to real options and classifies investments into those dominated by market and private risk. Then the option pricing model is applied only to investments dominated by market risk, and decision analysis is applied to those dominated by private risk. Although it is better than the previous, it distinguishes investments into two classes and implements two totally different approaches (Nga-Na, 2007).

The MAD approach, does not rely on the existence of a traded replicating portfolio. It admits the difficulty of handling private risk and uses project value without flexibility as the twin security, as if it were traded in the financial market. To some extent the best correlation with the project is the project itself (Copeland and Antikarov, 2005). Trigeorgis (1996) also argues that the assumptions underlying the DCF approach are traded assets of comparable risk (same beta), and MAD assumptions are no stronger than those of DCF. Contrary to Borison's understanding, Copeland and Antikarov (2005) clarified that the MAD approach does not blindly use all subjective assumptions. The integrated approach, similar to MAD, uses traded market data when they are available and subjective assumptions only when market estimates are not possible. The MAD approach and the integrated approach are considered to treat private risk in the same way with technical differences. MAD approach relies on simulations to evaluate project volatility, and attempts to combine all risks into one variable, whenever possible. While, the integrated approach relies on utility functions and models market risks and private risks explicitly and separately (Nga-Na, 2007).

From the above it is obvious that there exist many approaches that determine the way real options can be valued and each one affects the selection of the pricing technique that will be used. The selection of the approach depends on project or investment characteristics on a case-by-case basis. From a historical perspective, we can see that early approaches on real options were based on the classical approach and its assumptions and were actually direct implementations of financial options pricing theory to real options. After this early period, we notice a shift of the leading authors towards different approaches (Zhang, 2010). This phase was followed by critics and discussions on the suitability of classical approach and initiated the effort towards developing new methods for real options valuation (Borison, 2005; Copeland and Antikarov, 2005). Amram and Kulatilaka and Brealey and Myers among others presented discussions on the applicability of the classic approach to price real options (Amram and Kulatilaka, 1998; Brealey and Myers 2000). This led to the MAD approach which is based on subjective assessment and latest

theoretical discussions on real options theory and critics that empirical evidence do not verify assumption that a replicated portfolio of financial assets really exists (Borison, 2005; Copeland, 2005; Trigeorgis, 1996).

From the above, it is obvious that valuation approaches is still a matter of debate and no approach is considered as the dominating method, as the nature of investment projects is very unique (Zhang, 2010).

Amram and Kulatilaka, following a similar approach, propose to classify the methods in two broad categories based on the risk they face, market or private, where market risk can be hedged and private cannot (Amram and Kulatilaka, 1999). So if the risk is considered as market risk, then market data from a market traded replicating portfolio are used and the real option value is the no arbitrage value of investment (Luehrman, 1997). While, if the risk is considered as private, which is not closely correlated to any investment in capital markets, then real option is valued using subjective judgment without any track by traded securities (Trigorgis, 1996; Amram and Kulatilaka, 1999).

In the case where market risk dominates, the analogy between real options and financial options is considered as valid, replicating portfolios can be easily constructed, real options variables are constructed in analogy to financial options and financial option valuation methods, such as Black Scholes and binomial lattices, are employed (Copeland and Antikarov, 2001). Although in this case early works demonstrate that methods developed for financial options can be ported to real options valuation (Cobb and Charnes, 2007), it is argued that there exist many practical differences between them usch as the existence of private risk. In the case where private risk dominates, which is the case for the majority of projects, there is no corresponding market replicating portfolio and new methods are needed, as presented before (Borison, 2005). The real options parameters which map to the corresponding financial ones however needs to be addressed again as the original mapping may be problematic (Luehrman, 1997). While the financial valuation methods which are based on the no arbitrage theory are well justified, their assumptions are not so realistic and not appropriate for project valuation, so they usually run into difficulties (Zhang, 2010).

This is the reason for the development of the alternative MAD approach, which is based on the assumption that the present value of the project without options is the best unbiased estimator of the market value of the project (Copeland and Antikarov, 2001). This approach allows greater flexibility in the application of real options when DCF used to be followed (Dixit and Pindick, 1994). The MAD approach usually employs Monte Carlo simulations which compute many different possible realizations of uncertainty and along each path the options are exercised and their value is computed (Zhang, 2010).

Criticism

Findings from empirical surveys reveal that real options are not so popular among managers and firms in

capital budgeting decisions while relative old methods are still used. Opponents argue against real options at several points, where they identify flaws in the theory and application. Although, it is acceptable that a real options framework can model the investment uncertainty and flexibility it is however not clear how its application can be beneficial. In this section we review the most important theoretical objections towards the application of real options relevant to this study with references to relevant literature.

Underlying principles

As mentioned earlier the real options theory is in close relationship with financial options theory and as such it is based on the same assumptions. This is however, a subject of criticism, as there is doubt that the no-arbitrage pricing approach is valid for real assets too due to the non-tradable nature of real assets (Trigeorgis, 1996; Dixit and Pindyck, 1994). Another assumption that is mentioned is that the stochastic process is considered as continuous in the Black Scholes model while for real assets this may not be the case, as jumps may occur. Another criticism comes from the fact that while a financial option can be exercised in a very short time, almost immediately, a real option may require a long time and preparation in order to be exercised. So the lifetime may be less than the stated life in some cases (He, 2007). Finally, the complex mathematical modeling is considered as too sophisticated and not transparent to non-academics despite the computing advances (He, 2007; Teach, 2003).

Volatility estimation

One of the issues that is often a subject of real options criticism, and is an argument against real options application, is the volatility estimation. It will be pointed later in chapter 9 of this study that the application of the real options model requires the definition of the volatility value. Results also show that the volatility level affects the payoffs and the real option value. As such it is an important parameter and needs to be estimated accurately. Or else it may result to over investments.

By definition, volatility in financial options reflects the underlying financial asset future price uncertainty, while in real options volatility reflects the uncertainty of the project value future cash flows. When we deal with financial options the underlying assets are tradable and option volatility can be estimated by historical market prices of the financial assets or by using the Black-Scholes formula (implied volatility). However, in real options setting, assets are not tradable and there exist no historical data. So, it is not so easy to derive the real option volatility. In general we can group five methods in literature for the estimation of volatility in real options, which include various assumptions and will be highlighted below.

Often a real option refers to an investment project where there exists some underlying asset, such a natural resource, which is tradable. In such case the project's future cash flow is linked to the asset price, so the volatility of the project cash flow is assumed to be identical to the asset's price volatility. Such cases comprise investment projects related to metals such as gold or copper etc. and oil or land on the other hand. All these assets are market traded and the analyst can find historical prices. In addition the project's payoff is related to the price of the asset. So, Cortazar, et al. (2001) use copper price's volatility

for investments of the copper industry, Armstrong, et al. (2004) use oil price historical volatility and Quigg (1993) use land price volatility. While, when the underlying asset of the real option project is not tradable then an alternative is to use the volatility of an asset that is compatible to the one of the project (Insley and Rollins, 2005). Another approach is the case of perfect project's volatility correlation to stock price movement. If such correlation exists then the project's volatility can be inferred by the stock price volatility (Miller and Park, 2002). Except this approach, the industry's index historical volatility has also been used in cases where historical data were not sufficient. Finally, some relative recent approaches use Monte Carlo simulation methods in order to estimate project's volatility. These methods use in general historical data of the project to compute predicted future cash flows (Copeland and Antikarov, 2005; Mun, 2006). Lately approaches which revise the volatility estimation and eliminate upward bias have been proposed.

Open issues and future directions

It has been almost four decades since Myers introduced the real options term and during that period a tremendous development of the finance field has occurred due to the active academic research and application of models like Black and Scholes. Research publications in finance were numerous and their proposals were adopted by the international markets resulting in the exponential development of the field of derivatives. However, real options, despite its promising initiation, the advocacy and research publications that supported and still support its superiority against legacy DCF methods, has not evolved into a widespread tool for investment decisions, and not only. It rather seems that still remains a more or less academic subject, which tries to find its way and position to the market. In the next chapter the empirical evidence provided in details prove that the adoption rate of real options for investment decisions is relative low in comparison to the time being to the market. Although some argue that it is not meant to be a one for all tool, but a niche method with specific target users and cases, it cannot be avoided to think it as a lost promise as nobody can claim in behalf of its non-maturity. Financial options on the other hand have flourished and do not face such issues despite the increasing complexity of their pricing methods and the development of new exotic options, which is not always easily comprehensible. So it is not surprising that there exists a debate for the gap between theory and practice for the application of real options. Some reasons for the low rates of real options adoption are discussed below, along with some proposals for actions from relevant discussions (Georgiopoulos, 2004).

Academia and practice gap

Discussion could be possibly initiated by setting the question, whether real options is just another academic discipline which is useful only to the academic community or it has some real value to add to current investment practice. This question is based on the fact that after reviewing relevant research publications, one can easily identify the increasing mathematical sophistication of financial and real options valuation models which are presented in brief in previous sections, which requires advanced skills to be comprehended. On the other hand, markets and corporations are not fond of super complex models

that require advanced studies in mathematics to be comprehensible. Sophistication is welcome when it can be easy to be implemented, has clear definitions of variables and their links to reality and results can be conceivable to the less expert management teams. As it is obvious from the above sections as the complexity of the mathematics increase the intuition behind the model is fading and the link to real situations is not always possible. Namely, it is hard to provide a non-expert with an intuition of what the variables or the solution to a simulation solution for example are actually depicting and how their changes affect the model. This results to a situation where a real option model is more or less a black box for the practitioner without clear interfaces to reality and the way they interact with it.

Although scientific research requires a continuous building upon previous knowledge, which in turn, advances sophistication and complexity, this cannot be applied to practice. Except large firms with established analysis teams the majority of medium size corporations cannot afford to maintain such teams so they turn to less state of the art methods. So real options area remains a topic for academic publications with little penetration to the market.

Plurality of valuation models

This issue of theoretical complexity is getting worse by the fact that despite the years of academic research and application case studies of real options, there is no standard methodology generally acceptable to follow, at least for the most typical problems. The power of the Black and Scholes model and its widespread usage is due to the fact that it was clear and simple enough to be employed to any case. This explains its popularity for the financial options and despite its complexity it was widely adopted by the market leading to the evolution of the derivatives markets worldwide. Contrary to this, real options seem problematic. The fact that real options by nature are not like financial options and each case is more or less unique cannot be underestimated. However, even for similar cases, one can find different methodologies in literature. A least common factor is necessary between real options theorists so as a base framework with acceptable elements to be established. On the other hand tight connection to the financial options may be misleading as there exist substantial differences between them.

Possible actions

In order to advocate in behalf of the real options application one has to initially clarify the scope of application. Empirical findings suggest that small to medium enterprises do not adopt sophisticated models and use relative simple methods for investment decisions. Another point of importance is the area of application, which may also prevent from real options application. Empirical findings suggest that real options although it was promoted as a successor for the DCF methods, it seems that this is not possible. Assumptions of real options theory lead to limitations only to a part of investment decisions and lead to consider real options rather as a complement than a superseding methodology. So firms can have a portfolio of methods, with real options being one of them for specific cases.

Even so, three decades is more than enough for a new method to become widespread. Low adoption thus

may be attributed to non-appropriate actions from the academic community. In order to gain acceptance thus some targeted actions may be appropriate (Georgiopoulos, 2004; Borison, 2005). To name a few

1. Education. Real options may need to be included not as an exception but as a mainstream method for investment decisions to postgraduate and even undergraduate level in order to influence future management teams.
2. Academia. Work towards the establishment of some common frameworks which would provide certain roadmaps for every practitioner on some typical cases. Quantitative analysis should also provide some qualitative publications in order to assist the diffusion of knowledge.
3. Practitioners. Practitioners are in the middle between the theory and practice and act as persuaders and opinion leaders. They get the theoretical models and reduce them to practical models. This layer must feedback with cases studies and success stories so as to convince firms for the necessity of using real options instead of DCF and educate them in parallel.
4. Societies. It is also imperative that a body of societies and institutions should be formed to advance the diffusion of methodologies to public and attract and fund research and development in the field.

Conclusion

As a conclusion we can say that probably the most important issue for the real options application is the establishment of standard methods in terms of framework with correspondence to reference cases. This will reduce the pluralism and reduce the ad hoc approaches.

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Bank Peculiar, Macroeconomic Causes and Profitability of Banks: An Evidence from Pakistan

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Abstract

Banks play an important and vital role in the development of the economies. Its importance can't be neglected. The aim of this study is to investigate the impact of internal and external causes which affect the profitability. Internal causes include Size (LnTA), Capital (CAP), Liquidity (LQD), debt to equity ratio (DE), Non performing loan to Gross advances (NPL), portfolio composition (PC), Loan to Total Assets (LA) whereas external causes include Gross Domestic Product(GDP), Inflation(INF), and Unemployment (UNMP). Return on Assets and Return on Equity are used as a measure of profitability. Data is collected for twelve (12) variables of twenty one (21) banks including four (4) public and seventeen (17) private banks, for the year of 2006-2011, from the annual reports of banks, index mundi and financial statement analysis of State Bank of Pakistan (SBP). EViews is used for deriving the results of descriptive, correlation and panel Regression analysis .Results show that size has positive significant effect in both models (ROA&ROE).

Key words: Profitability; Internal and External causes; Public and Private Banks of Pakistan.

1. Introduction

Being a bridge between surplus units and deficit units, financial performance of banks has great importance in the development of the economy. Banks influence the depositors, borrowers, regulators, institutional shareholders, corporate owners and potential investors etc. Any bank as an institution is responsible for taking deposits, repay on demand, through cheques or drafts etc and lending money to indigent people for making profit. Banks provide safeguard functions and assist the economies in a variety of ways. They are really life blood of the economy and helpful in the financial growth of the country. At the time of independence, Pakistan didn't inherited healthy financial sector. At that time, financial sector consist of banks, leasing companies, development finance institutions, investment banks, modaraba companies, mutual funds, exchange companies, housing finance, venture capital and insurance companies.

In the beginning, there were three controlling authorities, Corporate Law Authorities, State Bank of Pakistan, and Pakistan Banking Council. They watched over the financial sector. Equity market was regulated by corporate law authorities. Nationalized commercial banks performance was oversee by Pakistan Banking Council. State bank was considered as a central bank. History of Pakistani banks started with the independence of Pakistan. Habib bank was the first bank and established in Bombay in 1941. State bank established on 1st July 1948 by the Pakistan government. It was in the hand of the government of Pakistan and intimate parties. But later on, it became as an independent authority. National Bank (NBP) was established in 1949 and it was first Pakistani bank which was state owned. After the establishment of NBP, numerous financial institutions were developed.

In the period of nationalization, in 1970 there was a boycott on private possessions and all private intuitions were transformed in the hand of the state. These organizations were fulfilling the requirement of public, government and certain large privately own organizations. In 1972 banking sector was nationalized (1972-1990). NCBs occupied the dominant position in the banking sector. They became the main player. Due to the ban on private commercial banks, 92% banking assets were hold by these nationalized banks. During nationalization era private ownership were restricted. The performances of commercial banks were unsatisfactory, due to the interference of government authorities. Private sector was intensely disturbed. Their growth, investment and savings, all were badly affected. Due to these factors, a lot of problem raised. Innovations going to be reduced, less innovative financial products, customers were dissatisfied and there was high tax rate. In such a critical situation there was a need of a very effective, healthy and strong system.

In 1991, banking sector reforms were introduced. Dr. Ishrat Hussain was the former governor of state bank of Pakistan. He told about the financial reforms and their importance. It was a solid need at that time. Due to the state owned system only government institutions were taking benefits from the banks. Political forces were effecting the lending, and there was no merit base system. All the top position and designated people were hired under the influence of the political leaders. They work under their pressure and there was no freedom. Banks were fulfilling the need of the government organization, trade financing and big corporate sectors. Small and Medium Enterprises (SME's) were ignored and there were no

lending to those enterprises. Agriculture sector was badly affected and there was a time when no agriculture products available. Unemployment was increasing day by day. Nonperforming loan percentage was arising day by day and there were no recoveries, because 75% loans are given to the political parties. There were high lending and low deposits. High tax rate is paid by the banks. There were no opportunity for new entrant, and it was not good situation. Therefore financial reforms were mandatory and it was implemented in the different phases.

In 1991 ban was removed, and private banks were allowed to start their operation. It was the first phase of financial reforms, in 1992; ten banks initiated their work properly. Three foreign banks were also established in this era and two more provisional banks started their operations within this era. MCB and Allied banks were denationalized in 1993. Due to the financial reforms, era of liberalization of banking sector started.

SBP became the strong regulatory authority and put a proper check and balance. It advised to banks that they all had to submit their annual reports, quarterly and annually. So that performance could be increase.

In 1997, second phase of financial reforms was started. In this phase banking council was liquidate and overall control was given to the SBP. It was an authority which is responsible for supervising, oversee and judge the performance of every bank. Five hundred million rupees was minimum paid up capital which required for the banks. It was also implemented in the second phase of the financial reforms. Due to implementation of the reforms, banking industry achieved 4 trillion rupees within 5 years. This was the progress of the banking sector. Return on banking sector increased. World Bank conducted study and in the competition regarding banking performance of south Asian countries, the Pakistani banking sector was ranked second in the banking industry. Pakistan banking industry faced a lot of ups and down and now it is in a very good form and it is playing a vital role in the progress of the country.

Now a days, there are seven types of banks in Pakistan namely, Public, Private, Islamic, Foreign, Microfinance, Specialized banks, and Development Financial Institutions. Under these categories, approximately 50 banks are working in Pakistan.

Various causes affect the bank's profitability. Some can measure in a quantitative way and some can't measure quantitatively. Here, only discuss those causes which affect the profitability of banks in a quantitative way. There are two causes which affecting the profitability, one is internal and another is the external. Internal causes are controllable by the management while external causes are not controllable by the management. Internal causes that include in the study are size, capital, liquidity, debt to equity Ratio, nonperforming Loans to Gross advances, portfolio composition, and loan to total assets. On the other hand, external causes include real gross domestic product, inflation rate, and unemployment. Data is taken for the year of 2006 to 2011 of 17 private sector banks and 5 public sector banks.

1.1. Problem statement

Banks are the backbone of the economies, and profitability is an important parameter, without which, organizations can't run. If an organization is earning good profit it will not only survive in the

rainy days but also in intense competition, otherwise it's tough to survive. Investors are also confused and want to know about the banks financial performance because they want to invest or deposit money to get profit. So, by increasing profitability, investment will be increased, employees will be satisfied by getting good salaries, bonuses, allowances and rewards. So profitability is really very important and manager is really worried about for getting maximum profit. With the help of this research, banks can get maximum profit by knowing the causes which affect the profitability of banks. So that investor feel satisfy to invest in banks and earn profit. Their confusion and ambiguities can be removed.

1.2. Objective of study

The purpose of this research is to investigate the following objectives

- i. How much internal factors influence on the profitability of banks
- ii. How much external causes impact on the profitability of the banks.

2. Literature Review

A lot of studies had examined the bank peculiar and macroeconomic causes which affect the profitability of banks. Early studies on banks profitability were provided by Short (1979) and Bourke (1989). Mostly researchers used ROA and ROE as a profitability measures. They determined the relationship between dependent and independent variables. They used different approaches to determine the effect of these factors on banks profitability.

Abreu and Mendes (2002) studied the profitability and net interest margin of banks for some European countries. They concluded that banks with more capital face less expected cost of bankruptcy and there, in return more profitability. However there was negative regression and interest rate and unemployment were according to the explanation of the profitability of banks. At that time, there was few work conducted on the performance of banking sector of Pakistan however a lot of work is done on the evolution of banking sector of Pakistan.

Ataullah et al.(2004) investigated on the commercial banks of India and Pakistan and made a comparative analysis for the period of 1988-1998.They found that efficiency is higher in loan base model however it is less in income based model. They put an opinion that India and Pakistan banks should improve the efficiency of their banks

Burki and Niazi (2006) studied the effect of financial reforms on the efficiency of banks of Pakistan, including foreign, private and state owned. They took the data of 40 banks for 1991-2000.They concluded that there is positive relation of size, loan to deposit ratio, and interest income to earning assets on estimated efficiency scores.

Kosmidou, Tanna, and Pasiouras, (2009) conducted research on UK owned commercial banks. They determined the effect of bank specific, macroeconomic prevailing conditions and structure of financial market on the performance of banks. They used net interest margins (NIM) and return on average assets (ROAA) as a profitability measure.

Ali, Akhter and Prof. Zafar (2011) examined the effect of bank specific and macroeconomic

factors on banks profitability. They reported significant role of capital adequacy ratio, operating efficiency, asset management, and gross domestic product on banks profitability. They also found very good performance of assets and returns in conventional banks. They also reported the financial and non financial risk. They used two regression models (ROA and ROE), for the year of 2006 to 2009 for 28 banks, including public, conventional and private banks. Risk of credit was used to determine the outcome of financial risk and for knowing the result of non financial risk, they used operational risk. In case of profitability was measured by ROA model, they concluded that size, portfolio composition, operating efficiency, asset management effect positively. Credit risk and capital affected negatively. In case of profitability was evaluated by ROE model profitability influenced positively by capital, asset management and portfolio composition, and show negative behavior, by operating efficiency, size, and credit risk. Macroeconomic variables, GDP affected in a positive way on the profitability of banks in both models (ROA and ROE).

Anber and Alper (2011) did their research on the factors/determinants affecting the profitability of banks in turkey for the period of 2002-2010. They also measured the profitability of banks by ROA and ROE. They used balanced data set and showed result that non-interest income and asset size had significant and positive impact on banks performance. However, loans under follow-up and credit portfolio size had negatively and significantly affecting the performance of banks. They suggested that through increasing bank size and non interest income and decreasing credit/assets ratio bank could improve their profitability. They also found that higher profitability was achieved by higher interest rate.

Gul, Faiza, and Zaman (2011) studied that banks with large amount of Loans, equity capital, Deposits, Total Assets, and macroeconomic factors i.e., economic growth, stock market capitalization and inflation were considered safe and result to higher profitability.

Sadaqat, Akhter, and Ali (2011) also analyzed the affect of micro economic determinants on banks profitability for the years 2006 to 2009. They used multivariate regression analysis for the formation of two regression models (ROA and ROE). They concluded that gearing ratio, NPLs ratio and asset management significantly affecting the banks profit in both models. When we used ROA as proxy for measuring banks profitability, the size of bank showed significant affect and insignificant relation as measured by ROE.

3. Methodology

Methodology is a set of process. It is a procedure of rules and regulations in which particular ways and methods derived for solving different problems with the help of specific discipline. Methodology includes the techniques, methods, and procedures that are used to collect and analyze information.

In order to fulfill the objective of study, descriptive statistics, correlation and regression analysis are used to check the performance of firms. Descriptive Statistics is the description of a selection of a data. It aims to summarize a sample representing the whole population. Correlation shows relationship between two variables. Measure of central tendency includes mean, median and mode while measure of dispersion includes variances, standard deviation and range.

3.1. Population

Population describes the group of things, persons and events that the researcher wants to investigate. Population is the kind of data that depicts the whole class from which sample is selected. All banking sector are the population of the research.

All total banks of Pakistan N= 47

3.2. Sample:

A sample is the subset or subgroup of population. It is extract from the population and portrays overall population. The sample of the study consists of total twenty one (21) banks, seventeen (17) private sector banks and four (4) public sector banks of Pakistan. Now a day's total five public banks are operating in Pakistan. Banks are selected on the basis of total assets.

Sample n=21

3.3. Sampling technique

Different types of techniques are used in the research. Generally there are two major form of sampling, non probability sampling and Probability sampling. In probability sampling, stratified random sampling is used which help to estimate population parameters.

3.4. Data

Data is a combination of characters, information, symbols, numbers, alphabets and that are collected for a particular purpose that reflects conditions or ideas. Data is infinite and found everywhere. Raw facts and figures or material is called data. It is processed for getting results. There are two categories of data.

Primary Data.

Data in which information is gather first hand for the specific purpose. Primary data focus on group, panels, individuals, and videoconferencing.

Secondary Data.

Secondary data tells about gathered information from existing source that's already available. This type of data can also obtain from these secondary sources, e.g. web sites, internet, articles, industry analysis, company records, and government publication, etc.

3.5. Data collection

Secondary data is used for the research. Financial data is taken from the financial statement analysis of financial sector of state bank of Pakistan, websites and annual reports of banks and index mundi. Consecutive six years, 2006 to 2011 is included in the research.

3.6. Variables description

All the variables which affect the profitability cannot include but it is tried to take maximum variables. Twelve (12) variables are included in the study, two (2) dependent and ten (10) independent variables.

3.6.1. Dependent variables:

Variables which are changed due to the change in the independent variables are called dependent variable.

1. Return on Assets (ROA)

When net income after tax is divided by total assets and multiplied by 100 then it is known as return on assets. This ratio tells us how much profit is generated by the total assets which are employed in the business. A lot of researcher used return on assets as the tool for the measurement of profitability. It is expressed as fellows.

$$ROA = \text{Net profit after tax} / \text{total assets} * 100 \dots \dots (1)$$

2. Return on Equity (ROE)

When net profit after tax is divided by overall shareholder equity and multiplied by 100 then it is known as return on equity. Total share holder equity is the sum of share holder equity plus share capital plus inappropriate profit (loss). It tells about that how much profit is generated by the share holder equity. It also measures the direct return of the shareholders. It is written as fellows

$$ROE = \text{Net profit after tax} / \text{total share holder equity} * 100 \dots \dots (2)$$

3.6.2. Independent variables:

The variables which influence the dependent variables are known as independent variable. A change in independent variable creates a change in the dependent variables. Following are the independent variables which is included in this study. Independent variables are divided into two categories, bank peculiar variable and macroeconomic variable.

A. Bank peculiar variable

3. Capital

It is taken as the ratio when total share holder equity is divided by the total assets and multiply by hundred then it is known as capital ratio. It tells about how much percentage of equity is included in total assets. It is expressed as fellows.

$$\text{Capital ratio} = \text{Total shareholder equity} / \text{total assets} * 100 \dots \dots (3)$$

4. Debt to Equity Ratio

When total debt is divided by total equity and multiply by hundred then it is known as DE ratio. Total debt is the sum of short term and long term liabilities. It is expressed as follows:

$$\text{Debt to equity ratio} = \text{total dedt} / \text{total equity} * 100 \dots \dots (4)$$

5. Size

Bank size is measured by the total assets. It is depicted as the natural log of all the assets of the bank.

6. Liquidity

For measuring liquidity means how much assets are in the hand of the bank that is easily convertible in to cash. The ratio of cash and balances with the banks is used. It is an important measure. It is expressed as fellows.

$$\text{Liquidity} = \text{Cash and balences with banks} / \text{total assets} * 100 \dots \dots (5)$$

7. Nonperforming loans to gross advances

It is considered as the percentage of nonperforming loan to gross advances. It shows the quality of

portfolio loan of a bank. It evaluates the assets quality which is fortified on loan portfolio. It is useful for banks.

$$\text{Non performing loans to gross advances} = \text{NPLs/Gross advances} * 100 \dots\dots (6)$$

8. Loan to total assets ratio

It is the primary income source of the banks. When more deposits are used for loaning purpose the higher will be the profit. It is an asset quality ratio. It is expressed as follows:

$$\text{Loan to total assets} = \text{Loan/total assets} \dots\dots (7)$$

9. Portfolio Composition

It is the ratio of total liabilities over total assets. It is considered as liability and has impact of profitability. It is the main source of funding .If deposit is high then the profitability of banks is also high.

$$\text{Portfolio composition} = \text{total liabilities/total assets} \dots\dots(8)$$

B. Independent Macroeconomic Variables

Not only internal factors affect the profitability but also external factors affect the profitability. The independent macroeconomic variables which affect the profitability are described as fellows.

10. Real Gross Domestic Product

Total economic activity is measured by the gross domestic product and it is adjusted against inflation. It effects on demand and supply of banks regarding deposits and loans. It shows positive relation with the bank's profitability.

11. Inflation Rate

When sudden increase is observed in the prices of goods and a service it is known as inflation .Inflation also affects the profitability. For all goods and services there is a percentage increase in the consumer products. Inflation directly or indirectly effects the organizations. It is sudden increase in prices. Banks profitability is also effect by the inflation.

12. Unemployment

It is an economic indicator that indicates that the number of people who are unable to get a job, however they've ability to do work. They are said unemployed. When there is said high unemployment in any country then it is said that the economic resources are not used in a best way.

3.7. Model

For examining the relationship and knowing the significant effect of performance indicators on profitability, panel regression analysis is used. Correlation deals with the problems of multicollinearity .For the finding of mean, standard deviation of variables descriptive statistics is applied.

Generally

$$\text{Profitability} = \alpha + \text{LnTA}\beta_1 + \text{CAP}\beta_2 + \text{LQD}\beta_3 + \text{DE}\beta_4 + \text{NPL}\beta_5 + \text{PC}\beta_6 + \text{LA}\beta_7 + \text{GDP}\beta_8 + \text{INF}\beta_9 + \text{UNMP}\beta_{10} + \mu_{it}$$

The model is the equation of profitability. It shows the relationship bank peculiar[Size (LnTA), Capital (CAP), Liquidity, Debt to equity ratio(DE), Non performing loan (NPL), portfolio composition(PC), Loan to total assets(LA)] and macro economic variables[Gross Domestic Product(GDP), inflation(INF), and

Unemployment(UNMP)] with the profitability.

Model 1:

$$ROA_{it} = \alpha + LnTA\beta_1 + CAP\beta_2 + LQD\beta_3 + DE\beta_4 + NPL\beta_5 + PC\beta_6 + LA\beta_7 + GDP\beta_8 + INF\beta_9 + UNMP\beta_{10} + \mu_{it}$$

Model 2

$$ROE_{it} = \alpha + LnTA\beta_1 + CAP\beta_2 + LQD\beta_3 + DE\beta_4 + NPL\beta_5 + PC\beta_6 + LA\beta_7 + GDP\beta_8 + INF\beta_9 + UNMP\beta_{10} + \mu_{it}$$

α depicts x-intercept value and it is a constant and the **beta(β)** values (**$\beta_1, \beta_2, \beta_3, \beta_4, \dots, \beta_{10}$**) represent that due to change in independent variable how much change occur in dependent variables

μ represents error term.

4. Results and Discussion

The research is conducted to examine the factors that affect the profitability. Three methods are used for deriving the results.

1. Descriptive statistics.
2. Correlation method.
3. Regression analysis.

4.1 Descriptive statistics

Descriptive statistics is basically branch of statistics which tells about the basic qualities of data. It is a basic element of statistics. Dispersions of the dependent and independent variable known as D.S. Descriptive statistics are given to measuring the central tendency and dispersion is used simply to describe the sample you are concerned with. The aim of the descriptive statistics is to order and manipulated data in a meaningful way that depicts population or sample. It is used to summarize the sample. It tells about the mean median standard deviation etc.

4.2. Correlation

Correlation is basically used to check the relationship between the variables, that at what extent, they relate to each other regarding nature and direction etc. It is a way to determine how two variables are associated or related. Degree of relationship is also described in it.

4.3. Regression analysis

In regression analysis relationship on dependent variable is checked against the independent variables and all other variable considered constant. This relationship is checked against all the independent variables. It is observed that when independent variable is changing then an impact is observed in the dependent variable too. It is statically measuring tool.

Descriptive Statistics

Table 1:

	CAP	DE	GDP	INF	LA	LNTA	LQD	NPL	PC	ROA	ROE	UNMP
Mean	0.11	13.47	4.35	12.45	0.48	18.74	0.10	0.13	0.74	0.00	-0.12	9.18
Median	0.08	10.59	4.55	12.65	0.50	19.01	0.09	0.10	0.77	0.01	0.10	7.00
Maximum	0.54	339.76	6.60	20.30	0.71	20.87	0.27	0.63	0.91	0.04	0.37	15.00
Minimum	-0.03	-38.73	2.40	7.60	0.13	15.56	0.03	0.00	0.44	-0.07	-14.74	5.60
Std. Dev.	0.08	30.74	1.46	4.27	0.10	1.30	0.04	0.11	0.09	0.02	1.39	3.82
Obs.	126	126	126	126	126	126	126	126	126	126	126	126

The above table 1 shows mean, standard deviation, maximum and minimum values. Mean of size, debt to equity, and nonperforming loan are, 18.74, 13.47 and 0.13 respectively. Standard deviations are, 1.3, 30.74 and 0.11 respectively. Minimum value of mean of ROA is -0.07 and maximum value is 0.04. Total 126 observations are taken for deriving the results.

Correlation

Table 2:

Var.	CAP	DE	GDP	INF	LA	LNTA	LQD	NPL	PC	UNMP
CAP	1									
DE	-0.23	1								
GDP	-0.02	0.02	1							
INF	-0.01	0.02	-0.71	1						
LA	-0.49	0.09	0.04	0.1783	1					
LNTA	-0.48	0.01	-0.16	0.07	0.37	1				
LQD	-0.01	-0.11	0.27	-0.20	-0.21	0.08	1			
NPL	0.07	0.04	-0.19	0.11	-0.24	-0.16	-0.18	1		
PC	-0.72	0.08	-0.04	0.03	0.39	0.32	0.24	-0.11	1	
UNMP	-0.13	0.12	0.12	0.25	-0.02	0.08	-0.17	0.14	-0.01	1

Table 2 shows Pearson correlation matrix. It shows relationship among all independent variables. It shows direct and inverse relationship between the variables. The multicollinearity problem does not exist and it is said by Kennedy (2008) when the correlation exceeds to 0.80 then the problem of multicollinearity exists in the data. Table shows that there is moderate correlation and the problem doesn't exist.

Regression Analysis

Table 3: (Hausman test)

Dependent Variable	Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
ROA	Cross-section random	0	10	1
ROE	Cross-section random	0	10	1

We applied panel regression and use random effect and then applied Hausman test and gained probability 1. As probability is 1 so, we applied fixed effect. (If probability less than .05 then random effect would be used)

Model 1
Table 4: (ROA)

Variable	Coefficient	t-Statistic
C	-0.21	-1.52
LNTA	0.01	2.16
CAP	0.06	1.86
LQD	0.08	1.55
DE	0.00	-2.04
NPL	-0.06	-3.24
PC	-0.08	-2.65
LA	0.04	1.83
GDP	0.00	0.10
INF	0.00	-1.32
UNMP	0.00	-1.36
R-squared	0.76	
F-statistic	10.11	

Model 2
Table 5: (ROE)

Variable	Coefficient	t-Statistic
C	-10.65	-4.31
LNTA	0.53	4.53
CAP	1.65	2.69
LQD	1.11	1.13
DE	-0.04	-50.49
NPL	-1.97	-5.66
PC	0.46	0.79
LA	0.38	0.90
GDP	0.13	2.98
INF	0.02	1.46
UNMP	-0.03	-3.16
R-squared	0.98	
F-statistic	140.61	

Model 1 shows the regression analysis of dependent variable ROA with all independent variables. DE, non performing loan and portfolio composition have negative significant relationship with the profitability, having t-stat values, -2.04, -3.24 and -2.64. As DE has negative significant relationship and it is supported by old studies (farhan, khizar & sadaqat, 2011). R^2 is 0.76 and F-statistic is 10.11 for ROA model. (t-stat > 1.96). Size has positive significant relationship with ROA having t-stat 2.16. It is according (ali, akhtar & zafar, 2011; sadaqat, 2011; gull, zaman & irshaad, 2011; altamimi, 2005; sufian, 2009) to that literature.

This model shows the regression analysis of dependent variable ROE with all independent variables. DE, NPL and UNMP have negative significant relationship having t-stat values -50.49, -5.66 and -3.16. Negative relation of DE is according to the old studies. (Farhan, Khizar & Sadaqat, 2011). CAP

and GDP has positive significant relationship and UNMP engaged in negative significant relationship. R^2 is 0.97 and F-statistic is 140 for the ROE model. Size has positive significant effect and it is also supported by literature (ali,akhtar & zafar, 2011: sadaqat, 2011: gull, zaman & irshaad,2011:altamimi,2005: sufian,2009).

5. Conclusion

Profitability is considered as an important indicator for measuring the performance of banks. There are a lot of causes which affect the profitability. Internal causes include Size, Capital, Liquidity, Debt to equity, Non performing loan, portfolio composition, Loan to Total Assets whereas external causes include Gross Domestic Product, Inflation, and Unemployment. Return on Assets and Return on Equity are used as profitability measure. These causes are examined and discussed in regarding the 4 public and 17 private banks using balanced panel data in regression analysis, for the year of 2006-2011. There are three significant variables, one positive significant and two negative significant variables. DE, and NPL have negative significant relationship in both models (ROA and ROE). Size has positive significant relationship in both models. Debt to equity, and non performing loan have negative significant relationship with the bank's profitability in both models (ROA&ROE). PC has negative significant relationship in ROA model. CAP, and GDP has positive significant effect in ROE model. UNMP has positive significant effect in ROE model.

Recommendations

It is recommended that:

1. The size of assets should increase and the banks should use maximum assets for earning maximum profit. More assets utilization enhances the profitability.
2. Advancing should not from the equity portion of the banks.
3. Inflation should be adjusted in such a way that the profitability of banks doesn't effect.
4. Liquidity should be maintained by the banks as it effects directly to the profitability of banks. If liquidity is not sufficient then it leads to the failure of banks.
5. Deposits of the banks should increase so that profitability increases.
6. Government should try to reduce unemployment rate.
7. Gross domestic product should enhance.
8. Capital should enhance as increase in capital will increase the profitability.
9. Banks should control over the NPL's so that loss avoided.

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9. Appendix

List of variables

Symbols	Variable	Measures
Dependent variable		
ROA	Return on Asset	Net profit after tax/Total assets*100
ROE	Return on Equity	Net profit after tax/ total share holder equity*100
Independent variable		
A) Bank Peculiar variables		
LnTA	Size	Logarithm of assets
CAP	Capital ratio	Total share holder Equity/total assets *100
LQD	Liquidity	Cash and balances with bank/total asset*100
DE	Debt to Equity Ratio	Total Debt/Total Equity
NPL	Nonperforming loan to	NPLs/ gross advances*100

	gross advances	
PC	Portfolio composition	Total liabilities/total assets
LA	Loan to total assets	Loan/total assets
B)Macro economies variables		
GDP	Gross domestic product	
INF	Inflation rate	
UNMP	Un employment	

Dynamic Linkages between BSE Sensex and Crude Oil Price - An Empirical Study in India

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Abstract

The present study has analysed the short term and long term relationship between crude oil prices and BSE Sensex for the period from 05/03/07 to 27/02/15. The data sets are not normally distributed and unit root was present and the data sets became stationary at first difference for the period of study. Using Johansen's Co integration test, the study finds the presence of long term relationship between crude oil prices and BSE Sensex. Error correction results have shown that it is crude oil price which correct the movements in BSE Sensex and the shocks that occur to crude oil prices have negative impact on the movements of BSE Sensex. Impulse response function indicates that there is significant and higher response of BSE Sensex to a shock in crude oil prices. Granger Causality test is applied to study the presence of short term relationship. It is found that the causality was one way, from crude oil prices to BSE Sensex.

Key words- BSE Sensex, Crude oil price, Impulse Response function, Causality, Johnasen's Co integration

JEL Classification code-G15, F36

Introduction

Petroleum products are a hydrocarbon-rich mixture of crude oil and gases. They not only run factories, cars, heats some homes but drive economies. Petroleum has provided Americans with an unprecedented standard of living since its discovery in America in 1859. Oil is a heterogeneous commodity. Crude oil has varied characteristics, quality and market penetration which determines price mechanism globally through values of underlying assets. Crude oil is considered to be the world's most influential physical commodity that plays a prominent role in all the economies by way of trade mobilisation and production of basic commodities (*Vishal Sood et al., 2014*). The price fluctuations in crude oil price during the recent years have generated a lot of interest in analysing its relationship with macro-economic variables and equity markets. The fluctuating crude oil price effects an economy, particularly a country like India in

many ways. For instance, rising crude oil price will become a burden to the exchequer as a country will have to pay more on importing crude oil in terms of dollars. This, as a result will widen the current account deficit (CAD) and its impact will be felt on the exchange rate instantly. The local currency starts depreciating against the dollar, the margins of oil marketing companies gets reduced as a result of increasing oil prices. On the other hand, a fall in crude oil prices (which was witnessed in 2013-14 and till date) will bring huge relief as the Country's import bill comes down and the deficit on account of current account transactions will narrow down in the short to medium term period. Also, a fall in the crude oil prices may bring down the earnings of those countries whose primary source of revenue is from sale of oil. This as a result would curb their spending and fall in revenue might force such countries to withdraw money from the stock markets of emerging economies like India. The Indices will also tend to fall with a fall in crude oil prices. Theoretically, oil prices can affect stock prices in several ways: expensive fuel translates into higher cost of carrying, production and heating costs which can put a drag on corporate earnings or rising fuel prices can stir up concerns about inflation and curtail consumers discretionary spending thereby reducing the demand for final goods and services and corporate profits (*Pescatori et al., 2008*). Rising oil prices are often seen as inflationary by policy-makers and the central banks automatically responds to inflationary pressures by raising interest rates which affect the discount rate used in the stock pricing formula (*Basher et al., 2010*). The change in crude oil prices can create both direct and indirect pressure on the worlds' economy and its volatility drives many companies away and it affects the stock market also. India satisfies its major crude oil requirements by importing from oil producing nations. Therefore, any upward and downward movements in prices are closely tracked in the domestic market by international factors. Many times it had been recorded that prices of essential products like, crude also acts as a prime driver for such volatility in price of various commodities (*Sharma, et al, 2012*). The relationship between crude oil price and equity market is in the spotlight in the last few years. With the introduction of futures trading in crude oil in the year 2005, derivatives trading in the equity market and trading in crude oil futures have started creating some tidal waves, the present has become important to study the association between crude oil price and a Stock Index. The objectives of

the present study is to analyse the short term and long term relationship between BSE Sensex and crude oil prices and interpret the results thereof.

Review of Literature

Maghyereh (2004) looked into the interaction between shocks that occurred in oil prices and stock markets of relevant countries. According to the results of the study, it was found that shocks that occurred in oil prices did not have meaningful effect on stock index returns of developing countries. (*Sari et al., 2006*) examined the relationship between crude oil price, stock return, interest rate and output within the period 1987 -2004 in the scope of Istanbul Stock Exchange (ISE). According to the results of the research, shocks that occurred in oil prices did not have meaningful effect on stock returns. (*Anoruo et al., 2007*) looked into the relationship between oil and stock market returns from 1993 -2006 in U.S.A. According to the result of the study, in which co-integration test and VECM model were used, it was revealed that there was a long term relationship (co-integration) between stock market and oil market and there was a one way causality relationship from stock market returns to oil market returns. (*Cong et al., 2008*) examined the interactive relationship between shocks that occurred in oil prices and stock market in China. In the study performed in the period between 1996 and 2007 and where VAR model was used, it was revealed that shocks that occurred in oil prices did not have meaningful effect on stock returns and some important shocks that occurred, negatively affected the stocks of oil companies. (*Miller et al., 2009*) investigated the long term relationship between world crude oil prices and international stock exchanges. According to the results of the study performed within period of 1971-2008 (separated based on periods) in the scope of OECD countries and in which VECM model was used, it was observed that there had been a long term relationship between variables between periods 1971-1980 and 1988-1999 and the stock exchange had responded negatively to the increase in oil prices in the long term. (*Arouri et al., 2010*) examined the relationship between shocks that had occurred in oil prices and stock returns by using linear and non-linear models within the period of 2005-2008 among countries exporting oil. According to the results of the research, it was revealed that stock returns in Qatar, Oman, Saudi Arabia and United Arab Emirates

had responded to changes in oil prices, though change that had occurred in oil prices in Bahrain and Kuwait did not affect the stock returns. (*Bhunja, 2012*) in the study examined the short-term and long-term relationships between BSE 500, BSE 200 and BSE 100 Index of Bombay Stock Exchange and crude price by using various econometric techniques. The study covered the period between 02.04.2001 and 31.03.2011 and was performed with data consisting of 2496 days. The empirical results show there was a co-integrated long-term relationship between the three indices and crude price. Granger causality results reveal that there was one way causality relationship from all index of the stock market to crude price, but crude price was not the causal of each of the three indexes.

Data and Methodology

The study is based on the secondary data. The daily closing data of BSE Sensex was collected from www.bseindia.com and the brent oil prices were collected from www.bloomberg.com . The natural logarithm of all values was used for analysis. The period of study is from 05-03-2007 to 27-2-2015. A total of 1982 observations were used for the present study.

Statistical Tools

The following statistical tools are employed for the present study. The tests namely JB test, Unit root test, Johansen's Co integration test, Block Exogeneity Test (Wald Test) were conducted using E-views software (version 7). A brief explanation about various statistical tools are given below-

Normality Test

The Jarque-Bera (JB) test [Gujarati (2003)] is used to test whether stock returns and exchange rates individually follow the normal probability distribution. The JB test of normality is an asymptotic, or large-sample, test. This test computes the skewness and kurtosis measures and uses the following test statistic:

$$JB = n [S^2 / 6 + (K-3)^2 / 24]$$

Where n = sample size, S = skewness coefficient, and K = kurtosis coefficient. For a normally distributed

variable, $S = 0$ and $K = 3$. Therefore, the JB test of normality is a test of the joint hypothesis that S and K are 0 and 3 respectively.

To analyse the pattern of distribution of data skewness and kurtosis have been calculated. Zero skewness implies symmetry in the distribution whereas kurtosis indicates the extent to which probability is concentrated in the centre and especially at the tail of the distribution. Kurtosis measures the peakedness of a distribution relative to the normal distribution. A distribution with equal kurtosis as normal distribution is called ‘mesokurtic’; a distribution with small tails is called ‘platykurtic’ and a distribution with a large tail is called ‘leptokurtic’.

Unit Root Test (Stationarity Test)

Empirical work based on time series data assumes that the underlying time series is stationary. Broadly speaking a data series is said to be stationary if its mean and variance are constant (non-changing) over time and the value of covariance between two time periods depends only on the distance or lag between the two time periods and not on the actual time at which the covariance is computed [Gujarati (2003)]. A unit root test has been applied to check whether a series is stationary or not. Stationarity condition has been tested using Augmented Dickey Fuller (ADF).

Augmented Dickey–Fuller (ADF) Test

Augmented Dickey-Fuller (ADF) test has been carried out which is the modified version of Dickey-Fuller (DF) test. ADF makes a parametric correction in the original DF test for higher-order correlation by assuming that the series follows an AR (p) process. The ADF approach controls for higher-order correlation by adding lagged difference terms of the dependent variable to the right-hand side of the regression. The Augmented Dickey-Fuller test specification used here is as follows:

$$Y_t = b_0 + \beta \Delta Y_{t-1} + \mu_1 \Delta Y_{t-1} + \mu_2 \Delta Y_{t-2} + \dots + \mu_p \Delta Y_{t-p} + e_t$$

Y_t represents time series to be tested, b_0 is the intercept term, β is the coefficient of interest in the unit root test, μ_i is the parameter of the augmented lagged first difference of Y_t to represent the p th-order autoregressive process, and e_t is the white noise error term.

Johansen’s Co integration Test

The Johansen’s Co integration test is used to test the presence of long term equilibrium relationship between the spot and future market of the currencies. The Vector Error Correction Model (VECM) is used to analyse the whether error correction mechanism takes place if some disturbance comes in the equilibrium relationship. The Block Exogeneity test is applied to analyse the short term causality relationship between oil price and BSE Sensex.

Impulse Response Function

Impulse response function indicates the effect when giving a shock to the values of the endogenous variable. On the one hand this shock can be given to the residual which is equal to the one unit or one standard deviation. On the other hand one can follow the Cholesky or generalized impulse. Here, the generalized impulse was applied to observe the effect of explanatory variables on inflation.

Analysis and Interpretation

Table I
Descriptive Statistics

Particulars	Crude Oil	BSE Sensex
Mean	4.5023	9.771
Median	4.6142	9.7832
Maximum	4.9715	10.2982
Minimum	3.5890	9.0070
Standard Deviation	0.2653	0.2376
Skewness	-1.0880	-0.6344
Kurtosis	3.7062	4.3817
Jarque Bera	432.013	290.50

Probability	0.00	0.00
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Table I shows the descriptive statistics of daily closing price of crude oil and closing values of BSE Sensex. It can be seen that the closing price in case of crude oil varies from 3.58 to 4.97 thereby stating that there is fluctuation in the daily closing prices. Similarly, the closing value of BSE Sensex varies from 9.00 to 10.29 respectively. The mean value for the entire period is 4.5 for crude oil and 9.771 for BSE Sensex. Skewness is negative (-1.088) for crude oil and BSE Sensex (-0.6344) indicating a relatively long left tail compared to the right one. Kurtosis with 3.7062 for crude oil and 4.38 for BSE Sensex indicates short tails and the distribution is platykurtic'. The findings are similar to the existing literature and with a high Jarque-Bera statistic, it can be confirmed that the series is not normally distributed.

Table II
ADF Unit Root Test for Crude Oil and BSE Sensex

Particulars	't' Value (Crude Oil)	Probability (Crude Oil)	't' Value (BSE Sensex)	Probability (BSE Sensex)
At level	-2.035637	0.2716	-1.1777	0.6862
At first difference	-37.533	0.00*	-41.3659	0.00*

*Significant @ 1%

Most of the financial time series data are non-stationary and contains unit root. Test of unit root in the daily closing values of crude oil and BSE Sensex is essential as the presence of unit root may give invalid inferences in the analysis. ADF (Augmented Dickey-Fuller Test) is the popular test for unit root testing of time series. Table II shows the results of ADF test and the results indicate that both crude oil and BSE Sensex are not stationary at level form but becomes stationary at first difference.

There exists a long term relationship between crude oil prices and BSE Sensex. The co integration test was introduced by Granger (1981, 1983) and Engle and Granger (1987) to explain stationary equilibrium relationship among the non-stationary variables. The co integration test is useful in analyzing the presence of a stationary linear combination among the non-stationary variables of the same order. If such

combination is found, an equilibrium relationship said to exist between the variables. The Johansen co integration test is applied in the present research study between crude oil prices and BSE Sensex. The result of the Johansen's Co-Integration Test are shown in table III. The trace statistics for the calculated Eigen value for crude oil prices is more than the table value and hence the null hypothesis of no co integration is rejected. The results are similar for BSE Sensex and hence the result indicates the presence of long term relationship between crude oil prices and BSE Sensex. The equilibrium relationship between the non-stationary variables is used to construct an Error Correction Model (ECM). An error correction model is a statistical specification of economic dynamics through which the pull and push forces restore the equilibrium relationship whenever a disequilibrium takes place.

Table III
Johansen's Co-Integration Test on Crude Oil and BSE Sensex

Co integration Between	Lag length selected	Co integration test using	No. of Co integrating Equations (CEs)	Eigen Value	Statistic	Critical value at 5%	Probability**
Daily Price of Crude Oil and BSE Sensex	1 to 4 (in first difference of 2 series)	Trace test	$H_0: r=0$ (None)*	0.00852	19.7304	15.495	0.018
			$H_1: r \leq 1$ (At most 1)	0.001417	2.8055	3.841	0.09
		Max-Eigen Value test	$H_0: r=0$ (None)*	0.00852	16.9249	14.265	0.018
			$H_1: r \leq 1$ (At most 1)	0.001417	2.8055	3.841	0.09

*Trace test indicates 1 Co integrating equation at 5% level of significance

Max-eigen test indicates 1 Co integrating equation at 5% level of significance

Denotes rejection of null hypothesis at 5% level of significance

**Mackinnon et.al.(1999) estimated p values

Table IV

Error Correction Model Result for Crude Oil and BSE Sensex

Variables	Variables	$\Delta(\text{Crude Oil})$		$\Delta(\text{BSE Sensex})$	
		Coefficient	t value	Coefficient	t value
Crude Oil and BSE Sensex	Equilibrium Error	0.00178	-3.6428*	0.00167	-1.82984
	$\Delta\text{Crude Oil}(-1)$	0.1750	7.81576*	-0.054	-2.5852*
	$\Delta\text{Crude Oil}(-2)$	-0.0468	-2.088*	0.039	1.89272
	$\Delta\text{BSE Sensex}(-1)$	0.0154	0.640	0.0711	3.1487*
	$\Delta\text{BSE Sensex}(-2)$	0.0098	0.409	-0.0307	-1.3598
	Constant	0.00013	0.33874	0.00015	1.14833

*Significant @ 5%

The results of the Error Correction model are shown in table IV for crude oil and BSE Sensex. The results indicate that the correction of equilibrium error is higher in the case of crude oil price and is statistically significant when compared to BSE Sensex. It shows that the crude oil price corrects BSE Sensex and also the disequilibrium between prevalent between the data sets. Also, the change in the crude oil price is influenced by its own lagged value and is statistically significant @ 5%. Similarly, the change in the BSE Sensex is influenced by lagged values of crude oil prices. One lag of crude oil prices has a negative influence on BSE Sensex and the coefficient value is statistically significant @ 5%.

Table V
VEC Grangers Causality/ Block Exogeneity Wald Test for Crude Oil and BSE Sensex

Dependent Variable	Excluded		
		Chi Square Statistic	P Value
BSE Sensex	Crude Oil	8.8782*	0.0118
Crude Oil	BSE Sensex	0.6115	0.7366

*Significant @ 5%

Table V represents the results of the Block Exogeneity Wald Test in vector error correction model for crude oil and BSE Sensex. The Block Exogeneity test is applied to analyse the short term causality relationship between crude oil prices and BSE Sensex. The results indicate unidirectional causality; crude oil causing BSE Sensex.

Variance decomposition explains the percentage of forecasting error that can be explained with the help of variances in its previous behavior as well as the behavior of other series. The results of variance decomposition of crude oil and BSE Sensex for ten lags are shown in table VI. The results indicate that the forecasting error in crude oil price is mainly explained by its own lagged values and values of BSE Sensex. Similarly, the forecasting error of BSE Sensex is mainly explained by its own lagged values and values of crude oil prices. The rate of decomposition is higher in case of BSE Sensex when compared to crude oil prices. Therefore, crude oil prices are exogenous in nature.

Table VI

Variance Decomposition Index for Spot Price and Future Price

	Crude Oil and BSE Sensex			
Period	Variance Decomposition of Crude Oil		Variance Decomposition of BSE Sensex	
	Crude Oil	BSE Sensex	Crude Oil	BSE Sensex
1	100	0.00	0.057	99.94
2	99.983	0.016	0.38	99.62
3	99.94	0.051	0.37	99.63
4	99.91	0.082	0.34	99.66
5	99.89	.109	0.33	99.67
6	99.863	0.136	0.32	99.68

7	99.835	0.164	0.34	99.66
8	99.806	0.193	0.36	99.64
9	99.975	0.224	0.37	99.63
10	99.74	0.257	0.39	99.61

The impulse response explains the responsiveness of the endogenous variable in the system to shocks to each of the other endogenous variables. So, for each endogenous variable in the system, a unit shock is applied to the error, and the effects over time are noted. Figure I the pair wise impulse response relations between crude oil and BSE Sensex. The first graph shoes the response of crude oil prices to a positive shock of its own prices. It can be seen from the graph a positive shock increases the crude oil prices and this effect remains the same throughout the period. The second graph shows that a positive shock of BSE Sensex does not have much impact on the crude oil prices. The third graph shows that any positive shock of crude oil price does have a negative impact on the movements of BSE Sensex. The results indicate the significant and higher response of BSE Sensex to a shock in crude oil price. Similarly, the response of BSE Sensex to a positive shock on its own values has a positive impact and the effect remains the same throughout the period.

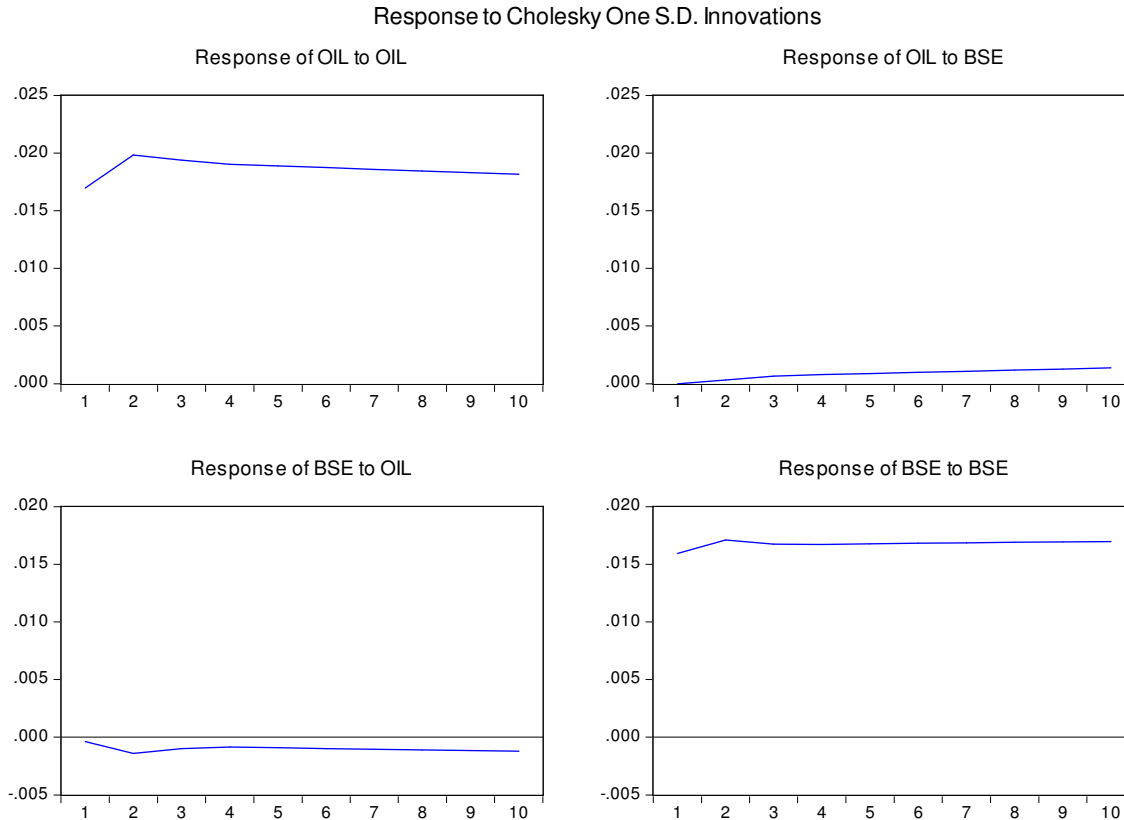


Figure I
Impulse Response Function

Conclusion

The study finds that the data of crude oil prices and BSE Sensex was not normally distributed during the period of study. Unit root was present in both the data sets and became stationary at first difference. Johansen's Co integration test revealed the presence of a long term relationship between crude oil prices and BSE Sensex. The findings are similar to the results of existing literature viz., (Anoruo *et al.*, 2007), (Miller *et al.*, 2009) and (Bhunja, 2012). Error correction results have shown that it is crude oil price which corrects the movements in BSE Sensex and the shocks that arise in oil prices do have a negative impact on BSE Sensex. The key finding of the present study contradicts the findings of some of the existing literature viz., (Maghyreh, 2004), (Sari *et al.*, 2006), (Anoruo *et al.*, 2007) and (Congo *et al.*, 2008), which have concluded that there is no effect of shocks of crude oil prices on the stock returns. Impulse response function indicates that there is significant and higher response of BSE Sensex to a shock in crude oil price. The presence of short term causality between crude oil prices and BSE Sensex

was analysed and it was found that there was one way causality from crude oil price to BSE Sensex. The results were in contrast to the findings of (*Bhunia, 2012*), where, according to the study, there was one way causality relationship from all the indices of the stock market to crude oil prices. The study confirms the presence of short term and long term relationship between crude oil prices and BSE Sensex. From the investors' perspective, the implications of the present study is that change in crude oil prices does have an impact on the movements of BSE Sensex and more so on those companies in the Sensex which use crude oil as their raw material in the manufacturing process or in any other form. Investors are advised to consider this factor while taking investment decisions. From a policy perspective, it is highly important that the Government adopts measures in oil consumption and popularises alternative sources of energy as it is evident from the current research that change in oil prices does impact stock markets. Future studies can consider sector specific indices such as BSE Oil and Gas Index and explore their relationship vis-a-vis crude oil prices. Also, there are other macro-economic factors such as Foreign Institutional Investments, exchange rates, inflation et al which may affect the index movements. Future studies can explore as to what extent the crude oil prices along with other factors influence the index movements. The results of the above suggested studies may add some more dimensions to the existing literature.

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French Bank Mergers and Acquisitions and Value Creation: The Role of Strategic Similarities

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Abstract

This paper analyses the impact on French bank value creation following mergers-acquisitions operations of a set of control variables (model 1) and explicative variables measuring strategic similarities between bidders and targets (model 2). Empirical findings showed that the two controlling variables (relative size and pre-merger bidder performance) were not significant. For explicative variables, only three of them (strategic differences in loan ratios, off-sheet activities and other expenses) provided evidence on the theoretical hypothesis suggesting that strategic differences between bidder and target affect negatively the value creation ex-post. Strategic differences in terms of efficiency, capitalization, credit risk, earnings diversification had a positive effect, while differences in terms of liquidity and deposit activities had no effect.

JEL classification: G21, G34

Keywords: French Banking Sector, Mergers-Acquisitions, Value Creation.

Introduction

The value creation is the objective of all enterprises wanting to satisfy the present investors and to

give out a good signal to the potential investors on the market for the good management. This objective appears in a movement of rise in power of shareholders in the enterprise piloting. Such power especially resulted in the requirement by investors of a big transparency on accounts, risks incurred and committed policies. Indeed, the enterprise that doesn't communicate on the value creation risks to disappoint financial markets and to have therefore some negative consequences on its stock value. Thus, the value creation is considered among indicators of measure and assessment of the performance of an enterprise since, besides information brought on the profitability of the investment done by the shareholder, the measure of the value created seems to constitute a signal for the appreciation of the capacity of this enterprise to mobilize funds in order to finance its growth.

The value creation analysis necessarily guides us to study the influence on the value of the enterprise of any phenomena susceptible to modify its trajectory (Parienté, 1997), such mergers-acquisitions operations. Like other enterprises, banks worldwide have experienced a consolidation process mainly via mergers and acquisitions. The main causes for this unprecedented wave of consolidation are the deregulation, integration of financial markets and technological innovations. Such reasons are common to most countries and led to accentuate the competition among banks from now on searching to cut costs and enhance revenues by expanding size via mergers and acquisitions. Bank mergers and acquisitions are largely justified on value creation grounds via the exploitation of synergisms and returns to scales between merged banks. This means to increase the bank market value and to reflect, then, its potential of generating profit.

On an academic plan, the more and more increasing interest of the value creation following the bank mergers-acquisitions operations resulted in the multiplicity of research in the subject without conclusive results. Worse again, the experience showed that an important number of consolidation operations results in a big failure.

Our contribution to the banking literature in this subject consists in verifying empirically the impact of mergers-acquisitions on the ex-post value creation of the merged French banks. To do this, we

will firstly present the main academic studies in the topic. Secondly, we will present the methodology and the data sources. Thirdly, we will present and discuss the main empirical results obtained.

1. Literature review

The traditional argument that supports the value creation following mergers-acquisitions operations is the hypothesis suggesting that the anticipated value of the group constituted following this type of operations exceeds, in terms of potential wealth creation, the sum of the respective values of each of the two groups separated. In another way, $1+1=3$. This value creation can be owed to improvements of efficiency, operational synergisms, financial synergisms and an increased market power. Empirically, studies in the subject are numerous, using panoply of methods going from the financial and accounting ratios (ROE, EVA, MVA...) to event studies, but without conclusive results. A survey reviewing more than 100 studies interested in this topic showed that more than 85% were interested by the American market, whereas alone few studies projected lights on the European operations.

Concerning the United States, studies of 1980 years showed that the bank mergers are traduced by a negative effect for bidders, meaningfully positive for targets and hopeless for the new group constituted following the transaction. Studies of 1990 years showed that the effect on the target is meaningfully positive (Hawiwini and Swary, 1990; Houston and Ryngaert, 1994; Madura and Wiant, 1994; Hudgins and Seifert, 1996). Results for bidders don't seem to be clear: most studies showed some weak effects on the value (Hawawini and Swary, 1990; Houston and Ryngaert, 1994; Madura and Wiant, 1994) or didn't find any effects (Hudgins and Seifert, 1996; Kane, 2000).

In a survey on the financial globalization and the transnational fusions, Shepherd et al. (2000) tested the hypothesis of the domestic advantage and the hypothesis of the total advantage. They concluded that, in some countries, it appears that the domestic banks stay to detain an advantage resulting in a

profit and an efficiency cost more elevated on the foreign banks. In the same year, David. A. Bêcher examined effects of valorization of 558 American bank mergers on the period 1980-1997. His results indicated that these operations create wealth. On average, on an event window of 36 days (-30, +5), targets won more than 22%, bidders achieved neither gain nor loss and the whole group won 3%. Results also showed that mergers of 90 years had some positive effects. In these years, targets won meaningfully, bidders won more than those of the 80 years and the combined groups won meaningfully. In 2003 Cornette and Hovakimian found an abnormal return meaningfully negative for the transfrontier operations but not for the national operations for bidders in a set of 423 American bank acquisitions on the period 1988-1995.

In Europe, Cybbo – Ottone and Murgia (1996) studied 26 mergers-acquisitions achieved between financial institutions between 1988 and 1995 in 13 European markets. They found that the average abnormal returns of targets are positive and those of bidders are essentially hopeless, demonstrating a transfer of wealth from bidders to targets. In 2000, these two authors studied a sample of 54 mergers-acquisitions from 1988 to 1997 and found meaningfully effects to the combined group at the date of the transaction announcement.

Tourani-Rad and Van Beek (1999) examined the transfrontier consolidation operations in the European banking sector in terms of their effects on the wealth of shareholders. They found that shareholders of target banks showed some positive and meaningful abnormal returns, whereas the abnormal returns of bidder banks shareholders were not meaningful. More again, results supposed that returns of bidder banks shareholders are positive when the bidder is bigger and more efficient. The transfrontier mergers were not more effective than the domestic mergers.

Patrick Beitel and Dirk Schiereck (2001) examined effects on the value of 98 big domestic and transfrontier mergers-acquisitions of European bidder banks. Authors found that shareholders of targets received a considerable and meaningfully positive revalorization of their actions. Effects on bidders were, for most banks, not meaningful.

In 2004, these authors studied 98 European mergers-acquisitions between 1987 and 2000. Their results showed that the transnational transactions appeared to increase the accumulated abnormal returns of the target banks whereas bidders created the value in the domestic transactions. For the combined entity, the geography is not an important factor of value creation.

In 2007, Coby Jérôme and Decos Christophe tested the performance of 133 European mergers-acquisitions on the period 1997-2000. Results showed abnormal returns negative for the bidder, positive for the target and hopeless for the combined entity. One year after, Yener Altunbas and David Marquès (2008) examined the strategic similarity impact on mergers-acquisitions performance of 262 banks of the European Union. 207 transactions were domestic and 55 transfrontier. The performance has been measured by the value creation (variation of ROE). Authors found that, on average, the bank mergers resulted in an improved performance, and that, for the domestic transactions, the consolidation of banks with different strategies in terms of credit, deposits and cost can be very expensive. For the transfrontier transactions, differences between merged banks in terms of strategies of credits and credit risk can lead in a more improved performance whereas the differences in terms of capital structure and cost have a negative impact on the performance.

2. Methodology and data sources

2.1. Data

To be included in the sample, banks (bidders and targets) must be two independent entities in the time of the consolidation operation and not to make part in any other operation for three years before and after the operation being part of the sample. These conditions are able to permit us to precisely examine the effects of every operation in an isolate manner (Ramaswamy, 1997), avoiding thus any external influences. Thus, the sample to study is composed of 10 mergers-acquisitions (7 domestic and 3 transfrontier) occurring on the period 1996-2006 and implying 20 banks (17 national and 3 foreign). These operations are: the merger in 1996 between the Paribas and the BNP

resulting in the creation of the BNP Paribas group, the acquisition in 1996 of the Sovac bank by the American GE Capital, the acquisition in 1997 of the Credit du Nord by the Société Générale, the acquisition in 1998 of the CIC group by the Credit Mutuel, the acquisition in 1999 of Natexis by the Banques Populaires, the acquisition in 1999 by the Banques d'Épargne of the Crédit Foncier de France, the acquisition in 2000 of the Worms bank by the Deutsche Bank AG, the acquisition in 2002 of Crédit Coopératif by the Banques Populaires, the acquisition in 2003 of the Crédit Lyonnais by the Crédit Agricole and the acquisition in 2006 by the BNP Paribas (group born following the merger between the BNP and the Paribas) of the Italian the Banca Nazionale Del lavoro. The acquisition in 2000 by the British HSBC of the Crédit Commercial de France and the acquisition by this latter of the Hervet bank in 2001 have been excluded from the sample because these two operations were very near in the time and that it doesn't permit us to study the impact of every transaction in an isolated way.

Dates of transaction announcement have been obtained from the business daily press and from press releases of banks constituting the sample. The financial data have been obtained using the “Bankscope” and “Thomson Financial” databases. All variables of the empirical model are calculated three years before and after the merger or acquisition operation. This choice is based on the observation of analysts stipulating that 50% of gains should appear after one year whereas the totality of these gains would be achieved during three years after the merger-acquisition.

2.2. Model

Like Altunbas and Marquès (2008), we build on the model suggested by Ramaswamy (1997) analyzing the impact of mergers-acquisitions in the American banking sector on performance depending on the strategic similarities between targets and bidders. We relate changes in performance following merger to a set of controlling (model 1) and strategic variables (model 2).

The strategic similarity concept used by the literature supposes that most aspects of the strategy of a business can be observed in its decisions of allowance of resources. Thus, if two enterprises show

similar decisions of resource allowance measured since some categories in their balances sheets through some strategic features, they can be considered like being strategically similar (Harrisson et al., 1991). Like Ramaswamy (1997) and Altunbas and Marquès (2008), the strategic similarity of merged banks is measured by an indicator including the financial features for each strategic variable and each merger:

$$SI_{i,k} = \sqrt{\left(X_{B,I,K} - X_{T,I,K} \right)^2}$$

Where: $SI_{i,k}$: The similarity index for the kth variable for the ith merger
 $X_{B,I,K}$ and $X_{T,I,K}$: The scores of the bidder and the target for the kth variable respectively)

To define the strategic similarities of banks engaged in mergers in France, we use a variety of financial indicators, such as liquidity, efficiency, capitalization, asset and liability composition, risk exposure, diversity earnings, off-balance sheet activities and other expenses. We are going to use two controlling variables of control ($X_{i,j}$), which are the relative size (RSIZE) and the ex-ante performance of the bidder (BID-ROE).

The dependent variable in our model is the creation of value (ROE) measured by the difference between the average of ROE of banks merged three years after the fusion and the one of three years before the fusion (See table 1. So, the model to estimate is the next one:

$$\sum_{i=1}^{10} \Delta ROE_i = \sum_{i=1}^{10} \sum_{j=1}^9 X_{i,j} + \sum_{i=1}^{10} \sum_{j=1}^9 SI_{i,k}$$

The level of the bidder's pre-merger performance (BID-ROE), measured as its return on capital, can influence post-merger performance of the combined entity (ΔROE). If a bidder creates value before the merger, it is more likely that the value of the new institution will be destructed in the short term due to the merger process. Alternatively, bidder with a lower level of performance will manage to create value after the consolidation operation. As a consequence, a negative relationship between

bidder’s pre-merger value creation and Δ ROE is expected (Vander Vennet, 2002).

The influence of the relative size of target and bidder (RSIZE) and performance (Δ ROE) is an ambiguous (Amaro de Matos, 2001) and depends on whether the operation in domestic or cross-border. The smaller the size of the targets compared to the bidders (i.e. the lower is the RSIZE ratio), the easier the integration can realize cost savings opportunities. For that reason, a negative relationship between the relative size (RSIZE) and performance (Δ ROE) is expected, particularly in the case of domestic mergers in which cost improvement has traditionally been a major driving force for consolidation. However, in the case of cross-border mergers, the goal of the bidders cannot be the rapid cost economies achievements, but the other benefits derived from synergies with firms abroad. As a consequence, for cross-border mergers, a positive relationship between RSIZE and Δ ROE is anticipated: the larger the target compared to the bidders (in other words, the higher the RSIZE ratio) the better is expected to be a firm’s performance.

Table 1: Definition of control and strategic variables

<i>Definition</i>	<i>Symbol</i>	<i>Formula</i>
<u>Dependent Variable</u>		
Value creation	Δ ROE	Weighted Return on equity (post-merger) – weighted return on equity (premerger)
<u>Control Variables</u>		
Bidder performance	BID-ROE	Return on equity of the bidder (pre-merger)
Relative size	RSIZE	Total assets of target/Total assets of bidder
<u>Strategic Variables</u>		
Liquidity	LIQ	Liquid assets/Total deposits
Efficiency	COST/INC	Total cost/ Total revenues
Capitalization	CA/TA	Total capital/ Total assets
Loan to assets	LOAN/TA	Loans/Total assets
Credit risk	BADL/NET INT INC	Loan loss provision/Net interest revenues
Diversity earnings	OOR/TA	Other operational revenues/ total assets
Off-balance sheet activities	OBS/TA	Off-balance-sheet items/ total assets
Loans to deposits	LOANS/DEP	Customer loans/ Customer deposits

The liquidity risk strategy is measured by the ratio of liquid assets to customer and short-term

funding (LIQ). Since the maintenance of an important liquidity ratio is expensive, the different strategies of liquidity management can imply that merged bank can improve its management of liquidity following the merger and realize thus a better performance.

The relation between the value creation (ΔROE) and efficiency (COST/INC) is supposed to be negative. In fact, a bank competing on the basis of low-cost and operating efficiency is expected to benefit from merging with another bank with similar competencies (Bollenbacher, 1995), as a result of economies of scale and scope deriving from the combination of similar skills. However, when banks characterized by different cost controlling strategies merge, they may realize a worse performance (Altunbas et al., 1997).

The level of adequacy of the capital is measured by the ratio equity on total assets (CA/TA). This ratio shows banks' strategy regarding their capital structure. The effect of the change of this ratio on the creation of value depends on the theory of the banking firm. According to the signaling hypothesis, commercial banks specialize in lending information to problematic borrowers (Berger et al., 1995). Since bank managers usually have a stake in the capital of the bank, it will prove less costly for a good bank to signal better quality through increased capital than for a bad bank. Therefore, banks can signal favorable information by merging with banks with larger capital ratio suggesting a positive relationship between capital structure differences and performance (Berger, 1995). Alternatively, Ross (1977) argues that of weaker capital ratios signal positive information, since the signaling of the good quality through a big indebtedness can be less expensive for a "good" bank than for a "bad" bank.

The ratio Net loans on total assets (NL/TA) takes into account the prominence of loans in terms of its weight on the overall portfolio. In general, it can be argued that when banks with very different asset quality and overall portfolio strategies merge, value destruction may be expected. Since the scale returns and the cost integration is an essential goal of a great number of domestic mergers, conflicts arising from managerial disparities on critical decisions, such as asset quality or the overall portfolio

strategy, may be an obstacle to creating such synergies. Then, the greater the difference among merged bank strategies, the lower the performance after merging is initially expected to be. The opposite may happen in cross-border mergers as one of the goals of these operations may be to improve revenues derived from including new portfolio strategies or reduce the risk profile of one of the merging partners (Demsetz and Strahan, 1997).

The strategy followed by the bank regarding its asset quality profile is measured as the level of loan loss provisions divided by interest revenues. The earnings diversification strategy referred to the emphasis on other sources of income deriving from potential new revenues, diversification and access to financial innovation possibilities from producing new products and services. Maximization of non-interest revenue as a general strategy is measured by the ratio of other operational revenue to total assets (OOR/TA). Differences in other operational revenue to total assets may enhance the value creation following merger. So a positive relation is expected between this ratio and the value creation post-merger.

The off-balance-sheet activities are measured as the ratio of off-balance-sheet activity to total assets (OBS/TA). Dissimilarities in off-balance-sheet activities are expected to enhance post-merger performance (Δ ROE) as they could help spreading access to financial innovation and new sources of revenues (Gande et al., 1997). This positive relationship is expected to be particularly strong in the case of domestic mergers where homogeneity among merging entities tends to be higher and the difficulties associated with the integration of the new products are normally lower than in the case of cross-border mergers (Harrison et al., 1991). The total loans to total customer deposits ratio (L/D) provides a proxy for the use of relatively low-cost deposits in relation to the amount of loans. Finally, banks' strategy in terms of technology and innovation is measured as other expenses as a proportion of total assets used for investment in technology and innovation (TECH). Dissimilarities in investments in technology among bidders and targets are expected to produce better performance as each of the merging partners may benefit from returns to scale and scope derived from the

investments made by their merging counterpart. However, these differences may lead to a drop in performance in the case of cross-border mergers, due to the risk of incompatibility among technologies across borders (Harrison and 1993).

3. Results and discussions

At first blush, the statistics indicate a destruction in French bank post-merger value (Δ ROE) following mergers of around 5.14% on their return on capital, although a median increase in returns of around 2.018%. For control variables, the increase of mean had been supported by an increase of median, but with a less elevated rhythm. For strategic variables, they knew some more or less important increases in means, supported by increases of medians for the ones and in spite of decreases of medians for the others.

Table 2: Descriptive statistics of the main determinants of value creation

<i>Definition</i>	<i>Mean</i>	<i>Median</i>	<i>Minimu</i>	<i>Maximum</i>	<i>St. Deviation</i>
<u>Dependent Variable</u>					
Value creation	-5.142	2.018	-54.4500	7.0093	18.9093
<u>Control Variables</u>					
Bidder performance	10.615	8.996	3.9200	21.7870	5.448068
<u>Strategic Variables</u>					
Liquidity	15.6119	16.353		41.3630	13.8642
Efficiency	37.1209	35.703	0.7703	92.3580	28.7587
Capitalization	10.0056			49.8660	14.8876
Loan to assets	14.4222	3.771	2.0130	30.3300	9.3511
Credit risk	9.1721	14.166		85.9834	26.9964
Diversity earnings	39.9835		0.4230	95.2430	23.2202
Off-balance sheet activities	40.8321	0.483		117.043	40.0563

Note: The strategic variables report the values of the similarity index for each variable.

Table 3 illustrates the responsiveness of French bank post-merger value creation to control variables (Model 1) and a set of variables measuring strategic similarities between merged banks (Model 2). Empirical results show that the two control variables (differences of size between partners and bidder pre-merger performance) are not meaningful.

This result is contradictory with Altunbas and Marquès (2008) result supposing that a relatively elevated level of bidder pre-merger performance tends to affect negatively the level of post-merger performance of merged banks. According these authors too, differences of size between merged banks play a major role in the influence of the performance, but that this influence differs extensively depending on whether the operation is domestic or transnational. For the first, more the target is bigger than the bidder, more the ex-post performance will be worse, due to difficulties to assimilate some bigger institutions. On the contrary, for the second, more the size of the target is big in comparison with the bidder, more the ex-post performance will be better. It is explained by the authors by the fact that for the cross-border operations the bidder's goal is not to achieve fast cost savings but rather to win profits coming from other synergisms.

The nine strategic variables explain 98% of the variance in the change of the creation of value following fusions. The relation between differences in efficiency levels measured as the cost to income ratio and value creation is positive. This result doesn't support the banking theory suggesting that difficulties in integrating banks with very different cost structure, particularly in the short-term will influence negatively the value creation following merger (Altunbas and al, 1997). A positive relation also existed between differences in capital structure and value creation. On the contrary, Y. Altunbas and D. Marqués (2008) found that the impact of this strategic variable on the value creation varies depending on whether the operation is domestic or transnational.

This impact is positive for the first and negative for the second. The negative effect is explained by the two authors by the fact that, since the capital is sometimes used by banks to signal the good quality of assets, it decorated to be more difficult for the transnational operations to integrate institutions to different structures of capital, seen that asymmetries of information between the merged parts are raised more than those in the domestic operations. Differences in terms of loan-to-assets ratio among merged banks affect positively the exp-post value creation. This result doesn't validate the hypothesis according to which the value is supposed to deteriorate when merge

banks with big differences in terms of quality of assets. Since returns of scale and the cost integration costs are the essential goals of number of domestic mergers, conflicts are born from managerial disparities concerning the critical decisions, as the quality of assets. These conflicts can constitute an obstacle to the value creation. Thus, the more different the bidder's type of business compared to the target, the worse the post-merger performance. In cross-border mergers, the larger the differences in loan-to assets strategy, the better the improvement on performance. Improved revenues derived from scope returns and broad complementarities are one of the major drivers of cross-border mergers.

Table 3: Results of regression analysis of change in value creation on strategic and control variables

<i>Variables</i>	<i>Model 1</i>	<i>Model 2</i>
<u>Control Variables</u>		
Bidder performance	-0.3278 (0.5716)	
Relative size	0.00805 (0.0581)	
<u>Strategic Variables</u>		
Liquidity		-0.2203 (0.1395)
Efficiency		2.1052 ** (0.2108)
Capitalization		2.6818 ** (0.3747)
Loan to assets		-4.7378** (0.414)
Credit risk		1.3719* (0.1042)
Diversity earnings		2.3588** (0.3123)
Off-balance sheet activities		-1.9275** (0.2744)
Loans to deposits		-1.8226 (0.3543)
Other expenses		-14.7838** (1.7921)
R ² -Adj	-0.169	0.98
Durbin Watson	2.5091	0.968

Note: Model 1 includes the control variables only. Model 2 is the complete model, which includes both the control and strategy variables.

*,** indicate significance at the 5% and 10% levels, respectively The standard errors of the coefficients are in parenthesis.

Our empirical results also showed a positive relation between differences in strategies among merged banks in terms of credit risk and the creation of value. This result supports those of Altunbas and Marquès (2008) in the case of cross-border transactions where improved revenues derived from scope returns and broad complementarities among merging institutions are one of the major drivers. For domestic deals, it could be quite costly to integrate heterogeneous institutions in terms of loan strategies. In other words, the more different the bidder's type of business compared to the target, the worse the post-merger performance. Our empirical findings stipulate a positive relation between differences in terms of diversity earnings and value creation ex-post. This result is consistent with the theoretical hypothesis stipulating that these differences are able to improve the value creation since they can help to reach the financial innovation and the new sources of income.

Dissimilarities in off-balance-sheet activities affect negatively the ex-post value creation. This result is contradictory with the hypothesis suggesting that these dissimilarities will enhance post-merger performance as they could help spreading access to financial innovation and new sources of revenues. The differences in other expenses strategy among merged partners affect negatively the potential of post-merger value creation. Interpretation of this result differs depending on whether the operation is domestic or cross-border. In the first case, these differences strategy are supposed to create the value. In the second case, these differences are able to destroy the value due to the risk of incompatibility among technologies strategies.

Differences in terms of the deposit strategies of merging partners have any impact on post-merger value creation. This result is contradictory with those of Altunbas and Marquès (2008) suggesting a positive relation both for the domestic and cross-border mergers, with the effects being stronger for cross-country mergers, which are normally more difficult to integrate. Differences in liquidity strategies of merging partners are not meaningful too. It is contradictory to our hypothesis stipulating that different strategies of liquidity management can imply that one of the two merged banks can improve its management of liquidity after the merger and enhance thus its performance.

Thus, our empirical findings could not provide us complete evidence on the effect of strategic differences between the bidder and the target on the value creation following mergers-acquisitions operations.

5. Conclusion

The objective of this study was to project lights on the bank mergers-acquisitions operations in France while analyzing the impact of differences between acquirers and targets of two control variables (model 1) and nine explanatory variables (model 2) on the creation of the value ex post. Variables of control were the bidder pre-merger performance and the relative size. The explanatory variables were differences in strategies of liquidity, efficiency, capitalization, loans ratio, loan risk, diversity of incomes, off-balance sheet activities, deposits activity and other expenses.

This study has been driven by the importance of the value creation for the shareholders among indicators of measure and assessment of the bank performance and by the necessity to study the influence on the value of the French banks of a merger or an acquisition, an important phenomenon able to modify their trajectory.

Results of the descriptive statistics analysis showed that the banking consolidation operations were translated, on average, by a destruction of the value of 5.14%, in spite of an increase of the median of 2.018%. So, these operations didn't succeed in getting the discounted results.

The empirical findings showed that the two variable of control (bidder pre-merger value creation and relative size) were not meaningful. For the explanatory variables, although having a good explanatory power (R^2 adjusted of 98%), they could not provide us complete evidence on the effect of strategic differences between the bidder and the target on the value creation following consolidation operations. In fact, only three of them had a negative effect. These variables are the strategic differences in terms of loans ratio, off-balance sheet activities and other expenses. The strategic differences in terms of efficiency, capitalization, loan risk, income diversities had a positive effect. Differences in terms of liquidity and activity of deposits didn't have any impact.

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Appendices

Table 1. Definition of controlling and strategic variables (in percentage)

Definition	Symbol	Formula
<u>Dependent Variable</u>		
Value creation	ΔROE	ΔROE Return on equity (post-merger) – weighted return on assets (premerger)
<u>Controlling Variables</u>		
Bidder performance	BID-ROE	Return on equity of the bidder (pre-merger)
Relative size	RSIZE	Total asset of target/Total asset of bidder
<u>Strategic Variables</u>		
Liquidity	LIQ	Liquid assets/Total deposits
Efficiency	COST/INC	Total cost/ Total revenues
Capitalisation	CA/TA	Total capital/ Total assets
Loan to assets	LOAN/TA	Loans/Total assets
Credit risk	BADL/NET INT INC	Loan loss provision/Net interest revenues
Diversity earnings	OOR/TA	Other operational revenues/ total assets
Off-balance sheet activities	OBS/TA	Off-balance-sheet items/ total assets
Loans to deposits	LOANS/DEP	Customer loans/ Customer deposits
Other expenses	TECH	Other expenses/ Total assets

Table2.Descriptive statistics

	Y	C1	C2	X1	X2	X3	X4	X5	X6	X7	X8	X9
Mean	-5.141280	10.61536	56.43579	15.61195	37.12098	10.00560	14.42220	9.172180	39.98350	40.83213	16.66492	2.447930
Median	2.018400	8.996650	19.38100	16.35355	35.70300	3.771500	14.16650	0.483100	32.40000	23.21500	13.70400	1.095300
Maximum	7.009330	21.78700	357.4552	41.36300	92.35800	49.86600	30.33000	85.98340	95.24300	117.0430	43.02400	14.28700
Minimum	-54.45000	3.920000	4.154000	0.770300	2.013000	0.423000	1.503000	0.055000	10.54000	8.333400	1.230000	0.082500
Std. Dev.	18.90938	5.659703	107.9480	13.86421	28.75874	14.88761	9.351153	26.99643	23.22026	40.05638	14.20060	4.246865
Skewness	-1.996636	0.813834	2.481249	0.526751	0.489391	2.157936	0.284827	2.663834	1.340659	1.119705	0.689112	2.468863
Kurtosis	5.806516	2.494746	7.492287	2.178850	2.343447	6.404742	1.914886	8.102188	4.351381	2.661479	2.202271	7.491997
Jarque-Bera	9.926146	1.210244	18.66960	0.743398	0.578782	12.59126	0.625824	22.67348	3.756540	2.137314	1.056613	18.56632
Probability	0.006991	0.54600	0.000088	0.689562	0.748720	0.001844	0.731314	0.000012	0.152854	0.343470	0.589603	0.000093
Sum	-51.41280	106.1536	564.3579	156.1195	371.2098	100.0560	144.2220	91.72180	399.8350	408.3213	166.6492	24.47930
Sum Sq. Dev.	3218.082	288.2902	104875.0	1729.947	7443.588	1994.768	786.9965	6559.265	4852.622	14440.62	1814.914	162.3228
Observations	10	10	10	10	10	10	10	10	10	10	10	10

Table3. Descriptive statistics of the main determinants of value creation

Variables	Mean	Median	Minimum	Maximum	Standard Déviation
<u>Dependent Variable</u>					
Value creation	-5.142	2.018	54.4500	7.0093	18.9093
<u>Control Variables</u>					
Bidder Performance	10.615	8.996	3.9200	21.7870	5.448068
Relative size	56.4358	19.381	4.1540	357.4552	107.9480
<u>Strategic Variables</u>					
Liquidity	15.6119	16.353	0.7703	41.3630	13.8642
Efficiency	37.1209	35.703	2.0130	92.3580	28.7587
Capitalization	10.0056	3.771	0.4230	49.8660	14.8876
Loan ratio	14.4222	14.166	1.5030	30.3300	9.3511
Credit Risk	9.1721	0.4831	0.055	85.9834	26.9964
Diversity earnings	39.9835	32.400	10.540	95.2430	23.2202
Off-balance sheet activities	40.8321	23.215	8.3334	117.0430	40.0563
Deposit ratio	16.6649	13.704	1.2300	43.024	14.2006
Other expenses	2.4479	1.0950	0.0825	14.287	4.2468

Note: The strategic variables report the values of the similarity index for each variable.

Table 4. Results of regression analysis of change in value creation on strategic and other control variables

<i>Variables</i>	<i>Modèle1</i>	<i>Modèle 2</i>
<u>Variables de contrôle</u>		
Bidder Performance	-0.3278 (0.5716)	
Relative size	0.00805 (0.0581)	
<u>Variables explicatives</u>		
Liquidity		-0.2203 (0.1395)
Efficiency		2.1052 ** (0.2108)
Capitalization		2.6818 ** (0.3747)
Loan ratio		-4.7378** (0.414)
Credit Risk		1.3719* (0.1042)
Diversity earnings		2.3588** (0.3123)
Off-balance sheet activities		-1.9275** (0.2744)
Deposit ratio		-1.8226 (0.3543)
Other expenses		-14.7838** (1.7921)
	-0.169	0.98
R ² ajusté	2.5091	0.968
Durbin Watson		

Notes: Model 1 includes controlling variables, model 2 includes strategic variables.

*, ** Significativity at 5% and 10%, respectively. Standard errors of variables are put into parentheses.

• **Model 1 estimation**

Dependent Variable: Y

Method: Least Squares

Date: 01/03/12 Time: 12:28

Sample: 1 10

Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C1	-0.327832	0.571654	-0.573480	0.5821
C2	0.008053	0.058158	0.138463	0.8933
R-squared	-0.039195	Mean dependent var		-5.141280
Adjusted R-squared	-0.169095	S.D. dependent var		18.90938
S.E. of regression	20.44571	Akaike info criterion		9.050279
Sum squared resid	3344.216	Schwarz criterion		9.110796
Log likelihood	-43.25140	Hannan-Quinn criter.		8.983892
Durbin-Watson stat	2.509107			

• **Model 2 estimation**

Dependent Variable: Y

Method: Least Squares

Date: 01/03/12 Time: 12:29

Sample: 1 10

Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X1	-0.220341	0.139504	-1.579460	0.3593
X2	2.105249	0.210799	9.987020	0.0635
X3	2.681808	0.374757	7.156123	0.0884
X4	-4.737809	0.414010	-11.44370	0.0555
X5	1.371954	0.104218	13.16430	0.0483
X6	2.358867	0.358438	6.580965	0.0960
X7	-1.927562	0.274484	-7.022490	0.0900
X8	-1.822612	0.354327	-5.143865	0.1222
X9	-14.78384	1.792167	-8.249142	0.0768
R-squared	0.997800	Mean dependent var		-5.141280
Adjusted R-squared	0.980203	S.D. dependent var		18.90938
S.E. of regression	2.660609	Akaike info criterion		4.292402
Sum squared resid	7.078841	Schwarz criterion		4.564729
Log likelihood	-12.46201	Hannan-Quinn criter.		3.993661
Durbin-Watson stat	0.967948			

BIBLIOMETRIC ANALYSIS OF THE JOURNAL OF LAW AND SOCIETY: A THIRTY ONE YEAR'S STUDY FROM 1982-2012

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ABSTARCT

This article describes and analyze the key bibliometrics components of the articles published in the *Journal of Law and Society* from 1982-2012. A total of 389 articles were studied in this regard and resulted that total 224 authors contributed 389 articles either individually or in collaboration. Furthermore most of the authors were belonging from Peshawar with a very less contribution from other parts of the country and foreign. Single author's articles ranked highest. Average citations per article were 5.57 citations and constitutional and administrative law was the most dominant subject of the articles.

INTRODUCTION

The term bibliometrics is usually applied to the quantitative analysis of publications of an individual, institution or any discipline. All quantitative aspects and models of science communication, storage, dissemination and retrieval of scientific information come in the circle of bibliometrics. Bibliometrics developed from the statistical studies of bibliographies. In 1969, Alan Pritchard used the term bibliometrics in his article *Statistical Bibliography or Bibliometrics?* That appeared in the December issue of the *Journal of Documentation*. He wrote that “Statistical bibliography is awkward, not descriptive, and can be tangled with statistics itself or bibliographies on statistics” and explained the term bibliometrics as “thesis of mathematical and statistical methods to books and other media of communication” (Pritchard, 1969).

The *Journal of Law and Society* is an HEC (Higher Education Commission) recognized journal published by Legal Research Centre Law College, University of Peshawar. The college started its publication in 1982 when it published the first issue of the *Journal of Law and Society* in July 1982. This is a bi-annual journal publishing two issues every year in the month of January and July. The scope of the journal covers issues regarding law and society, their relationship, impact etc. The journal is divided into three sections: the bulk of the journal is allotted to research articles; the next section “Case Book” is devoted to the examination of most recent and most important case laws and the last section “Book Review” is confined to the review of the latest publications in law and social sciences. It is also interesting to note that the journal is the only law journal published in the country by a public sector academic institution.

The main purpose of the study is to undertake bibliometric analysis of the articles published in the *Journal of Law and Society* from 1982 to 2012. For this purpose standard bibliometric indicators i.e. authorship patterns including; amount of author's productivity, institutional affiliation, collaboration and country origin along with the subjects covered, number of citations used, number of pages per paper and year-wise distribution of articles.

REVIEW OF THE RELATED LITERATURE

Bibliometric studies provide an appraisal of the journal literature by making a detail study of publications in a specific subject. That's why so much research work has been conducted in this field. In some bibliometric studies only citations are analyzed while in other studies the bibliographic aspects, such as quantitative growth of articles by year, authorship pattern, gender distribution, length of paper etc are studied. Some bibliometric studies under different categories are given below.

Bibliometric Studies in Sciences

Tajuudin (1998) conducted a bibliometric analysis of *Journal of Plantation Crops* and studied 24 volumes, carrying total 558 articles published from 1973 to 1996; Dihman (2000) analyzed the *Ethnobotany Journal's* volumes from 1989 to 1998 in terms of year-wise distribution, he studied the nature of authorship, geographic origin of the authors and average length of the papers etc.; Kumar and Sen (2001) analyzed the articles of *Journal of Bio Sciences* in respect of citations pattern; *Journal of Structure Chemistry* was analyzed by Buznik, Zibareva, and Peletskii & Sorokin in 2004, covering its volumes published from 1960 to 2002; Narang (2004) conducted study on the bibliometric analysis of *Indian Journal of Pure and Applied Mathematics* from 1998 to 2002, covering 8396 citations of 737

articles published in volumes 29 to 33; Bentio, Montesinos, Ferre and Torrento (2005) conducted a study on *differential item functioning* to know about the scientific output in the area of differential items functioning; *Indian Journal of Environmental Protection* volume 14, 19 & 24 were analyzed through bibliometric techniques by Braider in 2006; Biswas, Roy & Sen (2007) conducted research on the *Journal of Economics Botany* covering its volumes published from 1994 to 2003; Vijay & Raghavan (2007) analyzed the *Journal of Food Sciences & Technology* with its 779 articles along with the citations in its five volumes 37 (2000) to 41 (2004); *Pramana* a Physics journal was analyzed by Kumar, Parakashan & Kalyane (2008), studying its impact factor, types of articles, authorship pattern; Natter (2009) scientometrically analyzed *Indian Journal of Physics* covering its volumes from 2004 to 2008 and observed the authorship pattern, number of pages used per volume etc.; Hamadicharef (2010) conducted Scientrometric analysis of *Journal of Neurolamge*. This study covered 11604 articles published from 1992 to 2009.

Bibliometric Studies in Social Sciences

Ching-Chih Chen (1977) carried out citation analysis of the articles of the *Bulletin of the Medical Library Association (BMLA)*, published in 1966-1975; Tiew (1998) conducted a bibliometric study of the *Journal of Malaysian Branch of the Royal Asiatic society (JAMBRAS)*, covering all its issues published from 1987 to 1996; Knight, Hult and Bashaw (2000) analyzed the research productivity in the *Journal of Business Research*, covering its articles published from 1985 to 1999; The Bibliometric study of *Malysian Journal of Library and Information Science* (1996-2000) was carried out by Tiew (2002); Mehmood and Sharif (2004) conducted a study on the Pakistani Economic Journals i.e. *Pakistan*

Development Review (PDR) and *Pakistan Economic & Social Review (PESR)*; Jena (2006) analyzed the *Indian Journal of Fiber and Textile Research* (1996-2004); A study was conducted by Katare (2007) on the *Journal of the Indian Society for Cotton Improvement (ISCI)*; covering its articles published from 1995 to 2004; Verma, Tamrakar and Sharma (2007), conducted study on the contribution in *Annals of Library and Information Studies*, which was conceded by covering its issues published from 1999 to 2005; Naseer & Mehmood (2009) studied *Pakistan library and Information Science Journal* (1998-2007), covering 236 articles of 30 issues; Bibliometric review of *Korean Journal of Urology*, covering the period from 1960 to 2008 was carried by Yang, Kim & Park (2009); Thanuskodi (2010) conducted a study on *Journal of Social Sciences*, covering 273 articles of the issues published during 2003 to 2007; Ahmad (2011) carried out bibliometric study of the *Sarhad Journal of Agriculture*, covering its articles published from 1985 to 2009. Total 2761 articles in its 25 volumes were studied; *Pakistan Development Review (PDR)* international economics journal was studied in bibliometric aspects by Jan (2011). Total 1672 articles of the PDR were studied for this purpose; *Electronic Journals in Library and information sciences* were studied by Kaparde (2011) and studied 180 issues of 5 Electronic Journals in library and information sciences, namely *ASLIB*, *Proceeding Library High Tech*, *Library Review*, *Online Information Review*, *New Library World* from 2005 to 2009; Hussain, Fatima & Kumar (2011), conducted study on Electronic Journal. They studied total 578 articles published during January 1st 2000 to Dec 31st, 2010; *Library Herald Journal* was analyzed by Thanuskodi (2011) and studied the issues published from 2006 to 2010; *Pakistan Journal of Library & Information Science* was analyzed by Fatima & Ahmad (2011). Eleven issues of the journal published from 1995 to 2010 were analyzed; Khaparde (2011) studied the

bibliometric aspects of *Electronic Journal of Academic and Special Librarianship*, covering all the citations appended to 84 articles published from 2005-2009; Kumar, Tiwari & Deepu (2012) carried out the bibliometric study of *Journal of Contribution to Indian Sociology*, covering its issues published from 2000 to 2009. Total 139 articles along with 5386 citations were studied; a bibliometric analysis of the ‘*Chinese Librarianship*: an International electronic journal was done by Husain & Fatima; Swain carried out the bibliometric study of *Journal of Intellectual Property Rights* covering its issues published from 2002 to 2010. Total 1541 journal citations appended to 332 articles were analyzed.

Bibliometric Studies in Law

The only study reported in the literature about law journal was made by Kaur (2006) in order to study the bibliometric aspects, characteristics and trends of the research articles published in the *Malaysian Law Journal*. For this purpose 479 articles from different editorial periods were selected by stratified random sampling.

STATEMENT OF THE PROBLEM

Literature presents gaps in terms of publication patterns in law publications in Pakistan. No bibliometric study of any law journal has been conducted so far in the country to assess the patterns of publications in this domain of scholarship. Hence, keeping in view the importance of the journal in the field of law, there is intense need to analyze the said journal by using the bibliometrics methods that will ultimately help us to understand the patterns of publication in this subject. *Journal of Law and Society* is a premier scholarly journal published by Legal Research Centre, LawCollege, University of Peshawar. This study will help to know the authorship pattern, author collaboration, country of origin, topics covered,

number of citation used of this journal.

RESEARCH OBJECTIVES

The main purpose of the study is to undertake bibliometric analysis of the articles published in the *Journal of Law and Society* from 1982 to 2012. In order to meet the following research objectives:

1. To understand the authorship pattern of published articles in terms of :
 - Authors' Productivity
 - Extent of authors' collaboration
 - Authors' institutional affiliation
 - Authors' geographic affiliation
2. To assess the subjects, these papers do cover.
3. To know the number of citations these papers are cited.
4. To find out the size of papers in terms of number of pages.
5. To find out year wise distribution of the articles.

LIMITATION OF THE STUDY

This study covered the issues of the journal published during 1982 to 2012. The limitations of the study were that *Journal of Law and Society* started it from the July issue (mean the first January issue was not published), and then college also didn't publish any issue in the year 1984 due to financial problems. Furthermore January issue of 1987 and 2008 were missing in the journals record.

SIGNIFICANCE OF THE STUDY

The importance of law in society and social sciences can never be ignored. To govern the system

smoothly, a set of rules is implemented by the government. Law is the soul of all fields of life i.e. politics, economics and society.

It supports a large source of scholarly inquiry into legal history, philosophy, economic analysis and sociology. It helps in all the simple and complex issues of life regarding justice and equality, creating a great literature which is important for the future development of their fields. The law through legislative and administrative responses to new social conditions and ideas as well as through judicial interpretation of constitution statutes not only articulate but also set the courses for major changes. All such course /Literature needs to be analyzed to observe the prevailing needs and trends in the field.

The study is an attempt to examine the characteristics of research trends published in the *journal of Law and Society*. It is the first ever bibliometrics study of any law journal in Pakistan. Hence, the study will be very helpful for the researchers, teachers, students and policy makers to understand current focus of the authors and researchers in the field of law. The findings of the study will also help us to understand the publishing trends of the *Journal of Law and Society*. It will be helpful for editorial team as well as the university administration. The study will also open up this important area for researchers to conduct such studies on other journals published in the country.

RESEARCH DESIGN AND METHODOLOGY

Using bibliometric method of analysis this study scanned the characteristics and trends of the papers published in the *Journal of Law and Society*, University of Peshawar. Owing to this all the papers of *Journal of Law and Society* published from 1982 to 2012 were analyzed. In determining the authors' institutional and geographic affiliation, addresses given in the papers were considered; however where

this information was not mentioned was considered and marked as unknown. In case of double or triple authorship if both or all the three authors belong to one place, then the same place was considered only one time. However if their place of belongings was different then geographical affiliation was considered different. The subject of the papers were decided and determined by using Dewy Decimal Classification Scheme (DDC) 22nd edition.. In counting citations, citations and their references whether given in the footnotes or end notes were counted as references. However, in counting citations *ibid* and *op.cit* were ignored. Where no bibliography or references were given then the material used were considered as references. Annexure containing any type of data was included in the articles while counting its pages. Similarly last page of the article whether half or having only one line was considered full page. A total of 389 articles published in 29 volumes of *Journal of Law and Society* from 1982 to 2012, were the subject of the study. To record the data, a basic and primary database was created first in MS-Access with a table of columns for different categories of information i.e. year, volume no, issue no, subject of the articles, keywords, author, institutional affiliations, geographic affiliations, number of citations, number of pages etc. To perform calculations on the data, a second and final database was created in MS-Excel having columns of different categories of information.

FINDINGS AND DISCUSSION

Authorship Patterns

Amount of Author Productivity:

A total of 224 authors contributed 389 articles in 48 issues of the *Journal of Law and Society* published from 1982 to 2009. Table 1 shows the author productivity based on the number of articles an

author has contributed. The maximum numbers of authors contributing to an article as shared authorship were five. The data collected shows that majority of authors (118, 52.67%) contributed one article individually or in collaboration. In addition to this 43 (19.19%) of the authors contributed two articles, 14 (6.25%) contributed three, 13 (65.80%) contributed four and 10 (4.46%) contributed five papers. The highest numbers of articles contributed by an individual author were 29.

Table 1: Amount of authors' productivity

No of Articles	No of Authors	Percentage
1	118	52.67
2	43	19.19
3	14	6.25
4	13	5.80
5	10	4.46
6	3	1.33
7	2	0.89
8	5	2.23
9	2	0.89
10	2	0.89
11	2	0.8
12	2	0.89
14	4	1.78
15	1	0.45
19	1	0.45
21	1	0.45
29	1	0.45
Total	224	99.96%

Collaborative Authorship

Out of total 389 articles, 248 (638%) were the result of individual efforts while only 141(36.24%) papers were the result of collaborative authorship. In this collaborations, two authored papers were highest with 63 (16.2%), following by three authored papers with 47(12.1%), four authored papers were with 27 (6.9%) and five authored papers 4(1.03%). Table 2 present the position of authors' collaboration in regard of *Journal of Law and Society*.

Table 2: State of authors' collaborations

Authorship	Number of Papers	Percentage
------------	------------------	------------

Single Author	248	63.8
Two Authors	63	16.2
Three Authors	47	12.1
Four Authors	27	6.9
Five Authors	4	1.03
Total	389	99.99%

Institutional Affiliation of Authors:

There were total 40 institutions to which authors of the articles were affiliated. Data given in the table 3 shows the institutional affiliation of authors with 554 occurrences. In these institutions, University of Peshawar (Comprising of 24 departments contribution) was on the top, being the home institution of the *Journal of Law and Society* with 385 (69.42%) occurrences, following by Agriculture University Peshawar with 15 (2.70%), Universities of London with 13 (2.34%), International Islamic University Islamabad and University of Malakand with 10 (1.80%) occurrences each.

Table 3: Top 15 contributing institutions

Contributing Institutions	Frequency of Occurrences	Percentage
Peshawar University	1	0.18
Law College UOP	113	20.39
Dept of Sociology UOP	67	12.09
IMS UOP	32	5.78
Dept Of Political Science UOP	31	5.59
Dept of Economics UOP	28	5.05
Islamia College UOP	13	2.34
Dept of Psychology UOP	11	1.98
Dept of International Relations UOP	11	1.98
Dept of History UOP	11	1.98
Area Study Centre UOP	11	1.98
College of Home economics UOP	8	1.44
Jinah College For women UOP	6	1.08
Dept of Public Administration UOP	6	1.08
Dept of Geography UOP	6	1.08

Pakistan Study Centre	6	1.08
UOP		
Dept of Philosophy	4	0.72
UOP		
Dept of English	4	0.72
UOP		
Dept of Library Science	4	0.72
UOP		
Dept of Environmental	4	0.72
Sciences		
UOP		
Quaid-e- Azam College	3	0.54
of Commerce		
UOP		
Dept of Regional	1	0.18
Studies		
UOP		
Institution of Education	1	0.18
& Research		
UOP		
Institution of	1	0.18
Development		
UOP		
UOP		
Peshawar University	385	69.42
Agriculture University	15	2.70
Peshawar		
Universities of London	13	2.34
International Islamic University	10	1.80
Islamabad		
University of Malakand	10	1.80
University of Kohat/ Kohat	7	1.26
Division NWFP		
Universities of USA	6	1.08
Quaid-i- Azam University	5	0.90
Islamabad		
Abdul Wali Khan University	5	0.90
Mardan		
Hazara University Mansehra/ Govt	5	0.90
College Mansehra		
University of Punjab, Lahore	4	0.72
Punjab University Chandigarh	4	0.72
India		
Pakistan Law Commission	4	0.72
Islamabad		
Islamia College University	3	0.54
Peshawar		
Pakistan Academy for Rural	3	0.54
Development		
Peshawar		
Khyber Teaching Hospital	3	0.54
Peshawar		
University of Sindh Jamshore	3	0.54
University of Baluchistan, Quetta	2	0.36
Gomal University D.I Khan	2	0.36
University of Bahawalpur	2	0.36
Edwards College Peshawar	1	0.18
City University Peshawar	1	0.18
Executive Development Centre	1	0.18
Gandhara University Peshawar		
Khyber PakhtunKhw Textbook	1	0.18
Board Peshawar		
Pakistan Centre for vision sciences	1	0.18
Hyatt Abad Medical Complex		
Peshawar		
Government college Timergarha	1	0.18
Dir		

UNHCR Peshawar	1	0..18
GulamIshaq Khan Institute of Science and technology, Sawabi Provincial Judiciary	1	0.18
Government Degree College Matta Swat	1	0..18
Rajshahi University Bangladesh	1	0.18
University of Massachusetts, Amherst	1	0.18
Islamic Azad University, Iran	1	0.18
Allama Iqbal Open University Islamabad	1	0.18
Bacha Khan University Charsadda	1	0.18
Directorate of Social Welfare and Special Education	1	0.18
Directorate of Research and Development forest KPK	1	0.18
Wealth Regional Department Milan Italy	1	0.18
Unknown	45	8.122
Total	554	99.86%

Country Origin of Authors

Highest number of contribution in *Journal of Law and Society* was from Pakistan with 198 (88.4%) being the home country of the journal followed by UK with 8 (3.6%), India with 4 (1.8%), USA with 2 (0.9%) and Italy, Iran and Bangladesh with 1 (0.4%) respectively. In Pakistan province wise distribution was like this that KPK was on top with 178 (79.5%) followed by Federal area with 9 (4.00%), Punjab with 6 (2.7%), Sindh with 3 (1.3%) and Baluchistan with 1 (0.4%) author. There were also authors whose geographic location was not mentioned i.e. of the total authors, 9 (4.00%) authors' place of origin was not mentioned and therefore was marked as unknown.

Table 4: Country origin of authors

Place of Origin	Number of Authors	Percentage
Pakistan	178	79.5
KPK	9	4.00
Islamabad	6	2.7
Punjab	3	1.3
Sindh	2	0.9
Baluchistan		

Pakistan (Total)	198	88.4
UK	8	3.6
India	4	1.8
USA	2	0.9
Itlay	1	0.4
Iran	1	0.4
Bangladesh	1	0.4
Unknown	9	4.00
Total	224	99.9%

Subjects Analysis of Articles

Total 389 articles of the journal were categorized and 26 different subject divisions were assigned to these categories. The detail of subjects is given in table 5. The results show that the highest number of articles 73(18.76%) were on Constitutional and Administrative Law (the most dominant subject), followed by Law of Nations and International 58(14.91%) and Islamic Law with 41(10.53%), Sociology with 39 (10.2%), Military, Defense, Public Property and Labor social services, education and social insurance with 19 (4.88%) respectively.

Table 5: Subjects covered in the papers

Subjects	No of Papers	Percentage
Constitutional and Administrative Law	73	18.76
Law of nations and International law	58	14.91
Islamic law	41	10.53
Sociology	39	10.2
Military, Defense, Public property	19	4.88
Labor social services, Education and social insurance	19	4.88
Political Science/ Political thoughts	17	4.37
Law	16	4.11
Private law	14	3.59
General Consideration of Public administration	14	3.59
Civil procedure and courts	13	3.34
Criminal law	10	2.57
Social Welfare problems and services	10	2.57
Economics/ labor Economics	6	1.54
Research Methodologies	5	1.28

Management/ Marketing	5	1.28
Psychology	3	0.77
Philosophy	2	0.51
Human behavior/ human development	2	0.51
Library legislation/ Law Libraries	2	0.51
Subject Index of JoLS/ Bibliometric pattern of JoLS	2	0.51
Mobile phone addiction	2	0.51
Third World	2	0.51
Geography	2	0.51
Miscellaneous	13	3.25
Minorities, Medical Jurisprudence, Tourism etc		
Total	389	99.81%

Number of Citations used in the Papers

Citations in the articles of *Journal of Law and Society* were varying in ranges of citations starting from 0 (the least) to 139 (the most). Total 8835 citations were used in these 389 articles. Average numbers of citations per article were 5.57 citations. To analyze citations total 17 ranges of each five i.e. from 1-5, 6-10..... 135 -140 were used.

Table 6: Number of citations used in the articles

Citations Range	No of Articles	Percentage	Cumulative Percentage
1-5	37	9.51	9.51
6-10	63	16.19	25.7
11-15	60	15.42	41.12
16-20	61	15.68	56.8
21-25	47	12.08	68.8
26-30	25	6.42	75.22
31-35	27	6.94	82.16
36-40	16	4.11	86.27
41-45	11	2.82	89.09
46-50	12	3.08	92.17
51-55	7	1.79	93.96
56-60	2	0.51	94.47
61-65	3	0.77	95.24
66-70	7	1.79	97.03
71-75	5	1.28	98.31

76-80	2	0.51	98.82
80 and above	4	1.04	99.86
Total	389	100%	100

Size of Papers in Terms of Pages

In total 29 volumes of the *Journal of Law and Society* 2297 pages were covered, with an average 19.45 pages per article. Data given in the table show that highest number of articles i.e. 84 (21.5%) were consisting of 5 pages. The second highest were 66 (16.96%) articles with 6 pages, followed by 65 (16.70%) with 4 pages, 42 (10.79%) articles with 3 pages. Thirty three articles were in the length of 7 and 8 pages each and only 17 articles were consisting of 2 pages. However the longest paper of the journal was only one article of 25 pages.

Table 7: Size of papers in terms of pages

Pages	No of Articles	Percentage
1	0	0.00
2	17	4.37
3	42	10.79
4	65	16.70
5	84	21.5
6	66	16.96
7	33	8.48
8	33	8.48
9	13	3.34
10	14	3.59
11	7	1.79
12	4	1.02
13	2	0.51
14	1	0.25
15	2	0.51
16	2	0.51

More than 16	4	1.02
Total	389	99.82%

Year Wise Distribution of Articles

Results states that total 389 articles were published in the 29 volumes published from 1982 to 2012, with an average of 7.62 articles per year. Highest numbers of articles published in a year were 40 which appeared in the year 2006. While minimum number of articles were in the year 1995 and 1996 which were 11 in the congested volume for the issues, 1994 July issue, 1995 January and July issue, 1996 January and July issue and July issue of 1997. There was no set pattern for the year wise distribution of the articles per year. In the total 29 volumes there were total 57 issues (issues were counted separately for each year whether in congested form or other). After publishing the January issue of the year 1994 there was a long gap and then after some time college published congested volume for six issues of July 1994, January and July 1995, January and July 1996 and January issue of the year 1997 and published only 11 articles for the six issues. Similarly college published the three congested volumes for the year 2010, 2011 and 2012 in the year 2013, having two issues in one volume.

Table 8: Year wise distribution of articles

Volume	Year	Issue	No of Articles	Percentage
1	1982	1	9	2.31
2	1983	2-3	15	3.85
4	1985	4-5	10	2.57
5	1986	6-7	8	2.05
6	1987	8-9	4	1.02
7	1988	10-11	11	2.82
8	1989	12-13	11	2.82
9	1990	14-15	13	3.34
10	1991	16-17	13	3.34
11	1992	18-19	12	3.08

12	1993	20-21	10	2.57
13	1994	22	7	1.79
13-16	1995-1996	23-29	11	2.82
17	1997	30	9	2.31
18-19	1998	31-32	6	1.54
20-21	1999	33-34	13	3.3
22-23	2000	35-36	18	4.62
24-25	2001	37-38	14	3.59
26-27	2002	39-40	13	3.3
28-29	2003	41-42	12	3.08
30-31	2004	43-44	20	5.1
32-33	2005	45-46	23	5.9
34-35	2006	47-48	40	10.28
36-37	2007	49-50	13	3.3
38	2008	51-52	8	2.05
39	2009	53-54	19	4.88
40	2010	55-56	16	4.11
41	2011	57-58	16	4.11
42	2012	59-60	16	4.11
Total			389	99.96%

CONCLUSION

Based on the findings of the study, the following conclusions are drawn:

1. Most of the authors of the articles produced less number of papers and they mostly tend to work alone, however in the later years of the period the trend of the collaboration increased. The higher authorities should take this thing seriously and do something in practice to encourage team work.
2. It was noted that most of the authors of the papers were from University of Peshawar and its constituting departments, being the home department of the *Journal of Law and Society*. Although there was contribution from other provinces and capital of the country and even from some of the foreign countries but the contribution was very less in number which shows the standard of the journal at national and international level which is not good and healthy trend for the development of research in any discipline. In this context researcher should be encouraged to get involved in the in the national and international scholarly organizations and develop relations with research organization and institutes throughout the world

3. A great number of subjects are covered by the journals however there is still need to take serious attention to the journal and incorporate emerging topics in the new area must be covered.

RECOMENDATIONS

The following recommendations are suggested on the basis of the results and conclusion of the study.

- As collaborative research efforts improve the quality of papers, therefore an effort should be made for the promotion of team research and collaborative work.
- Legal Centre Law College University of Peshawar, ought to give serious attention to motivate researchers, through conferences, seminars and trainings to encourage research at national and international level, Which in turn will not only improve the quality of research but also will make it a trend and the Journal will develop.
- The college ought to set a proper pattern/ format for the publishing of papers in the journal. This will bring uniformity in paper formats, especially in giving references and citations, and papers without citations should be avoid in publishing because it's actually citations which shows the quality of a paper.
- The editorial board should make serious efforts to attract researchers from countries and encourage authors to the papers written in national and international collaboration.
- Scope of the journal should be defined so clearly that papers on all aspects of law and society should be contributed.

- There is an urgent need for conducting a citation analysis of the papers published in the

Journal of Law and Society.

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SOCIAL MEDIA MARKETING (SMM) STRATEGIES FOR SMALL TO MEDIUM ENTERPRISES (SMES)

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1. ABSTRACT:

Social media marketing involves the use of online social media tools such as Facebook, Twitter, and LinkedIn to reach consumers in innovative ways. Given the increasingly large numbers of consumers using social media, businesses of all types are getting involved in social media in an attempt to reach new audiences and strengthen their ties with existing customers. This paper will start by presenting the notion and concepts of SMEs and Social Media and its relation to Marketing, defining the terms and their features. Then, on the one hand, the theoretical analysis will use a wide literature review to discuss the main SME's marketing strategy and Social Media Marketing, explaining why SMEs should create their Social Media sites and maintain their presence on them regularly. On the other hand, the empirical analysis will examine the main marketing techniques used by SMEs on the Social Media channels, analyzing how businesses should develop their Social Media Sites. Finally, it will end with general conclusions and recommendations for SMEs using Social Media Marketing.

Key words: *Social Media, Social Media Marketing, SME, Business*

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“One of the greatest pieces of economic wisdom is to know what you do not know” – John Kenneth Galbraith.

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2. INTRODUCTION:

2.1.SME:

Small and medium sized enterprises (SME) differ from large corporations among other aspects first of all in their size. Their importance in the economy however is large [8].SME sector of India is considered as the backbone of economy contributing to 45% of the industrial output, 40% of India’s exports, employing 60 million people, create 1.3 million jobs every year and produce more than 8000 quality products for the Indian and international markets. With approximately 30 million SMEs in India, 12 million people expected to join the workforce in next 3 years and the sector growing at a rate of 8% per year, Government of India is taking different measures so as to increase their competitiveness in the international market. There are several factors that have contributed towards the growth of Indian SMEs. Few of these include; funding of SMEs by local and foreign investors, the new technology that is used in the market is assisting SMEs add considerable value to their business, various trade directories and trade portals help facilitate trade between buyer and supplier and thus reducing the barrier to trade With this huge potential, backed up by strong government support; Indian SMEs continue to post their growth stories. Despite of this strong growth, there is huge potential amongst Indian SMEs that still remains untapped. Once this untapped potential becomes the source for growth of these units, there would be no stopping to India posting a GDP higher than that of US and China and becoming the world’s economic powerhouse.

Table 1: Ceilings for small and medium sized enterprises

Manufacturing Enterprises – Investment in Plant & Machinery		
Description	INR	USD(\$)
Micro Enterprises	upto Rs. 25Lakhs	upto \$ 62,500
Small Enterprises	above Rs. 25 Lakhs & upto Rs. 5 Crores	above \$ 62,500 & upto \$ 1.25 million
Medium Enterprises	above Rs. 5 Crores & upto Rs. 10 Crores	above \$ 1.25 million & upto \$ 2.5 million

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Medium Enterprises	above Rs. 5 Crores & upto Rs. 10 Crores	above \$ 1.25 million & upto \$ 2.5 million

Source of data: Ministry of Micro, India (2006)

2.2.Social Media:

Kaplan and Haenlein (2010) describe social media as “a group of Internetbased applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user-generated content.” Social media offers an abundance of services on the Internet. This makes it complicated for companies to know which ones to use and how to use them. The types of social media include: social networks (Facebook, Myspace, and LinkedIn), micro-blogs (Twitter, Plurk, and Friend Feed), reviews and ratings (Yelp, Amazon, and Trip Advisor), video (YouTube and Vimeo), and more. Social media enables firms to engage consumers in a timely and direct manner at relatively low cost and higher levels of efficiency than with more traditional communication tools. This makes social media not only appropriate for large organizations, but for small and medium size companies as well [10]. Social Media is growing every day. Even if 90% of the 18-24 internet users use social network via any device at least once per month, social media affects every age group with much higher increase rates for the age groups over 35 [9]. Also, when looking at the average hours per week spent on online activities, we can definitely see that the world is becoming more social, with an average of 4.6 hours per week spend on Social Media Sites worldwide (Figure 1).

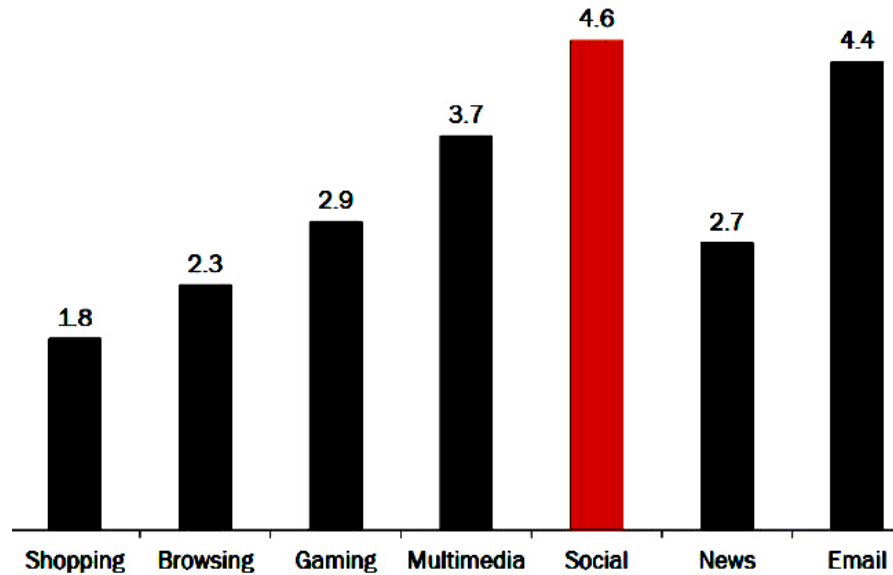


Figure 1: Average hours/week spent on online activities worldwide

Source: Hubspot, 2012.

2.3.Social Media Marketing:

Safko and Brake (2009) observe that social media “refers to activities, practices, and behaviors among communities of people who gather online to share information, knowledge, and opinions using conversational media” (p. 6). Weinberg (2009) notes that social media “relates to the sharing of information, experiences, and perspectives throughout community-oriented websites” (p. 1). [5] says that social media is “content that has been created by its audience” (p. 3). The Universal McCann report (2008) refers to social media as “online applications, platforms and media which aim to facilitate interaction, collaboration, and the sharing of content” (p. 10).

With a definition of social media in place, accurately defining social media marketing is possible. A basic definition is “using social media channels to promote your company and its products” (Barefoot & Szabo, 2010, p. 13). An expanded definition is “a process that empowers individuals to promote their websites, products, or services through online social channels and to communicate with and tap into a much larger community that may not have been available via traditional advertising channels” [17]. Nowadays, Social Media Marketing and more particularly Social Networks are becoming increasingly important in consumers’ purchasing decisions, mainly because they amplify word-of-mouth. They may even become more important than advertising as a trusted source of information. However, it is important to stress the fact that, in Social Media Marketing, marketers have less control over messaging and positioning. In this next section focussing on the notion of Social Media Marketing, we will define the notion of Social Media, the different concepts of Social Media Marketing, and its power on customers and global benefits for businesses.

Table 2: Social Media Forms (Mayfield, 2008)

Social Media	Purpose	Examples
Social Networks	Sites where people build personal pages and connect with friends	LinkedIn, Facebook
Blogs	A web log where you can post anything you want	Seaofshoes, Bryanboy
Wikis	A communal database where people can add or edit content	Wikipedia
Podcasts	Audio or video files that are available by subscription	Apple iTunes, Yahoo!
Forums	Online discussion around specific topics and interests	Next Gadget
Content Communities	Organize and share particular kinds of content	Flickr, YouTube
Microblogging	Combined social networking and bitesized blogging	Twitter

3. Objectives:

The purpose of this study is to understand how the owner of a small to medium enterprises, recognized for using social media to grow the business, uses social media to engage consumers. Social media plays a vital role in marketing and creating relationships with customers. In this study we try to identify the strategies that aid small-to medium enterprises' (SME) use of social media to engage consumers. The paper provides a set of techniques that the small to medium enterprises uses for their social media strategy, an analysis of these techniques, and lessons from the techniques that may benefit others. Second, it provides insights into marketing opportunities and challenges for SMEs to engage customers.

4. Problem Statement:

In the current modern societies, Social Media channels are commonly used in order to connect people together throughout the world using the Internet. Looking on a business perspective, it goes without saying that Social Media Marketing has offered a large variety of new opportunities for companies to promote their brand, products and services. In this paper I will aim at improving the understanding of the Social Media Marketing (SMM) Techniques for Small-to Medium Enterprises . Because the SME sector is important within most economies, it is important to understand how small businesses are taking advantage of marketing techniques and social media best practices to help promote business to consumer relationships.

5. Limitations:

In contrast with the large variety of significant benefits which will have been developed in the theoretical section, the limitations and risks of Social Media Marketing will also be listed in order to keep a complete and objective opinion of this new marketing technique. Indeed, we will take a closer look into the possible disadvantages or negative secondary effects of Social Media Marketing in the business

perspective. First, Social Media Marketing for businesses is extremely time-consuming, as it might require a complete team to work on it daily in order to produce regular content and be reactive at responding to customers' feedbacks and complaints. Besides, Social Media Marketing does also present some legal, reputational and operational risks for the business, which need to be taken into account and manage during the planning of the Social Media strategy. Limitations of my study include the low academic resources on Social Media Marketing as it is a relatively new domain of marketing and it is still evolving continuously. Interviews and questionnaires on the business benefits of Social Media Marketing are also very limited in response and valuable knowledge as most companies implementing Social Media Marketing strategy have not been able to measure their complete success yet.

6. Review of Relevant Literature:

Marketing is a crucial activity for the survival and success of a business. Businesses today have more marketing opportunities than ever [2]. In small businesses, marketing relies heavily on word of mouth recommendations for customer acquisition [14]. Today's economy, distinguished by relationships, technology, and networks, favors some of the characteristics of SMEs [16]. According to Kim and Ko (2010a), social media can have a dramatic impact on a brand's reputation. One-third of survey participants posted opinions about products and brands on the brand's blog, and 36% thought more positively about companies that have blogs. A recent study by DEI Worldwide (2008) provides the following statistics: 70% of consumers have visited social media sites to get information; 49% of these consumers have made a purchase decision based on the information they found through the social media sites; 60% said they were likely to use social media sites to pass along information to others online; and 45% of those who searched for information via social media sites engaged in word-of-mouth. The report states that companies not engaging in social media as part of their online marketing strategy are missing an opportunity to reach consumers. With a significant percentage of people passing along information to others through social media, the value of one customer is worth far more than what he or she initially spends. Thus, firms and brands now need to factor in the value of customers and also the influence of social media on them.

7. Methodology:

This study intends to initially give the reader a brief overview of the most popular social media. Later the paper will examine social media from a marketing perspective. This will be done by first describing social media in practice followed by guidelines for creating a strategy. This will be based on a literature study that was conducted at the start of this study. In order to analyze and resolve this problem formulation, the methodological approach chosen in this study will focus on understanding the role of Social Media Marketing in the SMEs. The main sources of information used throughout this study were issued from Internet articles and online blogs on Social Media Marketing, in order to always read up-to-dated information. On the whole, the methodological approach chosen for this study was aiming at providing study results as a synthesis of the literature review in a more structured and academic perspective. In this following methodology section, we will be starting with an explanation of the social media phenomenon,

accompanied with a definition of SMEs and social media and reasons for consumer and SMEs adoption of social media. Next, the focus shifted to explain Marketing Challenges or Opportunities of SMEs and SMEs Marketing Strategy. The final consideration was how to Benefit Social Media Marketing for SMEs.

8. Social Media and Marketing:

Social Media Marketing is marketing that focuses on people, not products (Diamond, 2008). Also, what is important about Social Media Marketing is that marketer can listen, track and measure what is shared on the Social Media Sites in order to improve the offered message and adapt it more to the customers' needs. Thanks to the Social Media analytics and metrics available, the impact of Social Media on a company's marketing strategy can be measured and evaluated relatively easily.

9. Social Media Marketing channels:

The Social Media domain is a huge medium that can be divided in many different types of channels. Every marketer has his own way of distinguishing one Social Media from another. Therefore, in this section, we will present the two most famous models showing the different types of Social Media channels. According to Robert Scoble, the Social Media Starfish (Figure 2) illustrates the different Social Media channels that people are using to interact on the Internet. It shows the evolving Social Media landscape. Although this model is very famous in the Social Media Marketing domain, it was developed in 2007 and is thus far out of date.

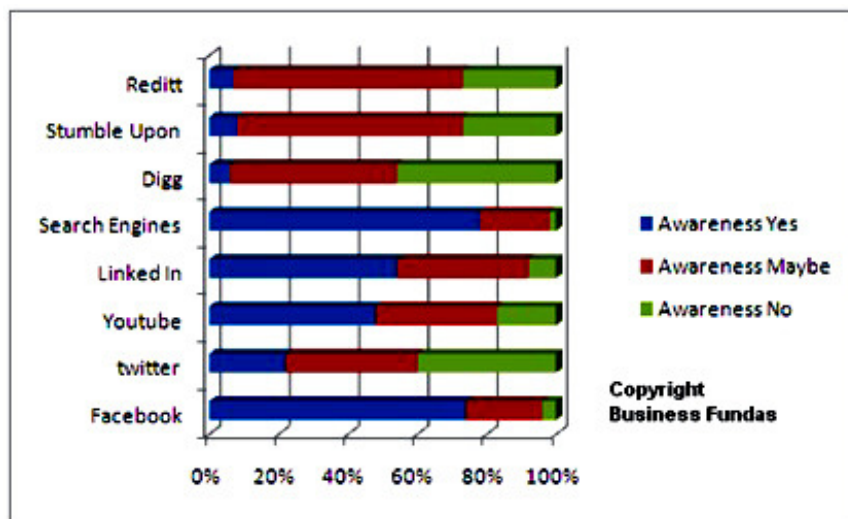


Figure 2: The Social Media Marketing channels, by Dr. Arpan Kar 2011

Source: Dr. Arpan kar, 2011.

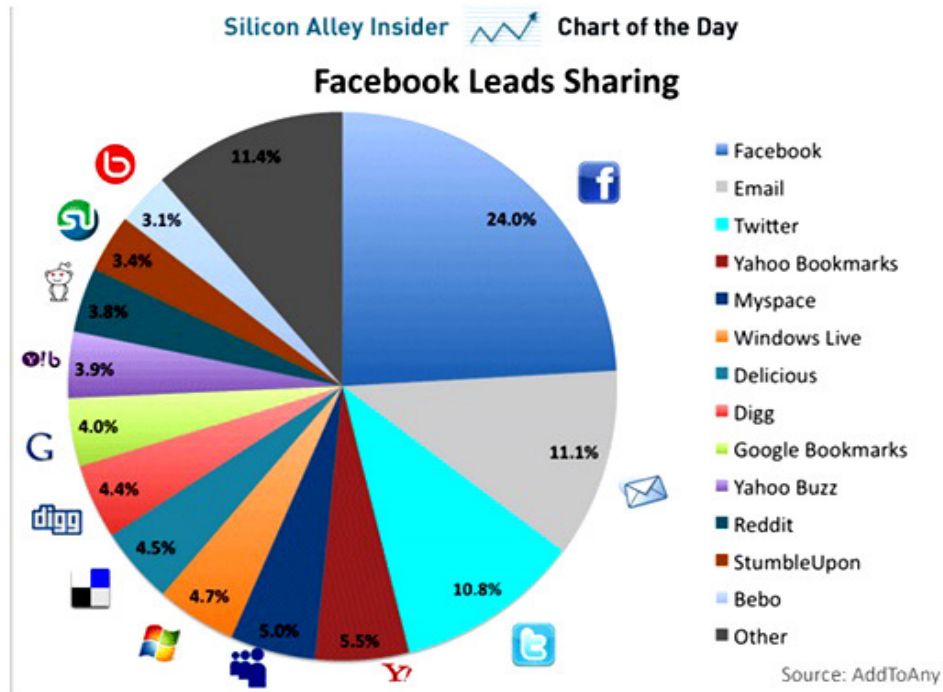


Figure3: [Different forms of Social Media](#)

Source: AddToAny,2012.

10. Marketing Challenges or Opportunities of SMEs:

Researchers widely agree that marketing practiced in small firms is different from that of large organizations [4]. Small firm marketing has been described as informal, unstructured, spontaneous, and reactive [6]-[12]. According to Stokes (2000), in small firms, marketing is used for immediate needs and little attention is paid to plans and strategies. SMEs direct their attention to sales in order to survive [14]. Leppard and McDonald [7] stated that the owner-manager has a significant impact on every aspect of the SMEs marketing activities. The SME ownermanager is often responsible for the performance of functions within an organization, such as banking, purchases, advertising, and recruitment. They will often decide which marketing strategies to use because the use of specialists is rare and they do not often have a marketing manager as an employee [3]. According to Walsh and Lipinski (2009), marketing in SMEs is not as well developed or influential as it is in large firms. Large organizations are often large enough to have a marketing department that permits the delineation of functions and activities. This difference can be attributed to certain limitations that small firms face including limited resources in terms of finance, time, and marketing knowledge [6]-[12].

11. SMEs Marketing Strategy and SMM:

Marketing strategy is defined as “a process that can allow an organization to concentrate its limited resources on the greatest opportunities to increase sales and achieve a sustainable competitive advantage” (BusinessLink). Social media is seen by marketers today as a great opportunity to boost market share figures. In a recent survey, 91 % of marketers indicated that they were using social media for marketing

purposes, and small businesses are the most likely to employ it [15]. Are businesses successfully aligning social media with their marketing strategy? Marketers are only too happy to view the social web as a new set of channels through which to market their goods or services. Thus promotion might be expanding, but it is not yet clear if companies are rethinking the rest of their marketing mix or their strategy in response to probably the most disruptive resource since the introduction of the Internet – social media. A social media strategy, for public relations or marketing, should be an essential part of the business' communications strategy and explicitly addressing the social media strategy should help to keep this strategy in line with the business strategy. Social technologies could help strengthen business strategy by building collaborative and open relationships across all the company's stakeholders, hence generating increased trust among them. "This increased trust will result in greater knowledge creation, which the same social technologies have the ability to capture, organize and distribute at a yet to be seen level of efficiency. By building collaborative

relationships with all company stakeholders using social technologies, businesses will be able to quickly create and capitalize more innovation" [1], Without strategy or goals, a business is unable to determine whether or not they are gaining anything through their efforts, or simply wasting time. Those businesses without a strategy also reported being less satisfied with social media's ability to generate new leads (SMB Group, 2012). Small businesses need to have a plan when using social media. Because social media is applied to marketing in various methods, no one strategy fits all. Businesses use social media in many ways including: monitor

conversations about their business, feedback, drive traffic to company web site, customer service, promotions and deals, and build community among others (Business.com, 2010). Not all social media are the same. Marketers recognize "different purposes or ways in which consumers respond to or use these media" [17]. Marketing in small businesses relies heavily on word of mouth recommendations for customer acquisition. Stokes and Lomax (2002) claim that "a number of studies have indicated that the most important source of new customers for small firms is recommendations from existing customers" (p. 351). For many owner-managers, reliance on customer recommendations is more suited to the resources available to their business [14].

12. Benefits of Social Media Marketing for SMEs:

Nowadays, Social Media Marketing is widely used by businesses because it represents a cost-effective marketing solution. The Social Media Marketing weapons can be used largely for free and very easily, in comparison with other promotional tools [11]. The main purposes of using Social Media Marketing are the amplification of word-of-mouth marketing, market research, general marketing, idea generation and new product development, co-innovation, customer service, public relations, employee communications and reputation management. Indeed, social networks can increase product and brand awareness, web traffic, customer loyalty, but also improve the company's Search Engine Optimization, and even increase the success of new product launches. Hubspot's report (2012) explains that 63% of companies using social media say it has increased marketing effectiveness among other benefits. According to Stelzner (2012), increased exposure is the major benefit from Social Media Marketing (Figure 3).

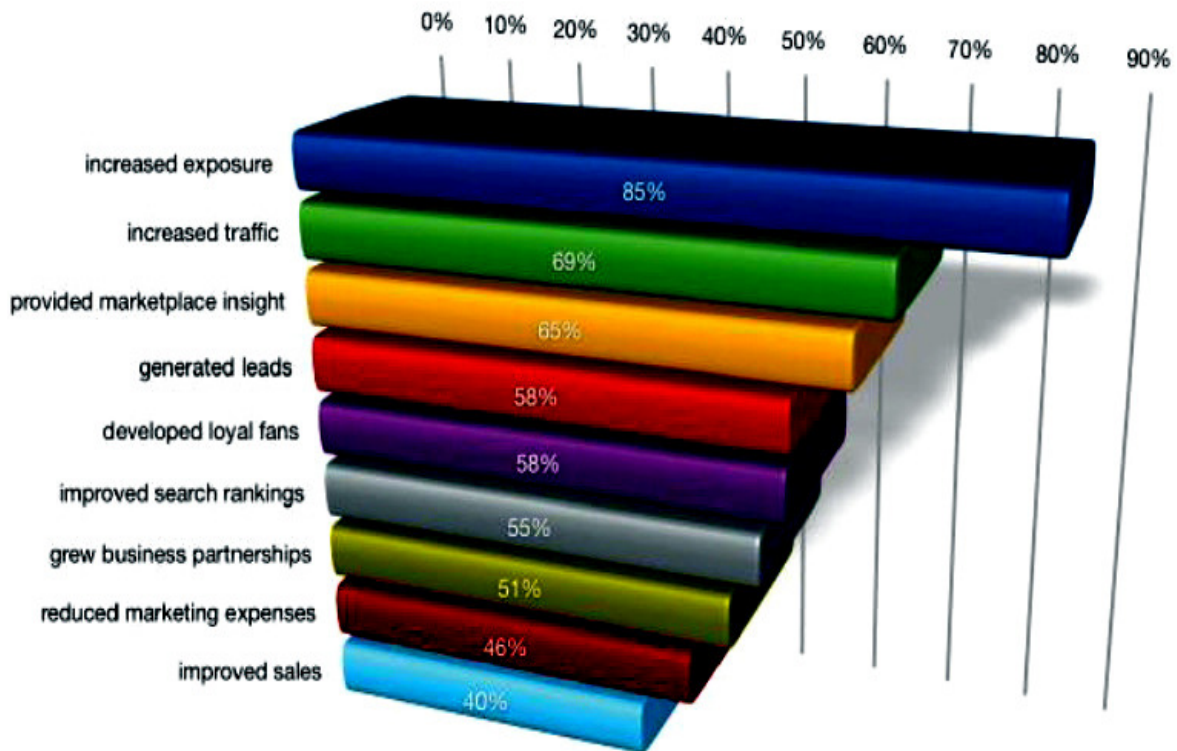


Figure 3: Benefits of Social Media Marketing, Source: Stelzner, 2012

Social Media Marketing can be using unconventional means to achieve conventional goals, through the use of creativity, community, and relationships instead of big budgets to achieve marketing objectives. These methods are powerful guerrilla marketing strategies. Every marketer is now armed with highly effective online communications tools that enable him to garner the same level of influence that many large corporations have. Therefore, Social Media Marketing is a great change in the world of marketing. According to Hubspot (2012), 57% of SMBs say social media is beneficial to their business. Whether it is concerning large multinationals or small and medium-sized enterprises, Social Media Marketing presents many significant benefits for the companies' success. Social Media platforms foster communication around brands and products, enhancing positive as well as negative word-of-mouth around a business and its products and services. Any message or piece of information shared on the Social Media channels can be seen by thousands of people in an extremely short period of time. Furthermore, 94% of marketers affirm that they are employing Social Media for marketing purposes [15]. 83% of them said that Social Media is important to their businesses and 59% of marketers are using Social Media for 6 hours or more weekly, and 33% for 11 or more hours.

Table 2: Summary of the benefits of Social Media Marketing for SMEs

FUNCTIONAL AREA	BENEFITS
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MARKETING	<ul style="list-style-type: none"> • Increased brand exposure • Build awareness • Brand reputation management • Increased targeted traffic • Improved Search Engine Optimization • Leads generation • Reduced marketing costs
CUSTOMER SUPPORT	<ul style="list-style-type: none"> • Customer interaction > Feedbacks • Real-time and personalized support • Improved customer experience • Increased customer retention and loyalty • Reduced support costs
RESEARCH AND DEVELOPMENT	<ul style="list-style-type: none"> • Market insights on target audience • Competitor monitoring • New ideas captured from community
FINANCE	<ul style="list-style-type: none"> • Cost effective • Reduce costs in marketing, customer service and recruitment
PUBLIC RELATIONS	<ul style="list-style-type: none"> • Communication in real-time • Increased brand exposure
HUMAN RESOURS	<ul style="list-style-type: none"> • Business networking • Facilitated recruitment • Reduce recruitment costs

Source: Celine Arca, 2012.

13. Conclusion:

In summary, this investigation into social media marketing began with an explanation of the social media phenomenon, accompanied with a definition of social media and reasons for consumer and corporate adoption of social media. Next, the focus shifted to ways of creating and capturing value through social media: managing online reputation, increasing brand awareness, communicating with customers, and other methods. The final consideration was how to formulate a social media marketing strategy. As previously stated, much research has been done into the social media practices of large organizations; however, there have been limited studies conducted relative to social media usage and experience specifically targeted at very small businesses. It is important to study how a small business uses social media to engage the public because the nature of this channel allows for the cultivation of relationships between businesses and individuals.

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Trade Balance of Pakistan and its Determinants

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Abstract

The paper investigated empirically the determinants of balance of trade of Pakistan. It has examined the effect of the determinants on trade balance of Pakistan. Multiple regression model is used for empirical assessment. Balance of trade is the dependent variable where as exchange rate of Pakistani Rupee against US Dollar, money supply, foreign direct investment, gross domestic product and Total domestic consumption are independent variables. Annual data from FY1975-76 to FY2009-10 has been collected for the variables. The results from multiple regression model show that only Pakistan Rupee exchange rate has a significant impact on balance of trade of Pakistan, while all other variables have no significant impact on balance of trade of Pakistan.

1. Introduction

In this era of globalization, international or foreign trade is not only important but unavoidable. Balance of trade is an important determinant of any modern economy. Economies with high trade deficit are seen as vulnerable to any slight economic shock or recession. Every country tries to meet, at least, a balance in its foreign trade, if not surplus. Pakistan is a developing state of South Asia with 180 million people. The economy of Pakistan is dependent on agriculture. Since independence in 1947, Pakistan has been witnessing trade deficit for most of the years.

As a developing state and under huge burden of foreign debt, Pakistan needs to be very careful and keep an analytical eye on this important determinant of the economy. Pakistan's foreign debt soared

to 58 billion in March, 2011, which is more than alarming. In the last three years the national foreign debt of Pakistan has increased by 12 billion US Dollars. This shows a poor balance of payments, in which a poor balance of trade plays the central role. If the country does not give attention to its poor balance of trade, the situation will get worse and even out of control because we are spending more and luxuriously and earning very less. We are wholly dependent on foreign aid and loans from international financial institutions and banks, at their conditions, which further hurts the economy.

Study of economic literature recognizes that exchange rate policy affects various items of the balance of payments. It influences the balance of trade of a state mainly through improving global competitiveness which affects the demand and supply for imports and exports. For developing countries like Pakistan its economy and currency is greatly influenced by its major developed trading partners and for this instant the US Dollar and its fluctuations affect in one way or the other. Historically, Pakistan has pursued a policy of export led growth, with the objective of improving its balance of payments. For achieving this objective, Pakistan had to adopt various exchange rate regimes at different times.

Pakistan faces challenges of globalization as well as regional competition from emerging neighbouring states like Bangladesh. Through the passage of time Pakistan has broadened its export base and moved towards more unconventional, non-agricultural and finish goods but this progress had been slow in speed than import. Imports have been increasing many folds and thus the trade deficit has been widening. The country has always enjoyed a trade deficit which has always worried and stressed the economy and at present, Pakistan is facing its worse economic and balance of payment crisis.

Rupee is on record low against the Dollars. It has helped the exports but its effect is minimized by the fact that it has bad impact on oil prices. As Pakistan has a huge crude petroleum import, the declining rupee increases the import bill and also cost of production in industries. Pakistan needs to clearly chalk out monetary and fiscal policy, which can grant its exports a helping hand and also can control its economy through its fiscal policy. Both will help the country to balance its foreign trade and also improve its balance of payments.

2. Literature review

Sulaiman D. M. (2010) empirically proved that foreign income, FDI, domestic consumption and real effective exchange rate significantly affect balance of trade of Pakistan. The paper has used data from 1975 to 2008. For long run analysis of relationship among the macro economic variables, the researcher has used Johansen co integration test (1996) and for short run analysis the VECM, vector error correction model has been used. All variables are taken in natural log. The VECM results provide that there is disequilibrium in short run, which will be adjusted within a year.

Waliullah, Mehmood, Rehmatullah and Wakeel (2010) found that income and money supply have an important role in balance of trade of Pakistan. These researchers also found that exchange rate is in direct relation to balance of trade of Pakistan but former two variables i.e. income and supply of money have a more vital and significant role. Growth and monetary policy have got stronger influence in the long run on balance of trade than exchange rate of the Pakistan Rupee. The paper argues that exchange rate will benefit trade balance of Pakistan but for a stable and long run change and improvement, the variables of money supply and income are of paramount importance and effect. The researchers have used ARDL model on annual data from 1970 to 2005.

Zehra and Sajawal (2008) have studied the Pakistan rupee real exchange rate depreciation and its effects on trade with its 12 major trading partners. The paper has avoids, what it argues the aggregate bias by not taking aggregate trade data but instead has taken bilateral trade data of 12 trading partners of Pakistan but have found no evidence in support of standard J-curve phenomenon. The ARDL or autoregressive distributed lag model has been used. The variables used are Pakistani exports to each partner, imports from respective partner, income of the respective partner, Pakistani income and real exchange rate with respective trading Partner.

Bahmani-oskooee and Cheema (2009) have also studied relationship of bilateral exchange rate of Pakistan with its 13 major trading countries separately. The study shows that in half the cases the bilateral exchange rate has an important role in bilateral trade. Here bounds testing approach has been used. The variables used are, trade balance between Pakistan and its trading partner (dependent variable), Pakistan income, income of respective trading partner and bilateral exchange rate.

Sadia B. (2006) has empirically assessed the question; whether intermediate and capital imports which are used in the preparation of Pakistani finished goods export, helpful to the exports or not. OLS technique has been used for empirical assessment and data was taken from 1973-2005. The variables used in the study are index of export, index of relative price, capital import index, nominal effective exchange rate index, import index, US domestic output index, and index of industrial raw material import (both consumer as well as capital). The variables taken are in log linear. Index of export is the dependent variable, while remaining are independent. The researcher found a long term relationship between Pakistani exports and relative import of intermediate and capital goods.

Jarita D (2007) has examined the relationship between Malaysian balance of trade and macro economic variables of real exchange rate, income and money supply. The researcher has found significant long term relation between Malaysian balance of trade, income and money supply. Here, most importantly the paper does not find long run relationship between balance of trade and real exchange rate. The paper finds and suggests that Marshall-Lerner condition does not find significance in the long run for economy of Malaysia. The paper has used bound testing approach to co-integration and error correction model. The paper also finds and suggests that Malaysian economy should be seen in view of absorption and monetary policies. The data for the paper has been taken annually from 1974 to 2003.

David M. G., Roy J. R. and M. D. Anderson (1996) have empirically examined trade deficit, its causes and consequences. The paper argues that trade surplus or deficit reflects a country's international borrowing or lending profile over a period of time. Trade deficit or surplus, not necessarily show the weakness or strength of an economy, unless proved empirically. Trade deficit may prove beneficial in the long run if investment is made in importing capital goods. Any economy having continual trade surplus or deficit may be the reaction to the income got from investments, which allow it to have desired trade and imports. This paper argues that there is no long run relationship between weak economy and trade deficit of a country because ordinary and prevalent thinking is that trade deficit hurts economy of the country. The paper gives a more broader perspective and argues that balance of trade surpluses or deficits are an important part of the world resource allocation in an efficient manner. This efficient allocation of world

resources is of key importance for well being and smooth running of the global economy. The paper looks to trade balance from a broader perspective and not from a narrow or a single country's perspective.

3. Research Methodology

3.1 Multiple Regression

The multiple regression model is used to find out the impact of independent variables on a dependent variable. For this purpose an equation is fitted with the dependent variable and independent variables for gauging the relationship. The dependent variable is associated with each and every variable and the change in the dependent variable is because of the independent variables of the equation.

In this study the multiple regression model is applied to a thirty-five years annual data (FY1975-76 to FY2009-10). The empirically assessment will give us evidence whether significant relationship exists between trade balance and its determinants and in what manner. Empirical results are analyzed and conclusions drawn on its basis. The Regression model is given below,

$$\text{BOT} = \alpha + \beta_1 (\text{EPR}) + \beta_2 (\text{MS}) + \beta_3 (\text{FDI}) + \beta_4 (\text{GDP}) + \beta_5 (\text{TDC}) + \varepsilon$$

BOT	Balance of trade of Pakistan
EPR	Exchange rate of Pakistan Rupee
MS	money supply
FDI	foreign direct investment
GDP	gross domestic product
TDC	Total domestic consumption

Where, β_1 , β_2 , β_3 , β_4 & β_5 in the model represent the slope of each determinant.

In addition to it " α " is the Y-Intercept.

3.2 Data Collection

For this study, data for macro-economic variables is collected. The data is collected for exchange rate, money supply, FDI, GDP, total domestic consumption and foreign trade of Pakistan. The large part of the data used in the study is collected from secondary sources. The main sources of the data collected are

Federal Bureau of Statistics, research papers, the state bank of Pakistan, International financial institutions, and economic survey of Pakistan.

4. Regression Analysis and Discussion

The paper investigated relationship between the exchange rate of Pakistan Rupee, money supply, FDI, GDP, total domestic consumption and balance of trade of Pakistan.

$$\text{BOT} = \alpha + \beta_1 (\text{EPR}) + \beta_2 (\text{MS}) + \beta_3 (\text{FDI}) + \beta_4 (\text{GDP}) + \beta_5 (\text{TDC}) + \varepsilon$$

Table 4.1

Number of parameters	6
RMSE	0.0948805
R-sq	0.7517
F	17.55936
P	0.0000

The P value of the model is 0.0000, which shows that the model is statistically significant and thus all variables are also statistically significant.

The R-sq. is the coefficient of determination, its value is 0.7517, meaning that 75.17% of the variability of balance of trade of Pakistan is accounted for by the variables in the model i.e. Exchange rate of Pakistan Rupee, money supply, foreign direct investment, total domestic consumption and gross domestic product. The coefficients for each of the variables indicates the amount of change one could expect in balance of trade of Pakistan given a one unit change in the value of that variable, provided that all other variables in the model are held constant. It also indicates the direct (positive) or inverse (negative)

relationship between the dependent variable and the independent variable.

Table 4.2

		Coefficient	Standard Error	t statistic	P value	[95% Conf. Interval]	
Pak Rupee per US Dollar	β_1	0.0140307	0.0026002	5.4	0.0000	0.0087127	0.0193487
Money Supply	β_2	1.23E-07	1.96E-07	0.63	0.535	-2.78E-07	5.24E-07
FDI	β_3	-0.0000562	0.0000407	-1.38	0.179	-0.0001395	0.0000272
GDP	β_4	0.0053314	0.0101081	0.53	0.602	-0.0153419	0.0260048
Total Domestic Consumption	β_5	-1.17E-07	7.26E-08	-1.61	0.118	-2.65E-07	3.16E-08
Constant	α	0.4070027	0.0869966	4.68	0.0000	0.2290747	0.5849307

Pakistan Rupee per US Dollar has coefficient of .0140307, this means that ratio of balance of trade of Pakistan i.e. X/M , is expected to increase by this much, when that independent variable exchange rate of Pakistan against US Dollar increases by one, holding all the other independent variables constant. The variable has a significant impact on balance of trade of Pakistan as its P value is 0.000, below 0.05 and its T value is 5.40, which is greater than 1.96, so we reject our H_0 hypothesis and accept our research hypothesis i.e. H_1 . The variable has a positive sign; this suggests that the variable positively affects the balance of trade. It means that if exchange rate of Pakistan Rupee per US Dollar increases, the ratio of balance of trade will increase and vice versa. So, balance of trade is in direct relation with Pakistan Rupee exchange rate. This means that when ever the Pakistan Rupee falls it has a positive impact on balance if trade and the exports increase and imports fall.

Money supply has coefficient 1.23e-07, this means that ratio of balance of trade of Pakistan i.e.

X/M, is expected to increase by this much, when that independent variable money supply increases by one, holding all the other independent variables constant. Money supply has no significant impact on balance of trade of Pakistan as its P value is 0.535, which is greater than 0.05. The t value is in between 1.96 and -1.96 (i.e. 0.63), therefore we accept H_0 . Money supply is positively or directly related to balance of trade of Pakistan.

Foreign Direct Investment, FDI has a coefficient of -.0000562, this implies that ratio of balance of trade of Pakistan i.e. X/M, is expected to decrease by this much, when that independent variable FDI increases by one, holding all the other independent variables constant. FDI has no significant impact on balance of trade of Pakistan as its P value is 0.179, greater than 0.05 and its t value is -1.38, which is in-between 1.96 and -1.96. The negative sign shows that there is negative relation between balance of trade and FDI or both variables are inversely related.

GDP has a coefficient of .0053314, this implies that ratio of balance of trade of Pakistan i.e. X/M, is expected to increase by this much, when that independent variable GDP increases by one, holding all the other independent variables constant. The "P" value of 0.602, which shows that GDP has not got significant impact on balance of trade of Pakistan. The t value of GDP also falls in-between 1.96 and -1.96 (i.e. 0.53). GDP and balance of trade of Pakistan are directly related.

Total domestic consumption has a coefficient of $-1.17e-07$, that shows that ratio of balance of trade of Pakistan i.e. X/M, is expected to decrease by this much, when that independent variable total domestic consumption of Pakistan increases by one, holding all the other independent variables constant. Total domestic consumption is also not significant because its P value is above 0.05, i.e. 0.118 and its t value is -1.61, which falls in-between 1.96 and -1.96, therefore we accept H_0 . The total domestic consumption and balance of trade are inversely related.

Table 4.3

	range	mean	std. dev
BoT (X/M)	[.47,1.07]	7.14E-01	1.76E-01
PKR/USD	[9.91,83.56]	34.0349	22.4997
Money Supply	[33074,5777231]	1.30E+06	1.60E+06
FDI	[10.7,5410.2]	867.229	1413.26
GDP	[1.21,8.96]	5.14514	2.03269
TDC	[116847,13127809]	2.60E+06	3.30E+06

Table 4.4

Percentiles	10%	25%	50%	75%	90%
BoT (X/M)	0.51	0.54	6.90E-01	8.60E-01	9.40E-01
PKR/USD	9.91	13.48	25.96	58.44	61.43
Money Supply	63659	146025	595390	1.80E+06	4.10E+06
FDI	35	70.3	322.5	798	3521
GDP	2.1	3.68	5.06	6.79	7.57
TDC	179117	387488	1.10E+06	3.70E+06	7.30E+06

5. Conclusion

This paper narrowly focuses on balance of trade of Pakistan and its determinants. The macro-economic variables which are examined as independent variables are foreign exchange rate of Pakistan Rupee against US Dollar, money supply, foreign direct investment (FDI), gross domestic consumption (GDP) and total domestic consumption. The model used is the multiple regression. The data for variables is taken for the period FY1975-76 to FY2009-2010.

The study shows that there is significant affect of Pakistan Rupee exchange rate on balance of trade of Pakistan and no other variable has significant impact on balance of trade of Pakistan. Based on our empirical findings the “the Pakistan Rupee exchange rate has a significant impact on balance of trade of Pakistan”. Policy and decision makers in the government needs to lay attention on exchange rate regime but also needs to widen the horizon of balance of trade of Pakistan, especially to monetary policy and growth rate because they also plays an important role.

Recommendations

- Pakistan needs to chalk out well analyzed and suited forex policy, which best suits the needs and interests of the economy and trading sector.
- Pakistan needs to expand and diversify its export base to more unconventional, non-agricultural and technologically advance finished goods. Presently it cannot compete with its semi-finished, agricultural and technologically less advance goods and services in the world and regional markets.
- Pakistan as a state and as a nation of consumers both spend luxuriously. Every year Pakistan has a substantial luxury items import bill, which needs to be curtailed immediately to balance its foreign trade and improve its balance of payments.
- Pakistan every year imports petroleum and related products in huge amount. Which make up majority of its import bill. Thus, Pakistan needs to explore petroleum reservoirs and alternative energy resources as coal, solar and wind etc. which are locally found in abundance.

- Services sector has been always undermine and not developed in Pakistan. Pakistan lacks in expertise and technical skills, which are of paramount importance for development and motivating FDI into the country.
- Pakistan needs to solve its energy crisis and provide cheap energy to its industries and thus they can produce cheap and compatible goods.
- Policy makers should strive for local investment and as well as FDI in research and development because in the twenty first century technology is changing and upgrading not by years but day by day.

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LABOUR CASUALIZATION AND TRADE UNIONISM IN NIGERIA

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Abstract

The role of trade union in contemporary industrial relation system is increasingly deflating as many work organizations (formal and informal) now engage in labour casualization. Labour casualization is the process where workers in an organization are casual, temporary, seasonal, contract or part-time employees with little or no legal provisions. However, the most perturbing issue is the restriction of casual workers from joining trade union which denied them from benefiting from collective agreement in the organization. It is against this veracity that this paper set out to examine how labour casualization practices have affected the activities of trade unionism in Nigeria. A descriptive survey method was adopted in the study. Participants were 120 staffs of Lafarge Wapco Cement, Ewekoro, Ogun State, Nigeria who were selected through triangulation of sampling methods. Data were collected through structured questionnaire. Result shows that labour casualization has weakened volume of trade union members, financial strength and bargaining power of trade unions in Nigeria. Thus, the study recommends that government should invoke relevant laws that will encourage casual workers to enjoy freedom of association in order to protect against exploitation and to give them a voice.

Keywords: Industrial Relations, Trade Union, Labour Casualization, Exploitation, Freedom

Wordcount: 186

1. INTRODUCTION

One outstanding challenge facing the practice of trade union in developing countries as well as Nigeria is “labour casualization”. Labour casualization depicts the process where workers in an organization are casual, temporary, seasonal, contract or part-time employees with little or no legal provisions.

Labour casualization is a function of incredible changes in the world of work- from a labour – management relationship to a commercial-management relationship- with the workers taking the greater portion of the risk of engagement. This form of labour practice has a history (see Noon and Blyton 2002; Statt 2004). In late 19th and all through 20th centuries, work is taken as an activity where individuals alone and collectively engage in productive endeavors to accomplish certain tasks in which are self set or set by

others and which may or may not be remunerated meanwhile, the need to foster workers satisfaction and workers right led to the formation of trade union (a voluntary organization of workers which aims to protect and promote the socio-economic interest of its members through collective bargaining with employers) in the organization. This posture, according to Marx, Engels, Webber and other prehistoric scholars marked the beginning of struggle between capitalism and socialism or between money and the people (see Carris and Malloch, 2006). However, the turn of 21st century experience an alternative view to the understanding of work by bringing in formal recognition for voluntary, unpaid and underpaid work carried out by citizens (Beck, 1998; 2000; 2004). This, notwithstanding, can be described as era of disempowerment of unionism that caused the return of workers to previously escaped web of diminishing rights and working conditions in work organization. For a fact, casualization in current sense is one of the ways which the role of trade union had been amputated in today's ultramodern organization.

Further attempts to review academic literature revealed that some factors are accountable for the stretch of labour casualization across workplaces. These factors includes; increasing desperation of employers to cut-down organizational cost and increase capital mobility (Kalleberg, 199; Basso 2003; Anugwon 2007; Okafor 2011; Fapohunda 2012), deregulation of labour market (Bernstein 2007), trade liberation (Standing 2008), inability to bring effective regulation to fill the loopholes of a globalizing economy (Okafor 2007; Kalleberg 2009), intention of the employees to combined work with study or family responsibilities, moonlighting, unemployment and poverty (Okafor 2012; Fapohunda 2012; Bamidele 2010). It must be noted here that there has been increasing arguments for and against the practice of labour casualization in current studies, some of which we shall examined in the later sections. However, this paper set out to examine the effect of labour casualization on trade union activities in Nigeria which is almost absent in contemporary studies.

Aim of the Study

The general aim of this study is to examine the effect of labour casualization on trade unionism in Nigerian cement companies. While the specific objectives are to:

- i. Know the factors hindering trade union anti-casualization campaign in Larfarge Cement Company.

- ii. Know the activities of trade union that has been affected by labour casualization in Larfarge Cement Company.
- iii. Investigate if those who work as casual staff will eventually become full time workers in Larfarge Cement Company.

2. LITERATURE REVIEW

This section examines some critical issues in the present understanding of casualization and labour casualization in contemporary world.

Casualization: A cursory look

The term casualization has been controversial issue among authors in management and social sciences. This is because of the dynamic nature of casualization as a new form of labour practice in developing countries like Nigeria. Casualization is complex to define however, is a process of filling positions that are supposed to be permanent with temporary or contract employees.

Some authors viewed casualization as a work structuring that promotes bad working conditions, inequality, injustice, exploitation and modern form of workers enslavement (Okafor, 2012; Fapohunda 2012; Bamidele 2010) as a result, casualization must not be entertained in employment relationships. While others are of the opinion that casualization constitute the price of progress because it creates room for unemployed individuals to kick out idleness and become casual workforce as well as develop their potentials though the reward for their contribution as casual worker may not be commensurate to that of full-time worker (May, Campbell and Burgess 2005; Kalejaiye 2014). In spite of the controversies, casualization still fix many prospective employees into the needs of production and service provision by offering only very limited choices to workers. Shorter hours are usually associated with lower pay and lower skilled work. Buchanan (2004) strongly affirmed that casual employment is primarily undertaken by those with other commitments (e.g. careers for children and the elderly and students) or with no other choice (e.g. blue collar workers seeking any kind of alternative to unemployment). With this mind, it is important to note that casualization can appear inform of contract/seasonal/interim labour (workers hired to perform certain tasks with stipulated deadline or expiring date) or casual labour (workers hired to work

full-time or part-time with little benefits compare to permanent employees). Another point to note is that casual/contract labour can be out-sourced or called 'agency labour' (workers who are employ temporarily to fill certain positions through an employment agency) and may be in-sourced (workers on contract business function and commencement of performing it internally).

Concept of Labour Casualization

There is no generally acceptable definition of labour casualization however; it can be viewed as part of a new era of the management of labour where workers in an organization are casual, temporary, seasonal, contract or a part-time employees. Labour casualization can take different forms in different countries. Labour casualization has been one of the prominent means for increasing the proportion of employees in Australia, United Kindom, Russia and United State of America in the last two decades (Campbell and Brosnan 1999; Watson et al. 2003).

The Bureau of labour Statistics (2012) revealed that labour casualization about 82 million workers in the United States are casual workers; casual workers constitute 60% in Korea, 58% in Bosnia and Herzegovina, 52.5% in Macedonia, 49% in Serbia as well as 40% in Japan and Greece respectively. In Maghreb, Egypt, China as well as Nigeria, there is no statistic available to show however, report shows that casualization is growing in unprecedented speed. The fact about the practice of labour casualization is Nigeria is that organizations that adopts casualization model do compromise the statutory labour standards and workers rights (Fapohunda, 2012) in order to make work activities less secure on a freelance and occasional basis (Bamidele, 2010) with strict ban of workers from trade unionism. This in effect results in powerlessness, lack of representation and freedom of casual workers. Now let's examine the issue of labour casualization in Nigerian context.

The Nigerian Experience of Labour Casualization

Inference from the statistics submitted by management experts revealed that the trail of labour casualization is spreading virtually to all work organizations (formal and informal) in Nigeria. In the statistics, about fifty percent of workers in the oil and gas, telecommunication, banking and manufacturing companies are casual workers whose interest are not fully captured under the Labour act

and as a result, they work under precarious working conditions with complete refutation of some benefits associated with permanent employment (Eroke, 2012; Fapohunda 2012; NLC, 2013). Also, the report published by Campaign for Democratic Workers' Rights in Nigeria a non-governmental organization reveals forty-five percent of Nigeria labour force is made up of casual workers who are under harsh working environment (CDWR, 2010). Consequently, CDWR condemns the management of Dangote Savannah Sugar Company Plc in Adamawa state, Nigeria for subjecting workers of the company to conditions akin to slave labour without commensurate reward for it.

Majority of the workers are underpaid while about 80 percent of them work under terrible working conditions for seven to eight years with no consideration for permanent employment in the company. Similarly, about 3,000 permanent workers who are Nigerians were sacked by a Telecommunication Company, Airtel Nigeria Limited in 2011 and they were replaced by casual workers (Fapohunda, 2012). Okei-odumakin (2013) described this kind of casualization of work as slavery in one's father land. However, the practice of casualization and its associated unfair labour practices are carried out in order to keep up with global trade liberalization and competition as well as to enhance organizational profit margin, have been an obstacle to the growth of ethically responsible management, and on the other hand, its recourse the era of cruel Scientific Management. Since, casualization force casual workers to trade off the right to join trade union and being fully protected by the labour statutory provisions in work organization in an intermittent manner. This in effect has consequential result on the scientific study of relationships among the actors of industrial relation systems (employers/employers association; employees/trade union; government and its agencies).

Commenting on the practice of casual employment in Nigeria, authors like Bamidele (2010), Fapohunda (2012), Okafor (2012) and Kalejaiye (2014) observed that casualization has brought in its the development of a more flexible and dynamic workforce in many workplaces in Nigeria yet, with many short-comings. The facts that informed their positions on the adoption of casualization in Nigeria include that:

- i. Casual workers are not entitled to statutory benefits provided by Labour act (Okafor 2010 and 2012)
- ii. Casual workers are relatively cheap to acquired and poorly paid i.e. most banks in Nigeria hired more casual workers than full-time or permanent workers in order to minimize cost of providing statutory benefits to workers (Fapohunda, 2012; Kalejaiye 2014)
- iii. As a prerequisite for many organizations to participate in the globalizing competitive economy (Okafor, 2007)
- iv. Casual employment gives the employer the power to hire and fire without observing any statutory procedures (Bamidele 2010)

Aside the above, another salient point is that casual employment saves employers from the troubles of unionism because casual employees are excluded from joining a union or any kinds of workplace association. This act will lead to unprecedented fall in union members with concomitant implication on the important resources (intrinsic and extrinsic) to promote active trade unionism.

To further understand the course of this study, the term trade union is examined below.

Concept of Trade Union Examined

Trade union is a vital part of industrial relation systems. International Labour Organization (ILO) defined trade union as “an association, consisting predominantly of employees, the principle activities of which include the negotiation of pay and conditions of employment for its members” (ILO, 2001). However, evidences from scholars revealed that unions also go beyond collective bargaining to perform other essential roles such as role for environment protection, energy management, politics and law making, public health, productivity and efficiency improvement of socialization process, poverty alleviation and disasters sensitization and assistance. According to ILO (2005), trade unions engage in indispensable roles that expand beyond the four pillars of the organizational environment. They make incredible efforts to lessening of inequality, employee’s oppression and social protection.

The more organized workers are, the better and stronger they can determine their destiny in the workplace, as they best understand their own economic and political situations. Thus, ILO report

acknowledged trade unions as a crucial engine to sustainable development and their actions contribute greatly to the regulation of the global economy. So why are employers restricting their casual employees from becoming member of trade union!

Studies on trade union performance in Nigeria also affirmed that unions played vital roles in the front line of the struggle for democracy, liberation and sustenance of democratic principles. Their roles can also be traced to the various struggles during the colonial era and even after independent (Adebisi, 2011). Most importantly, the several years of military dictatorship and despotic rules witnessed unprecedented challenges from the trade union movements. The number of strike actions and man-hour loss are unquantifiable because, they want to fight against social injustice, unfair dictatorship and human deprivations. Trade union movements also pursue the need for good governance and adherence to the rule of law during the few years of democratic experience in Nigeria.

Unfortunately, the performance of trade unions in Nigeria has been taunted by the increasing casualization of employment and the restrictions of casual workers to participate in union activities. More so, it is equally pertinent to note that workers restriction from union activities is not only peculiar to casual workers, but also to employees who secure job in workplaces where they are denied of full statutory protection or labour act. However, the rate at which casual workers are denied of the right to form or participate in trade unionism in Nigeria is very alarming and worrisome.

Impact of Labour Casualization on Trade Union Activities in Nigeria

Industrial sociologists and management scholars observed that there has been significant diminishing and disappointing role of trade unions in recent times. Part of the evidence reveals by them is the drastic reduction of union members and the incapacity to promote trade union activities in Nigeria (Moammed, 2010; Okafor 2012; Fapohunda 2012; Adefolaju, 2013). Commenting on the nature of labour casualization in Nigeria, Mohammed (2010) revealed that “casualization of employment worsened the activities of trade unions as casual workers are not fully employed and as a result, they are less secured by the legal laws or statutory act that ought to support them to engage in trade union activities”. This is so

glaring in the treatment of casual workers in Nigerian organizations, when casual staffs try to participate in protest against employer's policies, even if it affects the terms of employment and condition of their engagement, they are likely to receive sanctions or dismissal from the management. An example is the sacked of about 250 casual workers at Dangote Pasta Ikorodu in August 2010 for joining and participating in trade unionism (NUFBTE) which other staffs in the same organization belongs to. This posture depict that rather than creating a 'fit in', equality and good sense of belonging among the workers (casual and permanent), employers out of their selfishness build mammoth dichotomy between workers which is detrimental to the progress of the organization.

According to Oechslin (1997) and Kelly (1998) cited in Adefolaju (2013), the effect of new structure of production such as casualization of employment, part-time work, out-contracting, employing women to replace men, but paid lower wages, non-payment of wages and non-remittance of check-off dues has incredible consequences on trade unionism. Some of the consequences are:

- i. A decline in trade union membership, density and influence.
- ii. Absolute or relative decline in numbers of male, manual, full-time industrial workers and the use of female, non-manual part-time and service workers.
- iii. A decline in trade union movement as a unified political actor.

Adefolaju (2013) cited that Sklair (1995) observed that strike weapon has been blunted by the new structure of production whereby transnational corporations (TNCs) no longer depend on one factory and one workforce for production. As a result, the new international division of labour becomes more flexible such that employers migrate in search of cheap labour, while preventing labour from holding capital to ransom through a strike action. Adefolaju opted that this new production process has considerably reduced union power to organize locally.

More so, due to the new production structure, trade unions continue to confront various challenges which are posing a threat to its ability to organize and serve their members to the fullest. This also involve issues like job insecurity, reduced wages/salaries and increased hours of work and work load in the workforce further hinder trade union activities in Nigeria. In the face of these challenges, trade union

leaders need to be strengthened by the government or nongovernmental bodies against counteract forces that are barriers for workers (casual or full time) to partake in trade unionism. Unfortunately, government and its agencies seem not to be awake to address this virus (casualization) affecting the nature of employment, working conditions and trade unionism in Nigeria. This suffices to drive home the need for union representatives to engage in proactive anti-casualization campaign in Nigeria.

Strategies to enhance Anti-casualization Campaign of Union Representatives in Nigeria

The following strategies should be adopted in the anti-casualization campaign;

1. **Resist political and social pressures:** The interest of the casual workers as well as the union itself should be put at the forefront. Realities have shown that Nigerian society is socially and politically compromised, therefore, union executives should not accommodate political-fellow feelings, loyalist behaviour or social pressure that may undermine their struggle for casual workers participation in trade unionism in Nigeria.
2. **Adept use of the ideological apparatus or mass media:** Media and other mass communication apparatus should be used to create more awareness for the right of casual workers involvement in trade unionism. Hence, media channel such as newspaper, television, radio, bill board, hand bills and public lecture as well as periodic labour sensitization should all be utilized.
3. **Create freewill medium for funds or financial support:** Due to the fact that employing media and other ideological apparatus for publicity and awareness requires funds to execute, thus, union leaders should build a non-politically influenced means of securing financial assistance from external sources.
4. **Stand firm to resists non compliance to Nigerian Labour act by employers:** At this point, union leaders have to ensure that employers of labour adhere to Nigerian Labour act without discrimination among the workers. That is, all workers (casual or full-time) must enjoy equal coverage under the statutory provisions of Nigerian Labour act. In this regard, casual employees who to partake in trade union activities should be allow by their employers. Any employer who is caught in non-compliance to the statutory provision should be held by legal authorities.
5. **Seek illegal opinion and directives:** Professional advice and directives on technical issues should be sought from legal practitioners. This will enhance their knowledge and preparation to win the struggle for freedom of casual labour to join trade union in Nigeria.

3. METHODOLOGY

Research Design: The survey research design method was used. This involves using a self-designed

questionnaire in collecting data from the respondents. This method was chosen in order to make reference to phenomena as they exist in real life and it is relatively economical in terms of time and resources.

Study Area: Lafarge Cement Company was selected as the study organization being a multinational corporation with mixed organizational culture and value regarding employment practices. It is also aimed that using Lafarge Cement Company will complement other studies conducted on the subject matter who focused mainly on domestic and few foreign firms in Nigeria.

Subject: Subjects for the study were one hundred and twenty employees of Lafarge Cement Ewekoro plant, Ogun State, Nigeria. These subjects were drawn randomly from the different departments for sample. The simple random sampling is a basic sampling design, which allows equal representation and selection of samples. The selection of the subjects was done in such a way to include all categories of worker (casual staff and permanent staff) and it cuts across gender. This was done in anticipation that such a sampling of subject will provide the necessary variety of information required of this study.

Research Instrument: The instrument used in this study is a close-ended questionnaire that was designed by the researcher. The questionnaire comprises three (3) parts or sections; with section “A” comprising eight (8) items seeking demographic data such as age, sex, status, level of education etc. Section “B” consists of ten (10) items, which sought to collect information about the level of casualization and contract staffing in the organization. Section “C” contains ten (10) items on the effect of the rise in casual workers on trade union activities in the organization.

Reliability and Validity: In order to establish the reliability of this instrument, a pilot study was carried out on a sample of twenty (20) staff of the same company, Ewekoro plant, using a test-retest method. The result of the reliability test was 0.52 showing that the instrument is reliable. In confirming the validities of the instrument, face and content validities were ensured by conference of experts.

Procedure: The subjects were given the questionnaire in their place of work. Instruction on how to fill the questionnaire was given. Confidential treatment of information was assured. With regard to the scoring of responses, the first section of the questionnaire needs no score attached to it, since the information required are demographic data of the subject. The second and third section that is “B” and “C”

include both open-ended and close-ended questions.

Participants: The respondents for this study comprised of 120 employees from 4 key departments namely; Human resource, Financial, Production and Supply departments in the organization. A total of 34 (28.3%) respondents were males, 86 (71.7%) were females, 73 (60.8%) were single while 47 (39.2%) were married. In the sample, 25 (20.8%) of the workers were aged 18-23years, 68 (56.7%) were 24-30 years, 23 (19.2%) were 31- 42years and 04 (3.3%) aged 43years and above.

Table 1: Demographics and Employment Distribution of Respondents

Variables	Frequency	Percentage
Sex		
Male	34	28.3
Female	86	71.7
Marital Status		
Single	73	60.8
Married	47	39.2
Age		
18-23years	25	20.8
24-30years	68	56.7
31-42years	23	19.2
43 years or above	04	3.3
Educational Qualification		
SSCE	25	20.8
OND	53	44.2
B.Sc Degree/HND	29	24.2
M.Sc./professionals qualifications	13	10.8
Mode of employment		
Casual/contract staff	79	65.8
Fulltime/permanent staff	41	34.2

Source: Field Survey, 201

With regards to educational attainment, 25 (20.8%) had Senior Secondary Certificate Examination, 53 (44.2%) had Ordinary National Diploma, while 29 (24.2%) Degree certificate or Higher National Diploma and 13 (10.8%) had MSc and other professional qualifications. The participants consist of 79 (65.8%) of casual/contract staff and 41(34.2%) fulltime/permanent staff of the company. The average job tenure was 2.59 years.

4. Major Findings

This section deals essentially with the statistical testing of the research questions formulated for this study and also interpreting the result making use of simple percentage distribution.

Table 2: Effects of Labour Casualization on Trade Union activities in Larfarge Cement Company

Response	Frequency	Percentage (%)
Weakness in power of collective bargaining and negotiation of the terms and condition of work	31	25.8
Restriction of workers from freedom of association	23	19.2
Discrimination in pay among workers of equal work	16	13.3
Reduction in the volume of Trade Union Members	21	17.5
Reduction in Union Revenue and Financial Strength	29	24.2
Total	120	100.0

Source: Field Survey, 2014

Table 2 above shows the perception of the respondents on the effect of labour casualization and trade union activities in Larfarge Cement Company. The result shows that 25.8% of the respondents said that labour casualization has weaken collective bargaining power and negotiation of the terms and condition of work, followed by 24.2% who affirmed that labour casualization has brought about reduction in union revenue and financial strength, 19.2% claimed that labour casualization has encourage restriction of workers from freedom of association, 17.5% asserted that labour casualization has significantly reduced the volume of trade union members while 13.3% said that labour casualization promote variation in pay/salary among workers of equal work in Larfarge cement company. A report on negative effects of casualization and outsourcing from anonymous source detailed thus:

A bank contract staff affirmed that:

I have been on one spot in this bank for more than seven years without promotion. Some of the small boys and girls I personally train on the job have become senior banking officers just because they were employed as permanent staff (IDI/Labour Unions/August 14, 2013).

Representative of labour unions said:

Contract staffing and casualization contravene Section 7 (1) of the Labour Act, Cap 198, Laws of the Federation of Nigeria, 1990... The Act provides that, Not later than three months after the beginning of a worker's period of employment with an employer, the employer shall give to the worker a written statement specifying the terms and conditions of employment, which include the nature of the employment and if the contract is for a fixed term, the date when the contract expires.. (IDI/Labour Unions/August 14, 2013)

An interview with a legal practitioner who specializes in labour law revealed that:

Casualization is one weapon the employees had used in the last few years to weaken workplace organization and to drive wages down... what employers seem not to realize is that an over-reliance on casual employment can pose a serious risk to productivity (IDI/Legal practitioner/August 14, 2013)

The response above upholds Animashaun (2007), Owoseye and Onwe (2009), who noted that in spite of the provision in section 17 (e) of the constitution, which guarantees "equal pay for equal work without discrimination on account of sex, or any other ground whatsoever, the discrimination in pay between permanent and casual employees still persists." In similar view, Fapohunda (2012) and Bamidele (2010) reported that the number of unprotected workers has increased significantly because most of the workers who are casually employed can no longer be part or members of unions. This has dissuade unionizing efforts, reduced trade union members and union revenue, job security, forced workers to negotiate their positions on their own and made them vulnerable to exploitation.

Table 3: Factors hindering successful anti-casualization crusade in Larfarge Cement Company

Responses	Frequency	Percentage (%)
Excessive supply of labour in Labour market, mass unemployment and joblessness	11	9.2
Weak leadership and falling trade union membership	50	41.6
Inadequate support from government and lack of political will to enforce Nigerian Labour law in work organization	29	24.2

Poverty, corruption among government officials and lack of funds to embark on mass crusade	30	25.0
Total	120	100.

Source: Field Survey, 2014

Result in table 3 depicts the perception of the respondents on the factors hindering successful anti-casualization crusade in Nigeria. The result showed that majority 41.6% of the respondents affirmed that weak leadership and falling trade union membership, 25.0% stated that poverty, corruption among government officials and lack of fund to execute mass crusade, 24.2% assert that inadequate support from government as well as lack of political will to enforce Nigerian Labour law in work organization while 9.2% revealed that excessive supply of labour in Labour market, mass unemployment rate and joblessness in Nigeria. However, all factors mentioned by the respondents hindered anti-casualization crusade in Nigeria. Also, captured in that report on negative effects of casualization and outsourcing from anonymous source, a labour activist who stated that:

We have been fighting casualization in the recent times with everything we have but it seems to be increasing because the workers themselves have seen it as something that has come to stay... you can't tell someone who has no job for over five years not to take up temporary employment from an organization... thus, it is a structural problem, and there can be progress in the fight against this form of slavery without the government (IDI/Labour Activist/August 14, 2013)

The finding here corroborate Fapohunda (2012), Okafor (2007), Anugwom, (2001) and Kalleberg (1999) who reported that continuous trade, capital liberalization, globalization, deregulation, profit maximization and high unemployment rate among the youths led to the growth of the informal sector, which engage workers under unfair labour practices like casual/contract employment and deplorable working conditions and environment. In addition, Bamidele, (2010) reported that casual employment was occasioned by Structural Adjustment Programmes (SAP) which led to increasing desperation of employers to cut down organizational costs thus; casualization of employment is seen as an appropriate strategy for cost reduction.

From the finding in table 3 above, some factors such as weak leadership and falling trade union membership, poverty, corruption among government officials and lack of fund to embark massive public crusade, inadequate support from government as well as lack of political will to enforce Nigerian Labour

law in work organization, too much of labour in Labour market, mass unemployment rate and joblessness are responsible for the growth of labour casualization in Nigeria despite trade unions disapproval.

Table 4: Casual staffs and probabilities of joining full time staffs in Larfarge cement company.

What are the mode of recruiting casual worker in your organization	Frequency	Percentage (%)
Internal recruitment procedures	47	39.2
External outsourcing	21	17.5
Both	52	43.3
Total	120	100.0
Is there opportunity for casual worker to join full-time staff after certain period of time in your company	Frequency	Percentage (%)
Yes	71	59.2
No	49	40.8
Total	120	100.0
If yes, what are the criteria which the management utilized in making casual staff a full-time staff	Frequency	Percentage (%)
Job function and requirements	09	7.5
Performance, loyalty, punctuality and diligence	12	10.0
Family ties, connection and informal networking	34	28.3
Special skills, qualities, talent and potentials	06	5.0
Examination and qualifications	10	8.3
Total	71	100.0
How would you rate the movement of casual workers to full-time staff in your organization	Frequency	Percentage (%)
Very Often	42	35.2
Very Seldom	29	24.2
Not at all	49	40.8
Total	120	100.0

Source: Field Survey, 2014

Table 4 above shows the opinion of the respondents on the probabilities for casual staff to join full-time workers in the organization. However, respondents were asked to state the mode by which casual/contract staffs are recruited into the company. The result revealed that 39.2% of the respondents affirmed that casual/contract staffs are recruited through internal recruitment procedures and 17.5% claimed that casual/contract staffs are recruited through external outsourcing agents while 43.3% avowed that the company combined both mode of recruitment in employing casual/contract staffs. Thus, it can be

deduced that majority of the respondents acknowledge the use of both internal and external methods of recruiting contract staffs in the organization. The finding support Okafor (2012) who submitted that it more better for employers to adopts both internal and external recruitment methods in staffing process because it allow new ideas, innovation, competition and diversity that would in turn lead to increase performance and productivity. In the same vein, Du Plessis & Fouche (2006) cited in the South African Labour guide emphasized that employers who outsource their labour requirements to a Labour Broker are not in contravention of the Labour Act, but they must realize that they are not hiring “Independent Contractors.” The benefits provided for in the Basic Conditions of Employment Act (BCEA) must be provided to these workers by the Labour Broker. They further revealed that more and more employers are going the route of outsourcing labour requirements. Because, it solves a lot of problems, and in many cases can prove to be far more economical than employing labour directly. For example, the employer does not have to provide pension or medical aid, can easily reduce staff requirements during “valley” periods, and increase staff during peak periods and level out staff requirements for the table periods. The increasing or decreasing of staff can be done without the employer becoming involved in any expensive retrenchment exercises.

Furthermore, table 4 examines the knowledge of the respondents on whether there is opportunity for casual worker to join full-time staff after certain period of time in the company. The result shows that 59.2% agree that there is a probability that casual staff can become fulltime staff in the organization while 40.8% disputed it. The findings corroborates Kalejaiye (2014), May, Campbell and Burgess (2005) who observed that labour casualization constitutes the price of progress because it creates room for more and more unemployed individuals to become part of organizational workforce from which they may be converted to full-time staff.

Also, table 4 revealed the responses of the respondents on the criteria which the management utilized in converting casual staff to full-time staff. The result showed that the criteria include job function and requirements (7.5%), performance, loyalty, punctuality and diligence (10.0%), family ties, connection and informal networking (28.3%), special skills, qualities, talent and potentials (5.0%) and examination

and qualifications (8.3%) among others. However, majority of the respondents affirmed that the family ties, connection and informal networking are the most prevalent criteria. In addition, 35.2% of the respondents rated the movement of casual workers to full-time staff in your organization very often while 24.2 rated it very seldom and 40.8% denied the probabilities of converting casual staff to full time staff in the organization. The deduction that can be made here is that the propensity for converting casual staff to fulltime staff is very low and insignificant in the organization.

Conclusion

Trade unions in Nigeria have for long engage in the struggle and massive fight against workplace oppression, gender discrimination, bad working conditions, job insecurity, unfairness and injustice in workplace hence depleting virus such as “Labour Casualization” will further cripple their efforts to ensure continuity in the struggle. Since, casualization is a commercial employment relationship enables employers to ignore workplace standards and worker social needs and to create a strong barrier against workplace unionism. The findings of this study have shown that trade unions activities have been negatively affected due to increasing casualization of employment in Nigeria. Also, the struggle to fight the menace of casualization in many workplaces in Nigeria have been hindered as a result of some factors such as weak leadership and falling trade union membership, poverty, corruption among government officials and lack of fund to embark massive public crusade, inadequate support from government as well as lack of political will to enforce Nigerian Labour law in work organization. More so, the findings revealed that casualization has weaken collective bargaining power and negotiation of the terms and condition of work, brought about reduction in union revenue and financial strength, encourage restriction of workers from freedom of association and falling volume of trade union members as well as promoting variation in pay/salary among workers of equal work in contemporary work organization. Further findings of this study established that employers adopt both internal and external methods of recruitment in sourcing contract/casual staffs for the organization. In addition, the findings of this study showed that there is a prospect that casual staff can become fulltime staff in work organization though; this is very slim and rare in many organizations in Nigeria.

Recommendations

In view of the above discussion, this study is interested in fostering the following recommendations:

- i. Within work organization, every worker regardless of their mode of employment should be entitled to assemble freely and associate with other persons, and in particular form or belong to any trade union or association for the protection of his interests and determination of terms and condition of employment.
- ii. Policy makers must make legislations to protect casual workers from the exploitation of employers. Casualization of labour is against the campaign of full employment and decent work for all and an assault on workers' rights. Therefore, government for enact policies that will give signs of hope to the plight of casual/contract workers in Nigeria. Such policies should emphasize equity in terms and conditions of work among casual and permanent workers. Also, in some instances where casual workers are been used to filled permanent positions there should high level of probability that those casual work will be converted to fulltime staffs within reasonable period of service.
- iii. Casualization is a big challenge for unions in their bid to protect and advance workers' rights and foster decent work. Thus, trade unions must develop and explore new strategies to organize and fight for the rights of casual workers or its outright eradication in many work places particularly in organizations that employ more of casual staffs than permanent staffs.
- iv. In the face of increasing casualization of labour unions have a significant role to play. Trade unions must take the lead in the campaign against casualization of labour and the restoration of decency and dignity to work in all its forms and categories.

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Liberalisation and India's Middleclass Economy: A Critique

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Abstract

India's New Economic Policy has brought many changes in Indian economy, particularly to middleclass society. The larger number of India's middle class and their consumption pattern is predominant drivers of her economic growth and development. However, the transitional economy with sudden structural changes put the mass market into jeopardy. The steep and wide gap between richest and poorest is a unique problem for India to identify middleclass and their growing needs. Immature consumer markets, feeding to vast population, inordinate income inequality, cross-cultural divergence, migration etc. are some of the major issues with regard to middleclass economy. This review article tries to explore some of the hidden facts pertaining to liberalization policy of Government of India and its impact on middleclass economy. Secondary data were used for the study. Implications of the study were discussed.

Key words: Globalization, middleclass economy, liberalization, new economic policy, livelihood and private consumption.

1. Introduction

India's New Economic Policy by way of liberalization, privatization and globalization (LPG) has brought many changes in Indian economy. The larger number of India's middle class and their consumption pattern is predominant drivers of her economic growth and development. Asia's young population with rising productivity, drastically changing culture and frequent labour mobility are

important milestones in the liberalization history. However, the transitional economy with sudden structural changes put India's mass market into jeopardy. Immature consumer markets, feeding to vast population, inordinate income inequality, cross-cultural divergence, migration etc are some of the major issues with regard to middleclass economy. As India is having second largest population in the globe her fundamental challenges lies on many fronts; resource management, production of alternate energy, efficient management of farming and manufacturing industry etc. The India's distribution process is one of largest processes in the world. The steep and wide gap between richest and poorest is a unique problem for India to identify middleclass and their growing needs. The present policy of deregulation of many public sector organizations ceases job security and employees' welfare measures considerably. The sudden flow of FDI (Foreign Direct Investment) in major industries including defense, retail, insurance and other service sectors will result into larger amount of security concern and price volatility of consumer market. To gain comparative and competitive advantages, developing nations are continuously striving for their strategic planning by leveraging their potential business sources. But the globalization and liberalization process may differ from country to country based on their socio-economic commitment. This review article tries to explore some of the hidden facts pertaining to liberalization policy of Government of India and its impact on middleclass economy.

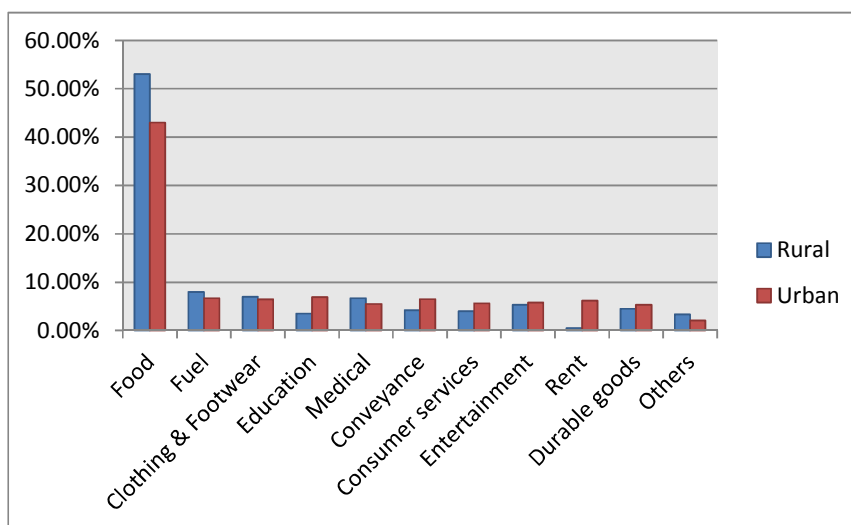
2. The Concept of Middleclass and Their Economy

Many authors defined and fixed parameter for middleclass member of a society, based on the income and spending capacity. Economically, middleclass is defined in two main ways: in relative terms, based on the middleclass income range of each country; and in absolute terms, using a fixed band for all countries. An influential exponent of the first approach was discussed by Lester Thurow (1984) who took as his reference point the median income in America—where there is an equal number of people above and below the line—and defined the American middle class as the group with incomes lying between 75% and 125% of the median. Nancy Birdsall (2000) discussed on the same idea to developing countries. Easterly, William (1999) selected those who were in the three middle quintiles of income (leaving out the poorest 20% and the richest 20%). This approach has its limitation of different median income, because

the definition of middle class differs from country to country. In a paper Branko Milanovic and Shlomo Yitzaki (2002) reviewed by using the average incomes of Brazil and Italy as the respective floor and ceiling. That translated into roughly \$12-50 a day per person, using household-survey data at 2000 *purchasing-power parity* (PPP). The above definition was also objected by researchers since it excluded many people in China and India who are recognisably middle-class but earn less than \$12 a day. OECD report (2010) defined that the emerging middleclass consumers all those living in households with daily per capita incomes of between \$10 and \$100, adjusting for local purchasing power.

An unpublished paper by Martin Ravallion (2007) at the World Bank used a range of \$2 to \$13 at 2005 PPP prices. Two dollars a day is a commonly accepted definition of the poverty line in developing countries assuming that people above this line are middle-class in the sense that they have moved out of poverty. \$13 a day is the poverty line in America, so this category might be described as people who are middle-class by developing-country standards but not by American ones. It is the developing worlds' own middle class. However, fixing an income of \$2 to \$13 per day as parameter for middleclass is also a controversial phenomena in India. The continuously raising food price escalation, volatility of the consumer market, hoarding and smuggling of essential commodities are pulling the average middleclass Indians to a below poverty line. The average Indian's share of spending their money to various needs is one of the best examples to understand the need-based economy.

Chart 1: Indian's Share of Spending their Money



Source: National Sample Survey Office (NSSO), Government of India

From the above Chart 1, it is understood that most of the earning of an average Indian is exclusively spent for food alone, i.e. 53% for rural and 43% for urban Indian.

3. Private Consumption

The consumption pattern is very big challenge for any developing country, particularly to India because of her vast population and transition economy. Consumption pattern and level of demand are closely related with the population, income, spending capacity, life style etc. When there is a change and increase in the consumption level, then it is a challenging task to the government to manipulate different operations including production, trading and distribution of goods and services. There is no doubt that private consumption is a driving force for economic growth, but also growing responsibility on the part of country's preparedness to meet out the demand domestically and globally. India's National Council for Applied Economic Research found that between 1995 and 2005 the number of Indians earning \$12-60 a day rose from 2% to only 5% of the country's population, but the number of those earning \$6-12 a day rose from 18% to 41%.

The realignment of consumer pattern is projected by many researchers (OECD, 2010) as follow: Asian (except Japan) middleclass spending will surpass that of US, European Union and Japan combined in 2022; India will move ahead of US in 2021, China in 2023 and EU in 2026. It is also projected by OECD that the size of global middleclass will increase from 1.8 billion (2010) to 3.2 billion in 2020 and 4.9 billion in 2030 in which 85% of growth is expected from Asia alone. India's consumption to GDP level was already reached at 57% in 2008, which is closed to that of developed nations such as Japan at 55% and US at 71% (Beinhocker, Eric D, et. al., 2007). Comparatively, China's historical consumption has been low at 37% in the same period 2008 and the growth is driven due to investments and exports rather than domestic consumption whereas India's consumption is higher and the growth is largely depend on domestic consumption.

Table 1: Middleclass Spending of Global Countries

Global Middleclass	Europe	US	Japan	China	India	Other	Other
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Spending	Union					Asia	Countries
Global Middleclass spending in 2009	30%	21%	8%	4%	2%	9%	26%
Estimated global middleclass spending in 20 years	14%	7%	4%	18%	23%	14%	20%

Source: OECD as on January 2010

During 2009, the global share of middleclass spending by China and India were 4% and 2% respectively. But in 20 years, China and India are expected to account for more than 40% of projected \$55.7 trillion in global middleclass consumer spending. It is one of the best examples of uneven growth of middleclass economy in India. The sudden growth of middleclass consumption is not only a threat for Indian economy but also a potent threat to population growth, resource management, socio-cultural divergence etc. In one hand, there are possibilities for middleclass benefit economically, but socially there will be a “cultural crux” among the Indian middleclass; in another hand, the problem of ‘rich-become-rich’ and ‘poor-become-poor’ will burden the society.

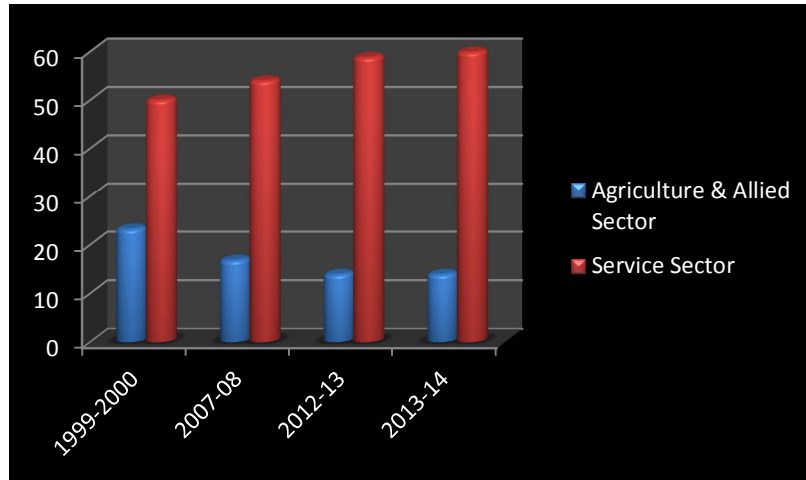
Indian market is conservative in nature, but western and developed nations’ markets are competitive in practice. Many reasons behind these markets are; education, socio-economic culture, consumption pattern, polity, psychological perception, buying behavior, preferential interest, habitual purchase etc. In India, most of the consumer’s interest is on ‘need’ based whereas in the developed countries, consumers’ interest mostly on ‘want’ based. Though unemployment and poverty exist in some of the developed countries, the severity is meager when compare with India. India’s economic objective and sociological priority is something very special at par with other Asian countries. India’s civil supply department is one among the largest operational unit distributing civil supplies to a vast mass at ‘subsidized price’ and most of the time as ‘freebies’. This is unique system of supplying basic economic needs with social objectives on long run basis.

4. Indian Economic Survey – Sectoral Analysis

The new economic policy came into existence in the year 1991. Some the surveys conducted from 1999-2014 is figured herein below. In the Chart 2, agriculture and service sector are pictured as the

shares of India’s GDP.

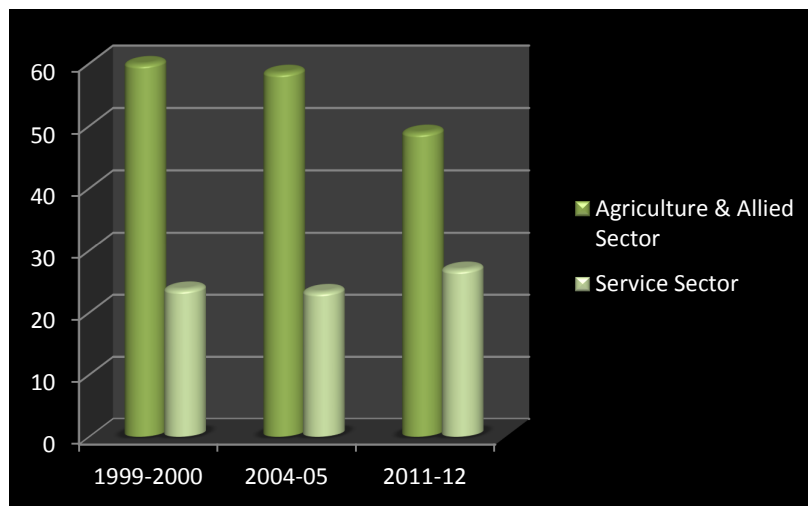
Chart 2: Indian Economic Survey-Sectoral Share of GDP



Source: Economic times, July 13, 2014, page 7

From the above Chart 2, it is found that the share of service sector to GDP is growing while agricultural share is shrinking. With regard to employment, the share of two major sectors, namely agriculture and service sector to total employment is figured herein below:

Chart 3: Share of Major Sectors in Total Employment (%)

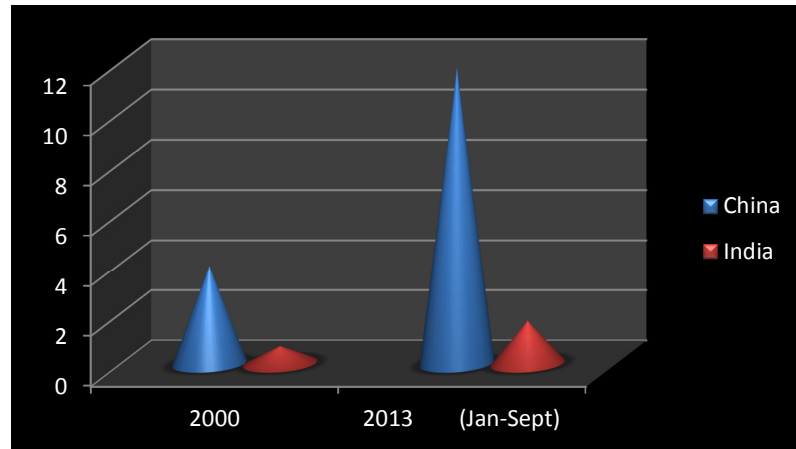


Source: Census, 2001 & Census 2011, Govt. of India Statistics, www.censusindia.gov.in

Though India’s agricultural sector is a largest employer, the number of farmers is shrinking. For the first time ever, India’s cultivators is shrank from 127 million (census 2001) to 118 million (census

2011). With regard to share of India's export, the following figure is self-explanatory.

Chart 4: India's Share of Exports to World Countries



Source: Economic times, July 13, 2014, page 7

India's share of exports to world countries has grown from 0.7% to 1.7%, but not as fast as other countries. For example, India's share of exports were valued at \$297 billion as against South Korea's share was valued at \$443 billion during 2012.

5. Resource Management

The sudden rise of middle class consumption poses severe threat to resource management to the global level. There is a danger that food-versus-fuel competition will develop between the world's 860 million automobiles and its 2 billion poorest people. The average income of the world's automobile owners is roughly \$30,000 a year; the 2 billion poorest people earn income on average less than \$3,000 a year (Brown Des, 2010). The severity and emerging need of energy demand many of the developing economy to concentrate on nuclear energy which also the subject matter of safety and security concern to the humankind. The transition of alternative renewable energy requires re-dedication and wholehearted governmental commitment, tax changes, and a considerable investment in research and resources. Conversion of renewable energy is somewhat easy for the countries that have low density of population, but it is a tough job for the thickly populated country having larger level of middleclass society like India.

6. Urbanization and Middleclass

Currently urbanization rate of India is 30% which will reach 48% in 2030 as per the Mckinsey

Report (2010). Even in the urbanization, India has proved her inability by allowing greater amount of inequality. For example, the state of Tamil Nadu and Gujarat are achieving an urbanization rate of 53% and 44% respectively; whereas Orissa, Himachal Pradesh and Bihar are having lowest rate of urbanization, such as, 18%, 12% and 9% respectively. There is no doubt that globalization has made some employment opportunities to the developing countries such as China, India, Brazil and other countries, particularly in the Information Technology industry. But this meager employment opportunity will not attain sustainability to the whole of Indian population since India's economy is immensely depending on agriculture and rural industries. The growth of India's population is linked to excessive urbanization, infrastructure failures and unemployment. The slum population in India is 23.8% of total population and the percentage of sewage treated is just 30% out basic service standard of 100% (Census 2001, Govt. of India). Nearly 90 per cent of the total workforce in India is from the unorganized sector. Most of them retired without any financial security like pension or other post-retirement benefits (Siva Raju, 2005) and majority are compelled to continue in some occupation to maintain their families. Some of the studies conducted in major cities (Delhi: Jagannathan & Palvia, 1997; Udaipur: Sati, 1988; Siva Raju, 2000) confirmed that a considerable percentage of retirees take up re-employment mainly due to financial constraints.

With regard to income inequality, almost non-overlapping distributions of India and the US: less than 5% of people in India richer than the poorest ventile in the US. But this is not true for Brazil, China and Russia: about half of the population of Brazil better off than the very poorest ventile in the US; for Russia, it is 3/4, for China 1/5 (Branko Milanovic, 2011). He further argued three implications of high international and global inequality, which are,

- a) no catch up of poor countries
- b) no global equality of opportunity
- c) need for impediments to migration

7. The Quest of Mixed Economy

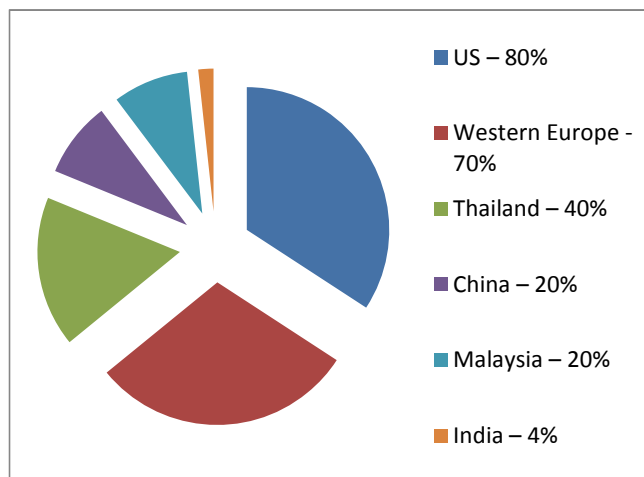
India's much avowed objective as per the constitution is socialistic pattern of society with 'mixed

economy'. The doctrine of mixed economy was enforced in India with a view to proportionate the public and private participation. The concept of policy of mixed economy is slowly being wiped out by the liberalization-policy makers. Globalization is a process of shifting the public authority to private. This is a policy allows individuals and private organizations to grow extensively through competition and competition alone. As reviewed by Edwards (1999), changes in the distribution of power and authority are characteristic of the processes we call globalization. Globalization of the world economy is driving us toward a borderless society; it will not reduce the differences among peoples in various regions overnight. Globalization is a long term process which requires structural changes. Globalization also motivates individuals for a larger amount of cross-cultural divergence and continuous migration. It is middleclass society who most of the occasions aspiring for power and prefer to frequent migration across borders. Many researchers criticize and raising objection that is there any need for borderless society and cross-cultural diversity for a peaceful and harmonious society. Some other facts also to be re-examined that the increasingly interconnected world cannot be a safe place if a large portion of its population still suffers from grinding poverty, disease, illiteracy, lack of education, unemployment and other barriers to survival. According to Mathews, Jessica (1997), this is not just a "power shift" from public to private interests, but a deeper and more complex process in which large numbers of people see their position systematically eroded by economic, social and political forces which work to the benefit of a small proportion of the world's population.

Many developing countries including India have trimmed their public sector with the belief to achieve fiscally sustainable growth and remain competitive at an international level. The globalization has caused the most distributional stress for what we commonly refer to as the "middle class", the large group of households that are neither wealthy nor poor, but that form the backbone of both the market economy and of democracy in most advanced societies (Easterly, William et al., 1999). The policy of liberalization, privatization and globalization continue to increase and the government participation is decreased. The new economic policy is also encouraging larger participation of FDI (Foreign Direct Investment) in almost all the industries including defense, insurance, retail sector etc. The liberalization

policy is being vigorously adopted with the hope of economic growth and development. But the immature market of India will not tolerate the sudden structural changes of economic policy. For example, the data of organized retail trend of top five countries are given below:

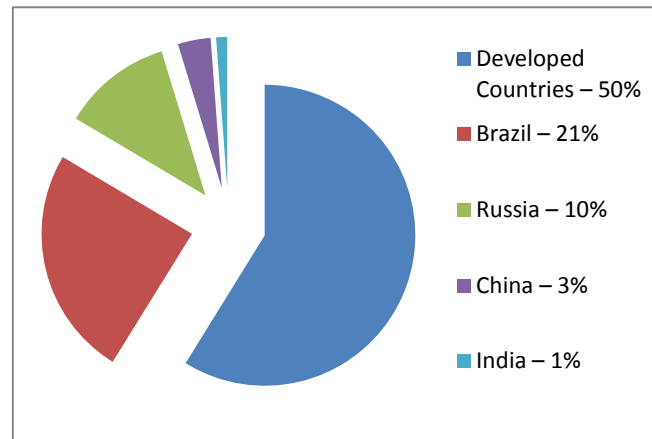
Chart 5: Percentage of Sales Generated Through Formal Channel



Source: City Investment Research & Analysis, Accenture as on 2009

From the above Chart 5, it is found that China and Malaysia are well below developed countries with just 20%. India’s retail is much lower with just 4% of their retail market being organized in 2008.

Grocery retailers which are non-traditional organized retail formats and chains including hypermarkets, supermarkets, cash and carry, department stores, specialty chains and shopping malls. While discussing on consumer products, matured markets of developed countries immensely advocate for packaged consumer products for which India’s immature market is in nascent stage with lowest rate of just 4%. Under these circumstances, the upper middleclass of Indian society may be indirectly or directly concentrated on purchase of foreign products which in turn, a threat to domestic manufacturers and traders. As an example, the market share of top five grocery retailers of world countries given below is self-explanatory.

Chart 6: Market Share of Top Five Grocery Retailers

Source: Kearney, A.T., as on 2008

8. The Growth of Emerging Market and India's Share of Responsibility

Unlike other developing economies, India share of social responsibility is huge and multidimensional. Of course, India is second populous country in the world and her socio cultural and civilization norms are unique in the world sociological history. As the economy is thrown to open market, the government control is also getting minimized. The labour market is getting wider but the job security and permanent employment are under greater amount of uncertainty. Most of the public sector organizations are least bothered of their manpower system and their welfare measures. The LPG process is also criticized by many researchers as it is not only breaks the law of self identity and citizenship but also instigates for global governance which is not practicable. It is further observed that LPG travels opposite direction to the world sustainability by acquiring and stagnating economic power to a very small group of the world and social consciousness to a larger population is restricted. The westernized system of merit-based recruitment may not suit to the socially divorced and educationally backward Indian society. So far, no government has fixed definite agenda or strategic formulation so as to invoke social responsibility to a vast mass on long run basis. Indian planning and budgets are mostly short run and objectives are politically molded. The following table shows staggering growth of world population with emerging-market middle class, who earns in between \$2 to \$13 per day.

Table 2: Half the World-Population Living on \$2 - \$13* a day

Population	1990	2005
East Asia and Pacific	315.5	1.117.1
Of which China	173.7	806.0
Eastern Europe and Central Asia	355.3	347.8
Latin America and Caribbean	276.7	362.1
Middle East and North Africa	170.2	240.1
South Asia	192.7	380.2
Of which India	146.8	263.7
Sub-Saharan Africa	117.7	197.1
Total	1.428.1	2.644.3

Source: Martin Ravallion, *2005 prices at purchase power parity

The above Table 2 shows staggering growth of the emerging-market middle class. During the period of 1990 and 2005, the total population is almost doubled from 1.4 billion to 2.6 billion, rising from one-third of the developing world's population to half. It also gives due weight to China, where the numbers living on \$2-13 a day rose from 174 million to extraordinary figure of 806 million in just 15 years. In India, the numbers rose from 147 million to 264 million, impressive in any other context. But Ravallion's (2007) definition excluded people living on slightly above-average incomes in Brazil, who would generally be considered middle-class too.

9. The Stresses, Shocks and Social Sustainability

From a view point of sociologists thinking, a man can't always rely upon competitive forces which can frequently produce stress and shocks. It is also perceived that globalisation don't achieve sustainability as it is a power politics and mostly dealing with competitive people and competitive markets. Equity, capability and sustainability are avowed objectives of any stable society. It is criticized by some of the economists that globalization paves way for unequal distribution of assets, capabilities and opportunities across world countries which is a potent threat for stable economy and sustainable society. Further, sustainability is the process of how assets and capabilities are utilized, maintained and enhanced on long run basis so as to preserve livelihoods in a society. At the global level, livelihoods are often threatened by international trade that reduce claims and disallows usage of public properties and rights. The livelihoods and survival of human beings, households, groups and communities are

vulnerable to stresses and shocks. As Indian society is comprised of larger portion of middleclass household, it is often subjected to stress, anxiety and shocks. Global recession and its meltdown often directly and indirectly affect the middleclass household, who knows the causes and consequences, but incapable to avoid the same. For example, the sudden increase of US dollar value from INR 45 to INR 62, the sudden fall of IT employment and compensation pattern, US claim of patent right on Indian traditional products etc. Stressors are pressures which are typically continuous and cumulative such as seasonal shortages, rising populations or declining resources, while shocks are impacts which are typically sudden, unpredictable and traumatic (Conwey, and Barbier, 1990). The causes of stresses and shocks are also interpreted with declining labour work available, declining real wages, declining common property resources, population pressure, declining return on labour etc. which build up gradually and affect the households (Evans, 1989). Though many number issues rising in the process of globalisation, social sustainability is one of the potent issues of middleclass economy prevailing in India.

10. Conclusion

The above review explores many numbers of suggestions to India's policy formulation. Conclusively, the sudden implementation of new economic policy of government of India is more like uneven and immature in its policy formulation and implementation. With reference to middleclass economy, most of the needs of middleclass society are creative and imaginary needs and not real needs. Most of the advertisements propagated through mass media and internet are exclusively on profit motive, obscuring the real needs of the society. The sudden shift of middleclass society poses severe scarcity in the resources of the nation and its management.

Economic power is expressed in the distribution of productive assets and the workings of markets and firms; social power is expressed in the status and position awarded to different social groups; and political power defines each person's voice in decision-making in both the private sphere and public affairs. These systems of power combine to produce a "social order", and transforming this social order is the task of social change. India's middleclass is a major social group and deciding factor of economic power. Until the socio economic power is tuned systematically and strategically on the long

term policies, India's socio-economic objectives will not gain her sustainable growth. With reference to India's intervention to globalization, globalization process will have possibilities to gain comparative and competitive advantages to the society, provided her socio-cultural and political objectives are taken care with long term perspectives. Otherwise, the LPG process will result into great confusion and economic crisis to the vast population by allowing 'rich to become rich' and 'poor to become poor'.

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Assessing the effect of demographic factors on conflict situations in Ghana government hospitals

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Abstract

The study seeks to examine the influence of demographic factors on conflict in Ghana government hospitals. It adopted the quantitative approach which involves the use of questionnaires and interviews coupled with statistical analysis to assess the effect of age, educational level, gender and number of years on the job of employees and conflict occurrences at the workplace. The use of purposive and convenience sampling techniques were adopted to get a sample of 123 employees and 10 heads or deputy heads of human resource of the ten regional hospitals in Ghana. The study found out that there is association between these demographic factors and conflict occurrences at these hospitals with 95% confidence level. It therefore recommends to management of these hospitals and other policy makers to pay much attention to these factors when formulating policies so that they meet the expectation of different categories of employees at the workplace.

Keywords: Conflict, demographic factors, hospitals, Ghana, government

1.0 Introduction

Workplace conflict is a universal organizational phenomenon because it is inevitable aspect of modern life. For any organization to perform well to achieve its objectives, different teams and individuals of different age, sex, gender and marital status must work together and create relationships across organizational lines and groups. In the flow of work and information, individuals, groups and departments depend on each other for information sharing, assistance or coordinated action. For example, in the hospital environment, doctors will depend on nurses, lab technicians, x-ray attendants and pharmacists to collate the needed and relevant information to assist their patients in the recovery process. Without the help of the personnel mentioned above, the work of the medical doctor will be very difficult especially if there are disagreements among them.

In the same way, the pharmacist will depend on the medical doctor in the area of prescriptions. Such interdependence may either foster cooperation or conflict. The hospital environment is a mixture of different categories of people with different background in terms of age, gender, education, religion,

beliefs and tribe and as mentioned by Collier (2006) such differences are potential causes of conflict in organizations. Again, the hospital is the only working environment where its customers patronized its service when they have health related problems and it can range from a simple disease to a complicated health condition hence makes the hospital a conflict prone workplace.

As people with different backgrounds, age, gender, sex, values, needs and personalities interact with each other, conflicts are bound to develop. Moreover where one party does not have a sound mind then the probability that the person will not reason up with the other party is high and hence disagreement is likely to occur. Taking the second largest government hospital (Komfo Anokye Teaching Hospital) as an example, according to the first half year report of the Ministry of Health for 2012, a total of 150,430 patients visited the Outpatient Department (OPD) whilst 199,176 also visited the OPD of the teaching hospital in 2011. These patients come to the OPD with varying degrees of health related disease and complications. Added to this, the government hospitals is one of the public institutions that absorbs a large number of employees in the public sector and these employees apart from the fact that they are different in terms of their values and needs are also demographically different in terms of sex, education level, income level, marital status, occupation (doctor or nurse) and religion.

As already indicated, it appears these differences in demographic factors together with the fact that the hospital is the only institution whose services are patronized when people have health related problems makes the hospital environment a place where conflict can easily occur. In support of this, the literature from American College of Physician Executives' (2009) indicated that 98% of those surveyed had witnessed an incident of disruptive behavior between nurses and physicians.

In another study by Anderson and D'Antonio (2005), about 50% of physician's time is spent on conflict. This according to the writers stem from the fact that the hospital is among the few organizations that normally does not segment or target specific customers. Demographically, all people of different age, sex, marital status, religion and occupation are expected to patronize in the services of these hospitals. Now the question one may ask is that, looking at the fact that these demographic factors are not homogenous and as such there are differences in age, gender, religion and marital status, is it prudent for health professionals to spend most of their time taking into consideration differences in these factors when dealing with patients and their fellow colleagues since their thinking, reasoning, perception, values and needs are not the same? In answering such a question, Studdert et al. (2010) are of the view that the uniqueness of the hospital environment demands that health professionals are tolerant in all situations and in the worse case when conflict occurs as a result of differences in reasoning, perception and thinking, they needed to be dealt with in a swift manner in order to avoid loss of human lives. Whilst we may agree with the writers, it is also true that one need to really examine what brings these differences in reasoning, perception and thinking and its effect on conflict occurrences.

In light of this, the researchers decided to go into this research to look at the effect of these demographic

factors on conflict occurrences in government hospitals in Ghana since though many research had been done on conflict and its occurrences, there is little on isolating these demographic factors and their consequences on conflict occurrence. Second in terms of Ghanaian context, literature available to the researchers indicates that proper attention has not been given in terms of research on conflict situations in government hospitals. It is the believe of the researchers that going into this research by focusing on this area will help bridge the gap in terms of knowing the effect of demographic factors on conflict and its occurrence in Ghana government hospitals.

2.0 Literature Review

Over the years the term conflict has been branded to many people as an awful conduct of parties who engaged in an argument which is normally generated from differences in ideas, beliefs and values. It was tagged as a disturbing force (Walton, 1969), hence most scholars advocated for its eradication. By the year 1980, researchers such as Tjosvold (1991), began to rethink about the constructive and solidarity consequence of conflict. Thus, though conflict act as a negative force operating against successful completion of group common goals, it may also lead to positive effects depending on the nature of the conflict (Obasan, 2011).

From the literature of Henry (2009), organizational conflict is regarded as the friction that occurs when the goals, interests or values of different individuals or groups are incompatible with those of other individuals or groups in an organization and where they may block or frustrate each other in an attempt to achieve their objectives. Other writers such as Meek, Heit and Page (2005), Hart (2000) and Reece and Brandt (1996) adding their voices to what is meant by conflict share a similar view that it is a state of opposition, disagreement or incompatibility between two or more people or groups of people which is sometimes characterized by physical violence or assault. Their views on conflict actually points to the fact that it is not always that parties tend to be physical or violent towards each other that one can actually says there is conflict. In some instances as can be found in the comments by Lambert and Myers (1999) and Hocker and Wilmot (1995), conflict can be latent and the other party may not even be aware that there is a conflict. In the case of health care environment, a patient may be in conflict with a physician without the physician been aware that the patient is in conflict with him since it is believed that conflict is cognitive rather than behavioral state.

Conflict is inevitable hence needs a strategic approach in terms of its resolution so that the end result can be functional rather than dysfunctional. Whilst it tends to be inevitable, from the literature of Rahim (2001), departments, units and sections competing with limited resources is one of the most common sources of conflict in organizations. Looking at the literature given by the writer, the researchers of this study based on their own observation see it as one of the major causes of conflict in Ghana government hospitals where patient frustrations due to congestions and pressure on health equipment generate frequent quarrels and disagreements among them and staff based on the time taken for health care professionals to deliver a service. To Tseveendorj (2008), the causes of conflict are not only limited to scarce resources but people's perception and culture also breeds conflict. Culture and perception is very

instrumental human make up that is very hard to transform. Instances where team mates working on the same task have diverse cultures and values, their perception on how to achieve the task vary because each one's decision will be influenced by his values or beliefs. From the literature of Henkin and Cistone (2000), demographic factors such as religion, educational level, gender and age have high influence on perception and as such makes people think differently. Looking at the writers assertion on the fact that age, religion, educational level and gender play important role in influencing perception, one can deduce from the comment made by Tseveendorj (2008) that the root cause of conflict as a result of differences in reasoning, believe and thinking is not perception but differences in demographic factors (age, religion, gender and educational level) since the latter has high influence on the former.

As organization comprises of people from different backgrounds and conflicts are bound to occur, it is necessary for managers and supervisors to acquire skills that will enable them manage conflicts when they occur since according to Watson and Hoffman (1996) supported by Dana (2001), managers most of the time spend about 42% of their time dealing with conflict related matters. Reynolds and Kalish (2002) share a similar view with the writers since to them; managers nowadays spend at least 25% of their time resolving workplace conflicts. Looking at the comments regarding the percentage of manager's time devoted to resolving workplace conflicts, it presupposes that organizations need to pay much attention to how they can benefit from conflict situation when they occur by ensuring that it tends out to be functional one. In ensuring that the outcome of conflict is functional, it is necessary for managers to also ensure that they adopt the right approach in terms of its management. In the view of Gatlin et al (2012), an early intervention by investigating disputes and complaints when they are raised, identifying root causes of problems in addition to symptoms, and sharing this information to create change can facilitate a smooth resolution of the conflict. In talking about the various approaches to handling conflicts, Johnson and Johnson (2000) and Bercovitch and Kadayifci-Orellana (2009) recommends mediation as the best approach to be adopted by managers in resolving conflicts. Despite their recommendation, they were quick to add that if the mediator is inexperienced, the end result of the conflict will not be beneficial. Based on our literature, one can set the following hypotheses to check is there is any association between conflict occurrence and demographic factors:

Ho: Conflict occurrence is independent on differences in age at the workplace

H₁: Conflict occurrence is associated with differences in age at the workplace at 5% level of significance.

Ho: Conflict occurrence is independent on differences in gender at the workplace

H₁: Conflict occurrence is associated with differences in gender at the workplace at 5% level of significance.

Ho: Conflict occurrence is independent on differences in educational level at the workplace

H₁: Conflict occurrence is associated with differences in educational level at the workplace at 5% level of significance.

Ho: Conflict occurrence is independent on differences in employees' number of years at the workplace

H₁: Conflict occurrence is associated with differences in employees' number of years at the workplace at 5% level of significance.

3.0 Methodology

The study seeks to assess the effect of demographic factors on conflict situations in Ghana government hospitals. In achieving this objective, the study adopted a quantitative approach and the target population consisted of all the government hospitals in Ghana. Since dealing with all the government hospitals was difficult because of resource constraint, the researchers adopted a non probability sampling which convenience sampling was used to sample the government hospitals to be used for the study. In doing this, the ten regional government hospitals namely Komfo Anokye Teaching Hospital (Kumasi - Ashanti), Effia Nkwanta Regional Hospital (Takoradi - Western), Regional Hospital (Koforidua - Eastern), Central Regional Hospital (Cape Coast - Central), Tamale Regional Hospital (Northern), Regional Hospital (Sunyani – Brong Ahafo), Regional Hospital (Bolgatanga – Upper East), Regional Hospital (Wa-Upper West), Regional Hospital (Ho –Volta) and Ridge Regional Hospital (Ridge – Greater Accra) were conveniently selected from the rest of government hospitals in Ghana. The choice of this non probability sampling was based on the researchers' easy access to information from those hospitals.

In getting respondents for the study, the researchers used quota sampling where 10 health workers were selected from each of the regional hospitals except Komfo Anokye Teaching Hospital, Kumasi where 13 workers were selected because of proximity and availability of workers to participate in the study. In all 123 workers excluding heads and deputy heads of human resource section of the various hospitals were sampled for the study and they comprise of 20 doctors, 20 nurses and midwives, 21 security, 20 pharmacists, 20 lab technicians and 22 administration workers. For the researchers to get this sample, both purposive and convenience sampling was adopted. The researchers adopted purposive sampling to include heads and deputy heads of human resources whilst convenience sampling was adopted to get doctors, nurses and midwives, security, pharmacists, lab technicians and administration workers in the study. The choice of purposive sampling was to ensure that heads and deputy heads of human resource of the various hospitals were included in the study since they deal with issues pertaining to conflict situations in their workplaces. Again, in almost all organizational setup, conflict and its management is part of the job description of human resource professionals and as such including them in the study helped the researchers to obtain vital information for the study. There were 10 heads or deputy heads, 1 from each of the regional government hospitals that was selected for the study.

Looking at convenience sampling, its choice to get the rest of the workers in the study was based on those who were willing and ready to participate in the study.

In getting data for the study, the researchers used questionnaires and interview. The questionnaires were directed to the sampled workers (doctors, nurses and midwives, lab technicians, pharmacists, security and administration) whilst interview was for heads or deputy heads of the various government hospitals. In a situation where the head of human resource was not available, the deputy head was interviewed to solicit the needed information.

With regard to the use of questionnaires, the researchers adopted the likert scale type (strongly disagree to strongly agree) to assess the effect of demographic factors on conflict situations in those government hospitals. Based on the information obtained from the questionnaire, the researchers looked at the effect of these two variables (demographic factors and conflict) by calculating Spearman Correlation Coefficient of the variables.

Chi square test statistic (X^2) was also used to test if the two variables are independent.

In pre-testing the questionnaire in order to ensure that it is accurate in capturing the intended information, the researchers selected Manyhia hospital in the Ashanti Region of Ghana to pilot the questionnaire in terms of its effectiveness in helping to gather the necessary information. In doing this, a small sample of 20 workers from the hospital was conveniently sampled and the questionnaires were distributed to them. From the responses obtained, it helped the researchers to reconstruct some of the questions which the respondents were finding it difficult to answer. This exercise enabled the researchers to get a well refined questionnaire which was finally used for the study.

The interview that was employed to solicit information from heads and deputy heads (human resource) of the various government hospitals centered mainly on the techniques adopted to deal with conflicts when they arise. The results of these statistical analyses together with the responses from these heads and deputy heads of human resource of these government hospitals helped the researchers to achieve objective of the study. For the purpose of the study, demographic factors were limited to age, gender and educational level and its influence conflict situations.

4.0 Data Presentation and Discussion

The main objective underlying the study is to assess the effect of demographic factors on conflict situations in Ghana government hospitals. In achieving objective of the study, the researchers employed a number of tools such analyzing the questionnaires provided by the respondents as well as the interviews conducted with the heads or deputy heads of human resource of the various government hospitals. In knowing the background characteristics of the respondents, data retrieved from the questionnaire of 123 respondents provided the following information:

Table 1: Demographic Characteristics of Respondents

Variables	Category	Frequency (N)	Percentage (%)
Gender	Male	79	64.2
	Female	44	35.8
Age	Below 25	19	15.4
	25-34	40	32.5
	35-44	45	36.6
	45-54	17	13.8

	55+	2	1.6
Educational Qualification	High Sch	7	5.7
	HND	27	22.0
	1 st degree	36	29.3
	Master's degree	38	30.9
	PhD	6	4.9
	Other	9	7.3
Years on the job	Less than 6	40	32.5
	6-10	47	38.2
	11-15	17	13.8
	16-20	12	9.8
	20+	7	5.7

N=123

The above information helped the researchers to have a general overview of the demographic factors which were to be used to assess how they influence conflict occurrences at these government hospitals. The data as can be captured in the above table shows high percentage of males (64.2%), more people with Masters Degree (30.9%), a large number of people who had worked in the government hospitals between 6 to 10 years (38.2%) and greater number of people falling within the age range of 35-44 (36.6%).

In assessing how these demographic factors influence conflict situations in government hospitals, cross tabulation involving the variables of demographic factors and conflict was done to assess if there is any association between them. This also involves calculating chi square to test the association between the two variables as well as determining if the results were significant at $P < 0.05$. Based on the response of the respondents with regard to yes or no whether they have been involved in conflict and its pattern with the demographic factors, the following results were produced.

Table 2: Cross tabulation of Demographics and Involvement in Conflicts

Variables		Encountered conflict		χ^2	P<0.05
		Yes	No		
Number of years worked	Less than 6	60.5%	39.5%	10.311	0.036
	6-10	83.3%	16.7%		
	11-15	83.3%	16.7%		
	16-20	84.6%	15.4%		
	20+	100.0%	.0%		
Gender	Male	58.5%	41.5%	4.519	0.021
	Female	72.7%	27.3%		

Age	20-29	72.2%	27.8%	8.257	0.025
	30-39	65.7%	34.3%		
	40-49	62.4%	37.6%		
	50+	52.9%	47.1%		
Educational qualification	High Sch.	100.0%	.0%	9.295	0.018
	HND	91.5%	8.5%		
	1st degree	86.1%	13.9%		
	Master's degree	34.2%	65.8%		
	PhD	33.3%	66.7%		
	Other	55.6%	44.4%		

N=123; $p < 0.05$

From Table 2, number of years worked at government hospitals showed some significant positive association with conflict involvement, while educational qualification indicated a negative association. At $p < 0.036$, the longer the employees work at government hospitals, the more likely they are in encountering conflicts. About 60.5% of the employees with less than 6 years at these hospitals were involved in one conflict or the other while about 83.3% each of those of 6-10 and 11-15 years encountered conflicts. This has risen to 84.6% and 100% as the number of years employees serve at these hospitals increase at 16-20 and over 20 years respectively. Females were found to be significantly more likely to encounter or engage in conflicts than their male counterparts (Male = 58.5%; Female = 72.7%; $\chi^2 = 4.519$; $p < 0.021$). Educational qualification on the other hand had shown some inverse association with engagement in conflicts. The higher the employees are educated, the less likely they are to engage in conflicts. From Table 2, all the high school certificate holders have engaged in some conflict. The trend decreases as educational qualification increases with about 33.3% of the PhD holders involved in some conflict whereas 91.5%, 86.1% and 34.2% of workers involved in conflicts been HND, 1st degree and Masters' degree holders respectively ($\chi^2 = 9.295$, $p < 0.018$). Looking at age and its influence on conflict occurrence at these hospitals, the results show an inverse relationship in that as people grow up they tend to avoid conflict by being tolerant with others (Age 50+: 52.9%) whilst people at the youth stage (Age 20-29; 30-39: 72.2% and 65.7%) tend to involve themselves more in conflicts.

From this one can deduce that the education attained by people at the workplace plays an important role in helping to reduce conflicts. This can be attributed to the fact that as people rise through the academic ladder, they tend to appreciate differences in individuals and also respect the views of other people although those views may not be in line with theirs. The inverse relationship between age and conflict occurrences at government hospitals can also be linked to the fact that as people grow up, they tend to bring their experiences to bear with the situations which they currently face and as such ensures that they do not engage in activities that will be to the disadvantage of other parties that will generate into conflict. This means that many young people especially those at the youthful stage who have no such experiences

are likely to engage in conflict with others.

Talking about gender and its association with conflict occurrences at the workplace, one can take a clue from the literature provided by Wilson (2011) that women engage in more conflict than men because of the fact that women have higher copper levels and lower zinc levels than men, see the truth about life around them better than men, are considered as delicate creatures and lastly have their anger more often hidden as compared to men. This means that one need to take these biological factors into consideration when dealing with women since they trigger women to engage in conflicts. The last demographic factor which is number of years and its positive association with conflicts can also be linked to the fact that the longer people stay at a particular place the more likely they will do something that will not be in agreement with others. In contrast, people who have not stayed or worked with these government hospitals for a longer period of time are likely to be careful when dealing with their colleagues, peers and subordinates especially during their probation period and as such avoids engaging in activities that will generate into conflicts with others.

Turning attention to the analysis of chi square test statistic of the demographic variables and its association with conflict occurrence at these government hospitals, we need to reject H_0 and accept the alternative hypothesis that there is association between the number of years employees worked in these government hospitals and their involvement in conflicts since the calculated test statistic ($X^2 = 10.311$) was more than the critical value of 9.488 at 4 degrees of freedom for alpha 0.05. The chi square test statistic for gender and its association with conflict occurrence showed $X^2 = 4.519$ and this makes us to reject H_0 and accept H_1 that conflict occurrence at these government hospitals has association with gender balance of workers since the calculated test statistic was more than the critical value of 3.841 at 1 degree of freedom for alpha 0.05. For the chi square test statistic of age and educational level and its influence on conflict occurrence, at 3 and 5 degrees of freedom respectively, the calculated test statistic of $X^2 = 8.257$ for age was more than the critical value of 7.815 while $X^2 = 9.295$ for educational level was less than the critical value of 11.070 for alpha 0.05. This makes the researchers to reject H_0 for age and its independency on conflict occurrence at Ghana government hospitals and therefore accept the alternative hypothesis that there is association between the two variables. Lastly, we accept H_0 and reject the alternative hypothesis by affirming that the two variables which is educational level and conflict occurrence at these government hospitals are independent

Since conflict originates and also exists in various forms, the researchers used Spearman Correlation Matrix to assess how demographic factors (age, educational level, gender and number of years on the job) influence the origination of conflicts in government hospitals. In doing this, the following results were produced.

Table 3: Spearman’s Correlation Matrix of Information on Conflict Situations and Demographic Data

		1	2	3	4	5	6	7	8	9	10	11	12
1	NYK	1	.893 ^a	.695 ^a	-.075	.322 ^a	-.041	-.019	-.104	-.013	.033 ^b	.032 ^b	-.150
2	NJ		1	.670 ^a	-.010	.320 ^a	-.031	-.032	-.176	-.013	.055 ^a	-.070	-.158

3	Age	1	.095	.251 ^a	-.066	-.070	.112	-.027	-.123	.148 ^a	.268 ^a
4	Gender		1	.119	.159	-.086	.206 ^b	-.018	.108	.102	.039
5	ED.Q			1	-.089	-.020	-.067	-.052	.183 ^b	-.102	.141 ^a
6	NFRC				1	.146	.197 ^b	.332 ^a	.237 ^a	.206 ^b	.120
7	PNCO					1	-.039	.435 ^a	.013	.126	.112
8	FMDS						1	.387 ^a	.270 ^a	.400 ^a	.036
9	PA							1	.339 ^a	.436 ^a	.045
10	FFR								1	.401 ^a	.096
11	STN									1	.243 ^a
12	PRCE										1

N=123; 1=strongly disagree; 2=disagree; 3=Neutral; 4=agree; 5=strongly agree; p<0.05; a= p<0.01 (sig. at 2-tailed); b=p<0.05 (sig. at 2-tailed)

NYK	Number of years	FMDS	Feel marginalized and do not trust the system
YJ	Years on the job	PA	People are apathetic (don't care about others)
ED.Q	Educational qualification	FFR	Fight to ensure the right thing is done
NFRC	Have no faith in managers to resolve the conflict	STN	See things to be normal even if not what is expected
PNCO	People don't notice when conflicts occur	PRCE	People recognises conflict early and resolve them prior to escalation

The results indicate that the longer employees work with these government hospitals, the more likely they are in fighting with others for the right thing to be done even if management and other authorities of these hospitals see nothing wrong with it ($r=0.033$; $p<0.05$). Older employees are more likely to see things as normal even if it does not conform to their expectations ($r=0.148$, $p<0.01$). Again, these workers who are old are able to recognize conflicts early and resolve them before they escalate ($r=0.268$; $p<0.01$). Looking at female employees, the results show that they feel they have been marginalized since most of the top positions are dominated by men ($r=0.206$; $p<0.05$). Further analysis also shows that employees educational level positively associates with their early recognition of conflicts and try to resolve them rather than allowing the conflict to reach an advanced stage with $r=0.141$ at $p<0.01$. Lastly with $r=0.183$; $p<0.05$, people with higher qualifications from their experience and education understand situations and prefer dialogue in coming into a compromise rather than engaging in conflict with others.

Apart from looking at the demographic factors and its influence on conflict there was the need to also look at the conflict management techniques adopted by these government hospitals. The interviews conducted with the 10 heads or deputy heads of human resource of the government hospitals indicated that all the hospitals (100%) follow a well documented procedure for resolving conflicts at the workplace. To these respondents, the procedure for resolving conflict was adopted by both management and employees of these hospitals through a collective bargaining agreement by the two parties. Looking at

this, the researchers see it as a system adopted by the hospitals to boost employees' confidence for them to report disagreements with their colleagues, subordinates and superiors so that they are resolved to the satisfaction of both parties. Again, having this system in place creates the avenue for both parties to explain why they are in disagreement so that compromise could be reached without prolonging the conflict.

5.0 Conclusion

The study assesses demographic factors and its influence on conflict in Ghana government hospitals. Data collected through questionnaires and interviews as well as the statistical analysis shows that demographic factors (age, educational level, gender and number of years on the job) have influence on conflict and its occurrence in Ghana government hospitals. This means that as most conflicts are perceived to be dysfunctional, there is a need for managers of these hospitals to take these factors into consideration when coming out with policies since differences in interpretation of these policies may come as a result of differences in these demographic factors. Again, employee differences in reasoning and thinking are potential triggers of conflict and the former comes as a result of differences in age, sex, educational levels and years of experience on the job among group of employees doing the same work or in a particular organization. This means that the kind of leadership style managers of these government hospitals adopt in managing their people should take cognizance of these factors since older people, people with higher level of education and had also served in these hospitals for a longer period of time feel peeved when they are not considered when a decision is taken.

6.0 Suggestion to policy makers

Managers manage people with different age, educational level, gender and experience on the job and their behavior tends to be different as a result of differences in these demographic factors. It is therefore suggested that managers acting in the capacity as policy formulators need to assign weight to these demographic factors before these policies are formulated if they are to be embraced by these people. The differences in existence of these demographic factors among people at the workplace means that even policies are well acceptable to employees, inter conflict among individuals at the workplace is not avoidable. On this note, it is suggested that policy makers also need to pay much attention to ensuring that well a documented policy on addressing conflict is made known to all their employees and their involvement in the preparation of such policy is crucial if it is to be acceptable to them.

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The Role of Brand Credibility on Purchase Intention on Fast Food Sector in Pakistan

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ABSTRACT

The purpose of this study is to identify those main factors that influence upon purchase intension of customers specifically in fast food sector. The variables which were selected for this research were perceived quality, customer value, perceived risk and purchase intention. The instrument that is used for research is close ended questionnaire. Questionnaires were developed collected data from 150 respondents. After analysis the results showed that all the three variables, perceived quality, customer value and perceived risk have a great impact on consumer purchase intentions. Perceived quality plays important role. Purchase intentions are built at the last moment when the consumer got the good perceived quality. Early making of decisions also lead to development of customer value.

Key Words: Customer Value, Fast Food Industry, Perceived Quality, Perceived Risk, Purchase Intention.

1-Introduction:

This topic of my research is impact of perceived quality on purchase intention. The main aim of this study is to identify those main factors that influence upon purchase intentions of customers. I have selected this topic as I believe that Purchase intention is the most important factor of customer that triggers the buying behavior of the customer to any kind of product. So I wanted to find out those important factors that influence this purchase intention variable. To proceed with this topic I selected three independent variables and these variables are perceived quality, perceived risk and customer value.

The sector I selected for my research is fast food industry. Fast food industry is on boom not only in Pakistan but also in the whole world. Especially in my geographic region where I have to conduct my study i.e. Lahore (Pakistan), people here are too much fond of eating and dining in different type of restaurants and try new types of food. So I selected fast food industry as my research sector.

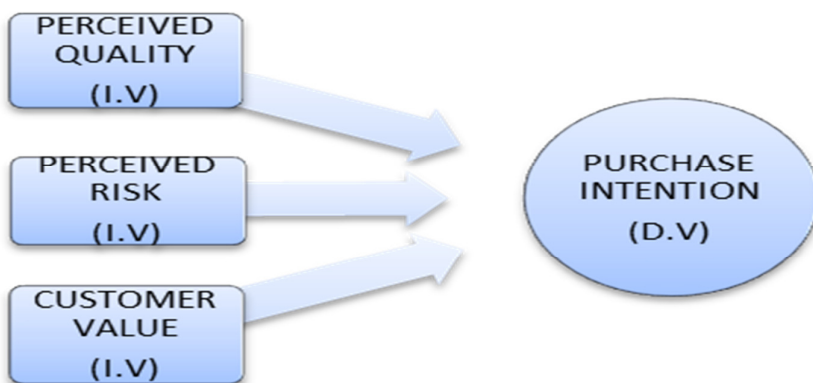
The dependant and main variable of my research is Purchase intention. Purchase intention is actually the mantel plan of a customer in which he /she intend to purchase a product or service at the same time or in near future. In my opinion purchase intention is the most important factor that is involves in customer buying behavior. All the companies and organization strive and adopt those methods and processes that increase purchase intention of customers. The purchase intention can be influenced my many factors, like advertising, pricing, product, location, quality, positive positioning of the brand or product in the market. Especially the need of the product at that time.

The first independent variables I choose for this research is perceived quality, Perceived quality is actually the perception or opinion of the customer toward the overall quality or superiority of a product brand or a service. It is also customer’s opinion of the brand’s ability to fulfill the expectation of customers. This opinion which made about any brand or product may have a little or nothing to do with actual excellence or performance of the product or service. It usually depends upon the positive or negative image of the brand in the market, also on multiple factors by which the brand position itself positively like target market, advertising, promotions , also location, product quality, staff behavior and many more factors . It may also depend upon the actual quality, durability and positive word of mouth of brand.

The second independent variable I choose is Perceived Risk. Perceived risk is actually the consumer’s level of uncertainty regarding the result of purchase decision. In every purchase of the product this factor exist, it the fear that whether the money is invested in the right place or not. Especially in case of high price items like cars and furniture or high involvement products like food and medicines the risk fear is doubled.

The next independent variable that I have chosen for my research is customer value. Customer value is the difference between what a customer have ordered and expected from the manufactures and what they gets from them. High customer value given by the organization to the customer results in high purchase intention and vice versa.

2-Model



2.1 HYPOTHESIS

PERCEIVED QUALITY:

H1: there is a relationship between perceived quality and purchase intention.

H0: there is no relationship between perceived quality and purchase intention.

PERCEIVED RISK:

H2: there is a relationship between perceived risk and purchase intension.

H0: there is no relationship between perceived risk and purchase intension.

CUSTOMER VALUE:

H3: there is a relationship between customer value and purchase intention.

H0: there is no relationship between customer value and purchase intention

3-Literature Review

Tsiotsou R. (2006) deemed “The role of perceived product quality and overall satisfaction on purchase intentions”. He discussed five variables included values, involvement, perceived product quality, purchase intention and overall satisfaction. The research was made on sport shoes. The technique was questionnaire. He selected 197 students as respondent. The finding of his study is that the thing which has the largest effect was perceived product quality. It was having the direct effect. The least to matter was purchase intention. While if satisfaction was considered it had the largest and the direct effect on the purchase intention but its overall effect is less because of indirect effect. Purchase intentions are very important in marketing term or functions. Purchase intention is important as it’s totally linked with the marketing literature. While he described perceived quality as the working of the product on the basis of judgments made. Objective quality is totally different from perceived quality. Perceived product quality is assessed globally. Consumer made purchase intention for those products that later satisfies them or create customer value for them. Purchase intention are made on the outlook of the product quality or feature.

Khatib H. and Lee H. (2011) examined “The role of perceived support quality”. They worked on nine variables included information quality, system quality, perceived trustworthiness, perceived risk, compatibility, complexity, perceived ease of use (PEOU), perceived usefulness (PU), and social influence. They used the study of Churchill to study construct. The item (generation) produced was 53. Qualitative empirical approach has been used. The technique was questionnaire. The findings of the study are that both the academics and practitioners are contributing towards understanding the factors that will distract government working regarding adoption and usage. Sometime citizens are useless. They have to pay taxes for each and everything. For their future benefits they would apply for social benefits. If any things get expire they have to renew them. For security and safety they’ll be having the need of health services. Many governmental websites are there but they not been viewed or checked from the perspective of perceived quality. E-Governments are making success model of information systems. Manu unskilled person can use them.

Bukenya J. and Wright N. (2007) worked on “The Determinants of Consumer Attitudes and Purchase Intentions with Regard to Genetically Modified Tomatoes”. He discussed fifteen variables included Race, Female, Young age, Middle age, Medium education, High education, Medium income, High income, Primary shopper, Knowledge, Attitude, Risk, Label, Perception, Price. The analysis is drawn on the data which was gathered through the survey on consumer held at different grocery stores in Alabama. The result showed up expanded preferences towards the tomatoes. He investigated that the price was being showed by the variable of prices differences between the mutant and non-mutant tomatoes. People will prefer to buy mutant tomatoes if the prices between mutant and non-mutant tomatoes will increases. Now the person having high income and good or selective at shopping will consider the expensive. Many factors have been neglect like consumer behavior and belief etc. because of the larger effect of the socio economic criteria.

Saizrbitoria I and Landin G. (2006) examined “The impact of quality management in European companies’ performance”. He worked on four variables Economic profitability, Market share, Sales per employee and sales growth. The technique they used was QM models. They came up with the result that the use of QM model has a good effect on the result of the company. QM models improved the operations and functions of the company. Efficiency was remarkably improved. Cost of internal activities was also reduced.

Fu Chen C. and Ying Chang Y. (2008) studied “Airline brand equity, brand preference, and purchase intentions the moderating effects of switching costs”. He worked on four variables included brand equity, brand preference, purchase intentions, and switching costs. They found on the brand of equity the moderating effect of the switching cost does not exist. Brand preferences also don’t exist. While on the path of equity there is involvement of the moderating effect and it exist strongly. Brand equity is important for every industry. It is the primary capital as it’s built in the long span of time. Customer can be attracted or strong attachment can be built only with the help or presence of strong brand having strong equity. Brand enables the customer to see beyond the horizon. To visualize what type of benefits the brand is offering them. Only then the customer can understand the intangible factors of brand and its built equity.

Bahia K. and NantelJ. (2000) studied “A reliable and valid measurement scale for the perceived service quality of banks”. They worked on six variables included effectiveness and assurance, access, price, tangibles, services portfolio and reliability. The researched that replications are always welcomed as the authentication of the measure is a lasting process. In any process repetition exist with the reliable data. Besides repetition of the data limitation also exists for the bank. Measurement that is limited can be improved until the bank reaches the perfect scale could be attain. Sometimes the perfect scale does not exist but sometimes reliable and valid data are also obtained. Perceived service quality is what the consumer thinks of the product whenever he confronts it. Their way of looking towards the product is the form of attitude. Consumer observes things and then makes judgments, comparison and decision of the basis of perceived quality. They presume the performance of the product on the basis of perceived quality. Chen Z. and Dubinsky A. (2003) studied “Conceptual model of perceived customer value in e-commerce”. They considered seven variables for their work. It includes purchase intention, perceived customer value, product price, perceived product quality, perceived risk, e-retailer reputation, valence of experience. Regression test was used to check the customer value. Several proposition was given about the customer value and their support regarding the empirical study was been checked. Multi co linearity does not seem to be the major concerns. The customer makes an overall assessment of the utilization of the product that is based on certain perceptions regarding what type of value a customer got and what he had paid to get those values.

Heijden H. et al., (2003) determined “The online purchase intentions: contributions from technology and trust perspectives”. They worked on three variables perceived risk, online purchase intention and perceived ease of use. They investigated that perceived risk and perceived ease of use has a background. The ancestor of them is attitude of customer towards online purchasing. Perceive risk is high at online purchasing because in many situation people don’t trust the web. While at the other hand perceived ease

of use is positive as the online shopping seems to be so easy for the people that while sitting home one can get the thing and the job done. The basic hurdle may come for a person having less knowledge of technology as the online consumer has to deal with the technology for placing the order or getting the services. Perceived risk is high as the store is replaced by the electronic things where there is no possibility of checking or trying the things. The store may either be replaced by information system (IS). Szybillo G. and Jacoby J. studied "Intrinsic versus extrinsic cues as determinants of perceived product quality". They discussed 4 variables included physical product, price, store image, Error within groups. They came up with the result that extrinsic cues has less effect upon quality perception. Intrinsic cues had a greater effect upon quality. Composition difference has a greater effect while price or information storage has a less effect. Perceived is the state when the consumer is so willing to buy the product as he acquires a little purchase intention. While in case perceived quality the purchase intention is less. In that case the purchase intentions will be followed up by the practitioners. Purchase intentions has a positive relationship with the purchase behavior which was actually been done. The basic findings say that the perceived worth is more so more focus should be given on worth rather than working on building perceived quality.

Kuo Y. et al., (2009) deemed "The relationships among perceived value, service quality, customer satisfaction and

post purchase intention in mobile services". The variables were tested to check the relationship of above four. Service quality greatly impact on perceived value and customer satisfaction. When a mobile service quality gives an excellent service so the purchasing intention automatically increases. It positively affects the satisfaction level of consumers. As high perceived value higher will be the satisfaction level. As far as post purchase intention is concerned there is no direct relation of service quality; although the perceived value is directly affected by post purchase intention. The service quality is actually the difference between the actual and desired state of the consumer. While the perceived customer value can easily be evaluated from the quality, money, benefits and other social factors.

4-Methodology:

In my research I have done the quantitative research. I used the quantitative techniques i.e. close ended questionnaires. I have used the same methods to get quantitative data.

4.1 Population and Sampling

Population is that category/segment of respondent's that we have selected to get data of our research questions, which will become the part of our survey. While sample is the total no of respondents of that same category from whom we have collected our data.

In my research the population is the whole segment of persons who like to go to fast food restaurants. And my sample size is 150

4.2 Data Collection And Instrument

After identifying the topic and research market i.e. respondents or sample, we have to develop an instrument with the help of which we attain different views of our respondents and interpret those views and data in numeric form so that we get the accurate information. Close ended questionnaire is the

simplest effective and widely used instrument, so a questionnaire is developed which included close ended questions with a scale to get accurate data. After that these questionnaires are randomly distributed and data was collected.

5. DATA ANALYSIS

After getting the data from respondents, the next step is to align data and interpret it using software. SPSS software is used for the analysis of data. Multiple test applied on collected data using SPSS; performed both descriptive statistics and inferential tests and analyzed the following

- Reliability
- Good fitness of model by ANOVA table.
- Regression Analysis

5.1 RELIABILITY AND VALIDITY

Validity:

validity is also called acceptability; here validity refers to the acceptability of our research instrument which is our close ended questionnaire I used face validity that is got my questionnaire checked by expert.

Reliability:

After validity of the instrument, the data is collected and after that, the reliability of our data collected is analyzed and checked for reliability. A test is applied in SPSS software to check the reliability.

Table 1. Reliability Statistics

Cronbach's Alpha	N of Items
.827	20

Here the value of Cronbach `alpha is 0.827 which is more than 0.7 which showed that the data is reliable.

5.2 ANALYSIS

Descriptive Statistics

Table 2. Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation
PQtotal	150	3.80	1.20	5.00	3.8147	.70553
PItotal	150	3.20	1.80	5.00	3.9213	.64043
PRtotal	150	3.00	2.00	5.00	3.7973	.61785
CVtotal	150	3.60	1.40	5.00	3.9120	.75458

Descriptive Statistics

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CVtotal	150	3.60	1.40	5.00	3.9120	.75458
Valid (listwise)	N 150					

Interpretation

The above table show the descriptive statistics of dependent and independent variables. As the above table contains the rang, Minimum value of variables, Maximum value of variable, Mean taken by adding the variable results and show the behavior of data and in the last std. Deviation is describe in the table. PQtotal range is 3.80, Mini is 1.20, Max is 5, Mean is 3.81 and Std. Deviation is 0.70553, PItotal variable Range is 3.20, Mini is 1.80, Max is 5, Mean is 3.92 and Std. Deviation is 0.64043. PRtotal variable range is 3.00, Mini is 2.00, Max is 5, Mean is 3.7973 and Std. Deviation is 0.61785. CVtotal is dependent variable which has range 3.60, Min is 1.40, Max is 5, Mean is 3.9120 and Std. Deviation is 0.75458.

5.3 Correlations

Table 3. Correlations

		PQtotal	PItotal	PRtotal	CVtotal
PQtotal	Pearson Correlation	1	.530**	.282**	.219**
	Sig. (2-tailed)		.000	.000	.007
	N	150	150	150	150
PItotal	Pearson Correlation	.530**	1	.435**	.277**
	Sig. (2-tailed)	.000		.000	.001
	N	150	150	150	150
PRtotal	Pearson Correlation	.282**	.435**	1	.455**
	Sig. (2-tailed)	.000	.000		.000
	N	150	150	150	150
CVtotal	Pearson Correlation	.219**	.277**	.455**	1
	Sig. (2-tailed)	.007	.001	.000	
	N	150	150	150	150

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

- H1:** there is a correlation between PQ.Total&PI.Total
- H0:** there is no correlation between PQ.Total&PI.Total
- H2:** there is a correlation between PQ.Total&PR.Total
- H0:** there is no correlation between PQ.Total&PR.Total
- H3:** there is a correlation between PQ.Total&CV.Total
- H0:** there is no correlation between PQ.Total&CV.Total
- H4:** there is a correlation between PI.Total&PR.Total
- H0:** there is no correlation between PI.Total&PR.Total
- H5:** there is a correlation between PI.Total&CV.Total
- H0:** there is no correlation between PI.Total&CV.Total
- H6:** there is a correlation between PR.Total&CV.Total
- H0:** there is no correlation between PR.Total&CV.Total

In the above table, the statistical significant association between scale variables is computed by Pearson’s correlation. We have selected Pearson’s correlation method because all the variables are both linear and normally distributed. These variables include PQ (perceived quality), PI (purchase intention), PR (perceived risk) and CV (customer value). According to the Pearson’s methodology, correlation exists if the significance value is less than 0.05.

According to the table the significance value between PQ.Total&PI.Total is 0.00 which shows that there exists a relation between both variables and the value of pearson correlation is 0.530, which showed that the strength of the relationship is moderate. Hence h1 is accepted. The significance value between PQ.Total&PR.Total is also 0.00 which shows that there is a relation between both variables hence h2 is accepted and the value of pearson correlation is 0.282, which showed that the strength of the relationship is weak. The significance value between PQ.Total& CV is also 0.00 which shows that there is a relation between both variables hence h3 is accepted and the value of pearson correlation is 0.219, which showed that the strength of the relationship is weak. The significance value between PI.Total&PR.Total is also 0.00 which shows that there is a relation between both variables hence h4 is accepted and the value of pearson correlation is 0.435, which showed that the strength of the relationship is moderate. The significance value between PI.Total&CV.Total is also 0.00 which shows that there is a relation between both variables hence h5 is accepted and the value of pearson correlation is 0.277, which showed that the strength of the relationship is weak. The significance value between PR.Total&CV.Total is also 0.00 which shows that there is a relation between both variables hence h6 is accepted and the value of pearson correlation is 0.455, which showed that the strength of the relationship is moderate.

5.4 Regression

Table 4. ANOVA^b

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	18.528	3	6.176	13.598	.000 ^a

Residual	66.310	146	.454		
Total	84.838	149			

a. Predictors: (Constant), PRtotal, PQtotal, PItotal

b. Dependent Variable: CVtotal

Table 5. Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.443	.423		3.412	.001
	PQtotal	.076	.093	.071	.825	.411
	PItotal	.073	.109	.062	.672	.502
	PRtotal	.498	.099	.408	5.008	.000

Table 6. Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.467 ^a	.218	.202	.67393	.218	13.598	3	146	.000

a. Predictors: (Constant), PRtotal, PQtotal, PItotal

b. Dependent Variable: CVtotal

a. Dependent Variable: CVtotal

Regression Equation:

$$\text{Purchase Intention} = a + bx_1 + cx_2 + dx_3$$

$$\text{Purchase intention} = 1.443 + 0.076(\text{perceived quality}) + 0.498 (\text{perceived risk}) + 0.073 (\text{customer value})$$

Multiple regressions are applied to check the impact of all the independent variables on the dependent variable. According to this method if the significance value of independent variable is less than 0.05 in the co-efficient table, then there is relationship between dependent and independent variable.

According to the readings all the three independent variables, which are CV.Total (customer value), PR.Total (perceived risk) and PQ.Total (perceived quality) have values 0.00. This is less than 0.05, which depicts that all the independent variables got relation with dependent variable which is PI.Total (purchase intention).

The significance value in ANOVA table is 0.00 which is less than 0.05 this shows that model is good fitted.

The impact of independent variable on dependent variable is showed up by adjusted R square value. The value of adjusted R square is 0.218 which shows that these variables are contributing approx. 20% in dependent variable while 80% is contributed by other various factors.

6. SIGNIFICANCE OF THE STUDY:

This research will be important in many ways. This research will help the fast food industry to take those actions that minimize the perceived risk and maximize customer value to increase their sale and ultimately profits. It will also help the managers and fast food owners to set up the efficient process of giving high service quality and high food quality that will increase purchase intentions. It will help the HR managers to train their employees that how to give high service quality to customer so that their purchase intention increase which will ultimately help in repeat buying. This research update the new entrants the customer perception scenario of fast food sector of Lahore so that they develop their organization according to this market need. And set up their quality that is expected by the customers. This study can be used as a base for further research in this sector.

7. CONCLUSION:

As the main purpose of this study is to identify the main factors that affect the purchase intentions of the customers in fast food industry in Pakistan, Lahore sector. Fast food industry is on boom not only in Pakistan but also in the whole world. The main focus of that study is on the fast food sector i.e., Hardees, Pizza Hut, Fri Chicks, KFC, McDonalds. To analyze the data of these restaurants, different tests applied to check the relationship between independent variable brand credibility; perceived quality, perceived risk and customer value and its strength with my basic dependent variable which is purchase intention.

From the above analysis we can conclude that perceived quality, perceived risk and customer value are the most important factors that play a vital role to increase the purchase intention of the customers. Purchase intention is the most important factor that is involves in customer buying behavior. All the companies and organization strive and adopt those methods and processes that increase purchase intention of customers. The purchase intention can be influenced by many factors, like advertising, pricing, product, location, quality, positive positioning of the brand or product in the market. If purchase intention is increased, it ultimately results in more sales and eventually more revenue generation. Without positive perceived quality, perceived risk and customer value the customer will not go for purchasing. Although there are many limitations factors that limited my research i.e. scope, financial problem, time limit and studies but these some factors played the most vital role. This study will help the fast food industry to take those actions that minimize the perceived risk and maximize customer value to increase their sale and ultimately profits.

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CSR Practices in Asia: Case Study of Multinational Companies in SMEs

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Abstract

Today the corporate social responsibility is an integral and important part of company's environment. The focus of the study is to evaluate the importance of the corporate social responsibility in Unilever Pakistan Limited in Asia. (Indonesia, Malaysia, Pakistan, Bangladesh, Thailand & Singapore). Furthermore this paper identifies the significance of corporate social responsibility in the labor rights, stakeholder's rights and protection of the environment.

Key Words: Asia, Corporate Social Responsibility (CSR), Multinational Corporations Stakeholders

I. INTRODUCTION

Corporate social responsibility has been extremely famous around organizations and top companies. Particularly in the 21st century when ecological concerns, human rights, work rights, reasonable exchange and numerous different concerns are getting to be progressively imperative to buyers, stakeholders and organizations apparently equivalent. However the careful definition and the viability of corporate social obligation are frequently exceptionally unclear and confounding to others. This paper will investigate in profundity of what precisely is corporate social responsibility, how organizations are driven to consolidating CSR into their beliefs, business systems and what movements do these organizations take to turn into a socially dependable organization. [1]

II. LITERATURE REVIEW---- WHAT IS CORPORATE SOCIAL RESPONSIBILITY?

Corporate Social responsibility (CSR) includes a guarantee by an organization to manage its different parts in the public eye, as maker, management, client and national in a mindful way. How a company satisfies its business liability goals is affected by its history, perspective of the creator, lifestyle, experience, viewpoint and business rules. It varies from simple conformity with law to genuine philanthropy. [2]

2.1 the Pyramid of Corporate Social Responsibility

For CSR it is suggested here that four kinds of social responsibilities constitute total CSR: economic, legal, ethical and philanthropic.



Fig.1: Pyramid of Corporate Social Responsibility.

Source: Carroll, A.B. (1979)

Economic Responsibilities

Traditionally, business company major part was to generate products or services that customers needed and desired and to make an appropriate benefit in the process.

Legal Responsibilities

Company is expected to adhere to the rules promulgated by federal, local and state government authorities as the rules under which business must operate.

Ethical Responsibilities

Ethical obligations incorporate those requirements, standards, or objectives that indicate a concern for what customers, workers, investors, and the community regard as reasonable, just, or in keeping with the regard or protection of stakeholders' moral rights.

Philanthropic Responsibilities

Philanthropy involves those business activities that are in reaction to society's anticipations that businesses be good business people. Philanthropy contains business efforts to the arts, education, or the group [3].

III. CSR AND ORGANIZATIONAL DEVELOPMENT

a) CSR

Business Public Liability is a control idea whereby companies incorporate social and ecological issues in their business functions and communications with their stakeholders.

b) Organizational Development

Company Growth is a body of knowledge and practice that increases business performance and individual development, watching the business as a complicated program of systems that can be found within a larger program, each of which has its own features and levels of positioning.

Creating a vision for CSR

Any perspective for the near future needs to include the difficulties experiencing Japan that has been difference, product building and popularity improvement [4].

It should illustrate how the company will play a role through the sort of CSR projects defined below.

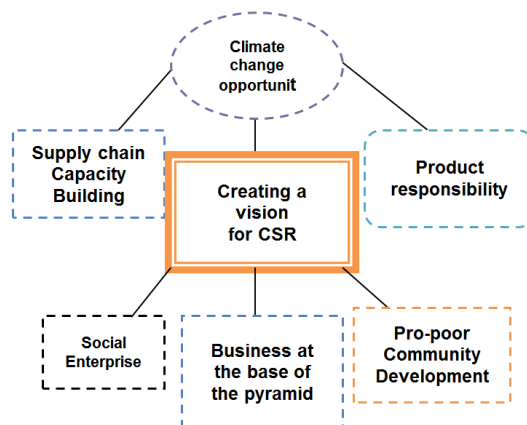


Fig. 2: Creating a vision for CSR

Source: Council for Better Corporate Citizenship (2002) International Corporate Social Responsibility (CSR)

IV. ASIA PACIFIC PERSPECTIVE

CSR has become an essential company exercise and has obtained much interest in bigger worldwide organizations. They understand that a powerful CSR system is an essential factor in accomplishing good company methods and effective authority. Many of the large corporations in Asia Pacific are private, and many do not have the same public pressures on corporate behavior that public companies in Europe and North America have for progress on corporate social responsibility [5].

4.1. KEY DRIVERS OF CSR IN ASIA

4.1.1 Quasi-public bodies

In Hong Kong, Malaysia, Chinese suppliers, Singapore, Thailand, stock markets are playing an important part in increasing the exposure of companies and motivating confirming on sustainability.

4.1.2 Employment

Recruitment/retention continues to be a key driver to owner that indicates the significance to organizations of gaining the right employees and maintaining them pleased. The big task experienced by many organizations is finding and choosing extremely professional people, particularly in center control level.

4.1.3 Transparency and accountability

Still in many Parts of Asia, family members have managing passions in huge detailed organizations. It is inquired whether in such conditions organizations are run in the passions of all Stakeholders. For that reason, transparency is an important phase to CSR. It reveals companies' perform to community analysis and indicates that a company principles the views of its stakeholders.

4.1.4 Social media

There is no doubt that social networking is now enjoying an important part in driving CSR in Japan. Only in Chinese suppliers

there are more than 80 thousand blog writers from a large and regularly increasing group of internet surfers involved in online conversation about modern issues.

4.1.5 Environment

Environmental issues are considered to be one of the least important drivers of corporate social responsibility not only in this region but also globally [6].

V. GRAPHICAL ANALYSES

5.1 Countries who Support CSR

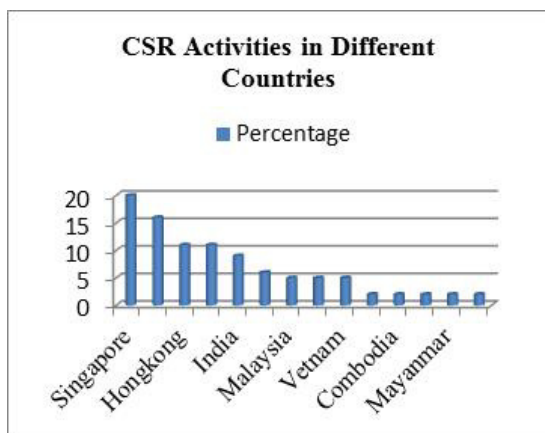


Fig. 3: CSR Activities in Different Countries.

Source: Rosario, R. Playing It Safe!

CSR has designed a higher attention in Philippines regarding ecological as well as public problems. Among Parts of Asia, Indian and Malaysia appear to be most effective in the area of business liability. While CSR is gradually changing in Pakistan, it is still mostly targeted on philanthropic. If the organizations already in the nation act as moral business resident, than it becomes attractive business environment for investors to start business in Pakistan. CSR in India, as it is practiced, is different from the Global Compact.

5.2 Challenges to CSR in Asia

Following are the challenges faced by the companies in applying the CSR activities in Asia.

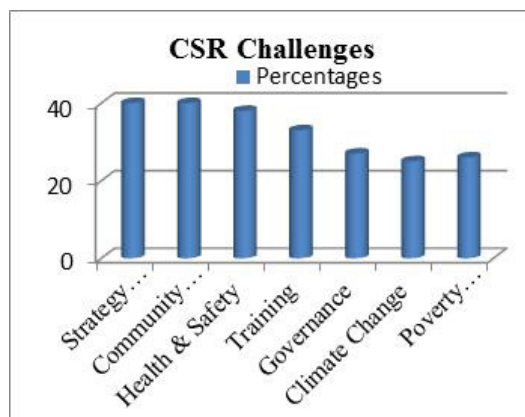


Fig. 4: CSR Challenges

Source: Rosario, R. Playing It Safe!

Most of the challenges faces by the Asian companies are lack of budget. Because of this companies unable to train their employees, unable to make reports, upgrade their systems. Another challenge is that the teams in the companies were too small and weak that employee didn't bother to follow them. They don't have basic knowledge about the rules and laws. There is no external support for the companies. Mostly the scope of the Asian companies is too narrow those employees hesitate to follow it.

5.4 Key strategic areas for CSR

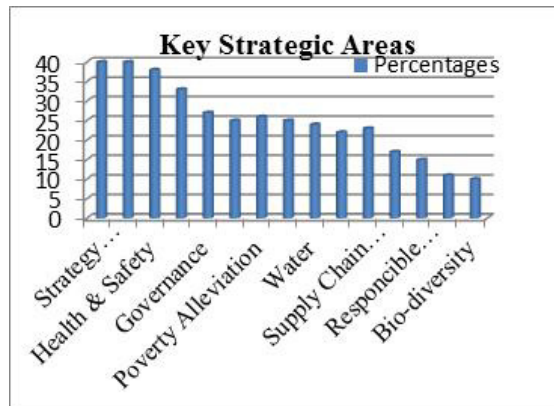


Fig. 5: Key Strategic Areas of CSR

Source: Rosario, R. Playing It Safe!

Above figure shows the industry respondents that are mainly supply chain management, product responsibility, diversity and biodiversity which are key focus areas for the next five years.[7].

VI. CASE STUDY

6.1 Unilever Pakistan Limited

Unilever Pakistan is the biggest FMCG Organization in Pakistan, as well as one of the biggest multinationals working in the nation. Being a company Unilever Pakistan considers that to be able to be successful it has to set up and sustain the biggest requirements of business actions. Its participation to Pakistan's financial growth cannot be overestimated. Now working six industries at different places around the country, the company leads to a significant percentage of the nation's taxation .

6.2.0 UPL initiatives

As an innovator organization in following the idea of CSR in Pakistan, the organization has a powerful perception that it can meet this business public liability by enjoying its part for the well-being of the nation and society. So Unilever Pakistan has targeted its participation to the three places that are most important to Pakistan and its people: knowledge, health & mineral water.

In the education sector of Pakistan UPL is providing funds to the universities like Lahore University of Management Sciences (LUMS).

These organizations and projects include the Marie Adelaide Leprosy Centre (MALC), Layton Rehmatullah Benevolent Trust

(LRBT) and the Lorlai TB Control Program.

Unilever also provide support to the water sustainability initiatives. In order to show commitment to water sustainability UPL has made partnership with, the Thardeep Rural Development Programme (TRDP) [8].

VII. CSR MODEL



Fig. 6: Strategic Business Plan for CSR.

VIII. CORPORATE SOCIAL RESPONSIBILITY IN ASIA

8.1 CSR in Indonesia

In Indonesia the CSR have been taken as an important strategy to create a sustainable future. CSR recommendations in Philippines are unpleasant, since regional and main government look upon the law in a different way, “the law is not a law; it is more of a common contract between government and enterprises” [9].

8.2 CSR in China

CSR development in China is still in the early stage. Cultural differences create challenges for multinational corporations [10]. Since CSR is still relatively new to China, the available pool of talent and experience is small , there is real risk of lost status, disappointed customers and reduced business when companies fail to live up to their espoused principles and moral recommendations [11].

8.3 CSR in Malaysia

Among Asia countries Malaysia appear to be most active in the field of corporate responsibility [12].It holds business practices for a sustainable future. CSR is all about challenging beyond technology, quality improvement, service trustworthiness and competitive pricing [13].

8.4 CSR in Thailand & Singapore

The main issue for both is education & training. In Thailand other prominent issues are environment & preservation, arts, and youth. For Singapore, the other noticeable community involvement issues are health & disability and welfare [14].

8.5 CSR in Bangladesh

CSR is growing in Bangladesh. Business liability is not just philanthropy and paying attention to the rules. The issues are the effect of company actions on community and the needs and objectives of all stakeholders [15].

A evaluation of the CSR methods shows that a variety of organizations are displaying an improved dedication to CSR beyond benefit making and conformity with control [16].

8.6 CSR in Pakistan:

There is a low understanding of CSR in Pakistan. The Islamabad-based Pakistan Centre for Philanthropy states “Forty percent of companies in Pakistan think CSR means paying taxes, 30% believe CSR is contributing to community welfare, 15% think CSR equates employee welfare, and 10% think CSR means working in areas where the company’s interests lie. Only 5% understand CSR means directly implementing social development activities and projects[17].

The business in Pakistan is pure philanthropic, social welfare and community development. The recent economic and political situation created energy crisis and redirect the attention of world of business to adopt weak CSR framework [18].

IX. LIMITATIONS/SUGGESTIONS

Following are the limitations and suggestion concluded from the study

- a) From the literary works knowledge, atmosphere and health areas are more targeted in evaluation to other factors.
- b) Awareness-raising about the benefits and crucial role of Corporate Social Responsibility
- c) For real development and improvement in the social sector of the state the input from private sector is necessary.
- d) The accessibility to a special assistance on social liability by means of an ISO Standard would assist in the marketing and execution of such knowledge and training.
- e) Less focus on labor rights.

X. CONCLUSION

The current study has several findings. As from the global context, Corporate Social Responsibility is an integral and important part of company’s environment. Without it no organization can move further. CSR practices are very weak in Asia. Companies don’t bother to follow the basic laws. The countries like Malaysia, Pakistan and Thailand has less CSR activity compliance as compare to Indonesia and China. Singapore is the country who follows the CSR activities very honestly.

For better CSR there should be Transformational leadership strategy which is the ‘solutions’ for improved sustainable corporate practices, observe and evaluate CSR performance, concentrate on interacting with the customers awareness-raising about the benefits and crucial part of Corporate Social Responsibility should be concentrated.

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FULL COMMITMENT OF TOP MANAGEMENT IN MACEDONIAN HIGH EDUCATION INSTITUTIONS

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Abstract

In this paper is given integral methodology for the design of TQM (Total Quality Management) system in higher education institutions and its implementation in practice of higher education, as well as actions to be taken to build a system of quality assurance. The success of the application of TQM strategy depends on the commitment of the academic staff and administration and their motivation. Although the philosophy of total quality management (TQM) is deeply involved in many higher education institutions and business aspects of European and other countries, it is not sufficiently present in the country and other developing countries. Especially critical is the long term point of this philosophy, when results do not come "overnight". Globalization allows creating a European area of higher education in order to facilitate joint knowledge creation and greater mobility of students and academic staff. Thus Europe has become a common space of higher education, the rules and principles designed to work together and to use the common results.

Key words: TQM strategy, internal standardization, statistical process control, quality assurance, cost analysis methodologies

Introduction

National Programme for the Development of Education in Macedonia (www.npro.edu.mk) expresses the desire of the state to bring about change in education that will enable compatibility of study programs, recognition and recognition of degrees awarded at all levels of education in European educational space and greater employability in the European labour market. The structure of the system of quality assurance in higher education institutions correspond to regulation, although there is a deep gap between management of quality and culture of quality. Higher education institutions are aware of the need to redesign the profile and curriculum and quality of teaching depends primarily responsible for the reassessment of values, attractiveness of an innovative learning environment, and in the highest degree will depend on the leadership of higher education institutions. Macedonian higher education institutions should accept new TQM strategy and implement it in educational processes.

The essence of TQM (Total Quality Management) strategy

TQM philosophy is embodied in many higher education institutions in the world, and its application means new key change in the approach to the quality of the educational process, according to Kano (1996). The first change concerns the establishment of a process of continuous improvement in all

segments of higher education institutions with the involvement of academic staff, and the other, to meet the needs of all users (students, teachers, Ministry of Education, employment and professional bodies, society general and international forum) with the results of the institution.

Factors for successful implementation of TQM strategy in higher education institutions

A condition for successful implementation of TQM strategy in higher education institutions is having modern management, particularly strong leadership (according Ciampa, 2005). Leadership Initiative includes the top, commitment to TQM philosophy with their active participation, according to academics, penetration of opinions, proactive work style, teamwork, training, support for successful actions and achievements. Spreading the TQM conception in higher education institutions requires a particular social and cultural level of the middle (habits and mentality of employees), infrastructure creation and development of corporate culture in higher education institutions. **In this paper we make an effort to, using the principles of TQM, develop a universal, integrated methodology for design and implementation of TQM system in higher education Mitreva (2010).** This methodology should help to give useful guidance to all higher education institutions tend to be educational institutions "world class".

1. INTEGRAL METHODOLOGY FOR DESIGNING AND IMPLEMENTING TQM SYSTEM IN MACEDONIAN HIGHER EDUCATION INSTITUTIONS

The need of redesign or reengineering can occur in educational institutions who want to leave the traditional approach by introducing a new, modern approach to education and science. Both approaches are based on the same tenets: competence, ability and knowledge, but they are applied differently according to the country's technological development and higher education systems therein.

Although the philosophy of total quality management (TQM) is deeply involved in many higher education institutions and business aspects of European and other countries, it is not sufficiently present in the country and other developing countries. Especially critical is the long term point of this philosophy, when results do not come "overnight". Globalization allows creating a European area of higher education in order to facilitate joint knowledge creation and greater mobility of students and academic staff. Thus Europe has become a common space of higher education, the rules and principles designed to work together and to use the common results.

In this paper is given integral methodology for the design of TQM (Total Quality Management) system in higher education institutions and its implementation in practice of higher education, as well as actions to be taken to build a system of quality assurance. The success of the application of TQM strategy depends on the commitment of the academic staff and administration and their motivation.

Integral methodology for designing and implementing TQM system, as suggested in this paper, consists of more methodologies Mitreva (2010): Methodology for subsystem-internal standardization; Methodology for subsystem-Statistical Process Control (SPC); Methodology for analysis of total cost of a given process; Methodology for subsystem-education; Methodology about evaluating the success of the designed and implemented system in TQM (Audit). Basis in creating this model is redesign, after that, it starts a new phase of business-continuous improvement, or turning round Deming quality (Plan-Do-Check-Act).

1.1. Methodology for subsystem - internal standardization

Each institution builds its own quality assurance system in accordance with the teaching - educational field that nurtures and under the conditions in which it is performed, and within the European standards for higher education. Working under the acts that defines all procedures of teaching - educational and scientific - research and obligations and responsibilities of all employees. The development flow of the design and implementation process of internal standardization is carried out through the following activities (See Figure 1).

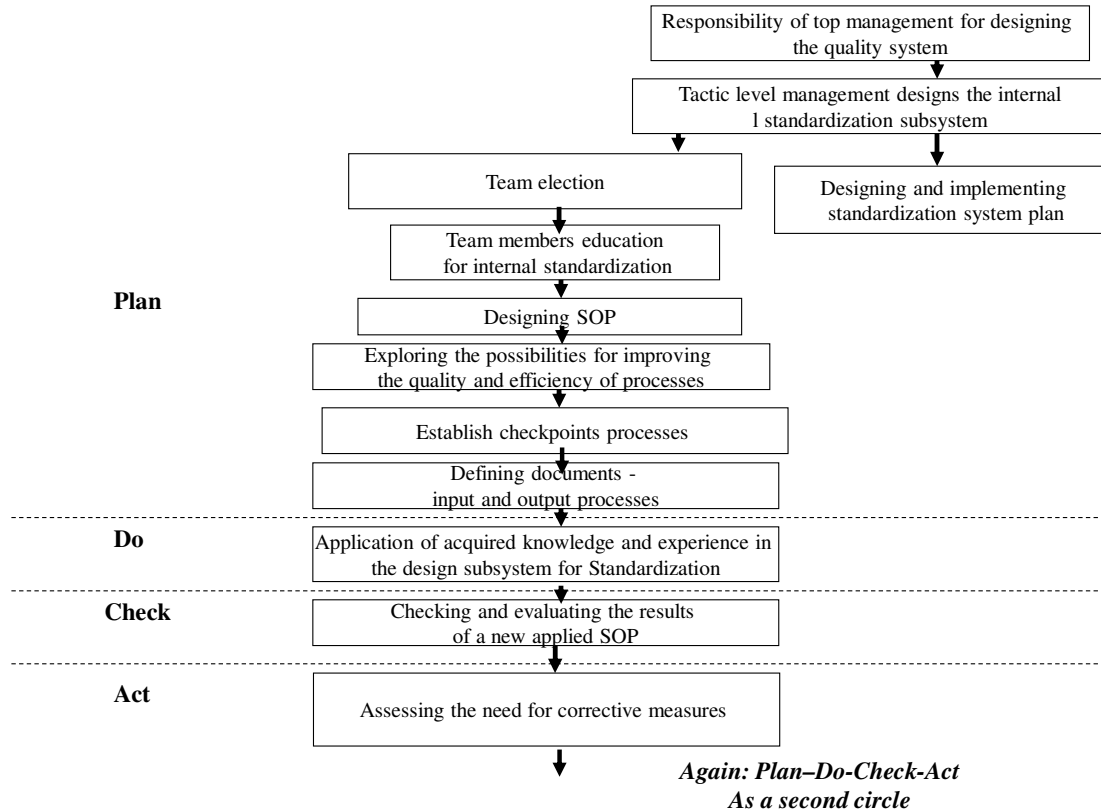


Figure 1: Flow of process design and implementation of the subsystem of internal standardization
 Checking (assessment) is organized within the institution (self-evaluation) and out of the institution by the Agency for evaluation.

1.2. Methodology for subsystem - Statistical Process Control (SPC)

Measuring the quality of the educational process is carried out by applying appropriate methods and techniques, which provide data collection and information about the current situation. Based on the data and information evaluated basic level indicators work and selected problems that require special attention. The ongoing construction of the subsystem of statistical process control is carried out through the following activities. (See Figure 2)

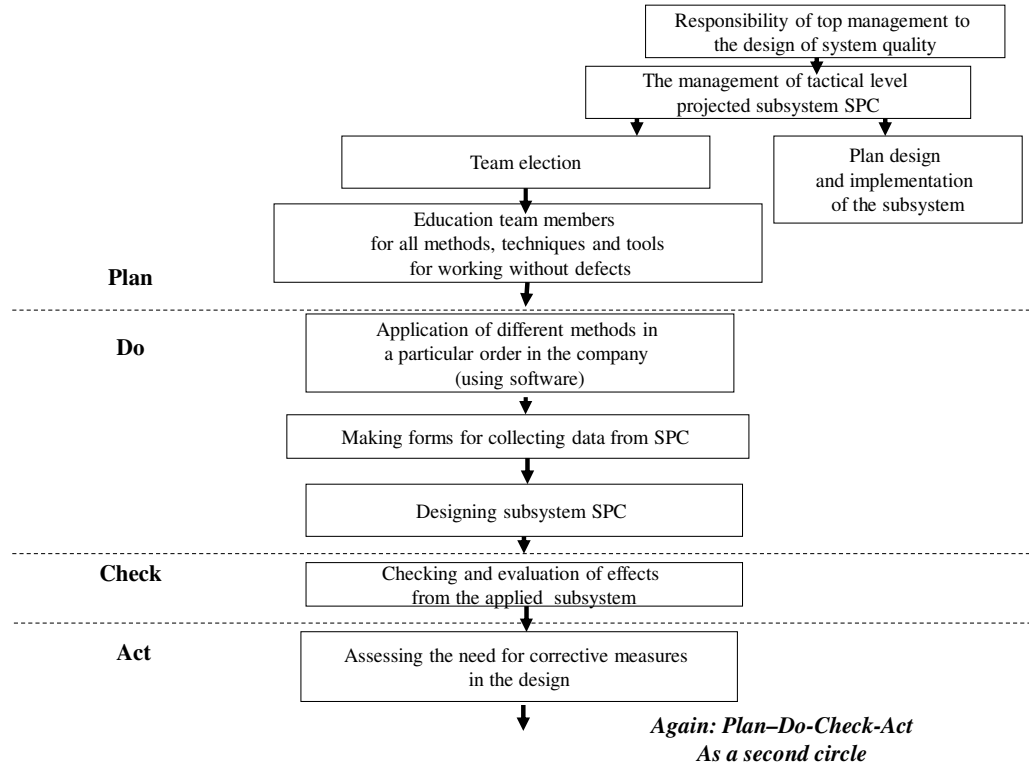


Figure 2: Flow of the process of designing the subsystem SPC

1.3. Methodology for analysis of total cost of a given process

TQM strategy requires quality management processes, and management costs. The methodology of the cost can be used for any process in the higher education institution (see Figure 3).

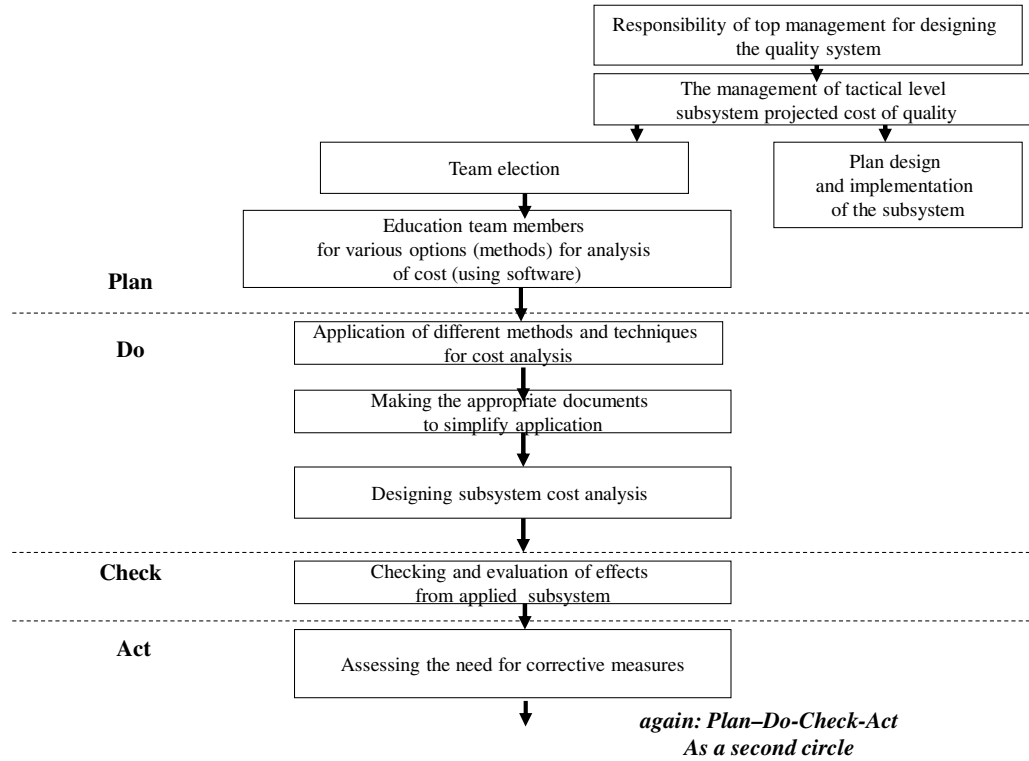


Figure 3: Flow of the process of designing the subsystem of costs

1.4. Methodology for subsystem – Education

The system providing total quality management should not only be designed well but it is necessary its consistent implementation in practice. It is therefore necessary continuing education, training, management and academic staff, training of students and the administration and application of Deming circle of quality. (See Figure 4)

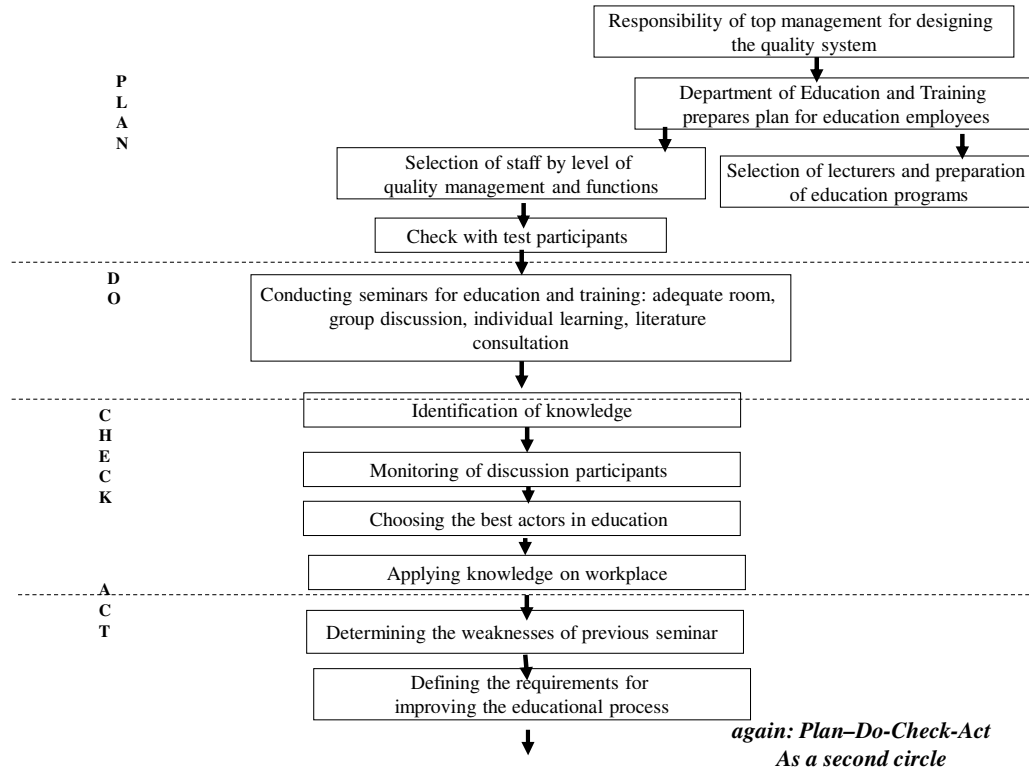


Figure 4: Flow of the process of design and implementation of the subsystem of education

1.5. Methodology for evaluating the results of the implemented system and projected on TQM (Audit)

The purpose of the fifth stage - control is the assessment and monitoring of the results of previous stages. (See Figure 5)

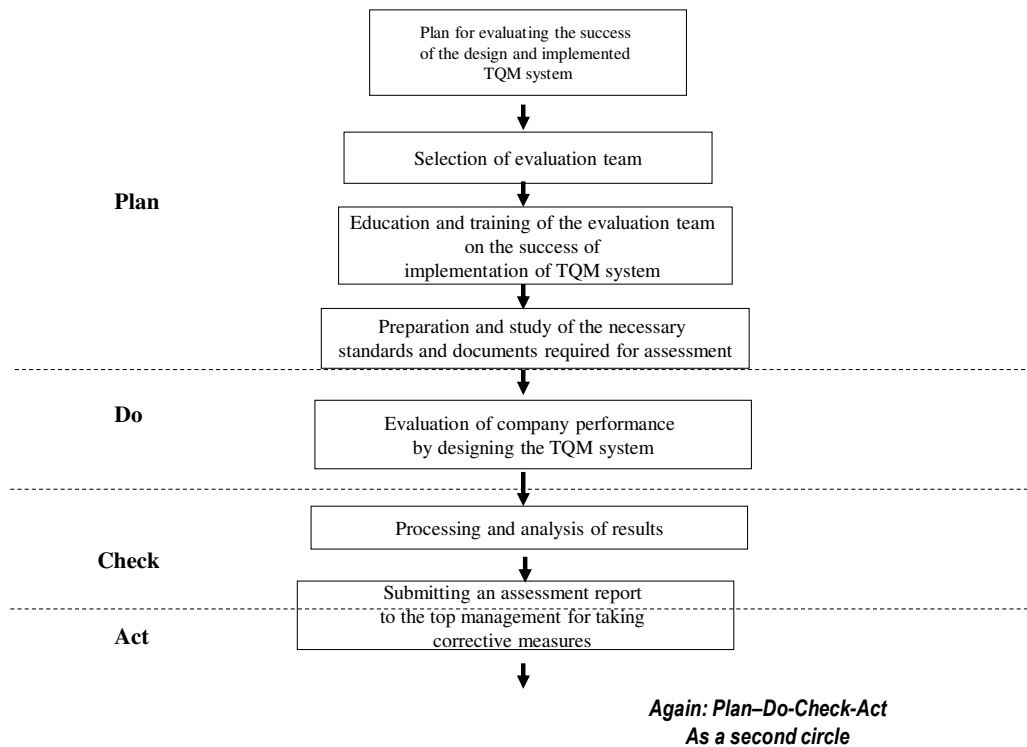


Figure 5: Flow process for evaluating the success of the designed and implemented system in TQM

At this stage of verifying and modifying the system to create new rules, procedures, instructions to staff and other norms of operation.

Conclusion

The model - methodology proposed by (Mitreva 2010) is an integral and universal meaning that it is applicable to all higher education institutions, regardless of their nature, and the success of its application depends if it is only achieved integration of information technology with the internal standardization, methods and techniques for improving quality, system cost analysis, but with continuing education and motivation of employees.

Integral methodology for designing and implementing TQM system has feedback as a result of the necessity of ongoing improvement of educational processes. By repeating or spiral repetition of such cycles will see the benefits of the application by changing the organizational culture to such initiatives and an incentive to higher goals of excellence.

This methodology not only a success in the implementation of the improvement of educational processes in Macedonian higher education institutions, but to raise awareness of the academic staff and administration for their quality and focus on increasing the satisfaction of students, teachers, Ministry of Education and Science the employment and professional bodies, society in general and international forum. But without the support of leadership and without the involvement of academic staff, all efforts to improve will be in vain.

Benefits of the proposal - the methodology for designing and implementing TQM system in higher

education institutions

Benefits of the methodology for designing and implementing TQM in higher education system are: the application of internal standardization improves responsibility of academic staff in the implementation and administration of the educational process;

the application of statistical methods and techniques to ensure the quality of education;

application software packages increases performance in the application of statistical methods and techniques;

by analyzing the cost of quality can be controlled losses and to reduce them to the minimum.

Besides these other important effects are expected to be achieved, such as:

involvement of all employees in achieving the quality of the educational process;

employee commitment to improving the quality of education;

full commitment of top management to the system in TQM and its continuous improvement;

ability to solve problems at all levels;

small but significant improvements in educational processes and services;

optimization of the educational process;

disposing responsibility for decision-making at lower levels.

Without the commitment of top management to set goals for the quality of the educational process and consistency in their implementation, these efforts will only be spending time and money, while at the same time will reduce the possibility of following such a successful initiative.

It should be emphasized that the benefits of the introduction of this model are not seen immediately, but in the long run. But it should not be a reason for the initial failure of the initiative, because quality is a long term process.

The benefits of implementing this model not only increase the commitment of top management and academic staff to improve the educational process, but achieving satisfaction of students, parents, teachers and society, we will continue to serve as the driving force for continuous improvement.

However, the conclusion remains that there is a clear determination of the Macedonian higher education institutions for the care and responsibility for ensuring and improving the quality of education, and thus increased the interest for cooperation with universities in the country, the region and Europe.

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“Stock selection abilities and the market timing skills of fund Managers”: A study with reference to banking sector funds in India.

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ABSTRACT

Mutual fund industry in India facing lots of issues and challenges such as the agents and the sales executives of the Mutual funds assure higher returns to the investors and the management paint a rosy picture about the Mutual funds while marketing schemes. In the present study the performance of banking sector fund is evaluated in terms of stock selectivity abilities and market timing skills of fund manager. We have used Jensen's measure, Fanma's Net selectivity model and Treynor and Mazuy's Model .The study indicates that majority of Mutual fund Managers did have sufficient market timing ability. In case of net selectivity. With regards to market timing skills, the entire portfolio managers were able to position their portfolios based on market movements. The Fund Manager of Sundaram Financial Services Opportunities could be credited with the highest correct market followed by Sahara Banking and Financial Services and Reliance Banking Fund. Other funds such as ICICI Pru Banking & Financial Services, UTI-Banking Sector and Religare Invesco Banking also showing positive t- statistic estimates.

Keywords: Mutual Funds, Performance Evaluation, Banking Funds

Acronyms: Net Asset Value (NAV), Unit Trust of India (UTI), Bombay Stock Exchange(BSE), Jensen's Alpha (JA), Fama's Net Selectivity Measure (FNSM), Treynor and Mazuy Model (TMM)

1. INTRODUCTION

The financial services in India have undergone revolutionary changes over the years and had become more sophisticated, in response to the varied needs of the economy. The process of financial sector reforms, economic liberalization and globalization of Indian Capital Market had generated and augmented the interest of the investors in equity. Though the investors today are having knowledge about stock market dealings due to the Securities Exchange Board of India (SEBI) awareness programs etc., but lack of professional expertise, the common investors are still hesitant to invest their hard earned money in the corporate securities. The advent of mutual funds Mutual fund has helped in garnering the investible funds of this category of investors in a significant way. As professional experts manage MFs, investment in them relieves investors from the emotional stress involved in buying and selling of securities.

The Mutual fund industry in India has passed through several distinct phases namely, formation of UTI (Unit Trust of India) in 1964, entry of public sector funds in 1987 and then the entry of the private sector funds in 1993. The fourth phase is marked by the bifurcation of UTI into two separate entities in February 2003 viz., Specified Undertaking of the UTI and the UTI mutual fund Limited. In the later part of nineties, the industry has also gone through some degree of consolidation through mergers and acquisitions. Over the years, Mutual funds have redefined the financial landscape of investors in India. There are several different ways an investor can diversify a portfolio, such as the different categories, several different asset classes etc., but another common way to diversify is between the various sectors of the economy. This is usually accomplished with Mutual funds that concentrate in one of the major sectors.

Feature of the sector is that it invest in the securities of only those sectors or industries as specified in the offer documents. The returns in these funds are reliant on the performance of the

respective sectors/industries. The point is fund managers are bullish on most sectors, which makes a solid enough situation for a sector allocation. While no one is signifying that pushing all the eggs in one basket is a worthy idea, a well-thought out portfolio approach, combining the benefits of diversification as well as a limited allocation to choice sectors with a positive outlook may be worth a try.

The banking sector is very much connected with the economy of the country. The GDP growth for the financial year 2013 was predictable at 7.6 per cent, so the economy is anticipated to improve and be back on the growth track in FY13. But Indian economy had recorded 5 percent growth in 2012-13. Stating that the basics of the Indian economy are strong, as Prime Minister Manmohan Singh has said GDP will progress in the second half of fiscal 2013 -14 and that the government is commitment to get back to a sustainable growth rate of 8-9 per cent. This will also result in the banking space witnessing an emission in growth in business next fiscal year.

Currently, Indian banks face several challenges, such as increase in interest rates on saving deposits, possible deregulation of interest rates on saving deposits, a tighter monetary policy, a large government deficit, increased stress some sectors such as, State utilities, airlines, and microfinance, restructured loan accounts, unamortised pension/gratuity liabilities and increasing infrastructure loans. With the advent of the process of liberalisation in the early 'nineties, the demands on banks' resources and capabilities increased as banks had to match the challenges of being financial service providers in a globalised, competitive environment.

This posed a dual challenge for the banking industry. The first challenge was to manage the growing needs of their existing customer segments and business locations for better and more efficient services, and the second was, how to expand the reach of their services and business beyond the traditional services and locations, which had large socio-economic implications because large parts of the population did not have access to even basic banking services. Increased use of information technology emerged as the key to meeting these challenges. Several measures were mooted at the level of the Government, the Reserve Bank of India (RBI) and industry, which provided an impetus to adoption of technology in the banking sector.

2. STATEMENT OF A PROBLEM

Various studies show that Mutual fund industry in India facing lots of issues and challenges in present days. Some of the major issues related to the performance are the agents and the sales executives of the Mutual funds assure higher returns to the investors and the management paint a rosy picture about the Mutual funds while marketing schemes. The Mutual funds in our country have been quite wrongly promoted as an alternative to equity investing and created very high expectations in the minds of the investors. The ignorance of the investors about Mutual funds coupled with aggressive selling by promising higher returns to the investors have resulted into loss of investors' confidence due to inability to provide higher returns.

Also Sondhi and Jain (2006) assessed the stock selectivity skills of fund managers using Jensen's Alpha (JA) and revealed that performance of open – ended Mutual funds were better than close ended Mutual fund also size wise performance analysis showed that small size equity Mutual funds performed better vis-à-vis medium and large funds and performance based on ownership pattern revealed differential rate of return amongst the various ownership categories. Kader and Kuang (2007), Vangapandu Rama Devi (2011) and Santhi & Balanaga Gurunathan (2012) used popular models such as JA, TMM index in their different studies and they examined risk – adjusted performance, selectivity, timing ability and performance persistence. The empirical study of 60 growth and growth – income Mutual fund schemes in India done by Sehgal and Jhanwar (2008) results suggested that the evidence on selectivity improved marginally when higher frequency data such as daily returns are used instead of monthly returns.

A number of studies have been carried out to evaluate the investment performance of Mutual funds in India. But there are only few studies that focus on the performance of sector based funds in India. One of which is the performance evaluation of pharma funds in India by Shanmugham and Zabiulla (2009). The present study evaluated portfolio manager's performance is in terms of stock selectivity skills and market timing abilities. There were few studies conducted

on banking sector funds which were undertaken on banking sector funds for period less than one year. Hence the present study has been made to analyse the performance of selected banking funds in India for at least four years and to examine the efficiency of the fund managers in their selectivity and timing skills.

3. OBJECTIVE OF THE STUDY

The objective of the study is to appraise the stock selection abilities and the market timing skills of Mutual fund Managers.

4. HYPOTHESES

Based on the above objectives, the following hypothesis were set.

H_0^1 = There is no significant relationship between fund performance and the stock selection ability of fund manager.

H_0^2 = There is no significant relationship between fund performance and the market timing skills of fund manager.

5. METHODOLOGY OF THE STUDY

5.1.SOURCES OF DATA AND PERIOD OF THE STUDY

The study is based on the secondary data. For evaluating the performance the requisite daily NAV (Net Asset Value) was obtained from Bloomberg database. The daily Bombay Stock Exchange (BSE) Sensex benchmark return was collected from prowest database provided by Centre for Monitoring Indian Economy (CMIE). In this study the yield on the 91-day treasury bills of Government of India has been used as surrogate for riskless return. The weekly published data of T-Bill rate is taken from RBI source and converted in daily average risk free rate. The present study covers a period of four years spanning from 1st April 2009 to 31st March 2013. For the purpose of analysis, benchmark portfolio and other macro-economic factors were collected for the same period. The data for the Banking sector funds collected for the period are subject to limitations such as continuous operation for the years under study

and hence final sample restricted to six banking sector funds.

5.2.SAMPLING DESIGN

Multi-stage sampling technique is used for the study and the different stages followed are mentioned below:

The total of 21 Equity banking sector funds are reduced to 19 since funds come under Dividend categories are ignored.

Among the 19 funds since 11 funds are launched recently after 2012 are also ignored. Final sample constitutes 6actively traded funds with availability of complete data required for the study for the study period. Our final six sample funds are mentioned as below:

Table 1: Sample Banking Sector Funds

Sl.No	Fund	Launch
1	ICICI Pru Banking & Financial Services (ICICIPBFS)	7-Aug-08
2	Reliance Banking Fund(RBF)	22-May-03
3	Religare Invesco Banking (RIB)	17-Jun-08
4	Sahara Banking and Financial Services (SBFS)	26-Aug-08
5	Sundaram Financial Services Opportunities (SFSO)	16-May-08
6	UTI-Banking Sector (UTIBS)	7-Apr-04

5.3.RESEARCH METHOD FOR ANALYSIS

Daily NAV values of the sample schemes for the study period were used for analysis. BSE sensex index was considered as a benchmark and the yield on the 91-day treasury bills of Government of India has been used as surrogate for riskless return. Eviews 6, analysis package is used for estimations.

Appropriate ratios as stated below are used to measure the performance.

- a. Fama' s Net Selectivity Measure (FNSM)

- b. Treynor and Mazuy Model (TMM)

6. LIMITATIONS OF THE STUDY

- The study is based only on secondary data which were collected from CMIE Prowess Package, Bloomberg. The quality of the study depends purely upon the accuracy, reliability and quality of secondary data.
- The funds chosen for the study are restricted to 6 due to the facts like non-availability of data and less period of operation of funds.

7. RESULTS:

7.1. JENSEN'S ALPHA (JA)

Jensen (1968) developed a return – generated model for evaluating the performance of managed portfolios relative to a benchmark. JA is popularly known as ‘alpha’. The measure is based on CAPM and reflects the difference between the return actually earned on a portfolio and the return the portfolio was supposed to earn, given its systematic risk (beta). The specification of the JA is given by the following equation:

$$\overline{R_p} - \overline{R_f} = \alpha_p + \beta_p (\overline{R_m} - \overline{R_f}) + \varepsilon_p$$

Alpha measures the portfolio manager's performance relative to benchmark while beta measures its systematic risk. A positive alpha shows that the fund has performed better and has outperformed the market; while a negative alpha suggests that the fund has underperformed as compared to the market. An alpha estimate of zero indicates that the fund has just performed what it is expected to. Table 3 presents the results of JA for the whole period of study from 2009-2013. The analysis of Table 2 reveals that ICICIPBFS has posted highest positive alpha as a whole, followed by RBF. It indicates that these two funds have outperformed the market for the period 2009-13.

All other funds also recorded positive alpha value during the study period. As mentioned earlier a positive and statistically alpha estimate of two funds shows that these funds have earned average premium above expected market return at the same level of risk of the fund. There is no Negative alpha value for any of the banking Fund. It indicates that there is no such poor performance shown as a whole for period 2009-13 in banking funds. As all the funds which has positive alpha has performed better and has outperformed the market. It is evidenced from the results of the Table 3. Hence it is proved that the sample Banking funds provide superior returns as against BSE sensex during the study period 2009-13.

TABLE 2: RESULTS OF JA FOR THE PERIOD 2009-13

Sl.No	Fund	Alpha	Std.Error	t-Statistic	Probability
1	ICICI Pru Banking & Financial Services	0.0499	0.0219	2.2787	0.0229
2	Reliance Banking Fund	0.0429	0.0239	1.7897	0.0738
3	Religare Invesco Banking	0.0305	0.0221	1.3832	0.1669
4	Sahara Banking and Financial Services	0.0388	0.0231	1.677	0.0938
5	Sundaram Financial Services Opportun	0.0209	0.0237	0.8849	0.3764
6	UTI-Banking Sector	0.0316	0.0244	1.2991	0.1942

7.2.FAMA'S NET SELECTIVITY MEASURE (FNSM)

Eugene Fama provides for an analytical framework, which enables for a detailed analysis

of scheme performance popularly known as Fama's Decomposition of Total Return. The total return on a portfolio constitutes of risk-free return (R_f) and excess return. The excess return arises from different factors such as risk accepted and stock selection. The excess return can be decomposed into two components, namely risk premium (reward for bearing risk) and for stock selectivity (return from stock selection). The Fama's Net Selectivity Measure (FNSM) Index indicates that the excess return obtained by the manager is not because of investing in the market portfolio. It compares the extra return obtained by the portfolio manager with a specific risk and the extra return that could have been obtained with the same amount of systematic risk. Selectivity involves forecasting the prices of individual stocks and identification of individual stocks that are undervalued or overvalued in comparison with the equity stocks in general.

According to FNSM, the return of a portfolio consist of risk - free rate of returns and risk premium, where the risk premium includes the reward for risk – bearing and reward for stock selection. The 'net selectivity' component of FNSM model measures the true stock selectivity skills of the fund managers. The net selectivity of the portfolio is estimated using the following Equation:

$$\text{Net Selectivity} = (R_p - R_f) - \frac{\sigma_p}{\sigma_m} (R_m - R_f)$$

Table 3 presents the results of FNSM for the whole analysis period 2009-2013. The table shows that all the Banking Funds have posted a positive value for net selectivity. The highest value was found for ICICI Pru Banking & Financial Services (0.0439), thus indicating superior performance over the other funds followed by Reliance Banking Fund (0.0359) and Sahara Banking and Financial Services (0.0324) which are also performed well. Sundaram Financial Services Opportunities (0.0146) has recorded the lowest value reflecting poor selectivity skill of the fund manager when compared to all other funds during the period. There is no negative net selectivity value shown during the analysis period as a whole from 2009-2013. The overall analysis demonstrates that in general, Managers of almost all the sample funds proved their efficiency in selecting the correct stock during the study period. This is clear from the positive Reward for net selectivity ratio. The Fund Managers are successful in positioning their portfolios

based on market fluctuations during the study period.

TABLE 3: RESULTS OF STOCK SELECTIVITY MEASURE FOR THE PERIOD 2009-13

Sl.No	Banking funds	Reward for net selectivity
1	ICICI Pru Banking & Financial Services	0.0439
2	Reliance Banking Fund	0.0359
3	Religare Invesco Banking	0.0244
4	Sahara Banking and Financial Services	0.0324
5	Sundaram Financial Services Opportunities	0.0146
6	UTI-Banking Sector	0.0248

7.2.1. TESTING OF HYPOTHESES

The testing of correlations between fund performance and the stock selection ability of fund manager. . It is evidenced from the results that the sample schemes displayed positive significant relation to their performance and the stock selection ability of fund manager Hence the hypothesis – 1, "There is no significant relationship between fund performance and the stock selection ability of fund manager." is rejected. Therefore the alternative Hypothesis would be

H_1^1 = There is a significant relationship between fund performance and the stock selection ability of fund manager.

7.3.TREYNOR AND MAZUY MODEL (TMM)

Treynor and Mazuy (1966) proposed a model to examine the market timing abilities of fund managers. Market timing involves assessing the market movements and positioning the portfolios accordingly. TMM is an extension of Jensen's single index model and incorporates a quadratic term in it. The specification of the model is given below:

$$\overline{R_p} - \overline{R_f} = \alpha + \beta(R_m - R_f)_t + \gamma(R_m - R_f)_t^2 + \varepsilon_{it}$$

The value of the parameter ‘‘acts as a measure of the market timing abilities of the fund managerIt is to be noted from the Table 4 that all the six sample schemes were significantly related to their market timings under conditional TMM at 5% level. It is clear that the Fund Manager of Sundaram Financial Services Opportunities could be credited with the highest market timing skill and followed by Sahara Banking and Financial Services and Reliance Banking Fund. Other funds such as ICICI Pru Banking & Financial Services, UTI-Banking Sector and Religare Invesco Banking also showing positive t- statistic estimates.

Thus the results from the estimation of TMM reveals that the portfolio managers of most of the Banking funds appears to engage in market timing but they were successful as they times the market correctly. They are successful to position their portfolios based on market fluctuations. This is evident from the statistically significant and positive t- statistic estimates. Thus, the null hypothesis of sample Banking fund managers exhibiting distinct market timing skills is accepted at 5% level of significance. The observation emerging from the overall analysis is that Indian Banking Fund Managers have successfully performed with their market timing ability.

TABLE 4: RESULTS OF TMM FOR THE PERIOD 2009-2013

SL.N o	Fund	Beta			Gamma		
		Coefficie nt t	Std error	t- statisti c	Coefficie nt t	Std error	t- statisti c
1	ICICI Pru Banking & Financial Services	1.0081	0.0176	57.3113	0.0049	0.0027	1.8407
2	Reliance Banking Fund	1.0088	0.0183	54.9817	0.0125	0.0028	4.4782

	Religare Invesco		0.016	59.852		0.002	
3	Banking	1.0163	9	7	0.0026	6	1.0047
	Sahara Banking and		0.018	56.955		0.002	
4	Financial Services	1.0311	1	9	0.0153	8	5.5586
	Sundaram Financial		0.018	58.890		0.002	
5	Services Opportunities	1.0897	5	4	0.0187	8	6.6381
	UTI-Banking Sector		0.019	56.401		0.002	
6		1.0997	5	2	0.0038	9	1.2659

7.3.1. TESTING OF HYPOTHESES

The testing of correlation between fund performance and the stock selection ability of the fund manager. It is evidenced from the results that the sample schemes have displayed negative significant relation to their performance and the stock selection ability of fund manager. Hence the hypothesis – 2, "There is no significant relationship between fund performance and the stock selection ability of fund manager." is accepted.

8. FINDINGS AND SUGGESTION

FNSM shows that all the Banking Fund have posted a positive value for net selectivity. The highest value was found for ICICI Pru Banking & Financial Services (0.0439), thus indicating superior performance over the other funds. Testing of correlation between fund performance and the stock selection ability of fund manager shows there is a significant relationship between fund performance and the stock selection ability of fund manager.

TMM market timing ability Model shows that all the six sample schemes were significantly related to their market timings however that the Fund Manager of Sundaram Financial Services Opportunities could be credited with the highest correct market timing and enjoyed the highest correct market timing ability. Testing of correlation between fund performance and the stock selection ability of fund manager

resulted that the sample schemes displayed negative significant relation to their performance and the stock selection ability of fund manager

Mutual funds operations utilized the public money of investors. Hence Fund Managers have to use this public money in a proper way and distribute reasonable returns to investors. Fund Managers must find the portfolio allocation under risk and returns proposition. After that they have to select the stocks for fund allocation. In general, high level of risk provides high returns. Hence Fund Managers are advised continue to select the correct stocks according to the expectations of investors. It is true that the market movement affects the Equity Mutual fund Performance. Hence the Fund Manager should continue to change their portfolio to suit the market conditions. The present study indicates that majority of Mutual fund Managers did have sufficient market timing ability. Hence Fund Managers must continue with skill of spotting out the correct market timings .The stock selection ability is the primary qualification of Fund Managers. They are advised to take more care while selecting the stocks according to the fund characteristics to provide continuous improvement in future. In the present scenario, many national and international factors affect the functions of Capital Market and Mutual fund Institutions. Hence it is advisable for Fund Managers to know these factors while taking any decision favorable to investors.

9. CONCLUSION

The performance of six banking funds were examined in terms of the stock selectivity abilities and examining the manager's market timing abilities. In terms of net selectivity ICICI Pru Banking & Financial Services have shown superior performance over the other funds reflecting that these fund managers have taken diversifiable risk that is compensated by additional returns followed Reliance Banking Fund and Sahara Banking and Financial Services. The testing of correlation between fund performance and the stock selection ability of fund manager shows there is a significant relationship between the variables.

With regards to market timing skills, the entire portfolio managers were able to position their portfolios based on market movements. It is clear that the Fund Manager of Sundaram Financial Services

Opportunities could be credited with the highest correct market timing and enjoyed the highest correct market timing ability of Fund Manager followed by Sahara Banking and Financial Services and Reliance Banking Fund. Other funds such as ICICI Pru Banking & Financial Services, UTI-Banking Sector and Religare Invesco Banking also showing positive t- statistic estimates. The testing of correlation between fund performance and the stock selection ability of fund manager resulted that the sample schemes displayed negative significant relation to their performance and the stock selection ability of fund manager.

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THE IMPACT OF SERVICE QUALITY AND CUSTOMER SATISFACTION ON CUSTOMER'S LOYALTY: EVIDENCE FROM FAST FOOD RESTAURANT OF MALAYSIA

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Abstract

This paper discusses the Customer's Loyalty as it is becoming an important element for gaining competitive advantage. The study looks into the impact of service quality and customer satisfaction on customer's loyalty in fast food restaurant of Malaysia. The selected sample size was 300 of respondents received in four major cities; the researcher received 300 valid questionnaires with a response rate of 100%. The results revealed that service quality and customer satisfaction were found significantly related with significance level to with customer's loyalty were partially correlated with dependent variable. Results of this research will help the fast food industry to shape their products and services in such a way that they could maximize customer satisfaction and maintain their customer's loyalty in order to achieve higher

market share.

Key Words:

Service Quality, Customer Satisfaction, Customer's Loyalty, Fast Food Restaurant, Malaysia.

1.1 The Background of the study

Malaysia is a multiracial and multireligious country. According to the information provide by World Bank Group, purchasing power parity and living of the population had increase rapidly in Malaysia which the GDP per capita in US Dollar 14,215. The phenomenon of globalization, a lot of Malaysian's lifestyle has been change and most people prefer to stick with the fast food. Customer loyalty is playing an important role in the customer strategy in any organization nowadays. Most of the families frequently incline to eating-out especially in fast food restaurants. The benefit of gaining customer loyalty will have the huge competitive advantage for an organization and institutions to be successful in future compare to others (Aksu, 2006). It is because strategy retaining existing customers is much more effective rather than attracting new customers to replace the existing customer (Gee R, 2008).

According to (Kotler, 2011), customers seek a variety of features and benefits with various capabilities to meet and satisfying their needs and wants. Therefore, multiple of criteria will be concerning when making decision for restaurant which are include product packages, service package and others. The factor that influencing customer loyalty should be understood by all restaurant industry especially fast foods because it able fulfills customers' demand and leading to gain more revenue for the restaurant. In previous researches, various types of analysis and investigation have been conducted regarding factors influencing customer loyalty towards fast food restaurant and innovative changes should be made.

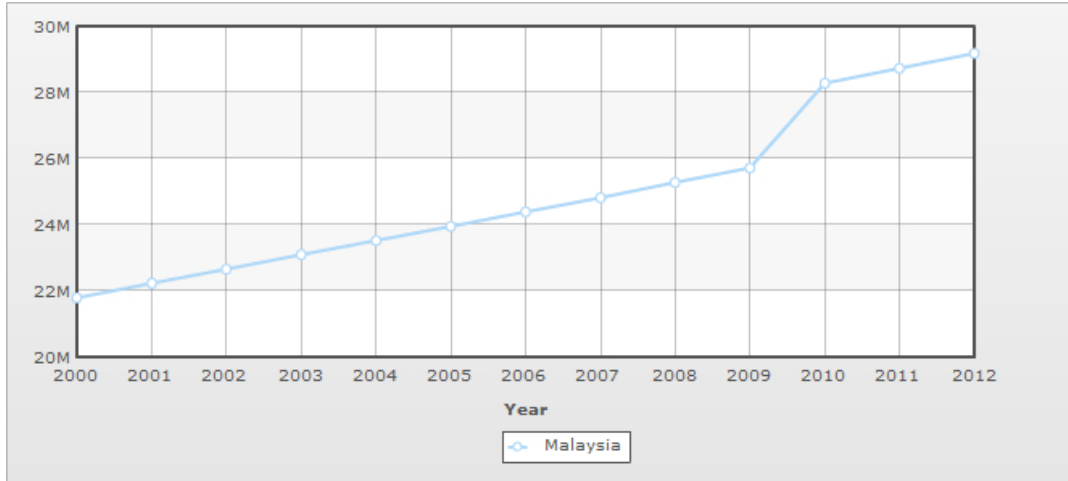


Table 1: Population growth of Malaysia, 2000 – 2012

Source: Department of Statistics (2014)

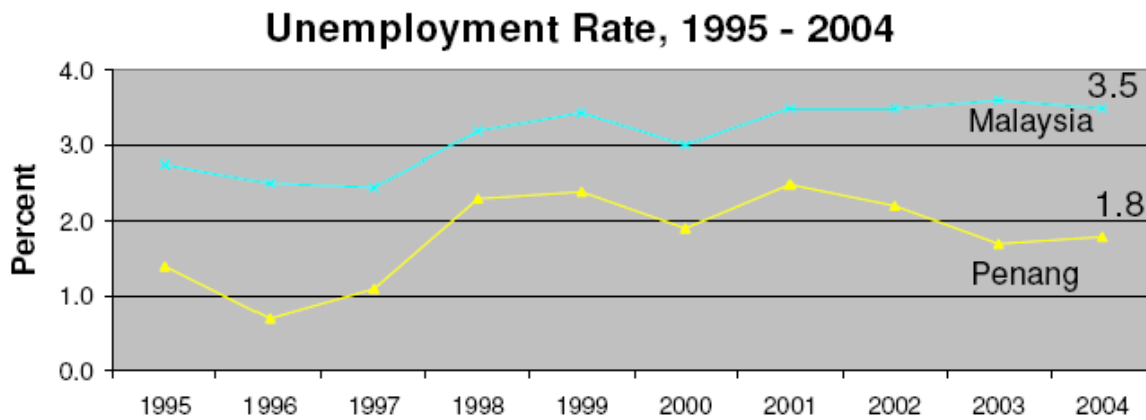


Figure 1.2.1: Unemployment rate in Malaysia, 1995-2004

1.2 The Research Problem

A study by (Nezakati, Kuan, & Asgari, 2011), fast food restaurant had make heavily promote through media and information technology exposure to give customer variety choices. Cause of that, fast food restaurant must always up-to-date and ready to change its trends and more innovative in order to avoid for losing existing and potential customers.

Some researchers argued that customer satisfaction can influence customer loyalty towards a fast food restaurant. Satisfaction can be achieved when customer's demand has fulfilled by an organization and it

determining future purchase intentions. (McAlexander & H.F., 1994) Demands from the customers are not only related with the food but it might include others factor such as environment, service quality, price fairness, food variety and strategies of the physical location. Due to that, all aspects have to alert and notify by fast food restaurant to increase its revenue neither short-term nor long-term.

There is no clear evidence about the factors influencing customer loyalty towards fast food restaurant in Malaysia. So, this study will deal with this issue by examining the factor that will influence customer loyalty towards fast food restaurant.

1.3 The Research Question

- i. Does the service quality factor will affect the customer loyalty towards fast food restaurant in Malaysia?
- ii. Does the customer satisfaction will affect the customer loyalty towards fast food restaurant in Malaysia?

1.4 The Objective of the Study

- i. To determine the relationship between the service quality and customers loyalty towards fast food restaurant in Malaysia.
- ii. To investigate the relationship between customer satisfaction and customers loyalty towards fast food restaurant in Malaysia.

1.5 The Significance of the Study

The purpose of this research is used to provide awareness and solutions to the fast food restaurant so that they can make some improvement. Besides that, it also used to remind the fast food restaurant about the factors which will lead customer loyalty towards them neither short-term nor long-term period.

Through this study, fast food restaurant can more understand the demand from their customer. Improvement from different aspect such as fairness of pricing, service quality, food quality, customer satisfaction, customer preferences are able to achieve by applied the strategies which match with it and it will give a hand to the fast food restaurant that involve in an extremely competitive business environment.

Information that obtains from this study also can act as guideline for new entrepreneur fast food restaurant to establish its business.

Last but not least, government is able to use the information from this research to improve sector of fast food and stimulate Malaysian's economy to better. In long-term orientation, GDP of Malaysia can be increase and it will lead fast growing of fast food sectors.

1.6 The Scope of Study

This research will take the sample from customers that frequently visit fast food restaurant in Malaysia. However, the factors of influencing customer loyalty towards fast food restaurant will be obtained from the journals and previous researches which were conducted in Malaysia. Thus, the group involve in this research is focus on consumer of fast food restaurant in Malaysia. It also focuses on these fields to analyze and study about the factors that will influence customer loyalty towards fast food restaurant in Malaysia.

2.0 LITERATURE REVIEW

2.1 Introduction

The terms of fast foods are the final products that are prepared in a minimum preparation time, quickly, and easily which are ready to serve directly to people. Besides that, fast food compared with alternatives home-cooked meals it is fastest and save more time, for the example of fast food such as Hamburger, pizza, fried rice and other foods. In addition information, most of the fast food restaurant is operating for 24 hours in all the time and growing rapidly day by day. Basically, fast food companies will provide product and services that meets or exceeds the customer's expectation every time (miler et al, 2000) and it may enable loyalty of customer to maintain or even increase.

Besides that, customer loyalty is categories into 2 dimensions which are attitudinal and behavioral dimension. The behavior is the practice, customer loyalty as long as they continue to buy and use of good or services (Clottey, Collier, & Stodnick, 2008). The attitudinal approach consists of criteria such emotional attachment, trustiness and commitment, whereas the behavior approach are includes criteria such as word of mouth referrals, share-of-wallet and repeat purchase.

(Reichheld, 2003) state that percentage of customers who were willing enough to refer a friend or colleague to a particular good or service is the strongest evidence of customer loyalty. (Nebert Matelong, 2013) also examined the link between attitude and behavior and found that "the stronger the attitudinal commitment..., the more likely consumers were to remain loyal" thus the use of an attitudinal measure would also indicate the behavioral dimension of loyalty. Customer loyalty can measure by the customer's response to how strongly they would recommend the retailer to their friends and family on a seven point

ordinal scale (Yoon, 2010).

2.2 Fast Food

Eating is one of the human's activities that it is enjoyable. There are many kinds of food available to eat, no exception is fast food. Fast food is define as “designed for ready availability, use, or consumption with little consideration given to quality or significance.” The words “fast food” was create in 1954 as a shorthand for the fare of restaurants that provided “fast food service.” Fast food usually does not require cutlery and generally consists of finger food such as hamburgers, french fries, chicken nuggets, tacos, and pizza. Among these, McDonald's is the leader of the fast food industry. Their founders, Ray Kroc, transformed a hamburger, fries, and a shake into American meal, establish golden arches to guide hungry travelers, and appointed a kid friendly clown as fast food's ambassador (Freeman, 2007).

Fast food has since expanded to include an extensive array of foods. In 2005, the top ten fast food chains in the United States were McDonald's, Burger King, Wendy's, Subway, Taco Bell, Pizza Hut, Starbucks, KFC, Dunkin' Donuts and Domino's Pizza. Preparing fast food is highly processed and done by using standardized ingredients and production techniques. Most of fast food is deep fried in partially hydrogenated oils which lead to high cholesterol rates and heart attacks. Combined with starchy vegetables and sugary drinks, these foods have a high glycemic load, a factor that contributes to obesity and diabetes. Fast food also contains a large amount of chemical additives and often lacks accurate nutrition labeling (Freeman, 2007).

Although fast food is a kind of meal which is prepared or served quickly, however, some people argue that by eating fast food, they may gain the advantages and disadvantages. The advantage of consuming

fast foods is that it can save time. Fast foods, such as hamburger and pizza only need a short time to order. Moreover, nowadays, the restaurants which sell them can be found easily. Therefore, no matter when you are hungry, or wherever you are, there is probably at least one fast food restaurant just a short drive away (Kriswintari, 2012).

Furthermore, there are another advantage of eating fast foods is that they have a good taste such as snack, spaghetti and fried chicken have special flavor which make the consumers be addicted. Because in fact, such fast foods are added with additives, such as Monosodium glutamate and sodium which can improve the taste of food. Unfortunately, fast foods would directly cause obesity. This is because fast foods have many of calories and these accumulate in the body as fat deposits that can cause obesity. Hence, with obesity come other problems like high blood pressure and diseases of the joints. Some researchers have shown that there is a direct link between fast food and obesity on children (Kriswintari, 2012).

As a conclusion, fast food is a multi-billion dollar industry that relies on a close relationship with

the government to ensure profits. While many outspoken critics of the food justice movement advocate a free-market society based on consumer choice, these arguments ignore the fact that, in many cases, true freedom of choice is not available to many Americans. The narrowing of choice results from the deals made between the government and the meat, dairy, and fast food industries (Freeman, 2007).

2.3 Customer Loyalty

There are many definitions of customer loyalty. Yet each of them fails to realize that loyalty runs hand-in-hand with emotions. Customer loyalty is the result of consistently positive emotional experience, physical attribute-based satisfaction and perceived value of an experience, which includes the product or services. Besides that, customer loyalty also was a discussion about attracting the right customer, getting them to buy, buy often, buy in higher quantities and bring you even more customers. However, that focus is not how you build customer loyalty (Customer Loyalty and Retention).

More and more companies are focusing on consumer loyalty to enhance long-term profitability (Jain and Singh 2002). To enhance consumer loyalty, companies adopt many strategies, and the most popular among them is the loyalty program. Hotels, airlines, department stores, drugstores, gasoline stations, grocery stores, mass merchandisers, and specialty apparel stores, all have adopted loyalty programs. However, it is not clear whether loyalty programs are, in spite of their widespread use, profitable in all cases. Some researchers argue that they are profitable whereas others take the opposite stand (Siddharth S. Singh, 2008)

Recent research by Villeneuve et al. (2007) in the journal of Siddharth S. Singh, 2008, shows that a firm would be better off looking at short term period-by-period profit maximization instead of long-term profit

maximization obtainable through initiatives such as loyalty programs. Thus, it is not clear whether loyalty programs really bring in more profits to the firms.

Another stream of research uses a game theoretic approach and analyzes the market equilibrium conditions that enable competing firms to offer loyalty programs (e.g., Klemperer 1995, Kim et al. 2001, Caminal and Matutes 1990, Von Weizsacker 1984). A common finding is that loyalty programs sustain in equilibrium because they reduce market competition by introducing consumer-switching costs. However, it is interesting to note that all of these studies focus on a market where both of the competing firms offer loyalty programs (Siddharth S. Singh, 2008).

On the other hand, keeping customer satisfied is what leads to customer loyalty (Jones and Sasser Jr, 1995). He found after examining thirty two different organizations with 5 different markets that if the customer has the choice the relationship between loyalty and satisfaction is linear it means that when the satisfaction rises the loyalty rises too. A higher customer satisfaction leads to a number of improvements like higher customer loyalty, higher consumption of the service, acquisition of further customers (Male, 2003). However in markets that there is an intense competency there is no relationship between customers and loyalty it means that there is a difference between loyal and satisfied or completely satisfied customers. Put simply if satisfaction ranked on a 1-5 scale from completely dissatisfied to completely satisfied, the 4's – though satisfied- were six times more likely to defect than the 5's.

Customer loyalty reveals itself in many forms of customer behavior such as:

- ❖ Intend to re-purchase;

- ❖ Primary behavior - organization have access to information on various transactions at the customer level and can track five categories that show actual customer re-purchasing behavior; regency, frequency, amount, retention, and longevity; and
- ❖ Secondary behavior – e.g. customer referrals, endorsement and spreading the word are all extremely important forms of consumer behavior for an organization.

In markets with repeat purchases, it is common for a firm to offer different prices to its repeat customers and customers who switch from a rival. Some industries are popularized by marketing programs that entice consumers to switch from rivals. For example, long-distance telephone companies often offer lower prices to rivals' consumers, satellite companies sometimes target cable users with lower prices, and credit card companies frequently offer lower rates to switching customers. In some other industries, however, the prevailing practice is for firms to reward consumer loyalty (Pearcy, 2010)

However, some of these companies which already do a very good job building relationships organically, by providing good products and services, run the risk of shooting themselves in the foot by launching questionable, artificial loyalty-building programs. If these programs do not deliver substantial value to the customer, the company runs the risk of eroding existing loyalty (Duffy D. L., 2005).

As a conclusion, customer loyalty presents a paradox. Many see it as primarily an attitude based phenomenon that can be influenced significantly by customer relationship management initiatives such as the increasingly popular loyalty and affinity programs. However, empirical research shows that loyalty in competitive repeat-purchase markets is shaped more by the passive acceptance of brands than by strongly-held attitudes about them. From this perspective, the demand-enhancing potential of loyalty

programs is more limited than might be hoped (D.Uncles, R.Dowling, & Hammond, 2003).

2.4 Factors Influencing Customers Loyalty towards Fast Food Restaurant

Regarding to the title of this research, there are several of factors have been found from previous research that will influence customer loyalty towards fast food restaurant in Malaysia. The following are the explanation about the factors and the previous research found.

2.4.1 Service Quality

When there is a close interaction between a service employee and a customer, the perception of what is being delivered is as important as what is actually delivered (Ozment & Morash, 1994). Therefore, the employee's behaviors and attitudes can influence a customer's perception of quality for that service offering (Brady & Cronin, 2001). The exchange process is more observable in the service industry, due to the evolving interaction between service providers and their customers. Service providers have an opportunity to offer something special that stands out in a customer's mind, thereby increasing the rate of customer retention (Crosby & Johnson, 2002; Mitchell, 1998; Shostack, 1977).

Creating long-term relationships with customers is the key to the survival and growth of service operations (Duffy D. , 1998). Thus, firms should benefit from a better understanding of what leads to customer satisfaction in services. The nature of evaluating service quality stems from comparing service expectations with actual performance perceptions (Zeithaml, Parasuraman, & Berry, 1990). In other words, it is the result of the comparison that customers make between their expectations about a service and their perceptions of the way the service has been performed (Parasuraman, Zeithaml, & Berry, 1985). This gap between perceptions and expectations (P-E) had been made explicit by the SERVQUAL

instrument. Parasuraman (1985) proposed that service quality is a multidimensional concept, consisting of five elements which are as follows:

- ❖ Reliability refers to the ability to deliver the promised services dependably and accurately. It covers keeping promises on delivery, pricing, complaint handling.
- ❖ Responsiveness is defined as the willingness to assist customers in a promptly manner. This dimension advocates positive service attitude and requires personnel to be attentive to customer requests, questions and complaints.
- ❖ Assurance focuses on the ability to inspire trust and confidence.
- ❖ Empathy is the service aspect that individualizes the treatment of customers.
- ❖ Finally, tangibles are the dimension that the elements that can be observed physically.

An important advantage of the SERVQUAL instrument is that it has been used and validated across different contexts in the service industry, e.g. hospitals (Babakus & Mangold, 1992), mechanic shops, higher education (Boulding, Kalra, Staelin & Zeithaml, 1993) and departmental stores (Finn and Lamb, 1991; Teas, 1993). Fitzsimmons and Fitzsimmons (1994) confirmed that the SERVQUAL instrument still remains the best measure for cross-sectional research and industry benchmarking.

The university system is one special kind of public administration. It prepared for the students as a customer the most important level of education, so it would be really necessary to evaluate its work in terms of the quality of the services offered. We could test quality of service by measuring student satisfaction, since we assume students as a real customer. This process could be carried out by comparing quality expected, quality provided and quality perceived (Baccarani, 2003, 2004).

According (Crosby & Kenneth & Cowles, 1990) defined that quality is a standard and specification degree for a product to maximize the external clients' needs. Based on Kotler (2003) advocate that is a set of characteristics and overall properties of the service which aim to satisfy the clients and meet their needs. From the previous research found that service quality is an activity for a business to deliver the need and expectation of clients. Besides, according to Gronros (1993) the quality of a service, as a perceived by the customer is a result of a comparison between the expectation of the customer and his real-life experiences.

Service quality is an important strategic for a business operation, a high service quality will increase the customer satisfaction and customer loyalty. According to Crosby (1990) state that the theory of relationship quality model which is a high service performance will make the impact of positive relationship on quality. Furthermore, service quality indicated the perceptions of high service quality and high service satisfaction resulted in a very high level of purchase intentions (boulding, Kalra, Staelin, & Zeithaml, 1993; Ceonin & Taylor, 1992; Taylor, 1997; Taylor & Baker, 1994; Zeithaml et al, 1996). According to Huang and Liu (2010) high service performance will increase the customer satisfaction, trust and loyalty.

According to Wong (2004), service quality positively would affect emotional satisfaction that in turn would have positive effect on both customer loyalty and relationship quality. The importance of service quality on customer loyalty intentions was highlighted by Venetis and Ghauri (2004) who found that service quality affected customers' intentions to stay in a relationship with a service provider. Service

quality also may affect loyalty through the mediating variables of trust and commitment (Caceres and Paparoidamis, 2007).

Consumers can strengthen their relationship with the organization via motivating by high quality services (Hess, Ganesan & Klein, 2003) while low quality can provoke a change in consumers' attitudes/behavior towards an organization. The high quality services will have positive consequences on its customers' purchasing intentions, on-word-of-mouth recommendations and on the willingness to pay a higher price (Zeithaml, Berry & Parasuraman, 1996).

Service quality plays an integrating role between organization and its customers. Service quality can also divided into 8 quality dimension there are tangible, reliability, responsiveness, competence, courtesy, credibility, security, access, communication and understanding the customer by (Zeithaml, Parasuraman & Berry, 1990). The following is the 8 dimension quality explanation and the example.

- i. Tangibles- which bring the meaning of the physical facilities on the restaurant and the design of the environment are attractive or the staff dressed appropriately.
- ii. Reliability- define as the truthiness of the restaurant and the reputation image of the restaurant, instead of this it also a promised service is accurate or correct.
- iii. Responsiveness- provide by the restaurant is good and willing to extra help the customer to do prompt service or a duty of the restaurant.

- iv. Competence- means the service activities of the restaurant are ability are successfully or efficiently besides if also the talent and skill of the restaurant. For an example, the restaurant's staff have do their job well or the staff fumbling around without doing anything.
- v. Courtesy- define as the attitude of the staff such as polite, kindly, friendly and manners of the restaurant.
- vi. Security- security can me define as the safety of the restaurant and the location of the restaurant. For an example, the restaurant design and the table location which is not safety in fact always inconvenient to their staff walking and customer and will make customer injuries this will also affect the restaurant image.
- vii. Access- refers to how easy to communicate with the staff member and how easy to reach the appropriate staff person for an example contact by using telephone or by email.
- viii. Communication-which is refers to the staff listening skill and the understanding of the customer's order.

Quality service for a business playing an important role and it's will bring a lot benefits to the business income. For 21 century, an increasing competition marketing service quality is an essential strategy for success and also survival has attracted increasing in over the past 20 years (Ismail, 2006). Furthermore, restaurant facing a lot of competition, many restaurant's manager try their best to making a difference type of order with other from their competitors. So that service quality plays a critical role to develop a competitive advantage (Brown, 1993).

According to (Jamal, 2009) service quality can define as the magnitude and direction of difference between perception and expectation of the consumers. Based on (Parasuraman et al, 1988) promote a multi-item scale which name as SERVQUAL to measure the service quality and investigate quality of service perceived by customer due to the result of comparing customer expectations and their original perception towards products and services.

2.4.2 Alternate Perspectives to Service Quality

A 3 dimensional view of service quality, which is interaction, physical and corporate identity was suggested by Lehtinen and Lehtinen (1982). Later, Gronroos (1983; 1990) proposed that service quality can be illustrated to be either output or process-oriented. This two dimensional model from the customer's perspective highlights the technical (or output) quality and functional (or process) quality as a resultant force in quality outcomes. The former refers to what has been delivered to the customer, be it the form of a meal in a restaurant, or recommendations provided by a consultant. The latter which is functional quality is concerned with what is achieved at the end of the service provider-customer relationship.

In other words, functional quality can be both psychological and behavioral that ranges from the level of accessibility the customers possess to how the services are carried out. In operationalization the two, technical quality can be evaluated objectively. However, this is not so with functional quality. An alternative three-dimensional view (interaction quality, service environment quality and outcome quality) was developed by Brady and Cronin (2001). The first i.e. interaction quality, is defined as a customer's experience as a result of the interaction with the human element of the organization.

The important role of front line employees in service industry has been confirmed by researchers such as

Gremler and Gwinner (2000) and Zeithaml and Bitner (2003). The second dimension of service environment quality refers to the physical element of the organization. Finally, outcome quality refers to the fulfillment of a customer's expectations after having used the service (Brady & Cronin, 2001). Brady and Cronin (2001) further proposed three sub-dimensions of the above three-dimensional view. Interaction quality can be further broken down into employees' attitudes, behavior, and expertise.

Service environment can be classified into facility design, customers' loyalty ambient conditions, and social factors. Lastly, the outcome quality can be categorized into waiting time, tangible element, and valence. Brady and Cronin's (2001) model had been applied in the context of health clubs in Greece (Alexandris Zahariadis, Tsorbatzoudis & Grouios, 2004).

2.4.3 Customer Satisfaction

According to Oxford dictionary, the word "satisfaction" is defined as a feeling of pleasure or something that gives happiness because of a need, a desire or a demand had been fulfilled or convinced. (Crowther, Kavanagh, & Ashby, 1995). A "satisfaction" in usual life, is something to fulfill or to be fulfilled and most commonly applied among business distributors and customers. That's why the phrase "customer satisfaction" is becoming a common goal in the business world. The meaning of it is defined very differently by various marketing experts including Richard L. Oliver, Philip Kotler, Johnson and Fornell etc. who come from different parts of the world.

This justifies that the customer satisfaction is being concerned at almost everywhere beyond the national boundaries and has generally becoming one of the focuses in business, in both of the product and service industries. To understand about the customer satisfaction, based on the earlier studies by Marit G.

Gundersen, during 90s, typically defining the term “customer satisfaction” which is “a post choice evaluative judgment concerning a specific purchase decision.” (Gundersen, Heide., & Olsson, 1996).

Another definition or conceptualization of the concept of customer satisfaction comes from the expectancy disconfirmation theory. (McQuitty, Finn, & Wiley, 2000)

The disconfirmation theory was developed by Richard L. Oliver. During the research back in 1980, Oliver proposed that the difference in satisfaction level is caused by the difference between the expected and perceived performance. In other words, the better or worse of discovered performance which differs from the expected performance results in satisfaction. (Oliver, 1980)

It is well-established that satisfied customers are the key to long-term business success (Gilbert and Veloutsou, 2006). To develop and maintain a healthy loyal customer base, expanding business and acquiring higher degree of market share is a must to increase long term profitability. Getty and Thompson (1994) conducted a study on lodging experiences of the customers and discovered that a customer will recommend product or service to others when they feel satisfied with the product or service regards lodging experience. A study have shown two main factors which are satisfaction level of the outgoing patients and service quality in the health care realm will determining future purchase intentions (McAlexander J. a., 2007).

Most studies show that higher levels of customer satisfaction will lead to greater customer loyalty, which in turn results in better company performance and also related to bottom line results (Gilbert and Veloutsou, 2006). According to Jang and Mattila 2005, attracting a new customer is three to five times more costly than retaining an existing customer. Therefore, most of the multinational companies will

come out with new marketing strategies or provide special promotion in order to attract new customers and retain existing customers. According to Heskett (1997), customer satisfaction passes a certain threshold will increase customer loyalty rapidly. Consistent with this "threshold" argument, it has been found that "delighted" customers have a much higher probability of retention than those who are merely "satisfied" (Oliver, 1997). Customer satisfaction is an overall attitude towards a service provider (Levesque & McDougall, 1996) or an emotional reaction to the difference between what customers anticipate and what they receive (Zineldin, 2000).

Customer satisfaction literature showed that the relationship between customer satisfaction and customer loyalty depended on the type of satisfaction. The positive impact of manifest satisfaction on customer loyalty was stronger than that of latent satisfaction on customer loyalty (Bloemer & Kasper, 1995); (Bloemer & Ruyter, 1998). According to Tjiptono and Diana (2000), customer satisfaction mean as post purchased evaluation whereas perception to the product and services performance that is chosen can fulfill or maybe give more hopeful with before purchased. Satisfaction will not occur if the perception to the performance is not match with the hopeful. Customer satisfaction plays a very important role in customer loyalty and retention although it does not ensure repeat purchase (Mohsan et al, 2011).

According to Hallowell (1996), the profitability of a business is dependent on satisfaction which means that attainable increases in satisfaction could dramatically improve profitability. Literature also shows that to enhance the customer loyalty, customer satisfaction plays a vital role and it is the most important driver (Sondoh et al, 2007). Customer's retention intention is directly proportional by the service quality and customer's satisfaction (Prof. Gopalkrishnan et al, 2011).

Satisfied customer will become loyal while dissatisfied customers will move to another vendor (Heskett et al. 1994: 164-174). According to Reichheld (2000), 60-80% of customers who defect to a competitor said they were satisfied or very satisfied on the survey just prior to their defection. So, it has shown that there are other factors besides satisfaction will have impact on customer loyalty. According to Rasmey and Sohi (1997), there is a correlated between customer satisfaction and customer loyalty. Customer satisfaction play vital role in enhancing and maintain long-term relationship among companies and their customers and customer satisfaction is reveled to be improved predictor of customer loyalty (Haq & Amin, 2009).

According to Kuuisk (2007), there is a direct connection among loyalty and satisfaction. Customers will loyalty if they are satisfied with the product or services while dissatisfied customer will switches to another vendor. So, customer satisfaction can act as a connection between customer participation and loyalty. Satisfaction does not imply necessary loyalty, but generally affect it (Chirico & Presti, 2008).According to Akbar and Parvez (2009), customer satisfaction act as reaction which result from a method of assessing what has been received against what was expected which including needs and wants related with the purchase ad purchase decision itself. Satisfaction also acts as a person's feeling of pleasure or disappointment resulting from comparing a product's perceived performance in relation to his or her expectation (Singh, 2006).

Customers will only repurchase if they are satisfied with the product or service (Gronroos, 2007 p. 144; Han & Ryu, 2009). Repurchase is the effect of cumulative satisfaction rather than individual episodic

satisfaction (Yi & La, 2004). The positive predisposition of long-term loyalty will lead by satisfactory multiple experiences with the product/services (Lee, Back & Kim, 2009). According to Anton (2007), customer satisfaction can achieve when it had met or exceeded the consumer's expectations about performance of the product or service. Satisfaction is the "seed" out of which loyalty develops; enhancing satisfaction is an important means for achieving loyalty (Wallace, 2004).

3.0 METHODOLOGY

3.1 Theoretical Framework

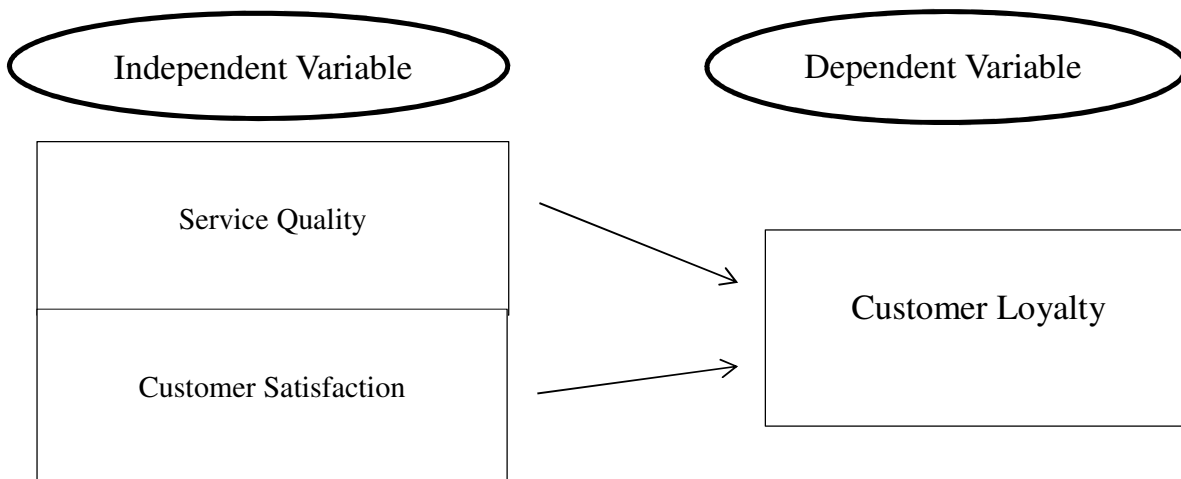


Figure 3.2: Relationship between dependent and independent variables

3.3 Hypothesis

H1: Service quality has a positive impact on the customer's loyalty towards fast food restaurant in Malaysia.

H2: Customer Satisfaction has a positive impact on the customer's loyalty towards fast food restaurant in

Malaysia.

3.4 Research Subject

The target population for this study will consist consumers of fast food restaurants in Malaysia. The majority of Malaysia’s Population which is consists of Chinese (41.5%), followed by Malay (40.9%) and Indian (9.9%).

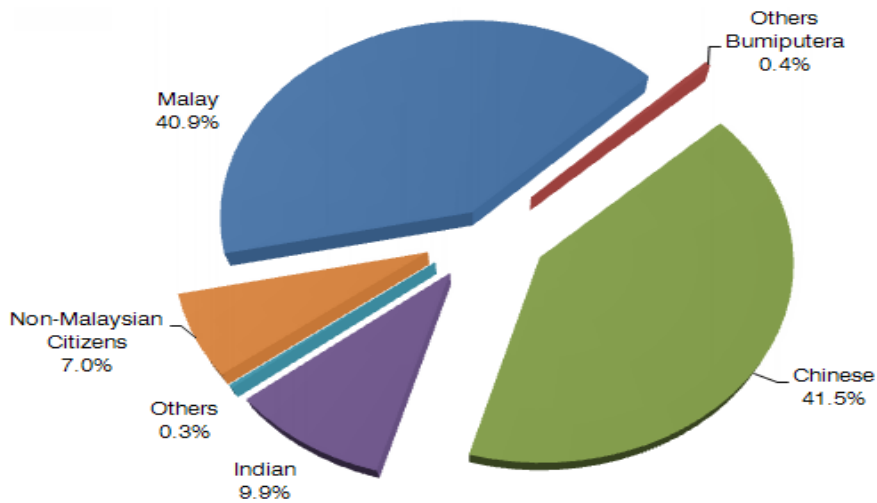


Figure 3.4 The population of Malaysia

3.5 Sampling

In this research, the questionnaire was distributed at Fastfood Restaurant namely McDonald, KFC, Domino Pizza and Secret Recipe randomly in Klang Valley, Penang, Melacca and Alor Setar areas. In order to get the reliable result, there were 300 questionnaires which will 150 males and 150 females. The main purpose choose them as respondents because they have experience of dining and eating at fast food restaurant in Malaysia. So, reliable feedback and response are able obtain via using questionnaire method in this study.

3.6 Questionnaire

This study was conducted using questionnaire method because its ability provide accurate feedback, cheap, do not require as much effort from the questioner and the answers are standardized which is easy to compile data. An close-ended questions will be created in the questionnaire and respondent only need to pick an answer from a given number of options. Questions flows will arrange from the least sensitive to the most sensitive in order to achieve the best response rates. Five-point likert scale from 5 (strongly agree) to 1 (strongly disagree). It could assists respondents easier to make their choice for each item by putting number and opinion can express with the particular statement. The research questionnaire will separate into four sections.

3.6.1 Structure of Questionnaire

Questionnaire will consists 4 sections whereby section A is about demographic profile, section B is general questions while section C is about independent variable and section D is the dependent variable question. There are 39 questions involve in my questionnaire as shown below:

For section A, it will focus about demographic profile of the respondent. In this section its consist of 3 question the question is about the gender, ethnic and age will cover in this section and it is use nominal scale and presence-absence method which is "yes" or "no".

For section B, it is focus on general question and includes 6 questions which involves factors of influence respondents' decisions to eat at fast-food restaurant, frequently visiting of a restaurant, method influence of visiting the restaurant and others. Further information there are five-point likert scale from 5 (strongly agree) to 1 (strongly disagree) nominal scale and presence-absence are using in this section.

For section C, it will focus on independent variable which includes service quality and customer satisfaction influence customer loyalty towards fast food restaurant. There are 10 questions in this section which have five-point likert scale from 5 (strongly agree) to 1 (strongly disagree) are also using in this section.

Lastly for section D, it will focus on dependent variable which influence by the independent variable that includes service quality and customer satisfaction. In the questionnaire there are 5 questions which give respondent to choose from five-point likert scale from 5 (strongly agree) to 1 (strongly disagree) are using in this section.

As a conclusion, there are 24 questions consists in the questionnaire to test the reliability of the factors that influence the customer loyalty among the customer towards fast food restaurant in Malaysia. Finally, the data collected will be analyzed using SPSS software analysis.

4.0 PRESENTATION AND INTERPRETATIONS OF RESULTS

The results are obtained through the Statistical Package for the Social Sciences (SPSS). The first section states the respondent's profile. Frequency and percentage were used to show generally the distribution of the profile in respect of the respondent. Subsequently, goodness of measures was examined by using factor analysis and reliability analysis, followed by the third section, which provides the inter-correlation between all the variables that are studied and descriptive statistics that showed the mean and standard deviation of the factors. Then, the hypotheses from the proposed model were tested through hierarchical regression analysis. Last but not least, the summary of the findings will be presented at the end of this

chapter.

4.2 Overview of Data Gathered

Number of Questionnaires Distributed	300
Number of Questionnaire Collected Back	300
Response Rate	100%
Number of Questionnaire Used For Analysis	300

Table 4.2: Sample Profile

The sample profile of the questionnaire survey is shown as the Table 4.2. All questionnaires were distributed randomly to the customer of fast food restaurant in Penang. A total of 300 sets questionnaires were distributed among randomly the randomly selected respondents.

4.3 Data Presentation

Variables	Categories	Frequency	Percentage (%)
Gender	Male	150	50
	Female	150	50
Ethnic	Malay	108	36
	Chinese	150	50
	Indian	42	14
Age	0 - 20	51	17
	21 - 40	177	59
	41 - 60	72	24
	61 & above	0	0

Table 4.3: Demographic Characteristics of Respondents

In this section is about summarizes all the demographic data of respondents including gender, age, race, education, occupation, income level and marital status. It can be see that out of 300 respondents; the total respondents are equally which are 50% male and 50% female involved in this survey. For the ethnic part, the total respondents who involve in this study were including 36% Malay, 50% Chinese and 14% Indian. Furthermore, explain about the age section there are 17% of respondent from age range between 0-20, 59% from the age range between 21-40 and 24% from the age range between 41 -60 and lastly which is 0% for age range between 61 and above.

4.4 Reliability Analysis

Variables	Number of Items	Cronbach Alpha
The Quality of Service	5	0.747
The Customer Satisfaction	5	0.789

Table 4.4: Results of Reliability Test

The number items of each variable and Cronbach Alpha is showing in Table 4.4. From the table1, we can see that Cronbach Alpha values from ranged 0.747 to 0.789. The highest Cronbach Alpha value is the Customer Satisfaction. 0.789 while the lowest Cronbach Alpha value is the quality of service, 0.747. The Reliability analysis was used to ensure that all items which used in the survey are free from error and providing more accurate results.

4.5 Descriptive Analysis among All Variables

Factors	Mean	Standard Deviation
Customer Loyalty	3.9640	0.53058
Service Quality	3.7420	0.61450

Customer Satisfaction	3.5660	0.69576
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Table 4.5 Descriptive Analysis

Table 4.5 is showing the mean and standard deviations for all the study variables. On the table 4.5 showing the mean for all variables ranges between 3.5660-3.9640. Mean is the most widely used measure of central tendency because of its mathematical qualities. It also named as average and sensitive to extremely large or small value. In the Table 4.5, the highest mean is the customer loyalty which showing 3.9640 and its standard deviation is 0.53058 and followed by the mean and standard deviation of 3.7620, 0.68384, the service quality 3.7420, 0.61450.

4.6 Factor Influence Customer Loyalty towards Fast Food Restaurant

Variables	Beta	t-Ratio	Sig. t
The Service Quality	0.128	2.122	0.036
The Customer Satisfaction	0.375	5.971	0.000
R Square = 0.748 Durbin-Watson = 1.8 F = 67.409 Sig. F = 0.000 Condition Index = 22.445			

Table 4.6: Results of Regression Analysis on Turnover

According to the regression analysis showed on Table 4.6, the service quality has the most weak significant effect Sig t = 0.036 with the customer loyalty towards fast food restaurant in Malaysia. This showed that service quality was a factor that will influence the customer loyalty towards fast food restaurant in Malaysia. Therefore, we can conclude that hypothesis 1 is accepted as a factor that influencing customer loyalty towards fast food restaurant in Malaysia since the significant level of

P-value is less than 0.05.

The regression analysis indicates that customer satisfaction has significant effect whereby the Sig t value is 0.000 with the customer loyalty towards fast food restaurant in Malaysia. Therefore, the hypothesis 3 stated the customer satisfaction has significant effect on customer loyalty towards fast food restaurant in Malaysia also accepted at the significant value of P-value is less than 0.05.

4.7 Conclusion

This section will conclude the results of the hypothesis testing. All results that analyze using the statistic data in this chapter will be show in the Table 4.7.

No of Hypothesis	Statement of Hypothesis	Results
H1	Service quality has a positive impact on the customer's loyalty towards fast food restaurant in Malaysia.	Accepted
H2	Customer Satisfaction has a positive impact on the customer's loyalty towards fast food restaurant in Malaysia.	Accepted

Table 4.7: Results of Hypothesis Testing

5.0 DISCUSSION AND CONCLUSION

5.1 Discussions

From the findings of study, the hypothesis 1 was accepted because the finding showed that service quality has a significant influence to customer loyalty towards fast food restaurant in Malaysia. According to

Wong (2004), service quality positively would affect emotional satisfaction that in turn would have positive effect on both customer loyalty and relationship quality. This had been supported by the previous research as same with this current research that service quality has positive significant influence to customer loyalty towards fast food restaurant in Penang.

Hypothesis 2 examined the relationship between customer satisfaction will influence customer loyalty toward fast food restaurant in Malaysia. This supported by Kuuisk (2007), there is a direct connection among loyalty and satisfaction. In this situation show that, most of the customer satisfaction will influence the loyalty toward a fast food restaurant. High satisfaction will get a loyal customer, in the other hand low degree of satisfaction will affect the loyalty towards a restaurant. Gilbert and Veloutsou (2006) research is contradicted with the result of this research and it showed that high levels of customer satisfaction will led to greater customer loyalty and automatically will have good impact in aspects of company performance. These show that the result had same with the previous research which had a positive significant influence to customer loyalty towards fast food restaurant in Malaysia.

5.2 Implication

The result of the study has showed the connection between service quality and customer satisfaction will influence customer loyalty towards fast food restaurants in Malaysia. Thus, the information that obtains this research will able to give helpful information to the owner of fast food restaurant or franchisor in identifying the factors influence customer loyalty towards fast food restaurants in Malaysia. It also let

them more understand what the customer needs and wants in order to increase their restaurants' revenue and at the same time enhance the image and reputation of its restaurants. It also leads an entrepreneur or owner of restaurant take the right action in aspects of establishing its sales volume and expanding their business as well.

5.3 Limitation of Research

It was necessary to recognize the limitations of the current study. Firstly, the limitation of this study was time constraints due to the overload of assignment to be done. There were tons of assignment have distributed. This was the major obstacles that impede the process of this study.

Next, as some of the respondents are known to the researcher, there might be a potential of respondents bias when answering the questionnaires. Furthermore, most of the respondents were rushing time, therefore they might not answer the questionnaire without much considerations and understanding in the question asked. The bias and the inaccurate answering might cause some variance in the study. Specific age group among respondents, time constraints, small sample size, biases, inaccurate answers, and, contributes to the limitations of this study

Conclusion

By this research, the entire objective that set was achieved. From the finding, the service quality and customer satisfaction had a significant affect customer loyalty towards fast food restaurant in Malaysia. So, it enable future researcher can do analyze and examined others than those factors that will influence customer loyalty towards fast food restaurants in Malaysia. Last but not least, it also can act as guideline

for all entrepreneur and owner of fast food restaurant to improve their business growth in terms of performance and revenue as well. It also leads a hand in terms of attracting new customers and at the same time retain existing customer to dine-in at its restaurant. It also allows all entrepreneurs or owner of restaurant understand what the customers' need and want so that they can make some improvement to this issues.

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APPENDICES

Appendix A: Questionnaire

Section A: Demographic Profile

Please tick (✓) only one of the appropriate box according to your answer.

1. Gender : Male Female
2. Ethnic : Malay Chinese Indian
Others
3. Age : 0-10 11-20 21-30 31-40 41-60
61 and above

Section B: General Question

Please tick (✓) the following according to what is being asked

1. Which of the following attributes most influence your decision to eat at fast-food restaurant?

- Food Quality Food Menu Price Location
 Speed of service Appearance/Cleanliness Friendliness of staff

2. Which chain do you believe offers the most consistent and reliable quality from one restaurant to another?

- McDonald Pizza Hut Domino's Pizza
 Subway Burger King Secret Recipes

3. Which fast-food restaurant do you frequently visit?

- McDonald Pizza Hut Domino's Pizza
 Subway Burger King Secret Recipes
 Others (Pls. specify) _____

4. Do you frequently visit or are you loyal to this restaurant?

- Yes No

5. Why do you prefer this restaurant?

- Food Quality Food Menu Price Location
 Speed of service Appearance/Cleanliness Friendliness of staff

6. What influence you visit to this restaurant?

- Peer-Decision Friends and families Media
 Others (Pls. specify) _____

Section C:

The Service Quality Influence Customer Loyalty Towards Fast Food Restaurant

Please tick (✓) only one of the appropriate boxes below according to your own answers by referring to the scale indicated.

Strongly disagree	Disagree	Average	Agree	Strongly agree
-------------------	----------	---------	-------	----------------

1	2	3	4	5
---	---	---	---	---

No.	Subjects	1	2	3	4	5
1	Staff friendly and patient when taking order					
2	Staff attentive and available when you needed him/her					
3	Staff knowledgeable and able to answer any questions you had about menu or restaurant					
4	Food order was correct and complete					
5	Staff coordinate the timing of the courses well					

The Customer Satisfaction Influence Customer Loyalty Towards Fast Food Restaurant

Please tick (✓) only one of the appropriate boxes below according to your own answers by referring to the scale indicated.

Strongly disagree	Disagree	Average	Agree	Strongly agree
1	2	3	4	5

No.	Subjects	1	2	3	4	5
1	Menu variety					
2	Available of sauces, utensils, napkins, etc.					
3	Employees are friendly and courteous					
4	Quality of beverages					
5	Restaurant Cleanliness					

Section D:

Customer Loyalty

Please tick (✓) only one of the appropriate boxes below according to your own answers by referring to the scale indicated.

Strongly disagree	Disagree	Average	Agree	Strongly agree
1	2	3	4	5

No.	Subjects	1	2	3	4	5
1	My preference for the fast food restaurant I like would not willingly					

	change.					
2	It would be difficult to change my belief about the fast food restaurant.					
3	Even if close friends recommended another fast food restaurant, my preference for the favourite fast food restaurant would not change.					
4	I would repurchase from the favourite fast food restaurant next time.					
5	I intend to having meal in the favourite fast food restaurant.					

Thank you for your cooperation and times.

Have a nice day

Appendix B: Frequency Table

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	150	50.0	50.0	50.0
	Female	150	50.0	50.0	100.0
	Total	300	300	300	

Ethnic

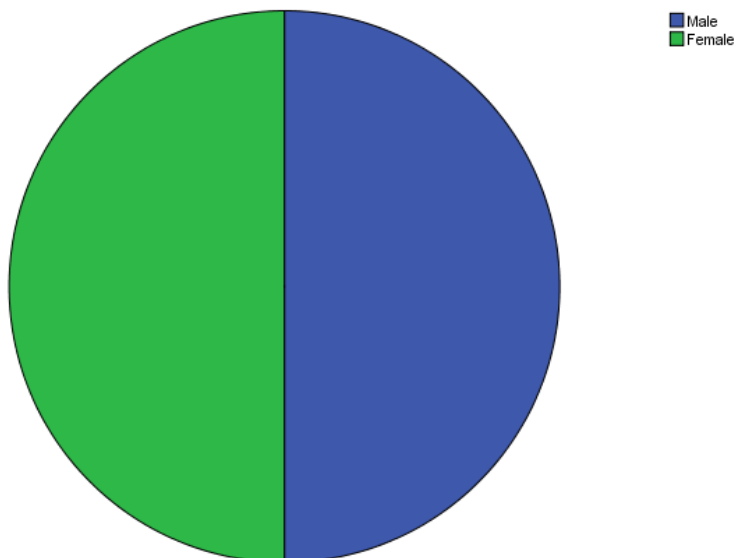
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Malay	108	36.0	36.0	36.0
	Chinese	150	50.0	50.0	86.0
	Indian	42	14.0	14.0	100.0
	Total	300	300	300	

Age

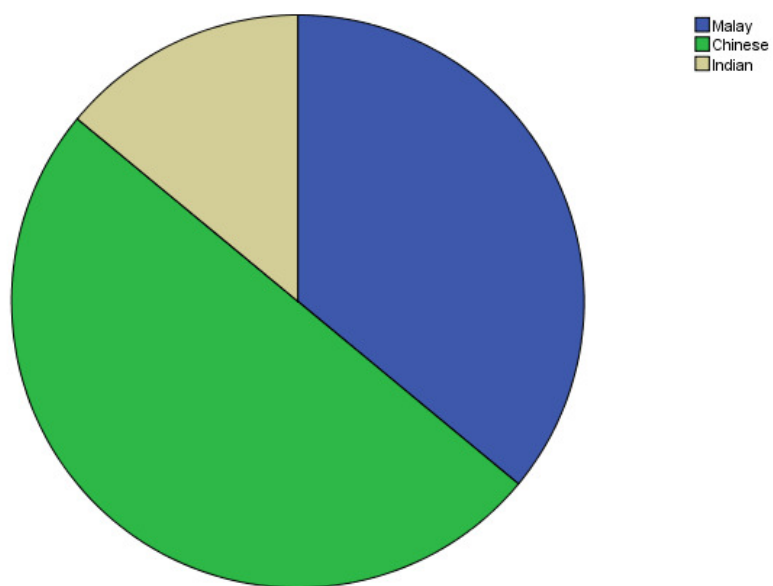
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-20	51	17.0	17.0	17.0

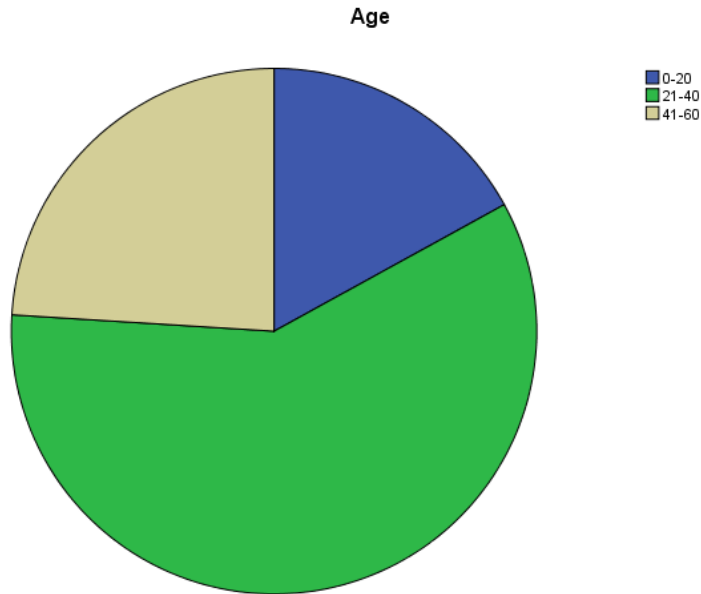
21-40	177	59.0	59.0	76.0
41-60	72	24.0	24.0	100.0
Total	300	300	300	

Gender



Ethnic





Which of following attributes most influence your decision to eat at fast-food restaurant?

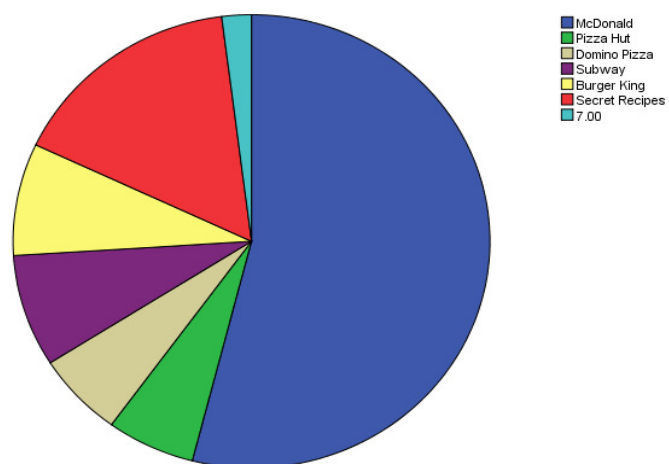
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Food Quality	126	42.0	42.0	42.0
Food/Menu Price	102	34.0	34.0	76.0
Location	12	4.0	4.0	80.0
Speed of Service	42	14.0	14.0	94.0
Ambience/Cleanliness	18	6.0	6.0	100.0
Total	300	300	300	

Which chain do you believe offers the most consistent and reliable quality from one restaurant to another?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid McDonald	162	54.0	54.0	54.0
Pizza Hut	18	6.0	6.0	60.0
Domino Pizza	18	6.0	6.0	66.0

Subway	24	8.0	8.0	74.0
Burger King	24	8.0	8.0	82.0
Secret Recipes	48	16.0	16.0	98.0
7.00	6	2.0	2.0	100.0
Total	300	300	300	

Which chain do you believe offers the most consistent and reliable quality from one restaurant to another?



Appendix C: Reliability (Service Quality)

Case Processing Summary

		N	%
Cases	Valid	300	100.0
	Excluded ^a	0	.0
	Total	300	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.747	.754	5

Item Statistics

	Mean	Std. Deviation	N
Staff Friendly and patient when taking order.	3.8900	.79003	300
Staff attentive and available when you needed him/her.	3.6500	.82112	300
Staff knowledgeable and able to answer any questions you had about menu or restaurant.	3.7100	.98775	300
Food order was correct and complete.	3.5800	.95537	300
Staff coordiante the timing of the courses well.	3.8800	.78212	300

Inter-Item Correlation Matrix

	Staff Friendly and patient when taking order.	Staff attentive and available when you needed him/her.	Staff knowledgeable and able to answer any questions you had about menu or restaurant.	Food order was correct and complete.	Staff coordiante the timing of the courses well.
Staff Friendly and patient when taking order.	1.000	.501	.334	.300	.420
Staff attentive and available when you needed him/her.	.501	1.000	.334	.390	.343

Staff knowledgeable and able to answer any questions you had about menu or restaurant.	.334	.334	1.000	.341	.347
Food order was correct and complete.	.300	.390	.341	1.000	.486
Staff coordiante the timing of the courses well.	.420	.343	.347	.486	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Staff Friendly and patient when taking order.	14.8200	6.674	.525	.333	.699
Staff attentive and available when you needed him/her.	15.0600	6.522	.535	.328	.695
Staff knowledgeable and able to answer any questions you had about menu or restaurant.	15.0000	6.222	.455	.207	.728
Food order was correct and complete.	15.1300	6.094	.516	.310	.702
Staff coordiante the timing of the courses well.	14.8300	6.607	.552	.335	.690

Appendix E: Reliability (Customer Satisfaction)

Case Processing Summary

		N	%
Cases	Valid	300	100.0
	Excluded ^a	0	.0
	Total	300	100.0

Case Processing Summary

		N	%
Cases	Valid	300	100.0
	Excluded ^a	0	.0
	Total	300	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.789	.792	5

Item Statistics

	Mean	Std. Deviation	N
Menu Variety.	3.5900	.90000	300
Available of sauces, utensils, napkins, etc.	3.5400	.94730	300
Employees are friendly and courteous.	3.4800	.97938	300
Quality of beverages.	3.4700	1.00960	300
Restaurant Cleanliness.	3.7500	.88048	300

Inter-Item Correlation Matrix

	Menu Variety.	Available of sauces, utensils, napkins, etc.	Employees are friendly and courteous.	Quality of beverages.	Restaurant Cleanliness.
Menu Variety.	1.000	.416	.283	.437	.634

Available of sauces, utensils, napkins, etc.	.416	1.000	.382	.345	.466
Employees are friendly and courteous.	.283	.382	1.000	.485	.422
Quality of beverages.	.437	.345	.485	1.000	.452
Restaurant Cleanliness.	.634	.466	.422	.452	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Menu Variety.	14.2400	8.285	.580	.447	.746
Available of sauces, utensils, napkins, etc.	14.2900	8.349	.522	.284	.764
Employees are friendly and courteous.	14.3500	8.250	.514	.317	.767
Quality of beverages.	14.3600	7.869	.567	.346	.750
Restaurant Cleanliness.	14.0800	8.014	.665	.497	.720

Appendix H: Descriptive Statistics (Service Quality)

Statistics

	Staff Friendly and patient when taking order.	Staff attentive and available when you needed him/her.	Staff knowledgeable and able to answer any questions you had about menu or restaurant.	Food order was correct and complete.	Staff coordiante the timing of the courses well.
N Valid	300	300	300	300	300
Missing	0	0	0	0	0
Mean	3.8900	3.6500	3.7100	3.5800	3.8800
Std. Deviation	.79003	.82112	.98775	.95537	.78212

Staff attentive and available when you needed him/her.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	48	16.0	16.0	16.0
	Average	27	9.0	9.0	25.0
	Agree	207	69.0	69.0	94.0
	Strongly Agree	18	6.0	6.0	100.0
	Total	300	100.0	100.0	

Staff knowledgeable and able to answer any questions you had about menu or restaurant.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	9	3.0	3.0	3.0
	Disagree	42	14.0	14.0	17.0
	Average	21	7.0	7.0	24.0
	Agree	183	61.0	61.0	85.0
	Strongly Agree	45	15.0	15.0	100.0
	Total	300	100.0	100.0	

Food order was correct and complete.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	63	21.0	21.0	21.0
	Average	36	12.0	12.0	33.0
	Agree	165	55.0	55.0	88.0
	Strongly Agree	36	12.0	12.0	100.0
	Total	300	100.0	100.0	

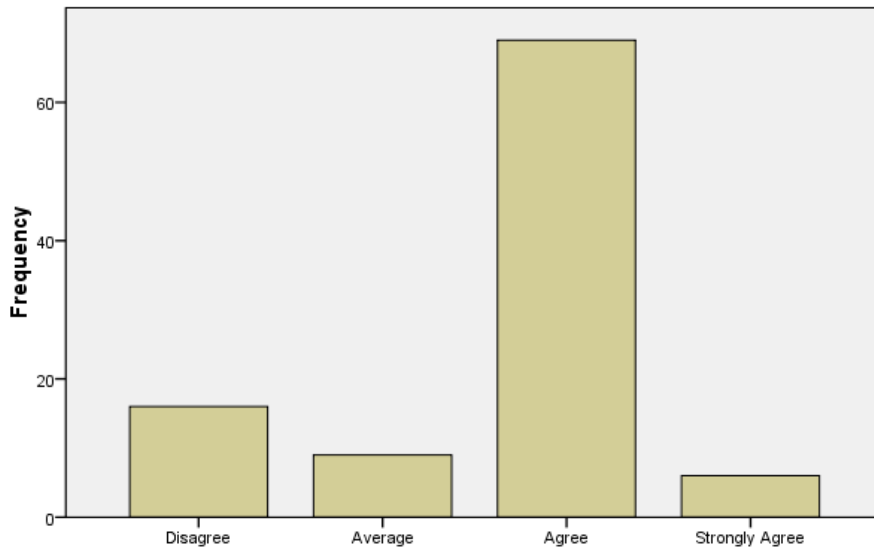
Staff coordiante the timing of the courses well.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Disagree	30	10.0	10.0	10.0
Average	21	7.0	7.0	17.0
Agree	204	68.0	68.0	85.0
Strongly Agree	45	15.0	15.0	100.0
Total	300	100.0	100.0	

Staff Friendly and patient when taking order.

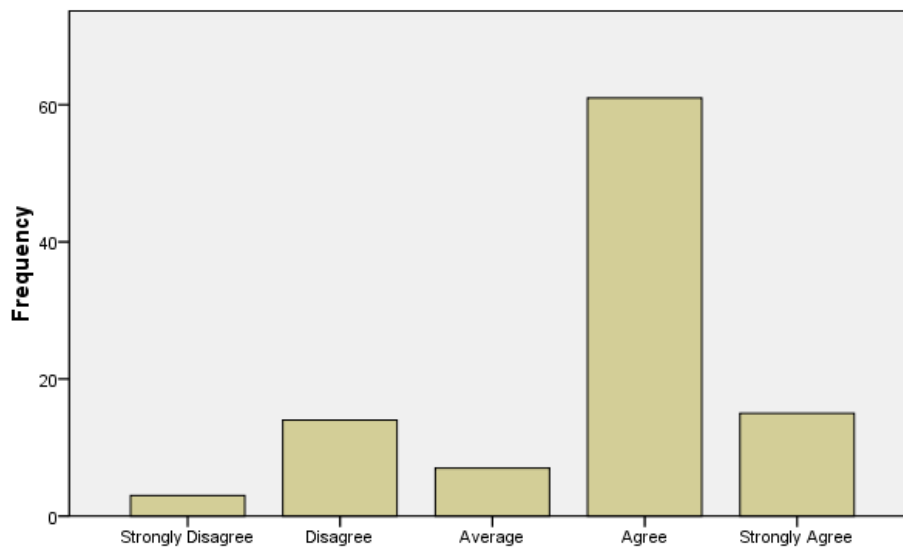


Staff attentive and available when you needed him/her.



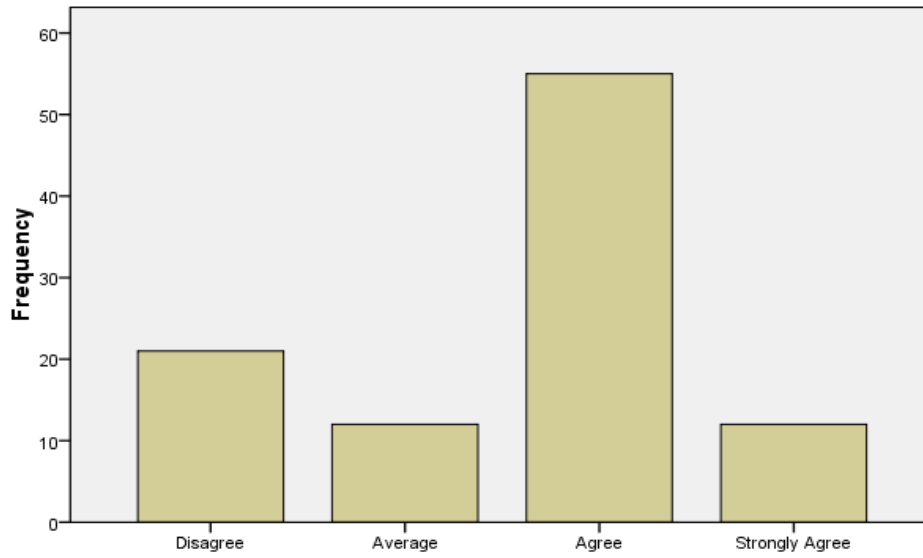
Staff attentive and available when you needed him/her.

Staff knowledgeable and able to answer any questions you had about menu or restaurant.



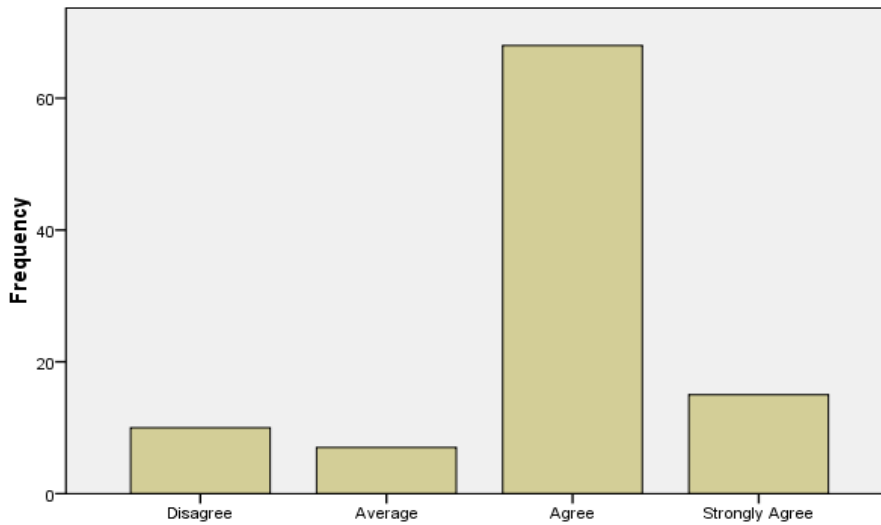
Staff knowledgeable and able to answer any questions you had about menu or restaurant.

Food order was correct and complete.



Food order was correct and complete.

Staff coordiante the timing of the courses well.



Staff coordiante the timing of the courses well.

Appendix J: Descriptive Statistics (Customer Satisfaction)

Statistics

		Available of sauces, utensils, napkins, etc.	Employees are friendly and courteous.	Quality of beverages.	Restaurant Cleanliness.
	Menu Variety.				

N	Valid	300	300	300	300	300
	Missing	0	0	0	0	0
Mean		3.5900	3.5400	3.4800	3.4700	3.7500
Std. Deviation		.90000	.94730	.97938	1.00960	.88048

Menu Variety.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	15	5.0	5.0	5.0
	Disagree	36	12.0	12.0	17.0
	Average	9	3.0	3.0	20.0
	Agree	237	79.0	79.0	99.0
	Strongly Agree	3	1.0	1.0	100.0
	Total	300	100.0	100.0	

Available of sauces, utensils, napkins, etc.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	6	2.0	2.0	2.0
	Disagree	60	20.0	20.0	22.0
	Average	18	6.0	6.0	28.0
	Agree	198	66.0	66.0	94.0
	Strongly Agree	18	6.0	6.0	100.0
	Total	300	100.0	100.0	

Employees are friendly and courteous.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	1.0	1.0	1.0

Disagree	81	27.0	27.0	28.0
Agree	201	67.0	67.0	95.0
Strongly Agree	15	5.0	5.0	100.0
Total	300	100.0	100.0	

Quality of beverages.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	12	4.0	4.0	4.0
Disagree	60	20.0	20.0	24.0
Average	21	7.0	7.0	31.0
Agree	189	63.0	63.0	94.0
Strongly Agree	18	6.0	6.0	100.0
Total	300	100.0	100.0	

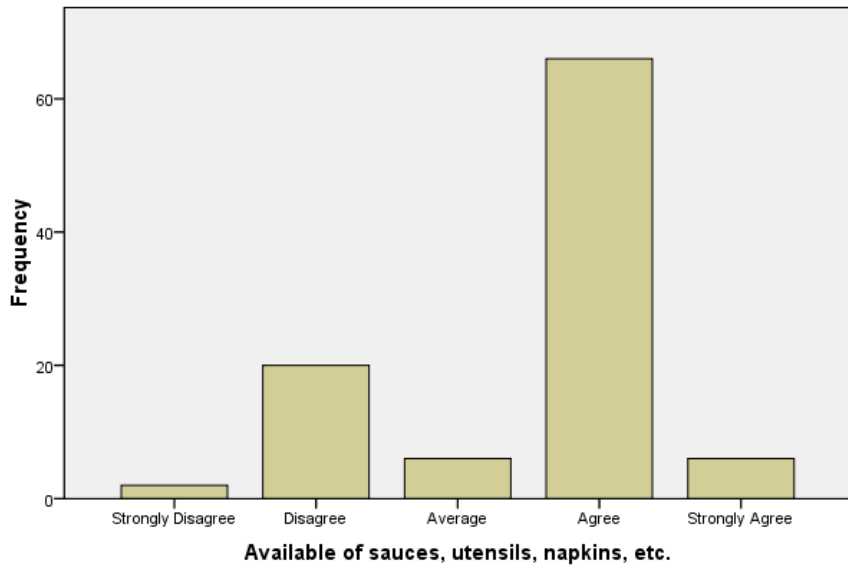
Restaurant Cleanliness.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	18	6.0	6.0	6.0
Disagree	15	5.0	5.0	11.0
Average	9	3.0	3.0	14.0
Agree	240	80.0	80.0	94.0
Strongly Agree	18	6.0	6.0	100.0
Total	300	100.0	100.0	

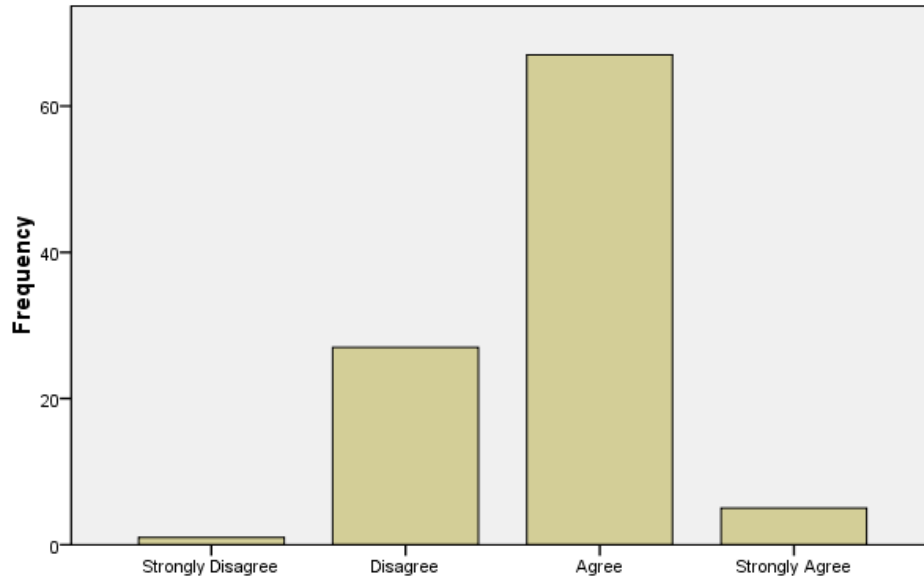
Menu Variety.



Available of sauces, utensils, napkins, etc.

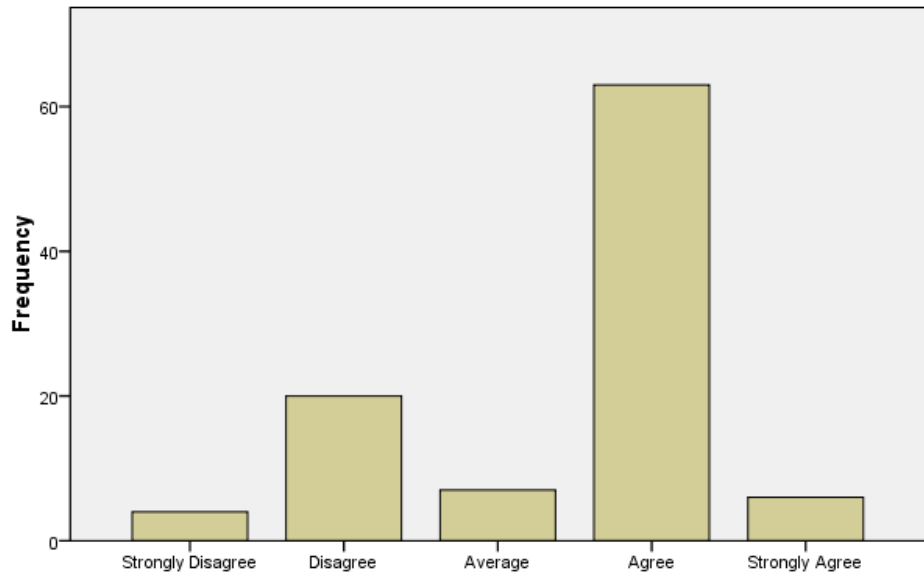


Employees are friendly and courteous.



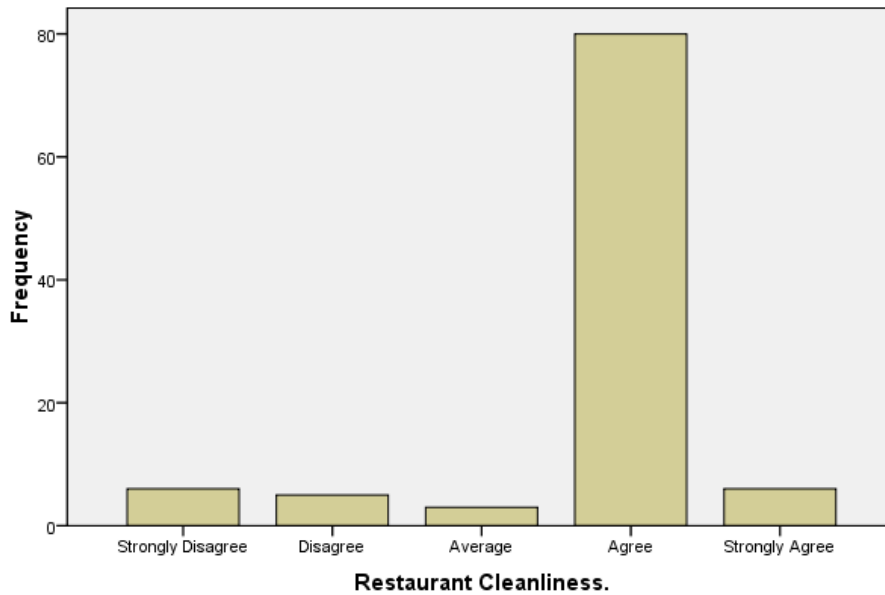
Employees are friendly and courteous.

Quality of beverages.



Quality of beverages.

Restaurant Cleanliness.

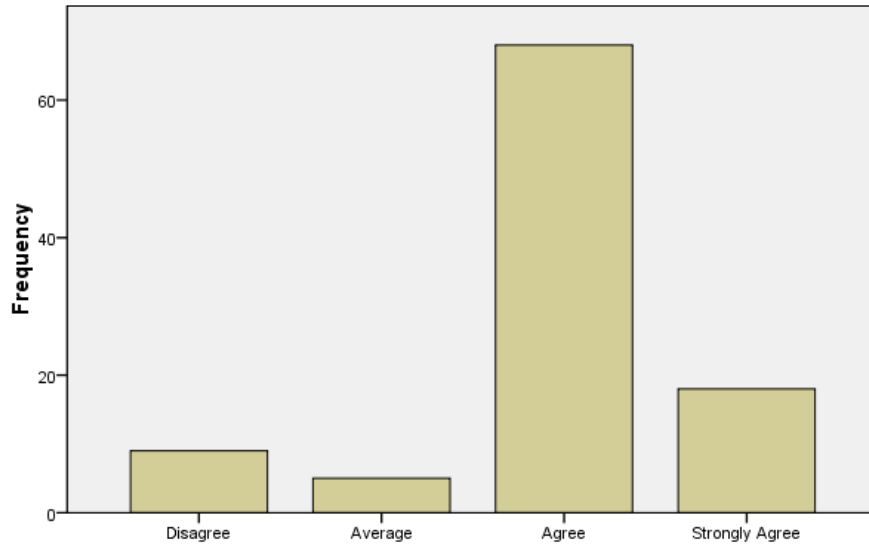


Appendix M: Descriptive Statistics (Customer Loyalty)

Statistics

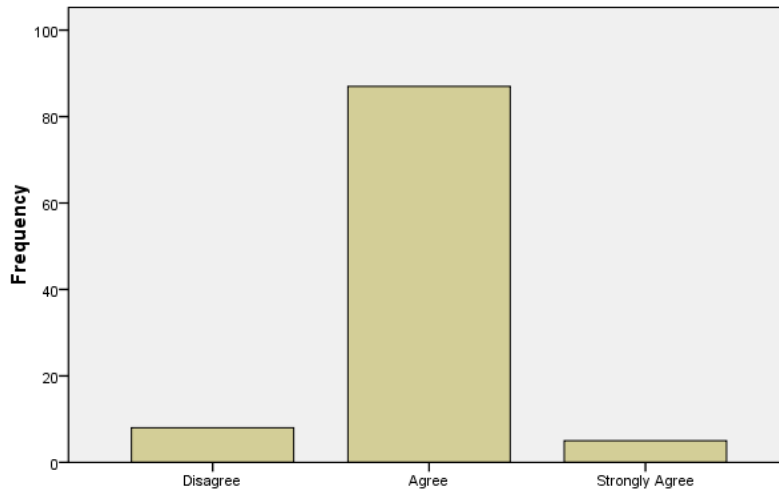
	My preference for the fast food restaurant I like would not willingly change.	It would be difficult to change my belief about the fast food restaurant.	Even if close friends recommended another fast food restaurant, my preference for the favourite fast food restaurant would not change.	I would repurchase from the favourite fast food restaurant next time.	I intend to having meal in the favourite fast food restaurant.
N Valid	300	300	300	300	300
Missing	0	0	0	0	0
Mean	3.9500	3.8900	3.8900	4.0400	4.0500
Std. Deviation	.77035	.60126	.76403	.75103	.74366

My preference for the fast food restaurant I like would not willingly change.



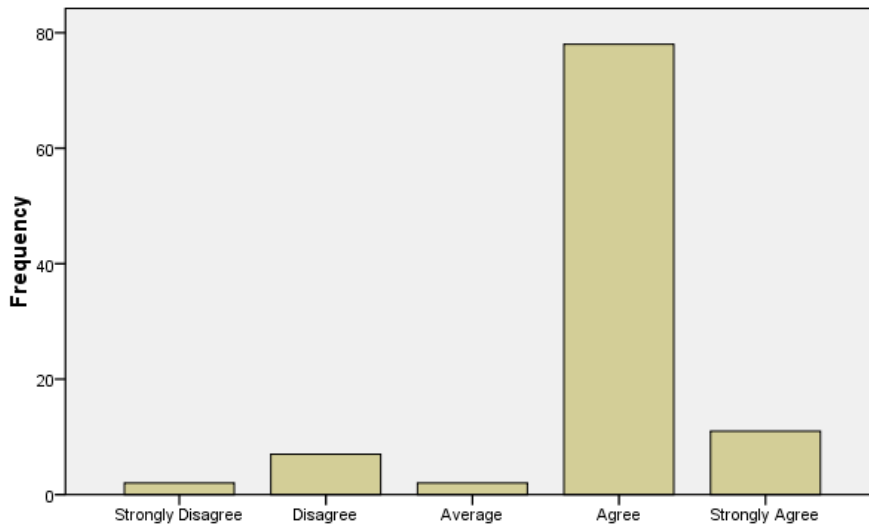
My preference for the fast food restaurant I like would not willingly change.

It would be difficult to change my belief about the fast food restaurant.



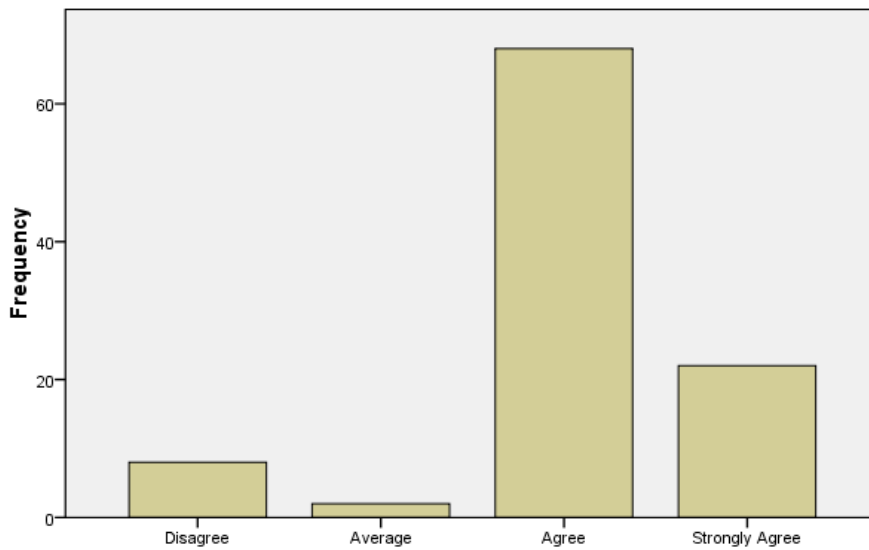
It would be difficult to change my belief about the fast food restaurant.

Even if close friends recommended another fast food restaurant, my preference for the favourite fast food restaurant would not change.



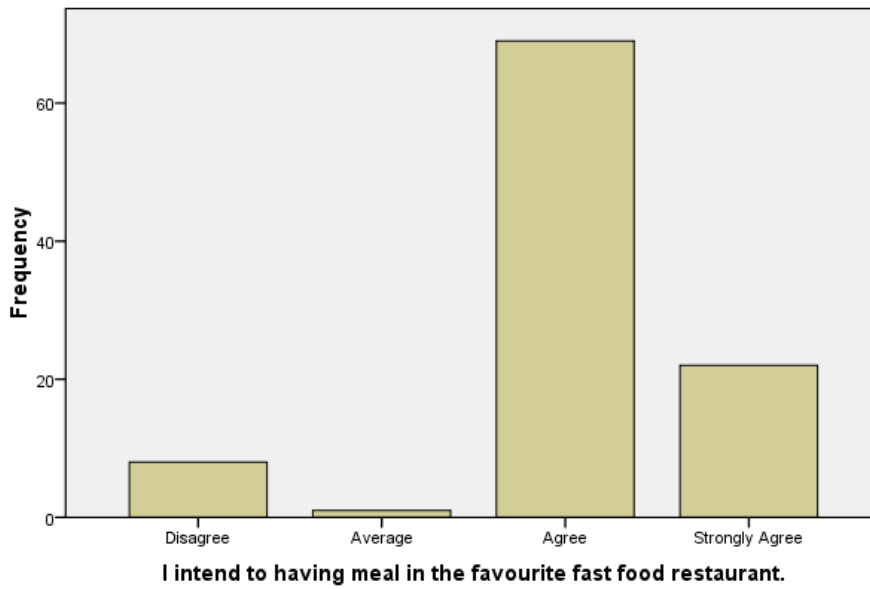
Even if close friends recommended another fast food restaurant, my preference for the favourite fast food restaurant would not change.

I would repurchase from the favourite fast food restaurant next time.



I would repurchase from the favourite fast food restaurant next time.

I intend to having meal in the favourite fast food restaurant.



Appendix N: Descriptive Statistics

Descriptive Statistics

	Mean	Std. Deviation	N
SQ	3.7420	.61450	300
CS	3.5660	.69576	300

		SQ	CS
SQ	Pearson Correlation	1	.363**
	Sig. (1-tailed)		.000
	N	100	100
CS	Pearson Correlation	.363**	1
	Sig. (1-tailed)	.000	
	N	300	300

IMPACT OF SUPERVISORY SUPPORT ON ORGANIZATIONAL COMMITMENT IN THE PRESENCE OF POWER DISTANCE: A QUANTITATIVE STUDY OF TEXTILE SECTOR OF FAISALABAD, PAKISTAN.

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Abstract

Supervisory support has been considered a vital element to create organizational commitment. Supervisors are the “human face” of the businesses. Better & supportive supervisors enable individuals to achieve organizational goals. The purpose of this study was to investigate the impact of supervisory support on organizational commitment with mediating role of power distance in the textile sector of Pakistan at Faisalabad. Total 250 questionnaires were distributed among five organizations, 203 were received back with 68 % response rate. Empirical results revealed that supervisory support has a positive relationship with organizational commitment. Theoretical and managerial implications along with research limitations have been discussed.

Key Words:

Supervisory support, Organizational Commitment, Power distance

1. Introduction

Supervisor’s support to the individuals is most important retention factor. Supervisors are the “human face” of the businesses. Better & supportive supervisors enable individuals to achieve organizational

goals as well as their own goals. Supervisors integrate as a link to perform function between declared objectives and potentials. Ontario, (2004) argued that supervisor support has very strong impact on the individuals and it can be believed that human resources depart bosses, not jobs.

Borstorff & Marker (2007) stated that individuals desire to have trust-full supervisors who should recognize them, appreciate them and deal with them in a fair manner. Insulting supervisors are really responsible for all the disagreements in several ways and cause a disturbance in individual's attitude, life, work and organization. In the dynamic world, organizations are working with diverse work force to achieve their goals. So it is the need of hour that they should develop strategies to hold the employees for long term.

Silbert (2005) argued that employees who are well trained and have an excellent status could discover alike work somewhere else but the effectual method to keep them is to persuade support and extend close working affiliation.

Organizations formulate many policies to retain the right people with them. These policies vary in nature in order to meet the requirements of individuals. Organizations should apply only the applicable retention plans. Employees vary in nature & values, so there is no universal strategy which fits to the all organizations; it is the matter of concern that human resource departments have to formulate the strategies keeping in view the variation in the individuals.

These factors include supervisory support, operational surroundings, job growth prospects and work-life steadiness on employee retention.

Organizations having turn over problems can't enjoy the accomplishment, until they handle this turnover crisis professionally and productively. One of the mainly significant aspects that have impact on job dedication is the affiliation between an employee and a supervisor. Presently different labor force is being utilized; hence a new level of correlation is noticed between the supervisor and the employee. Borstorff & Marker (2007) argued, workers desire reliable supervisors who recognize them, appreciate them and take care of them comparatively.

A lot of literature has been published on job retention through organizational commitment. Current practices of elevated employment intensity, most of the businesses suppose that equilibrium of control has been shifted from the employer to the employee since the spin over effect over the performance of the organization have not been managed well. Disproportionate turnover is often an indication of basic harms within the organization. It's seriously significant to keep hold of them; to do this, one must know how the worker can be retained in the particular corporation.

Organizational commitment has very dimensions. Employees prefer to be attached with any organization either because the organization satisfies their needs and uses their abilities

to an optimal level or because they just can't find another job that can be termed as continues commitment. Investigation of employee commitment has proved that employees have perception regarding their organizations that they are worthwhile for the organizations and it is considered as perceived organizational support (Eisenberger, Huntington, Hutchinson & Sowa, 1986).

Employee retention cannot be defined with a single definition. Simply it can be termed as retaining the good people. This retention depends upon the culture and way in which employees are treated. Various theorists have treated employee retention as controllable phenomena and organization can control it. Due to growing needs at both, organizational level and individual level, organizations have to formulate various strategies to retain employees in the businesses and even for the particular divisions. Employees can be retained for long term with the organizations by paying them in reasonable way. Other factor for retention is treatment of individuals with respect. Valuing employees as asset, praising their attempts; clearly communicate goals, responsibilities and expectations.

Cohen (2000) found the relationship between Hofstede's (1980) cultural dimensions and organizational commitment, while Geiger (1998) found the impact of cultural values on the escalation of commitment. These studies showed positive relationships between commitment and performance while Steers (1977) found a negative relationship. From the above studies, it is clear that organizational commitment has a potential impact on organizational performance. Thus, culture could enhance the level of organizational commitment and thereby ensure organizational success. Further, these factors have important implications to managers, who are the drivers of the organization

2. Review of literature

Leaders should provide support to their staff because in most of the cases "People Don't Leave Organization, People Leave Managers" (Jim Collins). Different people different approaches, few consider work environment as the top priority, few think they can be better performer if they are having good relationship as the team among themselves or with the bosses (Asmed, 2006). Wilson (1994) argued that the restricted acknowledgment is that type of recognition which one has to earn by his own hard work and which is gained by some sense of success of an action or result. When job of individuals becomes a source of satisfaction for them then they come closed to the employer.

Motivated and satisfied employees contribute their efforts to achieve organizational goals, show better workplace attitudes such as increased job involvement, reduced non- attendance and high retention with the organization. Supervisors can help individuals by providing support in the shape of formal and informal gratitude's. Individuals always response to praise, encouragement and support (Silbert, 2005). Supervisor confers employee's improvement, frequently outside the official assessment procedure. They assist workers to come across the accurate position in the organization, not just the next step on the

hierarchy (Freyermuth, 2007).

Many researchers analyzed that retaining employees is a key strategy to achieve financial success. The challenge might be increasing day by day. The organizations want to hold the valued employees. Organization needs to establish a realistic balance among the employee commitment and organizational performance. Considerable quantity of literature is accessible on job commitment.

Disproportionate or excessive workforce turnover is often a gauge of fundamental troubles within the company. It is seriously significant to keep hold of the employees. Many researchers analyzed that keeping workers is considered as a key approach to attain fiscal victory. This confrontation may be rising day by day; the organizations want to hold the valued workers.

Ever since this notion of organizational commitment was explained by Mowday et al., (1982) many researchers have tried to explore this phenomena. These researchers have tried to find out the different effects of organizational commitment on the behaviors of employees. Allen & Meyer, (1996) argued that organizational commitment is construct distinguishable in nature as compared with pleasure in the job, job participation, work- related obligation, turnover objectives.

Wiener (1982) defined organizational commitment as an approach to achieve the business targets. O'Reilly & Chatman, (1986) described organizational commitment as emotional affiliation felt by an individual for the company; it reflects the level to which a person involves personally with the business.

Allen & Meyer (1990) stated that individual emotional binding with the organization is known as organizational commitment. Meyer & Allen (1991) argued that organizational commitment has three key factors, emotional commitment and exciting attachment of individuals with the organization, persistence commitment, a wakefulness of the costs linked with departure from the organization and a sense of ethical responsibility with the business or the work place.

The difference in various approaches of commitment may be due to different reasons. In order to resolve the different ways of measuring commitment, Allen and Meyer (1990) suggested a three-component model of commitment (TCM). This three component model integrates different conceptualizations. Allen and Meyer, (1990) argued following components of commitment: (1) Affective; (2) Continuance (3) Normative. Component of affective commitment refers to emotional attachment of individuals, identification with, and involvement in, the organization. This attachment with the organization may be due to one's role in relation to the organizational goals and values, or to the organization for its own sake. The continuance commitment refers to commitment based on the costs which employee associate with leaving the organization. If the viable alternatives are few then the continuous commitment of the individuals will be very high. The 3rd component of three component model is normative commitment which refers to employees' feelings of obligation to remain with the organization. This type of

commitment will be influenced by an individual's experiences both prior to cultural socialization and following organizational socialization entry into the organization. For example, an employee would have strong normative commitment if one friend or family member had been a long-term employee of an organization, and emphasized the importance of organizational loyalty

Researchers of cross cultural studies have found that cultural affects the attachment of individuals with the organization. This affect is on the psychological attachment of employees. This psychological attachment leads towards the loyalty and commitment with the organizations. Employees on high power distance show an attachment with their supervisors as compared with the low power distance employees (Bochner & Hesketh,1994).

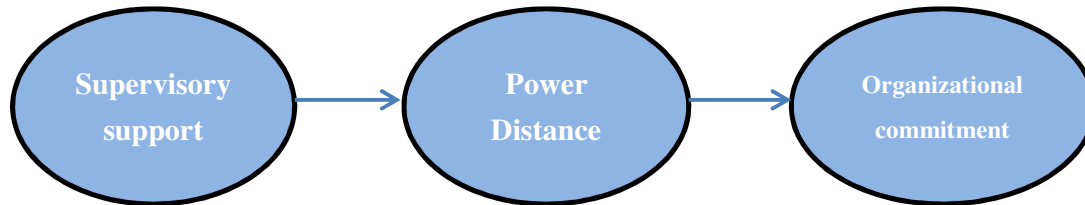
Hofstede, (1980) argued that power distance is the level to which a culture recognize an uneven sharing of power in the business or organizations within the hierarchy. The researcher divided his study on power distance into two, namely; high (countries in Latin America, Asia and Africa) and low (countries like the United States of America, Germany, Great Britain, Canada, France, Belgium, e.t.c.) power distance.

Subordinates under a high-power distance culture are highly dependents on the top management for direction and further suggested that employees manage their work according to what the managers stipulate (respect for hierarchy). In this case, the employees are more co-operative dealing with the superiors and are, frightened of disagreeing with them, but are reluctant to cooperate with their peers. Power distance shows the degree by which employees accept the unequal distribution of power in the organizations. Ripley & Ripley (1992) and Spatz (2000) stated that empowerment can enhance the responsibilities as well as motivation of employees in their routine work, improve satisfaction level, quality of services, employees loyalty and productivity by giving them self-respect that worth a lot and ultimately increases the productivity and quality of products and reduces the employee turnover.

Empowerment enables the managers to perform and help others working under them to achieve through successful work systems. This requires that management should take more responsibility to lead toward destiny with the intention to develop internal commitment. An individual's personal reasons and motivation are the factors that make him committed to a particular project, person or program and create internal commitment.

2.1 Hypothetical framework

Hypothetical framework for the study is as under:-



2.2 Hypothesis

From literature support followings hypothesis were formulated:-

H1: Supervisory Support has positive impact on organizational commitment.

H2: Power distance mediates the relationship between supervisory support and organizational commitment.

3. Methodology

Study was carried out among the workers of textile mills of Faisalabad, Pakistan. A total of 250 questionnaires were distributed, from which 203 were received back with response rate of 81 percent. Respondents include workers, junior, middle and senior level management staff. Descriptive statistics calculated for obtaining information normality. Means value describes the average response of workers whereas standard deviation shows the variation in responses against the mean value. Correlation and regression analysis have been used to test the nature and impact of relationship between independent, dependent and mediating variables. Data has been analyzed using SPSS 20.0. Reliability of the questionnaire has been measured and it was within the accepted range.

3.1 Instrument

Multiple factors affect the employee's intention to stay with the organization. Literature was investigated for finalization of instrument. Already established tools have been followed to develop the questionnaire. Likert scale ranging from 1-5 was used. Negative question were also the part of questionnaires so that respondents may answer in careful way. Questionnaire contains following sections:-

3.1.1 Section-1

The section-1 of instruments contains questions regarding gender, qualification, average age, and designation, length of service and department of respondents.

3.1.2 Section-2

The section-2 of instruments comprises upon the questions regarding supervisory support, power distance and organizational commitment.

3.1.2.1 Supervisory support

Supervisory support has been measured by various researchers in the history. For the purpose of this study Supervisory Relationship Questionnaire (SRQ) was adopted. This questionnaire was developed by Marina Palomo, (2004). Original version of this instrument contains total 67 questions with 6 sub scales at 7 point likert scale. Partial amendment was made and total 17 questions from this questionnaire were adopted for the study purpose. Responses were obtained on 5 point likert scale.

3.1.2.2 Power distance

Dorfman and Howell's (1988) cultural scale was used to measure the mediating role of power distance between the relationship of supervisory support and organizational commitment.

3.1.2.3 Organizational commitment

Allen and Meyer, (1991) 3 dimensional questionnaire was adopted to measure the organizational commitment. Affective, normative and continuance commitment component were measured through 24 items

3.3 Instrument Reliability

Cronbach's coefficient alpha was calculated to check the reliability of the instrument and the calculated values were in acceptable range.

4. Results

4.1 Descriptive statistics

4.1.1 Frequency distribution of the respondents

Description	Frequency	% Age
Designation		
Worker	93	45.8 %
Supervisors	55	27.1 %
Manager	54	26.6 %
Senior Manager	1	0.5 %
Length of service		
1-5 years	117	57.6 %
6-10 years	61	30.0 %
11-15 years	24	11.8 %
16-20 years	1	0.5 %
Gender		
Male	199	98.0 %
Female	4	2.0 %
Qualification		
Intermediate	65	32.0 %
Graduation	103	50.7 %
Master Degree	35	17.2 %
Average age of respondents		
20-25 Years	58	28.6 %
26-30 Years	76	37.4 %
31-35 Years	40	19.7 %
36-40 Years	19	9.4 %
Above 40 Years	10	4.9 %

Table 4.1.2 shows Mean, Standard Deviation and Cronbach's Alpha.

Descriptive Statistics.					
	N	Mean	Std. Deviation	No. of items	Alpha
Supervisory support	203	2.268	.196	17	.61
Organizational commitment	203	2.623	.157	24	.55
Power distance	203	3.43	.596	5	.72

4.2 Correlation Analysis

Table 4.2 shows the correlation analysis of independent, dependent & mediating variables

Correlations			
Variable	1	2	3
1 Supervisory support	1		
2 Organizational Commitment	.224 ^{***}	1	
3 Power distance	-.240 [*]	-.014 [*]	1

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

**. Correlation is significant at the 0.05 level (2-tailed).

*. Correlation is significant at the 0.10 level (2-tailed).

There is a positive correlation between supervisory support and organizational commitment. Whereas the relationship of power distance with supervisory support and organizational commitment found negatively correlated.

4.3 Regression analysis

Simple regression analysis has been used to test the impact of supervisory support on the organizational commitment. Simple and multiple regression techniques have been employed to investigate the mediating role of power distance. The impact of supervisory support on organizational commitment has been shown in table 4.3.1. ($R^2=0.05$, $F=10.590$, $Sig=0.01$). Positive value of coefficients of independent variable (β) explains the positive and significant relationship between supervisory support and organizational commitment.

Hence H1 accepted.

Table. 4.3.1 Regression Analysis: Supervisory support as independent variable

Dependent	Independent	β	t	Sig
Organizational commitment	Supervisory support	0.179	3.254	.001

4.4 Mediation analysis

There should be significant path between the supervisory support and power distance in order to claim the mediation. In the output of multiple regression analysis shown under table 4.3.2 the significance level is .309 which is above the required level of significance, hence the impact of mediating variable has not been proved at 5 % confidence level. So we have not sufficient evidence to accept the H2, hence H2 is rejected.

Table. 4.3.2 Regression Analysis: Power distance as mediating variable

Model	Dependent	Independent	β	t	Sig
1	Organizational commitment	Supervisory support	0.179	3.254	.001
2	Organizational commitment	Supervisory support Power distance	0.179 0.019	3.254 1.020	.001 .309

5. Discussion & Conclusion

Form the statistical analysis and empirical findings it has been found that supervisory support has an impact on the organizational commitment in the textile sector of Pakistan. The results are in connection with the findings of Greenhus, (1987) that when supervisors provide a support to the workers then workers are less likely to leave an organization and their commitment level increases. Value of R-Square (0.05) shows that supervisory support has an impact on organizational commitment but the magnitude of the impact is low. These results did not show strong relationship with the findings of Ontario (2004) that supervisor support has very strong impact on the individuals. The mediating role of power distance between the relationships of supervisory support was not proved. Results of hierarchal regression analysis showed that power distance remains insignificant in the presence of supervisor support.

5.1 Theoretical & managerial implications

By considering the above empirical findings and discussions it has been found that supervisory support has very little impact on the organizational commitment level of employees during the downtime and economic stress as the textile sector of Pakistan was facing energy crises. Further under these conditions the mediating role of power distance has also been found insignificant. These findings are against the theory of social exchange but these result may be the outcome of economic stress. It is recommended that organizations and managers have to formulate different strategies to maintain and retain the talented man power with them. During economic distress or financial crises supervisory support does not contribute too much towards organizational commitment and it can be said that employees want to work with the

organization due to economic stress or non-availability of opportunities in the market. Under these conditions financial rewards can help organizations to boost the motivation and satisfaction of the employees to enhance the organizational commitment level.

5.2 Limitations and suggestions for future research

The study has many limitations and due to this inconsistencies have been found with the previous studies. This variation in results may be due to the improper sample size and population. The study was conducted by considering only the textile mills of Faisalabad. Energy crises that Pakistan has been facing since many years may also be the fundamental reason for this variation. In future studies, other factors may also be considered and included in the model to the antecedent of organizational commitment.

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The Role of Online Service Quality in Enhancing Customer Satisfaction: An Empirical Investigation of Pakistani Banks

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ABSTRACT

The study is aimed at examining the dimensions of online service quality that affect the customer satisfaction. Data was collected through questionnaire from 100 respondents belonging to diverse professional backgrounds. Results of correlation and regression analysis portray that reliability, assurance of service, tangibles and transactions security have significant positive relationship with online service quality. Bearing in mind that online service quality has a substantial room for improvement in Pakistan; the results of this study uncover several practical implications. Online banking service providers shall strive to offer reliable and assured services to their customers. In addition, tangible infrastructural improvement and security of online transactions also plays a key role in enhancing the satisfaction level of the customer on their service provider. In the backdrop of intense competition in the banking and financial services industry, an efficient and effective service quality system can enable the banks to not only expand and grow more rapidly but also to sustain the existing customer base. By incorporating these online service quality dimensions into their quality policy, banks can improve their operating efficiency as well as can maximize satisfaction of their valued customers.

Key Words

Banking Industry, Online Service Quality, Customer Satisfaction

INTRODUCTION

Service sector has experienced enormous changes mainly due to the various forces influencing this sector. The major factor behind this shift is the advancement in technology. Furthermore, opportunities in the market are increasing with the conception of new products and services, which further add to the importance of developing more information and customer-focused business and management processes. Electronic banking and online payment techniques are opening doors of new opportunities for banks to introduce new and innovative financial products. This technological advancement is expected to shape a new and efficient banking system. Technology facilitate institutions to provide banking products and services employing advance delivery channels to consumers in a more economical and convenient way without compromising the existing service level. The use of internet has witnessed a rapid growth in all walks of life. It has also brought in a number on new opportunities of doing business for all types of users.

In the context of online transactions, Awad (2000) presented four e-commerce activities that are performed by the internet users that are banking, shopping, online electronic payment for internet services and investing. To perform all these activities the customer requires a banking relationship. Massive growth of the Internet is providing new ways of interaction with the consumer for businesses. SERVQUAL developed by Zeithaml (1988) is the most commonly used model for accessing the customer satisfaction. The fast growth in communication technology has enabled firms to introduce advanced services. Internet banking is new addition in the existing portfolio of services. Based on these developments it is valuable area of research to analyze that what factor are considered important by the customer in making an evaluation of the technology based services. In this new era of internet based home banking the bank will have to adopt new ways for maintaining relationship with customers.

Numerous researchers have focused upon the relationship among the service quality and the customer satisfaction in different types of businesses. Internet banking is a modernized and dynamic field therefore the dimensions used to measure conventional aspects of service quality is not directly applicable upon e-banking. Therefore previously conducted studies have adopted various dimensions to measure electronic service quality. The widely used elaboration of electronic or website service quality is “the degree to which a web site assists purchasing, effective and efficient shopping and delivery of product or services (Siu and Mou, 2003). Also e-service quality was regarded as the second most important factor, involving empathy, follow-up, quick response, and assurance (Awad, 2000). A range of studies have identified important dimensions of service quality in the conventional banking but comparatively less attention is devoted to service quality dimensions in the internet banking industry and its impact on customer satisfaction (Jun and Cai, 2001). Fewer empirical studies are conducted in the context of Pakistan to understand this phenomenon of online service quality.

REVIEW OF LITERATURE

From Pakistan’s perspective, (Naeem, Akram, and Saif 2009) conducted a comparative study to discover the effect of service quality on satisfaction level of customers in foreign and public sector banks of

Pakistan. Sample includes two hundred respondents. Most of the constructs used to measure the service quality was taken from the SERVQUAL model developed by Zeithmal. The results of regression analysis demonstrated that quality of services has a positive and significant impact upon customer satisfaction in case of foreign banks but the impact was insignificant in case of public sector banks of Pakistan. The finding revealed that effectively managed service quality can make a significant contribution toward customer satisfaction.

To investigate the similar phenomenon in telecom sectors (Ahmed et al. 2010) examined the customer satisfaction with the SMS services rendered by telecom organizations. The dimensions used to gauge the service quality include reliability, responsiveness, assurance, empathy and tangibles. The sample size included 331 SMS service users. Correlation and regression analysis indicated a positive relationship between dimensions of service quality and customer satisfaction.

However the impact of online service quality on customer satisfaction in Pakistani banking sector was analyzed by (Zafar et al. 2011). The dimensions used to measure online service quality included Reliability, Responsiveness, Efficiency, Privacy, Assurance and Fulfillment. The sample size consisted of 264 respondents. The results of the empirical analysis revealed that online service quality enhances customer satisfaction. So bank must strive for improved web service quality to achieve customer satisfaction. (Herington and Weaven 2009) explored the relationship between e-service quality and satisfaction of customers. The sample involved 200 Australian respondents who were regularly using online banking services. The e-service quality dimensions used in the study were personal needs, site organization, user friendliness and efficiency. The result of factor analysis and regression analysis indicated that these dimensions of online service quality significantly enhance customer satisfaction except efficiency that was not found to be a predictor of customer satisfaction.

(Ganguli and Roy 2011) conducted a study to investigate the impact of technology based dimensions of banking service quality on customer satisfaction and customer loyalty. Service quality dimensions identified in the study were customer service, technology convenience, technology security and information quality, easiness in the usage of technology and reliability. The result suggested that customer service and usage of technology easiness and reliability have significant positive impact on both customer satisfaction and customer loyalty.

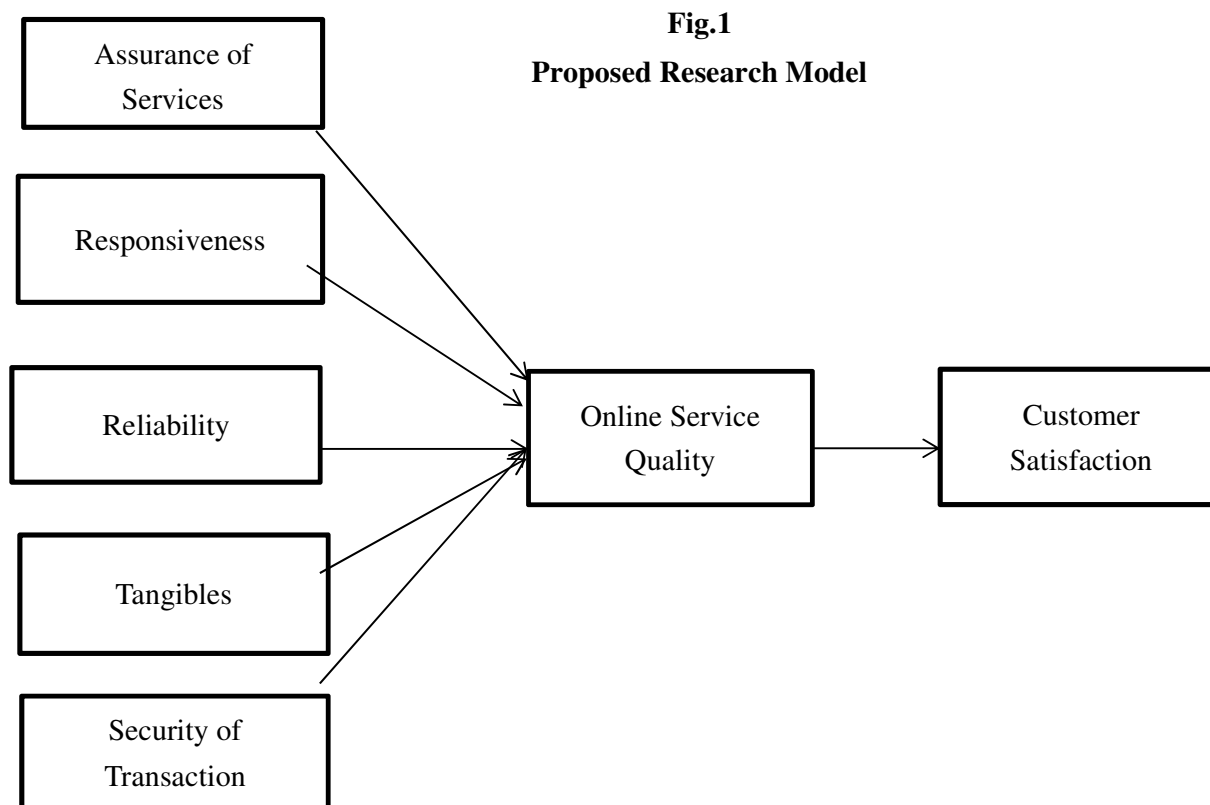
(Rod, Ashill, Shao, and Carruthers 2009) examined the relationship among three service quality dimensions that influence overall service quality of internet banking and their subsequent impact on customer satisfaction in the context New Zealand banks. The result shown a significant relationship among online customer service quality, banking service product quality, online information system quality, overall service quality of internet banking and customer satisfaction. (Herington and Weaven 2007) explored the impact of online service quality on the delight level of customers and in customer relationship development. The empirical results revealed that quality of online services has no effect on

customer happiness but it has a noteworthy relationship with e-loyalty.

(Kadir, et al., 2011) conducted a study on “Impacts of service quality on customer satisfaction: Study of Online banking and ATM services in Malaysia”. Service quality dimensions were taken from SERVQUAL model introduced by (Zeithaml, et al., 1996) and from E-SERVQUAL Model (Zeithmal, et al., 2002). 11 quality dimensions such as Truth worthiness, quick response, accessibility, comfortable navigation, flexibility, efficiency, security, assurance, design of the site, information about price and customization were considered from E-SERVQUAL Model and 5 quality dimensions such as tangibles, reliability, responsiveness, empathy and assurance from SERVQUAL Model. E-SERVQUAL Model was implemented on online banking system. 3 out of 11 dimensions from E-SERVQUAL Model such as responsiveness, customization and flexibility had no accordance with customers’ needs. So anchor banks were suggested to work on these areas so that customers’ needs could be fulfilled. 2 out of 5 dimensions from SERVQUAL Model such as tangibles and responsiveness were observed unable to respond according to customers’ needs. These dimensions were related to ATM services. So improvement was required regarding these dimensions so that customers’ needs could be satisfied.

Theoretical Framework

Based on the review of related studies following theoretical frame work emerges.



Indication of Independent Variable and Dependent Variable

Online service quality is being treated as independent variable and customer satisfaction as dependent variable. The dimensions such as reliability, responsiveness, security of transaction, tangibles and assurance of services are used to measure the satisfaction level of the customers with online service quality.

Development of Hypothesis

A comprehensive insight into the literature led to the development of following hypothesis.

Hypothesis 1: Reliability has significant and positive relationship with online service quality.

Hypothesis 2: Responsiveness has significant and positive relationship with online service quality.

Hypothesis 3: Assurance of services has significant and positive relationship with online service quality.

Hypothesis 4: Tangibles has significant and positive relationship with online service quality.

Hypothesis 5: Security of transaction has significant and positive relationship with online service quality.

Hypothesis 6: Online service quality has significant and positive relation with customer satisfaction.

DATA & METHODOLOGY

The section below provides the comprehensive detail about data collection and data analysis methods.

Data Collection Methods

The study adopted a survey questionnaire method to obtain primary data from the target respondents. Online service quality dimensions and items presented E-SERVQUAL model of Zeithmal (2002) were taken as benchmark and modifications were made with context to Pakistan. Like security of transaction and tangibles justify their place into the online service quality model. To ensure whether items were measuring the same dimension, Cronbach Alpha technique was applied to check the Reliability of the instrument. Population for this study was the online banking service users. Because of the time and financial constraints 100 online banking service users were taken as a sample. Information from sample was taken from two districts of Pakistan that are Sahiwal and Okara. Convenience sampling technique was used because bank managers did not show their willingness to share the information of online users with the researcher due to privacy concern. The sampling surrounds all those persons using the online banking services

Data Analysis Methods

SPSS 20 was used for statistical analysis of the surveyed data. Personal information of online users was depicted through percentages. Reliability of the questionnaire was examined using Cronbach Alpha.

Correlation analysis was used to check how much the dimensions of online service quality, online service quality and customer satisfaction are correlated with one another. Regression analysis was used to measure the impact of the dimensions of online service quality on customer satisfaction levels.

Result of Analysis

The section below presents the results of analysis involved in this study.

Table I. Reliability Analysis

No.	Dimension	Items	Cronbach Alpha
1	Reliability	3	0.753
2	Responsiveness	3	0.827
3	Assurance of services	3	0.780
4	Tangibles	3	0.721
5	Transaction security	3	0.802
6	Online service quality	3	0.732
7	Customer Satisfaction	3	0.740

The results of reliability analysis provide strong empirical evidence in favor of the reliability of the instrument as the value of Cronbach Alpha was more than 0.7 for all the items covering several dimensions of online service quality.

Descriptive Statistics

Results of demographic characteristics of respondents were shown in percentage in the following tables.

Table II. Income of the Respondents

Income	Frequency	Percent
BELOW 15,0000	33	22.0
FROM 15,000 TO 29,999	34	22.7
FROM 30,000 TO 44,500	18	12.0
FROM 45,000 TO 59,999	23	15.3

60,000 OR ABOVE	28	18.7
PREFER NOT TO DISCLOSE	10	6.7
Total	146	97.3
Total	150	100.0

Table III. Profession of the Respondents

Profession	Frequency	Percent
STUDENT	61	40.7
TEACHER	35	23.3
BANKER	14	9.3
LAWYER	17	11.3
GOVT.SERVANT	7	4.7
GENERAL OFFICE WORKER	2	1.3
ADMINISTRATOR	2	1.3
PROPERTY DEALER	1	.7
ACCOUNTANT	2	1.3
PURCHASE OFFICER	1	.7
LIBRARIAN	1	.7
MARKETING OFFICER	1	.7
EMPLOYER	1	.7
Total	150	100.0

Table IV. Qualification of the Respondents

Qualification	Frequency	Percent
Uneducated	10	6.7
Attended School	7	4.7
Attended College	16	10.7

Bachelor	64	42.7
MS/M.PHIL	37	24.7
PhD	9	6.0
7.00	4	2.7
Total	147	98.0
Missing	3	2.0
Total	150	100.0

Scatter plot

	Reliability	Responsiveness	Assurance	Tangibles	Security	Overall
RELIABILITY	1	.655**	.725**	.442**	.654**	.654**
		.000	.000	.000	.000	.000
	149	149	148	148	147	147
RESPONSIVENESS	.655**	1	.775**	.407**	.692**	.683**
	.000		.000	.000	.000	.000
	149	149	148	148	147	147
A.O.SERVICES	.725**	.775**	1	.492**	.659**	.781**
	.000	.000		.000	.000	.000
	148	148	149	148	148	147
TANGIBLES	.442**	.407**	.492**	1	.556**	.562**
	.000	.000	.000		.000	.000
	148	148	148	149	147	147
TRAN.OF.SECURITY	.654**	.692**	.659**	.556**	1	.734**
	.000	.000	.000	.000		.000
	147	147	148	147	148	146
O.S.QUALITY	.654**	.683**	.781**	.562**	.734**	1
	.000	.000	.000	.000	.000	
	147	147	147	147	146	148
C.SATISFACTION	.606**	.637**	.709**	.508**	.621**	.720**
	.000	.000	.000	.000	.000	.000
	146	146	146	146	145	147

Before applying the correlation analysis it is important to know the type of relationship between the variables. Scatter plot was drawn to judge which correlation technique was appropriate amongst the Pearson correlation Kendall’s tau-b co-efficient or Spearman correlation. Results of scatter plot indicated that their exist almost linear relationship between online service quality and customer satisfaction. So, Pearson correlation co-efficient was calculated.

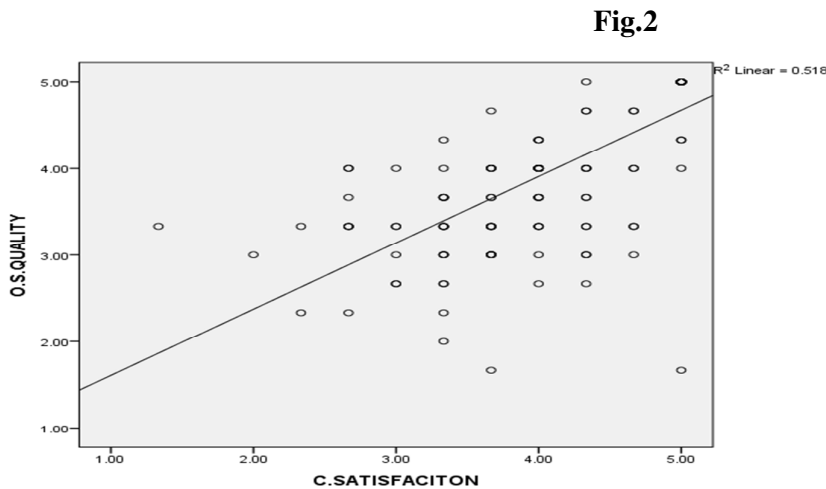


Table V. Correlation Analysis

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

The above table presents the results of correlation analysis. The table indicated the correlation coefficient among the dimensions of online service quality. However, the important part of the analysis includes the correlation of each of online service quality dimension with the perceived customer satisfaction. It is interesting to note that most of the service quality dimensions positively and significantly correlate to the other online service quality dimensions. These results suggests that these service quality is an interconnected phenomenon and the online service providers must consider the linkages between the one dimension of service quality on the counterparts to boost customer satisfaction. More importantly, Significant values in all cases present a very strong case on the existence of the relationship between online service quality and customer satisfaction in banking sector of Pakistan.

Regression Analysis

Before applying the regression analysis, Durbin-Watson test was applied to avoid the consequences arising from serial correlation. Value of Durbin-Watson test for our regression model was found within the limit that was 2.014 suggesting that there was no autocorrelation problem in the data.

Table VI. Regression Model

Item	Proposed Effect	Beta Co-efficient	Observed t-Statistic	P-Value
Online Service Quality (Adjusted R Square= 0.719)				
H1: Reliability	+	0.112	1.897	0.060
H2: Responsiveness	+	.067	0.989	0.324
H3: Assurance of Services	+	0.353	5.272	0.000
H4: Tangibles	+	0.127	1.907	0.059
H5: Security of Transaction	+	0.264	3.335	0.001
Customer Satisfaction (R Square= 0.518)				
H6: Online Service Quality	+	0.676	3.554	0.000

The results of regression analysis provides strong support to our hypothesis suggesting that the dimensions of online service quality employed in this study have a significant explanatory power to explain positive variations in customer satisfaction. All the dimensions of online service quality have a significant positive effect on customer satisfaction except responsiveness. Moreover, reliability and tangibles was found to be significant at 10% level; however this is acceptable in social sciences. Security of the transaction and assurance was found highly significant as demonstrated by the t-statistics and corresponding p-values. In addition the whole of online service quality based on all the dimensions used in this study have positive relationship and results are significant at 1%. The adjusted R square of the regression model is 71.9% which indicate that the model is quite robust. These empirical findings infer that online service quality dimensions are very important and bank management shall emphasize on these dimensions to offer superior online services to their customers.

CONCLUSION & FUTURE RESEARCH DIRECTIONS

The empirical findings of this study provide several conclusions. Firstly, in the backdrop of fast paced technological advancements, banks are striving for providing efficient online services to create a base of

satisfied and loyal customers. Firstly, banks need to improve their tangible infrastructure in order to avoid breakdowns and ensure hazard free services to their clients. To ensure this they need to increase investment on the purchase of latest technology. Secondly, banks shall strive for providing a good security mechanism to secure the private information of the online customers. Additionally, customer service staff shall adopt such attitudes that instill reliability and assurance in their customers. The significant positive relationship of online service quality dimensions as well as overall service quality highlights the importance of these factors in online service organizations. Managers can create positive value for their organizations as well as outperform their competitors by focusing on these online service quality dimensions. Further researches in this area shall take some other dimensions of service quality like transactional charges, timeliness of the transaction and convenience of using online services to check their effect on customer satisfaction.

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Impact of Working Capital Management on Firm Profitability: An Empirical Study of ITC Ltd.

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Mr. Titto Varghese²

Abstract

The efficient management of working capital plays a crucial role in the successful functioning of a firm. . Firm should always keep monitoring the liquidity position as it projects the company's credit image. Lack of liquidity can create a bad image among the parties interested in the firms functioning. Also firm must ensure that there should be a proper balance between current assets and current liabilities , as it can affect the profitability of the firm. For making the analysis of Liquidity-profitability relationship of ITC, ratio analysis techniques of Financial Management have been used.

By observation of this it can be seen that even though the profitability position was strong, the liquidity position of ITC is not up to the ideal level. The short term solvency position of the firm must be strengthened so that it is able to meet its obligations timely. These things facilitate the maximization of the wealth of the firm. From this study it can be concluded that there is a significant difference in the profitability & liquidity position of the company because it has been seen that the profitability position was strong were as the liquidity position was not satisfactory. The risk factor of the firm is high as compared to profitability. The total risk of the firm is also high as compared to the ROCE, which was not worthwhile for the future prospects of the firm.

Key Words: *Liquidity, Profitability, Risk, Current ratio, Net Working Capital, ROCE, Risk-return Trade Off*

JEL Code: G31, G32

Concept

The Management of Fixed assets and Current assets has a great impact on future return and risk of the company. Managing fixed assets will help the concern in long term decisions. The current assets are the assets which can be used by the company to meet their short term obligations. Working capital refers to the firm's investment in short term assets i.e. cash, short-term securities, debtors etc. it is the fund needed to meet the day-to-day expenses. So it is vital ingredient to the business as the blood is to the human body.

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There are two concepts of working capital: Gross Working Capital and Net Working Capital. The former means the firm's investment in current assets and later the excess of current assets over the current liabilities. Since the elements of working capital are short term in nature constant monitoring must be done for proper management. Working capital can also be defined as the working expenses that get blocked in current assets along the productive line of an enterprise. The Net Working Capital is that liquidity which takes care of the working expenses.

The working capital requirement of a firm will depend upon its operating cycle. It is a cycle having a continuous series of steps for conversion of sales into cash. The working capital is required maintaining its liquidity in day-to-day operation to ensure it's smooth running and meets its obligation (Eljelly, 2004). Yet, this is not a simple task since managers must make sure that business operation is running in efficient and profitable manner. There are the possibilities of mismatch of current asset and current liability during this process. If this happens and firm's manager cannot manage it properly then it will affect firm's growth and profitability. This will further lead to financial distress and finally firms can go bankrupt.

Working Capital management

A firm should maintain adequate level of working capital to meet the current obligations to maintain uninterrupted business operation. Firm should always keep monitoring the liquidity position as it projects the company's credit image. Lack of liquidity can create a bad image among the parties interested in the firms functioning. Also firm must ensure that there should be a proper balance between current assets and current liabilities , as it can affect the profitability of the firm. Greater investment in idle current assets can result in decrease in profitability.

So the goal of working capital management is to ensure that the firm is able to continue its day-to-day operations and it has the sufficient ability to satisfy its present and future short term expenses. There should be proper proportion between the level of current assets and current liability. So an efficient working capital management will enable the concern to maintain a good balance between the liquidity and profitability. Ezra Solomon states that " liquidity measures a company`s ability to meet expected as well as unexpected requirement of cash to expand its assets, reduce its liabilities and cover up an operating losses".

Risk-Return trade off

Every financial Decision has different degree of risk. Return and Risk are directly proportional, as a higher degree of risk can lead to higher return and vice-versa. Risk return trade off in an enterprise can be sustained by maintaining a proper balance between liquidity and profitability. Liquidity in a firm represents the amount of investment in current assets and profitability the productivity of these current assets. Higher investment in unproductive current assets can lead to decrease in profitability. Working capital is to achieve desired trade off between liquidity and profitability (Smith 1980; Rehman & Nasr, 2007). Referring to theory of risk and return, Investment with more risk will result to more return. Thus, Firm's with high liquidity of working Capital many have to low risk then low Profitability. Conversely, Firm that has low liquidity of working capital ,facing high risk results to high Profitability. The issue here

is in managing working capital, Firm must take into consideration all the items in both accounts and try to balance the risk and return. So a proper management of Net Working Capital will ensure a good risk-return proportion.

Justification of the Topic

Proper management of working capital is required to ensure that the firm is able to continue its day-to-day operations and it has the sufficient ability to satisfy its present and upcoming short term expenses. The working capital position helps the investors, creditors, bankers, suppliers, financial institutions, government etc. judge the stability of the enterprise. The financial institutions and individuals may be interested in investing in that company which is financial strong to meet its present and upcoming short term expenses. Well maintained working capital will help to create good creditors image, avoid unwanted borrowing, healthy government support etc. An efficient working capital management will only help a firm to compete in the present global market. Working capital is the life blood and nerve centre of business. Just as circulation of blood is essential in the human body for maintaining life, working capital is very essential to maintain the smooth running of the business. No business can run successfully without an adequate amount of working capital. Working capital plays a vital role in the impact of the business. So there exist a number of implication and gaps for enquiry into working capital management of companies; against this background a study was conducted on the Working Capital position of ITC Limited.

Objectives of Study

This study has the following objectives:-

- i. To analyze the Working capital position of ITC Ltd.
- ii. To analyze the effect of liquidity on profitability
- iii. To analyze the effect of risk on profitability.
- iv. To give suggestions on the basis of findings of the study.

Hypotheses of the Study

This study is based on the following null hypotheses (H_0):

- i. There is no significant difference between liquidity and profitability of ITC during the period of study.

- ii. There is no significant difference between risk and profitability of ITC during the period of study.

Company profile

ITC was incorporated on August 24, 1910 under the name Imperial Tobacco Company of India Limited. As the Company's ownership progressively Indianised, the name of the Company was changed from Imperial Tobacco Company of India Limited to India Tobacco Company Limited in 1970 and then to I.T.C. Limited in 1974. In recognition of the Company's multi-business portfolio encompassing a wide range of businesses - Cigarettes & Tobacco, Hotels, Information Technology, Packaging, Paperboards & Specialty Papers, Agri-business, Foods, Lifestyle Retailing, Education & Stationery and Personal Care - the full stops in the Company's name were removed effective September 18, 2001. The Company now stands rechristened '[ITC Limited](#)'.

The office on Radha Bazar Lane, Kolkata, was the centre of the Company's existence. The Company's headquarter building, 'Virginia House', which came up on that plot of land two years later, would go on to become one of Kolkata's most venerated landmarks. Though the first six decades of the Company's existence were primarily devoted to the growth and consolidation of the Cigarettes and Leaf Tobacco businesses,

In 1975 the Company launched its Hotels business with the acquisition of a hotel in Chennai which was rechristened 'ITC-Welcomgroup Hotel Chola'. In 1979, ITC entered the Paperboards business by promoting ITC Bhadrachalam Paperboards Limited, which today has become the market leader in India. In 1985, ITC set up Surya Tobacco Co. in Nepal as an Indo-Nepal and British joint venture. Since inception, its shares have been held by ITC, British American Tobacco and various independent shareholders in Nepal. In 1990, ITC acquired Tribeni Tissues Limited, a specialty paper manufacturing company and a major supplier of tissue paper to the cigarette industry. In 1990, leveraging its agri-sourcing competency, ITC set up the Agri Business Division for export of agri-commodities.

In 2000, ITC forayed into the Greeting, Gifting and Stationery products business with the launch of Expressions range of greeting cards. A line of premium range of notebooks under brand "Paperkraft" was launched in 2002. In 2008, ITC repositioned the business as the Education and Stationery Products Business and launched India's first environment friendly premium business paper under the "Paperkraft" Brand. ITC also entered the Lifestyle Retailing business with the Wills Sport range of

international quality relaxed wear for men and women in 2000. The Wills Lifestyle chain of exclusive stores later expanded its range to include Wills Classic formal wear (2002) and Wills Clublife evening wear (2003). ITC also initiated a foray into the popular segment with its men's wear brand, John Players, in 2002.

With all these achievements ITC is the biggest FMCG player with a turnover of Rs. 29605.58 Crores in the financial year 2012-13

Review of Literature

Gul, Khan, Rehman, Khan, Khan and Khan (2013) investigated the influence of working capital management (WCM) on performance of small medium enterprises (SMEs) in Pakistan. The duration of the study was seven years from 2006 to 2012. The data used in this study was taken from SMEDA, Karachi Stock Exchange, tax offices, company itself and Bloom burgee business week. The dependent variable of the study was Return on Assets (ROA) which was used as a proxy for profitability. Independent variables were Number of Days Account Receivable (ACP), Number of Day's Inventory

Almazari (2013) investigated the relationship between the working capital management(WCM) and the firms' profitability for the Saudi cement manufacturing companies. The sample included 8 Saudi cement manufacturing companies listed in the Saudi Stock Exchange for the period of 5 years from 2008-2012. Pearson Bivariate correlation and regression analysis were used. The study results showed that Saudi cement industry's current ratio was the most important liquidity measure which effected profitability, therefore, the cement firms must set a trade-off between these two objectives so that, neither the liquidity nor profitability suffers. It was also found, as the size of a firm increases, profitability increased. Besides, when the debt financing increased, profitability declined. Linear regression tests confirmed a high degree of association between the working capital management and profitability.

Akoto, Awunyo- Vitor and Angmor (2013) analyzed the relationship between working capital management practices and profitability of listed manufacturing firms in Ghana. The study used data collected from annual reports of all the 13 listed manufacturing firms in Ghana covering the period from 2005-2009. Using panel data methodology and regression analysis, the study found a significant negative relationship between Profitability and Accounts Receivable Days. However, the firms' Cash Conversion Cycle, Current Asset Ratio, Size, and Current Asset Turnover significantly positively influence profitability. The study suggests that managers can create value for their shareholders by creating incentives to reduce their accounts receivable to 30 days. It is further recommended that, enactments of local laws that protect indigenous firms and restrict the activities of importers are eminent to promote increase demand for locally manufactured goods both in the short and long runs in Ghana. Omesa, Maniagi, Musiega and Makori (2013) examined the relationships between Working Capital Management and Corporate Performance of manufacturing firms listed on the Nairobi securities exchange. A sample of 20 companies whose data for 5 years from 2007-2011

Sharma and Kumar (2011) examined the effect of working capital on profitability of Indian firms. They collected data about a sample of 263 non-financial BSE 500 firms listed at the Bombay Stock (BSE) from 2000 to 2008 and evaluated the data using OLS multiple regression. The results revealed that working capital management and profitability is positively correlated in Indian companies. The study further reveals that inventory of number of days and numbers of day's accounts payable are negatively correlated with a firm's profitability, whereas number of days accounts receivables and cash conversion period exhibit a positive relationship with corporate profitability.

Raheman, Afza, Qayyum and Bodla (2010) analyzed the impact of working capital management on firm's performance in Pakistan for the period 1998 to 2007. For this purpose, balanced panel data of 204 manufacturing firms was used which are listed on Karachi Stock Exchange. The results indicate that the cash conversion cycle, net trade cycle and inventory turnover in days are significantly affecting the performance of the firms. They concluded that manufacturing firms were in general facing problems with their collection and payment policies. Moreover, financial leverage, sales growth and firm size also had significant effect on the firm's profitability. They study recommended that effective policies must be formulated for the individual components of working capital.

Mathuva (2010) in his study on the influence of working capital management on corporate profitability found that there exists a highly significant negative relationship between the time it takes for firms to collect cash from their customers and profitability. He explained that the more profitable firms take the shortest time to collect cash from the customers. The study further revealed that there exist a highly significant positive relationship between the inventory conversion period and profitability. It was explained that firms, which maintain sufficiently high inventory levels reduce costs of possible interruptions in the production process and loss of business due to scarcity and products. Finally, the study established that there exists a highly significant positive significant positive relationship between the average payment period and profitability. He held that the longer a firm takes to pay its creditors, the more profitable it is. In this study, a sample of 30 firms listed on Nairobi Stock Exchange for the periods 1993 to 2008 was used. Both the ported OLS and the fixed effects regression models were used.

Gill, Biger and Mathur (2010) analyzed the relationship between working capital management and profitability of 88 American firms listed on New York Stock Exchange for a period of 3 years from 2005 to 2007 was selected. The data was analyzed using Pearson Bivariate Correlation Analysis and Weighted Least Squares (WLS) Regression techniques. They found statistically significant relationship between the cash conversion cycle and profitability, measured through gross operating profit. It followed that managers can create profits for their companies by handling correctly the cash conversion cycle and by keeping accounts receivables at an optimal level.

Bonamyong (2005) highlighted that a company with a lower cash conversion cycle is more efficient because it turns its working capital over more times in a year, which means it generated more sales per unit of money invested in working capital management.

Garcia-Teruel and Martinez-Solano (2007) in their Study demonstrated that managers can create value by reducing their inventories and shortening the number of days for which their accounts are outstanding. Gupta (2010) observed that better working capital can significantly help companies improve their growth

rates vis-à-vis competitors and ultimately increase the wealth of their share holders.

Research Design & Methodology

In this study the sample company named ITC has been taken for analysis of Working Capital position. Present study is based on secondary data i.e. published annual reports of the company. These financial data's are edited, classified and tabulated as per the requirements of the study. This study has covered 13 years data's from 2002 to 2014 for analyzing the Working Capital position of ITC Ltd.

The Liquidity and Profitability position have been measured to analyze the Working Capital position of ITC. The collected data have been analyzed by the various ratios for finding liquidity and profitability. For assessing the behavior of above ratios, Spearman's Rank Correlation Co-efficient and Student t-test has been used.

Limitation of the Study

The following are the limitation of the study:

1. The study covers only 13 years period i.e. 2001-2002 to 2013-2014 for the Working Capital analysis of ITC Ltd.
2. The secondary data's used in this study have been taken from published annual reports only.
3. As per the requirement and necessarily some data's have been grouped and sub-grouped.
4. For making the analysis of Working Capital position of ITC Ltd, some ratio analysis techniques of financial management have been used.

Analysis of Working Capital Management of ITC Ltd

Liquidity

Working Capital Position

Gross Working Capital and Net Working Capital. The former means the firm's investment in current assets and later the excess of current assets over the current liabilities. The excess of current assets over the current liabilities provides measures of safety margin available against uncertainty in realization of current assets and flow of funds.

Table-I

Statement Showing Net Working Capital Position			(` In Crores)
Year	Current Assets(`)	Current Liabilities (`)	Net Working Capital (`)
2001-2002	3077.61	2130.51	947.10

2002-2003	3487.73	2720.38	767.35
2003-2004	3485.35	3532.71	-47.36
2004-2005	3539.29	3033.82	505.47
2005-2006	5161.90	3578.07	1583.83
2006-2007	6289.72	3857.59	2432.13
2007-2008	7019.27	4432.3	2586.97
2008-2009	8161.11	4705.01	3456.10
2009-2010	8127.92	8049.08	78.84
2010-2011	10183.97	8562.78	1621.19
2011-2012	14443.57	9101.83	5341.74
2012-2013	17591.47	10330.73	7260.74
2013-2014	20928.73	11504.32	9424.41
Arithmetic Mean	8576.74	5810.70	2766.04
Avg Annual Growth Rate (%)	44.62	33.84	68.85
S.D (σ)	5758.82	3216.88	2916.17

Source :Annual reports of ITC Ltd (2001-2002 to 2013-2014)

Interpretation

Table 1 Shows the working capital position of the concern. During the period of study working capital showed a fluctuating tendency. The highest value of working capital `9424.41 Crores was in last year 2013-14 and least of `78.84 Crores in 2009-10. During the year 2003-04 working was negative with value of ` - 47.36 Crores. The Gross Working capital of the firm had a mean value of ` 8576.74 Crores. Gross Working Capital was highest in 2013-14 and least in 2001-02 with values of ` 20928.73 Crores and `3077.61 Crores. The Current liability of the firm was highest in 2013-14 with ` 11504 Crores and least in 2001-02 with `2130.51 Crores. The Gross working capital had an average annual growth rate of 44.62% and standard deviation of 5758.82. The Net working capital of the firm had an average annual growth rate of 68.85% and a high standard deviation of 2916.17.

Current Ratio

Liquidity ratio is defined as the ratio of current assets to current liabilities. It is an index of technical solvency and an index of the strength of the working capital. A high current ratio is an assurance that a firm will have adequate funds to pay current liabilities and other current payments. It can be calculated as follows:

$$= \frac{\text{Current Assets}}{\text{Current liabilities}}$$

Table II
Statement Showing Current Ratio (` in Crores)

Year	Current Assets (`)	Current Liabilities (`)	Current Ratio (Times)
2001-2002	3077.61	2130.51	1.44
2002-2003	3487.73	2720.38	1.28
2003-2004	3485.35	3532.71	0.99
2004-2005	3539.29	3033.82	1.17
2005-2006	5161.90	3578.07	1.44
2006-2007	6289.72	3857.59	1.63
2007-2008	7019.27	4432.3	1.58
2008-2009	8161.11	4705.01	1.73
2009-2010	8127.92	8049.08	1.01
2010-2011	10183.97	8562.78	1.19
2011-2012	14443.57	9101.83	1.59
2012-2013	17591.47	10330.73	1.70
2013-2014	20928.73	11504.32	1.82
Arithmetic Mean	8576.74	5810.70	1.43
Avg Annual Growth Rate	44.62	33.84	2.03
S.D (σ)	5758.82	3216.88	0.28

Source :Annual reports of ITC Ltd (2001-2002 to 2013-2014)

Interpretation

Table 2 Shows the current ratio as a measure of liquidity position. During the period of study it was observed that current ratio had a current ratio of above 1, The Highest ratio of 1.82 times was observed in the year 2013-14 and the least of 0.99 in the 2003-2004. The current assets and current liabilities showed an increasing trend throughout the study. The Average annual Growth rate of Current assets and Current liabilities was 44.62% and 33.84% respectively. The Current Ratio showed an increasing

trend with an average ratio of 1.43 times with an average annual growth rate of 2.03%. The standard deviation of the ratio was low with a value of Rs. 0.28.

Liquid Ratio or quick ratio:

It is the ratio which shows the relationship between liquid assets and current liabilities. It firm's capacity to pay its obligation at time of emergency situation. The ideal ratio is 1:1 Times. The ratio can be expressed as given below:

$$= \frac{\text{Liquid Assets}}{\text{Current liabilities}}$$

Where Liquid Assets= Current Assets - (Stock +Prepaid Expenses)

Table No. III

Statement of Liquid Assets to Current liabilities (₹ in Crores)

Year	Liquid Assets (₹)	C L (₹)	Liquid ratio (Times)
2001 – 2002	1897.34	2130.51	0.89
2002 – 2003	2235.51	2720.38	0.82
2003 – 2004	1951.14	3532.71	0.55
2004 – 2005	1536.3	3033.82	0.51
2005 – 2006	2525.61	3578.07	0.71
2006 – 2007	2935.69	3857.59	0.76
2007 – 2008	2968.75	4432.3	0.67
2008 – 2009	3561.39	4705.01	0.76
2009 – 2010	3578.85	8049.08	0.44
2010 – 2011	4916.44	8562.78	0.57
2011 – 2012	8805.74	9101.83	0.97
2012 - 2013	10991.27	10330.73	1.06
2013 - 2014	13569.19	11504.32	1.18
A.M. (\bar{x})	4728.71	5810.70	0.76
Avg Annual Growth Rate	47.32	33.84	2.50
S.D (σ)	3873.21	3216.88	0.22

Source :Annual reports of ITC Ltd (2001-2002 to 2013-2014)

Interpretation

The Above table shows the liquidity ratio of the firm during the period of study. The ratio had the highest value of 1.18 times in the year 2013-14 and the least of 0.44 times in 2009-10. During the period of study this ratio also observed a fluctuating tendency. The liquid assets of the firm were highest in 2013-14 and

least in 2001-02 with values of ₹13569.19 Crores and ₹1536.30 Crores respectively. The liquid assets had an average value of ₹4728.71 Crores with an average annual growth rate of 47.32%. The liquidity ratio had an average value of 0.76 times with an average annual growth rate of 2.50%. The standard deviation of the ratio was very low with a value of 0.22.

Cash Position Ratio.

It shows how much of total assets is kept in the form of cash is revealed through this ratio. How much per rupee of total assets is kept in the form of cash. Higher the ratio shows less risk, but lower rate of return as cash by itself does not earn profit. The ratio can be denoted as given below:

$$= \frac{\text{Cash + Cash Equivalents}}{\text{Total Assets}}$$

Table: IV

Statement of Cash to Total Assets (₹ in Crores)

Year	Cash & Equivalents (₹)	TA(₹)	Cash position Ratio (Times)
2001 – 2002	44.21	6964.49	0.006
2002 – 2003	378.84	8266.56	0.046
2003 – 2004	34.04	15231.05	0.002
2004 – 2005	55.66	11550.88	0.005
2005 – 2006	855.82	13084.04	0.065
2006 – 2007	900.16	14968.4	0.060
2007 – 2008	570.25	17249.47	0.033
2008 – 2009	1032.39	19484.83	0.053
2009 – 2010	1126.28	23006.18	0.049
2010 – 2011	2243.24	25433.82	0.088
2011 – 2012	2818.93	28988.2	0.097
2012 - 2013	3615	34017.43	0.106
2013 - 2014	3289.37	39229.39	0.08
A.M. (\bar{x})	1304.94	19805.75	0.05
Avg Annual Growth Rate	564.64	35.64	99.81

S.D (σ)	1261.00	9865.03	0.03
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Source :Annual reports of ITC Ltd (2001-2002 to 2013-2014)

Interpretation

The above table shows the cash generating capacity of the total assets of the firm. Cash position ratio also showed similar fluctuating tendency like the above ratios. It had a mean value of 0.05 times with an average annual growth rate of 131.17%. The highest ratio of 0.106 times was observed in 2012-13 and least of 0.002 in 2003-04. The firm maintained the highest cash of `3289.37 Crores in 2013-14 and the least of `34.04 in 2003-04. Cash had an average value of `1304.94 Crores with an average annual growth rate of 564.64%. The Total Assets of the firm had a mean value of `19805.75 Crores with an average annual growth rate of 35.64%. Total Assets of the firm was highest in 2012-13 and least in 2001-02 with values of `39229.39 crores and `6964.49 Crores. The ratio had a very low degree of standard deviation with value of 0.03.

Working Capital Turnover ratio

This ratio reveals the overall picture of the operational capital necessary for maintaining a level of its sales. Higher ratio indicates quick conversion of working capital into sales. Also greater the ratio, shorter is the working capital cycle and better is working capital management. It can be expressed as follows:

$$= \frac{\text{Annual Sales}}{\text{Average Working Capital}}$$

Table: V

Statements of Annual Sales to Working Capital (₹ in Crores)

Year	Avg Annual Sales (₹)	Working Capital (₹)	Working Capital Turnover ratio (Times)
2001 – 2002	9259.43	947.10	9.78
2002 – 2003	10432.49	767.35	13.60
2003 – 2004	8747.66	-47.36	-184.71
2004 – 2005	7054.945	505.47	13.96
2005 – 2006	8714.99	1583.83	5.50
2006 – 2007	11079.92	2432.13	4.56
2007 – 2008	13158.42	2586.97	5.09
2008 – 2009	14667.82	3456.10	4.24
2009 – 2010	16770.65	78.84	212.72

2010 – 2011	19660.39	1621.19	12.13
2011 – 2012	22983.01	5341.74	4.30
2012 – 2013	27202.01	7260.74	3.75
2013 - 2014	32882.56	11504.3	2.86
A.M. (\bar{x})	15770.56	2926.03	8.29
Avg Annual Growth Rate	19.63	85.75	-5.44
S.D (σ)	8308.42	3338.40	81.28

Source :Annual reports of ITC Ltd (2001-2002 to 2013-2014)

Interpretation

The above table shows the sales generated per amount of working capital of the firm. This Ratio also showed a fluctuating tendency during the period of study. The Ratio had an average value of 8.29 times with a negative average annual growth rate of -5.44%. Net Working Capital turnover ratio observed the highest value of 212.72 times in 2009-10 and least of -184.71 times in 2003-04. The highest average sales of `32882.56 Crores was in 2013-14 and the least of `8714.99 Crores in 2005-06. Average annual sales had a mean value of `15770.56 Crores with an average annual growth rate of 19.63%. The Ratio had a high standard deviation of 81.28.

ANALYSIS OF LIQUIDITY, PROFITABILITY AND RISK USING SPEARMAN'S RANK CORRELATION AND STUDENT T-TEST

Spearman's rank correlation is the relationship between different rankings of the same set of items. A rank correlation coefficient measures the degree of similarity between two rankings, and can be used to assess its significance.

$$r = 1 - \frac{6 \sum D^2}{n(n^2 - 1)}$$

Where D= R1-R2, R= Rank

Student t – Distribution is a small test used for testing of hypotheses of sample size less than 30. If the calculated value of t is less than the table value. The null hypotheses will be accepted and vice-verse; for a given significance level. It can be calculated as follow:

$$t = \frac{r}{\sqrt{1 - r^2}} \times \sqrt{n - 2}$$

Where r = Spearman's Rank Coefficient of Correlation

n = No. Observation

Liquidity & Profitability Analysis of ITC using Student t-test

Profitability

It indicates the percentage of return in the business. A high Return on Investment shows the company is having a higher rate of profit as percentage of capital employed. It is calculated as follows:

$$= \frac{\text{Operating Profit}}{\text{Capital Employed}} \times 100$$

Table VI
Statement Showing Profitability
(Rs in Crores)

Year	Total Assets(TA)	Current Liabilities (CL)	Capital Employed (TA-CL)	Operating Profit (₹)	ROCE(%)
2001-2002	6964.49	2130.51	4833.98	1851.62	38.30
2002-2003	8266.56	2720.38	5546.18	2091.21	37.71
2003-2004	15231.05	3532.71	11698.34	2348.25	20.07
2004-2005	11550.88	3033.82	8517.06	2720.82	31.95
2005-2006	13084.04	3578.07	9505.97	3284.97	34.56
2006-2007	14968.4	3857.59	11110.81	3935.33	35.42
2007-2008	17249.47	4432.3	12817.17	4589.04	35.80
2008-2009	19484.83	4705.01	14779.82	4854.12	32.84
2009-2010	23006.18	8049.08	14957.10	6088.31	40.71
2010-2011	25433.82	8562.78	16871.04	7326.48	43.43
2011-2012	28988.2	9101.83	19886.37	8975.45	45.13
2012-2013	34017.43	10330.73	23686.70	10770.65	45.47
2013-2014	39229.39	11504.32	27725.07	11554.89	41.67
A.M. (\bar{x})	19805.75	5810.70	13995.05	5414.70	37.16
Avg Annual Growth Rate	35.64	33.84	36.43	40.31	0.88
S.D (σ)	9865.03	3216.88	6754.08	3307.78	6.81

Source : Annual reports of ITC Ltd (2001-2002 to 2013-2014)

Interpretation

During the period of study the operating profit ratio showed an increasing tendency except in the first two years. The operating profit ratio had the highest value of 45.47% in 2012-13 and the least of 20.07% in 2003-04. The operating profit ratio had a mean value of 37.16 % with an average annual growth rate of 1.56%. The Standard Deviation of the ratio was moderate with a value of 0.88. The firm employed the highest amount of capital `27725.07 Crores in 2013-14 and least of `4833.98 Crores in 2001-02. The Capital employed of the firm had a mean value of Rs. 13995.05 Crores with an average annual growth rate of 36.43%.

Relation between Liquidity and Profitability

Testing of Ist Null Hypothesis

Table VII
Statement for Calculation of Correlation

Year	Current Ratio	R1	ROCE	R2	D=(R1-R2)	D ²
2001-2002	1.44	8	38.30	6	2	4
2002-2003	1.28	9	37.71	7	2	4
2003-2004	0.99	13	20.07	13	0	0
2004-2005	1.17	11	31.95	12	1	1
2005-2006	1.44	7	34.56	10	3	9
2006-2007	1.63	4	35.42	9	5	25
2007-2008	1.58	6	35.80	8	2	4
2008-2009	1.73	2	32.84	11	9	81
2009-2010	1.01	12	40.71	4	8	64
2010-2011	1.19	10	43.43	3	7	49
2011-2012	1.59	5	45.13	2	3	9
2012-2013	1.70	3	45.47	1	2	4
2013-2014	1.82	1	41.67	5	4	16
						270

Source : Annual reports of ITC Ltd (2001-2002 to 2013-2014)

Interpretation

The current ratio is used as an indicator of liquidity and ROCE as for measuring profitability. The Spearman's rank coefficient of correlation(r) between Current Ratio and ROCE has been shown for which the relevant formula has been used. The test used for determining significance of r is "t" test. The Spearman's rank coefficient of correlation (r) between ROCE & Risk Factor has been calculated. The "t" test is applied for determining significance of r . Then computed value of 't' has been compared with the tabulated value of 't'.

In the above table $r = 0.24$ and value of $t = 0.895$. The table value of 't' at 5% level of significance for 11 degrees of freedom (Where $n=13$) is equal to 2.22. Since the computed value of t is less than the table value the null hypothesis (H_0) is accepted.

Profitability & Risk analysis of ITC

The risk associated with the concern can be calculated by the following method:

$$R_k = \frac{(E + LTL) - FA}{CA}$$

Where R_k = risk

E = Equity + Reserve % Surplus

L = Long term loan

FA= Fixed Assets

CA= Current assets

In the aggressive approach the current assets are financed by short term sources and in case of conservative approach the current assets are financed by both long term and short term sources. The risk faced by the firm can be measured with the above formula

Table VIII**Statement Showing Risk****(Rs in Crores)**

Year	Equity + Reserve & Surplus (E)Rs	Long term Loans (L) Rs	Fixed Assets (FA) Rs	Current Assets (CA) Rs	Risk (R_k) %
2001-2002	4413.98	284.54	2592.68	3077.61	68.42
2002-2003	5365.62	116.98	3006.55	3487.73	70.99
2003-2004	6410.06	120.85	3298.31	3485.35	92.75
2004-2005	7895.61	245.36	3950.76	3539.29	118.39
2005-2006	9061.48	119.73	4161.73	5161.9	97.24
2006-2007	10437.08	200.88	4744.77	6289.72	93.70
2007-2008	12057.67	214.43	6168.83	7019.27	86.95
2008-2009	13735.08	177.55	7271.91	8161.11	81.37
2009-2010	14064.38	107.71	8142.4	8127.92	74.18
2010-2011	15953.27	86.58	8345.07	10183.97	75.56
2011-2012	18791.89	77.32	9099.19	14443.57	67.64
2012-2013	22287.85	66.4	11209.34	17591.47	63.35
2013-2014	26262.02	56.09	14308.47	20928.73	57.38
A.M. (\bar{x})	12825.85	144.19	6638.46	8576.74	80.61
Avg Annual Growth Rate	38.07	-6.18	34.76	44.62	-1.24
S.D (σ)	6646.72	73.04	3526.48	5758.82	16.78

Source :Annual reports of ITC Ltd (2001-2002 to 2013-2014)

Interpretation

Table 5 shows the measure of liquidity. During the period of Study concern's highest risk of 118.39% generated a return of 31.95% and the least risk of 63.35% generated a return of 45.47%. The risk taken by the company showed a decreasing tendency from 2004-05 onwards. The average risk taken by the company was 80.61% with a negative average annual growth rate of -1.24. The standard deviation of the risk taken by firm during the period of the study was 16.78.

Testing of IInd Null Hypothesis

Table IX

Statement for calculation of Correlation

Year	Risk (R _k)	R3	ROCE(%)	R4	D=(R3-R4)	D ²
2001-2002	68.42	4	38.30	6	2	4
2002-2003	70.99	5	37.71	7	2	4
2003-2004	92.75	12	20.07	13	1	1
2004-2005	118.39	13	31.95	12	1	1
2005-2006	97.24	11	34.56	10	1	1
2006-2007	93.70	10	35.42	9	1	1
2007-2008	86.95	9	35.80	8	1	1
2008-2009	81.37	8	32.84	11	3	9
2009-2010	74.18	6	40.71	4	2	4
2010-2011	75.56	7	43.43	3	4	16
2011-2012	67.64	3	45.13	2	1	1
2012-2013	63.35	2	45.47	1	1	1
2013-2014	57.38	1	41.67	5	4	16
						60

Source :Annual reports of ITC Ltd (2001-2002 to 2013-2014)

Interpretation

The Spearman's rank coefficient of correlation (r) between ROCE & Risk Factor has been calculated. The "t" test is applied for determining significance of r . Then computed value of 't' has been compared with the tabulated value of 't'.

In the above table $r = -0.84$ and value of $t = 3.32$. The table value of 't' at 5% level of significance for 11 degrees of freedom (Where $n=13$) is equal to 2.22. Since the computed value of t is more than the table value the null hypothesis (H_0) is rejected.

FINDINGS AND SUGGESTIONS

- The Net working Capital of ITC during the period of study was not satisfactory as it showed frequent fluctuations in its values. It even turned negative during the period of study, which is dangerous for the firm. ITC must try to keep regular check, whether its current liabilities are exceeding the gross working capital of the firm.
- Liquidity position of the firm was not adequate because the average value of this Current Ratio was only 1.43 times which is well below the ideal ratio of 2:1 times. Which indicates that, even though it is in a position to meet its short term obligations with the existing current assets, but it is in the verge of break even. So the firm must increase the position of its current assets to maintain a current ratio of at least the ideal value.
- The Liquid ratio of the firm was also not up to the level due to a lower amount of liquid assets during the period of study. The arithmetic mean of the liquid ratio was 0.76 times which is well below the ideal value of 1:1 times. So the firm should increase the portion of the liquid assets to stabilize the short solvency position.
- The cash position ratio of the firm was also not satisfactory as it was not able to generate adequate amount of cash from its assets. The average value of the ratio was only 0.05 times. The firm must try to keep regular check on its assets to identify whether they are staying idle or obsolete. Only the liquid cash will help the firm to face any uncertainties at the times of depressions.
- Working capital turnover ratio of the firm was satisfactory as it was able to generate on an average 8.29 times the amount of working capital deployed. It should try to at least maintain this situation or to increase its sales turnover.
- The profitability position of the firm was satisfactory because its operating profitability position was 37.16 % of its turnover, which is well above the risk free bank rate. The capital employed in the firm was appropriately used. It should maintain and stabilize the present profitability position.
- Applying of student's t test between Current Ratio and ROCE showed that the calculated value of t is less than the table value of t. Hence the null hypothesis was accepted and alternate hypothesis was rejected. It says that there was no significant difference between liquidity and profitability of the firm during the period of research study.
- When student's t test was applied between ROCE and Risk showed that the calculated value of t greater than the table value of t. Hence the null hypothesis was rejected and alternate hypothesis was accepted. It says that there was significant difference between profitability and risk of the firm during the period of research study.

Since the amount and risk involved in capital investment decision are very high, the firms give little importance to the issues related with working capital. But from the above study we can say that ITC

should give due consideration to its working capital management policies. The company must improve its present liquidity position to remain stable at the time of discrepancies or recession. It should also try to generate higher returns from its assets. The company must keep an optimum balance between liquidity and profitability for efficient use of its working capital. At the same time it should not stop formulating certain policies to keep a well-monitored working capital for better profitability, stability, reliability, growth and consistency.

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The Impact of Practicing Earnings Management on Borrowing Costs in Pharmaceutical Companies listed in Amman Bursa

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Abstract

Profits indicator is considered one of the most important indicators, which measure the efficiency of administrations, so administrations often resort to rig in this indicator to improve its image opposite parties involved, through practicing earnings management. This study aims to determine the extent of the practice of earning management in pharmaceutical companies listed in Bursa Amman, and to find out the impact on the cost of borrowing. Modified Jones model, 1995 has been used to determine if the company practices earnings management or not, also multiple regression analysis has been used to investigate the effect of earnings management practicing on the cost of borrowing. This study concluded that the studied companies practiced earnings management with varying degrees, and in final outcome they practiced earnings management, and there is no impact to earnings management practicing on the cost of borrowing. This study recommends the need to add a new responsibility of the responsibilities of the auditor regarding the practice of earnings management by companies, and the need to develop the encouraging legislation and binding for companies to resort to the stock market to get the funding they need, through the issuance of the loan bonds to take advantage of the benefits of financial market efficiency.

Keywords: Earnings Management, Cost of Borrowing, Pharmaceutical Companies, Bursa Amman.

Introduction

Managers usually depends on the earnings measure as a way to show their efficiency in managing companies and obtain a confidence from various external parties particularly owners and lenders. Because this measure is one of the important measures to judge the earning' ability for companies in the present and future, also its importance appears in determining the expected return, which focused by owners and lenders. Companies generally practices earnings management when they face some difficulties especially when earnings measure becomes low. In this case companies tend to rig in earnings to keep landlords and lenders confidence, a so-called "earnings management", which makes the accounting numbers shown in financial statements distorted. This reflects a negative impact to decision-makers both owners and lenders.

Using accounting information by external users such as investors, lenders, financial analysts and others encourages management to rig in these information to influence their decisions in favor of the company, which is reflected on several perspectives related to the company such as the cost of borrowing for the company, which is the subject of this study.

Showing the reality of the profits better than the actual amount achieves to the company - in the view of the administration – provides a feature to get a good share of the money offered for lending in the financial market on one hand, and on the other hand the company gets the borrowed funds at a lower cost, on the basis that lenders accept to sacrifice with a percentage of the expected return versus a low-risk that they believe it is available in these companies.

Importance of the study

It is well known that there is a relative scarcity in the amount of capital that accepts the risks of investing in the financial markets. So it is expected that there will be competition between enterprises to attract the maximum amount of funding, and thus there is a strong incentive for enterprises to report adequately and accurately all aspects of its activities through periodic financial reports. On the other hand, the good reporting system will lead to reduce the cost of borrowing for the enterprise, as a result of the low degree of uncertainty among lenders and, thus reduce the rate at which lenders accept as a return on their loans.

Hence, the importance of this study arises by showing the impact of the practice of earnings management in the cost of borrowing, where the practice of earnings management process is considered as a factor that results in misleading reports. Thereby, increase the degree of risk to the lenders and the returns on the money they require.

Problem of the study

Practice of earnings management in behavior of investors in general and lenders in particular, leads us to study the impact of the practice of earnings management in the cost of borrowing. Accordingly, the problem of the study can be scales in the following questions:

1. Are studied companies practicing earnings management?
2. Is there an effect of the practicing of earnings management in the cost of borrowing in the studied companies?

Objectives of the study

This study aims to achieve the following:

1. identify the earnings management policy, methods and caveats.
2. Identify whether the studied companies practice earnings management or not, through the application of the modified Jones Model, 1995.
3. Identify the cost of borrowing in the studied companies.
4. Show the impact of practicing earnings management in the cost of borrowing in the studied companies.

Variables of the study

For the purposes of this study, independent, dependent and control variables have been adopted as

follows:

The independent variable (Earnings management): earnings management is "any behavior practices by management which affects the income shown in the financial statements and do not achieve real economic advantages, and may lead to damage in the long term". This can be measured through discretionary accruals, according to the modified Jones Model, 1995 which includes:

- Discretionary accruals: is a non-obligatory expense that has not realized yet (such as an anticipated bonus for management, deductive allowances) but it has recorded in the account books.
- Non-discretionary accrual: is an obligatory expense that has not realized yet, but it has already recorded in the account books (such as Accrued expenses).

The dependent variable (The cost of borrowing): The cost of borrowing is the actual rate of interest paid by the company to the lender. So, the company achieves tax savings through the amount of interest times the tax rate. Thereby, the actual interest rate will be pre-tax actual interest rate minus the tax savings.

Hypotheses of the study

H₀-1: The studied companies do not practice earnings management policy.

H₀-2: There is no statistically significant effect of the practicing of earnings management in the cost of borrowing in the studied companies at a level of significance: $\alpha \leq 0.05$.

Limits of the study

This study was limited to the pharmaceutical companies listed in Bursa Amman in the period 2010-2013.

Methodology of the study

The study depends on descriptive analytical method to arrive at logical results that support the theoretical hypothesis included in this study to determine the impact of earnings management in the cost of borrowing. It will also be relying on the historical approach by reviewing the previous studies. The nature of the study is an applied study, because the problem of this study predominantly has an analytical nature for a set of independent and control variables that affect the cost of borrowing.

This study depends on a range of primary and secondary data and information from two sources:

Primary sources: through the reports issued by Bursa of Amman related to companies studied .

Secondary sources: through the availability of books, periodicals, research and theses in Arabic and English.

Literature review

The study (Audi, 2014) aims to investigate the effect of earnings management on the accounting information in decision-making process. The researcher used two types of analysis which are, the first one is statistical analysis with study sample (20) public Jordanian industrial company during the period 2005-2012. The study used Pooled Data Regression to measure the impact of the practicing of earnings management on the quality of accounting profits. The results show that lowering the quality of earnings caused by the practice earnings management by Jordanian industrial companies. The second one is the questionnaire where distributed to 37 companies and the number of distributed questionnaires was (350) questionnaire and was multi-sectors and had results that Jordanian companies practice earnings management using the following methods (Cleaning financial statements, manipulation of accounting

ways and policies) Therefore, the practice of earnings management affect the accounting information and the quality of earnings, and this affects the decision-making process in the company. The most important recommendations that mentioned to be by the researcher are the drafting and amendment of accounting standards so that modulate weaknesses and flexibility that help managers to the practice of earnings management and the elimination of discretionary options relating to estimated and non-estimated accruals, and to establish a committee with the efficiency and capacity of the income tax to detect operations of manipulation in the profits, and work to unify the accounting policies and measurement methods that reduce the practice of earnings management.

The study (Lozi, 2013) aims to analyze earnings management and its impact on the price of shares in republic contribution industrial companies listed in Bursa Amman, also discussed some of the other variables in addition to earnings management, which can be affects on the stock price. The researcher uses modified Jones Model 1995 to measure earnings management, Pearson coefficient and simple regression analysis, and program (SPSS). The researcher found that almost 50% of the sample companies practice earnings management, and they affect the share price in Bursa Amman, where the price fluctuates according to the practice of earnings management. The researcher recommends the need for the expertise of audit firms to limit the practice of earnings management, and doing modern studies about the impact of earnings management on the reservation policy variables.

The study (Bertomu, 2013) shows more results between earnings management and cost of capital, within a simplified version of a model which shows the relationship between the administration costs activities and the capital of companies, with a risk of individual fraud. The study finds that the cost of capital increases with the increase in earnings management. The researcher emphasizes that the importance of accounting handlings are not only in terms of the division of politics, but also in terms of what may mean for the pricing of assets, and that investors expect lower earnings management.

The study (Strobl,2009) aims to demonstrate the impact of earnings management on the cost of capital. The researcher uses the agency model with many companies through cash flows. The researcher also shows the correlation between manipulation profits and the company's various business cycle. The researcher finds that managers more tendency to manipulate earnings during periods of economic expansion, that means the reliance on the economic situation in the manipulation of earnings, also finds that earnings management affect the cost of capital, and reduce the linking of cash flows for businesses and thus reduce the risk premium required by investors.

First: earnings management

Accounting literature has included different definitions for Earnings management. It was known (Michael, et al., 2007) as "an attempt by the administration to influence on disclosed profits, or manipulate it by using certain accounting methods, such as recognize with unrecurring items to become recurring items, and delay or accelerate recognition of certain expenses or revenue, or use other techniques designed to influence in the short-term profits".

For (Hammad, 2005), he had defined it as "active maneuver to reach to a predetermined number that may be subjective by management or predictions known by financial analysts or values agreed with more smoothly and sustainability flow of a gains".

For (Partha, 2003), he had defined it as "a deliberate distortion of the profits, which in turn leads to accounting numbers differ fundamentally from what could be in the absence of manipulation, and that's when managers make decisions are not subject to strategic reasons, but simply to adjust the profits".

While it had known by (Merchant & Rakness, 2002) as "a behavior that the administration do it and it impacts on the income that appears in the financial statements and do not achieve real economic advantages, in fact, may lead to damage to the company over the long term."

From the previous definitions, the researchers conclude that earnings management is intended practices done by the administration to influence the company's profits, either upward or downward untapped accounting treatments available which allow them to use discretion, in order to achieve personal gain or simply to influence the number of profit.

1. The motives of earnings management

Administrations often have motives when they practice the earnings management, in order to achieve prior objectives. Those motives can be classified as follows:

1.1. Motives related to expectations and assessment of the financial market: because the administration's belief that investors and financial analysts use accounting information to assist in stock evaluation. So, this generates motivation or incentive for managers to manipulate earnings, and to influence the stock price in the short term (Coles, 2006). Motivates had classified, in three forms: (motivates related to reduce the regulatory cost – motivates related to reduce the cost of capital - motivates related to maximize managers' benefits) (Stolowy, et. Al., 2004).

1.2. Contractual motives: for (Scott, 2003), he pointed out that the accounting data may be used in the monitoring and regulating of the contracts between the company and multi-owners, where the explicit and implicit administrative bonuses contracts arise to accommodate between the administration' interests and among the third parties' interests.

1.3. Regulatory motives: the greater of likelihood that the company may expose to external pressures and interventions by the government, the company' management may tends to adopt accounting policies that show low levels of profitability (Stolowy, et al., 2004).

2. Earnings management ethics:

Strategy should balance between transparency and full disclosure for all material information related to the company on one hand, and on the other hand, to maintain confidentiality that require to protect the information to be not available to everyone, as to maintenance this balance is the foundation of good corporate governance within the company. The ethical aspect of the earnings management is a matter of considerable disagreement as to whether the practice morally justified or not. In other words, does the company mean by this act to achieve an essential improvement for some aspects of its future strategy or to do deliberate deception to the parties related. Anyway, the deception is not always non-morally, but it needs to justify. So, when an alternative for deception becomes available, then we could not find a justification for practicing of deception. As the philosopher (Bok) said, that the problem with the deception may obscures a target or hides suitable alternatives, resulting in estimates lead to damage the party that has been deceived (Gaa and Dunmore, 2007).

3. Earnings management methods:

Researchers have agreed to divide the practice of earnings management into two types, real earnings management and fictitious accounting earnings management (Kin Lo, 2008):

Type I: real earnings management: by using management decisions regarding activities of production, investment and sales. This will be done by using three methods as follows (Ali, 2009):

- Sales and Purchasing management: such as granting inordinate reduction to customers in the fourth quarter of the fiscal year, or lax in terms of forward sales, or postpone the purchase of certain assets to a later period of time to influence the size of the cash flows or make decisions regarding the timing of the sale of assets.
- Discretionary expense management: such as research and development expenses, advertising and notarization expenses, and maintenance expenses in order to achieve the targeted profit, especially if these expenses do not contribute to the achievement of income in the current period.
- Production management: by speeding up the production rate at an exaggerated rate, thereby leading to reduction of fixed costs and thus reduce the cost of the unit, and at the same time an increase in the inventory thereby reducing the cost of sales, and consequently increase in profits.

Type II: accounting profits Management: by using phantom or accounting variables by the management which can be classified as follows (, et. Al., 2007 Joshua, R.):

- Exploiting the flexibility available under generally accepted accounting principles such as accounting accruals management and discretionary accounting changes, and choose an appropriate time to practice a mandatory accounting policy.
- Using of fraudulent practices and methods which are outside the framework of generally accepted accounting principles in order to distort the financial reports and to minimize the transparency related to published financial reports such as an early recognition in revenues and overstated inventory.

4. Detecting ways for earnings management

There are two methods for detecting earnings management which are accounting analysis method and discretionary accruals analysis method (Mohan ram, 2003).

- Accounting analysis method: by using a number of ways (Alfar, 2006; Abu Agile, 2007) which are: identify the key accounting policies, assessing the accounting flexibility for the company, assessing the accounting strategy of the company, assessing the quality of the situation of the company, identify the likelihood of risk, and to prevent the accounting distortions.
- The accruals method: requires identifying the total accruals, and deduct the non-discretionary accruals to reach to the discretionary accruals (Dechow & Saloan, 1995):

a- Total accruals = Declared income - operating cash flows

b- = Total accruals = discretionary accruals + non-discretionary accruals

Discretionary accruals usually by the administration, while non-discretionary accruals specify economically. There are several models to estimate discretionary accruals:

- 1. The Jones Model, 1991: this model depends on regression model to measure the discretionary accruals and separate it from the total accruals with two variables which are the total ownership such as factories, and the change in the Working Capital Fund model.
- 2. The Modified Jones Model, 1995: this model assumes that the discretionary accruals coefficient has a value less than the non-discretionary accruals coefficient. This means that discretionary accruals are more prone to fraud by managers, so it is a valid measure for earnings management (Jones, 1995).
- Cross - Sectional Model: which are the cross-sectional Jones model and the modified cross-sectional Jones model. Guides are estimated by using cross-sectional data and not the time series (Dechow & Dichow, 1994).

For the purpose of achieving the goal of this research the modified Jones model, 1995 will be used.

The Modified Jones Model, 1995: by measuring whether the company practice earnings management, which will be measured by using modified Jones model, 1995 such as follows:

1. **The total accruals:** it is calculated in the way of cash flow, which is the difference between net operating income and net cash flow from operating activities using the following equation:

$$TACC_{i,t} = ONI_{i,t} - OCF_{i,t}$$

Where is:

$TACC_{i,t}$ = the total accruals for the company (i) through the period (t)

$ONI_{i,t}$ = net operating income for the company (i) through the period (t)

$OCF_{i,t}$ = net cash flow from operating activities for the company (i) in the period (t)

2. **Non-discretionary accruals:** it will be measured by the regression equation by using the following equation:

$$TACC_{i,t} / A_{i,t-1} = a_1(1/A_{i,t-1}) + a_2(\Delta REV_{i,t} - \Delta REC_{i,t}) / A_{i,t-1} + a_3 CHF_{i,t} / A_{i,t-1} + E_{i,t}$$

Where is:

$TACC_{i,t}$ = the total accruals for the company (i) through the period (t)

$A_{i,t-1}$ = total assets for the company (i) through the period (t-1)

$REV_{i,t}$ = change in company' revenues for the company (i) through the period (t)

$REC_{i,t}$ = change in accounts receivable for the company (i) through the period (t)

$CHF_{i,t}$ = cash flow for the company (i) through the period (t)

$E_{i,t}$ = random error

3. **The normal Non-discretionary accruals:** they are measured by the following equation:

$$NDACC_{i,t} = a_1(1/A_{i,t-1}) + a_2(\Delta REV_{i,t} - \Delta REC_{i,t}) / A_{i,t-1} + a_3(CHF_{i,t} / A_{i,t-1})$$

Where is:

$NDACC_{i,t}$ = The normal Non-discretionary accruals for the company (i) through the period (t)

$A_{i,t-1}$ = total assets for the company (i) through the period (t-1)

$REV_{i,t}$ = change in company' revenues for the company (i) through the period (t)

$REC_{i,t}$ = change in accounts receivable for the company (i) through the period (t)

$CHF_{i,t}$ = cash flow for the company (i) through the period (t)

4. **Discretionary accruals:** it is measured by finding the difference between the total accruals and

non-discretionary accruals for each company separately.

$$DACC_{i,t} = TACC_{i,t} - NDACC_{i,t}$$

Where is:

$DACC_{i,t}$ = discretionary accruals for the company (i) through the period (t)

$TACC_{i,t}$ = total accruals for the company (i) through the period (t)

$NDACC_{i,t}$ = normal non-discretionary accruals for the company (i) through the period (t)

The result: the company considers practicing earnings management if the absolute value of discretionary accruals for the company is more than its average discretionary accruals, and if less than its average discretionary accruals, the company does not practice earnings management.

Second: the cost of borrowing:

What is the cost of external borrowing and its impact on financial decisions and financial structure for the economic property:

1. Long-term loans:

The cost of borrowing is the actual rate of interests which pays by the company to the lender. But the company achieves tax savings through these represented in the amount of interest times the tax rate. So, the final and actual interest rate is pre-tax interest rate minus tax savings. But how does the cost of borrowing is estimated?

The cost of long-term borrowing can be defined as the costs (after tax) must be paid to get the money through long-term borrowing, and can be calculated (borrowing by issuing bonds) according to the following equation:

$$ACB = RBMD (1 - TR)$$

Where is:

ACB = The actual cost of borrowing

TR = tax rate

RBMD = Return of the bond to maturity date

$$RBMD = \frac{\text{annual interest} + \text{annual commission}}{\text{average loan}} = \frac{\text{interest} + (\text{number of years})}{(\text{principal of loan} + \text{net loan})/2}$$

2. Cost short-term loans

Short-term debt is a source of external funding which the company depends on in the financing of its operating activity. Therefore, it pays for this a cost summarized in interest and commissions paid by the company for getting bank or commercial credit.

Commercial credit

Is a short-term credit granted by the seller to the buyer in the form of goods for the purpose of resale. The most important forms of commercial credit is the current account in the seller book. The seller opens an account to the buyer in its books recording the price of the goods that were sold on account and the amounts paid first by first.

Commercial credit is often free if the buyer committed to the terms of the seller. But it may become charged in many cases:

- 1-Not to acquire a discount to accelerate payment
Discount percentage = (Discount amount/Invoice value)100
- 2-Exceeding the credit period: that means any buyer will pay interest in case of delayed payment beyond the period granted to him by the seller.
- 3-Cash purchase price is usually lower than the forward purchase price.

Bank credit:

Bank credit is defined as a relatively clear for activities including obtaining the loan and that lead to success or lack of success to loan recovery (Altman, 1980).

Also known as the confidence, the bank gives to someone physically or morally by putting at his/her disposal a sum of money or guaranteed for a specific period to be agreed between the parties, where the customer has to fulfillment of obligations at the end of that period (Gulab, 1993).

Granting a credit depends on rules and foundations stable and recognizable such as safety of providing bank funds and make a profit and liquidity. Also, there are criteria for granting credit, including the personality of client and the client's ability to achieve income, the client' capital, guarantees established by the customer under the disposal of the bank and the surrounding circumstances (Zubaidi, 2002).

Hypothesis testing and analysis of the results:

H₀-1: "The studied companies do not practice earnings management policy".

1-**Total accruals:** it will be calculated by using the following equation:

$$TACC_{i,t} = ONI_{i,t} - OCF_{i,t}$$

Table (1): Total accruals

Table of calculating TACC									
Co.	MPHA			JPHM			HPIC		
YEARS	2011	2012	2013	2011	2012	2013	2011	2012	2013
ONI	-2948099	-492408	620672	1631280	-365660	-1739829	1088649	2023989	2326872
OCF	1087033	631191	1427929	-3275855	2830324	3846770	1725529	1342137	3501111
TACC	-4035132	-1123599	-807257	4907135	-3195984	-5586599	-636880	681852	-1174239
Co.	PHIL			DADI			APHC		
YEARS	2011	2012	2013	2011	2012	2013	2011	2012	2013
ONI	-240261	-533858	817922	-1214164	2810277	8250459	-1142224	-727836	-976737
OCF	-497414	237021	-122434	3599497	1753428	-2244684	-209716	-391525	369201
TACC	257153	-770879	940356	-4813661	1056849	10495143	-932508	-336311	-1345938

2. **Non-discretionary accruals:** it will be measured by the regression equation by using the following equation:

$$TACC_{i,t} / A_{i,t-1} = a_1(1/A_{i,t-1}) + a_2(\Delta REVI_{i,t} - \Delta RECI_{i,t}) / A_{i,t-1} + a_3CHFI_{i,t} / A_{i,t-1} + E_{i,t}$$

Table (2): Non-discretionary accruals

		TACC _{i,t} /A _{i,t-1}	1/A _{i,t-1}	(ΔREVi,t-ΔRECi,t)/A _{i,t-1}	PPEi,t / A _{i,t-1}
		Y	x1	x2	x3
MPHA	2011	-0.143468463	3.55548E-08	-0.139273383	0.407756138
	2012	-0.044480896	3.95879E-08	0.030126887	0.435292907
	2013	-0.030926138	3.83102E-08	0.042557062	0.401397754
JPHM	2011	0.080432405	1.63909E-08	0.042080414	0.263404715
	2012	-0.043503741	1.3612E-08	0.092423248	0.205663385
	2013	-0.080861627	1.44742E-08	-0.124455064	0.20931418
HPIC	2011	-0.052549576	8.2511E-08	0.162117356	0.045769734
	2012	0.054454729	7.9863E-08	0.105981441	0.448898119
	2013	-0.084977526	7.23682E-08	0.145875051	0.40032667
PHIL	2011	0.064865619	2.52245E-07	-0.095350969	0.356466155
	2012	-0.181556649	2.35519E-07	-0.009721753	0.341956155
	2013	0.257007078	2.73308E-07	0.663746368	0.400263524
DADI	2011	-0.048129663	9.99856E-09	-0.005459072	0.170834962
	2012	0.011705803	1.10761E-08	0.000503399	0.241472921
	2013	0.121517472	1.15784E-08	-0.060668604	0.357007088
APHC	2011	-0.110233024	1.18211E-07	-0.103955174	0.193263254
	2012	-0.039589167	1.17716E-07	0.246094362	0.384585403
	2013	-0.157593426	1.17088E-07	0.125946951	0.418143656

By depending on the previous table and using (SPSS) program, model parameters was extracted which were as follows:

Table (3): model parameters

a1	a2	a3
719970	-0.4	-0.59

They will be used at the next step when computing the normal non-discretionary accruals for each studied company and for each year of the study years.

3. The normal Non-discretionary accruals: they are measured by the following equation:

$$TACC_{i,t} / A_{i,t-1} = a_1(1/A_{i,t-1}) + a_2(\Delta REVi,t - \Delta RECi,t) / A_{i,t-1} + a_3CHFi,t / A_{i,t-1} + Ei,t$$

Table (4): The normal Non-discretionary accruals

		a1	a2	a3	
		719970	-0.4	-0.59	
Co.	Years	1/A _{i,t-1}	(ΔREVi,t-ΔRECi,t)/A _{i,t-1}	PPEi,t / A _{i,t-1}	NDACC
MPHA	2011	3.55548E-08	-0.139273383	0.407756138	-0.1592684
	2012	3.95879E-08	0.030126887	0.435292907	-0.2403715
	2013	3.83102E-08	0.042557062	0.401397754	-0.2262653

JPHM	2011	1.63909E-08	0.042080414	0.263404715	-0.16044
	2012	1.3612E-08	0.092423248	0.205663385	-0.1485105
	2013	1.44742E-08	-0.124455064	0.20931418	-0.0632923
HPIC	2011	8.2511E-08	0.162117356	0.045769734	-0.0324457
	2012	7.9863E-08	0.105981441	0.448898119	-0.2497435
	2013	7.23682E-08	0.145875051	0.40032667	-0.2424398
PHIL	2011	2.52245E-07	-0.095350969	0.356466155	0.00943436
	2012	2.35519E-07	-0.009721753	0.341956155	-0.0282988
	2013	2.73308E-07	0.663746368	0.400263524	-0.3048803
DADI	2011	9.99856E-09	-0.005459072	0.170834962	-0.0914103
	2012	1.10761E-08	0.000503399	0.241472921	-0.1346959
	2013	1.15784E-08	-0.060668604	0.357007088	-0.1780306
APHC	2011	1.18211E-07	-0.103955174	0.193263254	0.01266537
	2012	1.17716E-07	0.246094362	0.384585403	-0.2405912
	2013	1.17088E-07	0.125946951	0.418143656	-0.2127836

4. Discretionary accruals: it will be measured by finding the difference between the total accruals and non-discretionary accruals for each company separately.

$$DACC_{i,t} = TACC_{i,t} - NDACC_{i,t}$$

Table (5): Discretionary accruals

		TACC	NDACC	DACC=TACC-NDACC
MPHA	2011	-4035132	-0.1592684	-4035132
	2012	-1123599	-0.2403715	-1123599
	2013	-807257	-0.2262653	-807257
JPHM	2011	4907135	-0.16044	4907135
	2012	-3195984	-0.1485105	-3195984
	2013	-5586599	-0.0632923	-5586599
HPIC	2011	-636880	-0.0324457	-636880
	2012	681852	-0.2497435	681852.2
	2013	-1174239	-0.2424398	-1174239
PHIL	2011	257153	0.00943436	257153
	2012	-770879	-0.0282988	-770879
	2013	940356	-0.3048803	940356.3
DADI	2011	-4813661	-0.0914103	-4813661
	2012	1056849	-0.1346959	1056849
	2013	10495143	-0.1780306	10495143
APHC	2011	-932508	0.01266537	-932508
	2012	-336311	-0.2405912	-336311

	2013	-1345938	-0.2127836	-1345938
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5. determining if a company practice earnings management: the company practices for the earnings management if the absolute value of discretionary accruals larger than the average of its discretionary accruals, and if less than the average of its discretionary accruals, the company does not practice earnings management.

0: means not practice

1: means practice

Table (6): practice or not practice

		DACC	Av	DACC-AV	Result 1:0	Av result
MPHA	2011	-4035132	-1988662	-2046469	0	1
	2012	-1123599		865063.7	1	
	2013	-807257		1181406	1	
JPHM	2011	4907135	-1291816	6198951	1	0
	2012	-3195984		-1904168	0	
	2013	-5586599		-4294783	0	
HPIC	2011	-636880	-376422	-260458	1	1
	2012	681852.2		1058274	1	
	2013	-1174239		-797817	0	
PHIL	2011	257153	142210.1	114942.9	0	0
	2012	-770879		-913089	0	
	2013	940356.3		798146.2	1	
DADI	2011	-4813661	2246110	-7059771	0	0
	2012	1056849		-1189261	0	
	2013	10495143		8249033	1	
APHC	2011	-932508	-871586	-60922.5	1	1
	2012	-336311		535274.8	0	
	2013	-1345938		-474352	1	

The previous table shows that all companies has practiced earnings management with varying degrees. Three companies has practiced earnings management (MPHA, HPIC, APHC) for two of the three years of study, the other three companies (JPHM, PHIL, DADI) has practiced earnings management for one year from the three years of study. In total, we can say that all companies have practiced earnings management, or has the intention to practice earnings management in order to reach a pre-defined results and mislead the profitability index to influence the decisions of external parties especially lenders. Therefore, the first nihilism hypothesis must rejects HO-1: " the studied companies do not practice earnings management policy", and accept the alternative hypothesis H1-1: " studied companies practice earnings management policy" with varying degrees.

The second hypothesis HO-2: "There is no statistically significant effect of the practicing of earnings management in the cost of borrowing in the studied companies at a level of significance: $\alpha \leq 0.05$ ".

Initially, the researchers will measure the cost of borrowing in the studied companies before studying the impact of practice earnings management on the cost of borrowing .

Cost of borrowing

Due to lack of information about changes happened in the balance of loans and credit in the studied companies during each financial year, the researchers consider the calculation of average loans and credit between beginning and end of the period. Also, prevailing tax rate in Jordan imposed on companies (including studied companies) is 14%. By applying the following equation for the cost of borrowing:

$$RBMD = \frac{\text{Annual interest} + \text{Annual commission}}{\text{Average loan}} = \frac{\text{Interest} + (\text{Number of years})}{(\text{Principal of loan} + \text{Net loan})/2}$$

The following table has prepared:

Table (7): Cost of borrowing

			Average loans		
		Land	(1/1+31/12)/2	Interest	cost of %
MPHA	2010	11345782			
	2011	11820661	11583221.5	908723	6.7468431
	2012	13135017	12477839	912563	6.28958412
	2013	12716860	12925938.5	1088182	7.23998896
AVR					6.75880539
JPHM	2010	14088329			
	2011	21083100	17585714.5	644893	3.15374152
	2012	20299857	20691478.5	1473032	6.12236346
	2013	19716472	20008164.5	955323	4.10621264
AVR					4.46077254
HPIC	2010	315238			
	2011	354411	334824.5	31454	8.07899064
	2012	253183	303797	22470	6.36089231
	2013	385003	319093	34169	9.20902057
AVR					7.88296784
PHIL	2010	491428			
	2011	916715	704071.5	71838	8.77477358
	2012	853964	885339.5	86895	8.44079588
	2013	972530	913247	96975	9.13208584
AVR					8.78255177
DADI	2010	23196560			
	2011	27464009	25330284.5	1726851	5.8629103
	2012	29959474	28711741.5	1744377	5.22491546
	2013	38302933	34131203.5	1833428	4.6196674
AVR					5.23583105

APHC	2010	775770			
	2011	1863939	1319854.5	38818	2.52933032
	2012	2356350	2110144.5	98782	4.02591007
	2013	2684776	2520563	125295	4.27498539
AVR					3.61007526

By considering the results of practicing earning management by companies and for the purpose of showing its impact on the cost of borrowing, the researchers have used the multiple regression analysis, and the following results have reached:

To determine whether there is a significant relationship or not between the practice of earnings management on one hand and cost of borrowing on the other hand, the simple regression analysis was performed and the results were as follows:

Table (8) Model Summaries

F	Sig	R	R Square	Adjusted R Square	Std. Error of the Estimate
.804	.673 ^a	.873 ^a	.763	-.186-	2.202

Table (9) Coefficients

Variable	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Constant	12.652	1.809		3.552	.175
REV	9.514E-7	.000	8.248	1.444	.386
REC	-4.690E-7	.000	-3.738-	-.609-	.652
PPE	5.169E-7	.000	2.182	.926	.524
A	-3.833E-7	.000	-7.037-	-1.181-	.447

It is obvious from tables (12) & (13): that the model representative of variables of practice of earnings management / cost of borrowing is not significant, because the value of Sig. (F) (.673a) is bigger than (0.05).

The value of the correlation coefficient (R) which describes the strength of the correlation between the variable practice of earnings management and the variable cost of borrowing is (87.3%) This value indicates the existence of a good positive and direct correlation between the two variables.

The value of Sig. (T) was (3.552) which indicate that the practice of earnings management is not effect on the cost of borrowing. Thus the null hypothesis that says there is not a significant effect practice of earnings management on cost of borrowing.

The researchers argued that the lack of effect of the practicing of earnings management on the cost of

borrowing goes back to that the borrowing market in Jordan is not sensitive towards the practice of earnings management being one of the emerging markets, and most of loans due to the credit facilities obtained by companies from banks in return for guarantees and mortgages and sometimes may return to the personal relations between the company management and banks management, but not to the existence of bonds and loans that are highly affected by the financial information published in the financial statements.

The conclusions

1. The pharmaceutical companies listed in Bursa Amman practice earnings management with varying degrees, where there are three companies that practice earnings management for two years from the three years studied, and three other companies practice earnings management for one year of the three years studied.
2. The weakness of the sensitivity of the cost of borrowing against the practice of earnings management due to that most loans in the studied companies are credit facilities from banks and not loan bonds shown in Bursa Amman.
3. The difference of the cost of borrowing among the studied companies is due to the difference between the interest rate on the local currency, which was (8.10%) and interest rate on the US dollar, which was (3.5 - 5%).
4. No effect practicing earnings management on the cost of borrowing in the studied companies.

The recommendations

1. The need for a paragraph included in the External Auditor's report on practicing earnings management by companies.
2. the need for special attention by the committees of corporate governance to limiting the earnings management practices.
3. The need to issue a stimulating legislation for companies to obtain financing they need through the issuance of a loan bonds to take advantage of the efficiency of financial markets in determining the interest rate.

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The Determinants of Manufacturer Firm Value in Indonesia Stock Exchange

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Abstract

This study tests determinant of firm value of 32 publicly listed manufacturing companies in Indonesia Stock Exchange during period of 2005 to 2010. Factors which affect firm value are classified into 2 parts which are policy and performance. Policy factors include financing, investment, and dividend policies. Performance factors include liquidity, profitability, activity, and also size factor. Data sources are from Indonesian Capital Market Directory (ICMD) and company annual reports. To find the determinants of firm value, panel regression is used. Based on sampling on 32 manufacturing companies, it was revealed that liquidity has negative and significant influence to manufacturing firms value. On the other side, financing, dividend policy and profitability have positive and significant influence to firm value. Investment policy has a positive influence and significant to firm value at 10% level. Activity and size of company does not have an effect to firm value.

Keywords: determinant, company policy, company performance, firm value, panel regression

1. Introduction

The main purpose of company according to *theory of the firm* is to maximize wealth or company value (Sartono, 2009) through increase of share price (Fama, 1978). With the increasing of firm value, the company can obtain many benefits, among others, access to source of fund from capital market, high selling price or value when the company is bought or merged. Company value is also very important, because with this affects stockholders prosperity.

The price of share as representation of firm value is determined by three primary factors, there are,

internal and external factors. This research emphasizes at internal factor of company because this factor is manageable. Internal factor of company can be grouped into company policy factor and performance factor. Company policy factor in this research emphasized in financial management policy which covers investment, financing, and dividend policy (Damodaran, 2001). Financing policy is approximate to debt policy or debt equity ratio. Investment policy is approximate to Investment Opportunity Set. Dividend policy is approximate to dividend payout ratio. Performance factor in this research is liquidity, profitability, and activity. In addition to company policy and performance factors, size is also considered as a factor which affects firm value.

To maximize firm value, firm needs to pay attention to the various factors. Therefore, variables which affects firms value is considered to be understood in terms of its direct influence to the company.

2. Literature Review

On the bottom line, company net profit can be shared to stockholders as a dividend or retained to finance company investment. There are some theories about dividend policy that affects firm value. The Theory of Irrelevance Dividend expresses that dividend policy does not affect firm value. Bird in the Hand Theory expresses that high dividend will increase firm value. The Theory of Brennan (1970) expresses that increasing high dividend payout ratio of a firm, would lower value of the firm.

The beginning of theory of modern capital structure was from Modigliani and Miller (1958). Its proposition is that financing decision is not relevant. Then there was an opposing capital structure theory that is Trade-off Theory (Balancing Theory) and Pecking Order Theory (Myers and Majluf, 1984). Both theories express that financing decision is relevant in capital structure policy in imperfect capital market condition.

For the first time Myers (1977) introduced Investment Opportunity Set (IOS). Two matters which affect firm value are placed asset future investment opportunities. IOS emphasized more on selection of investment in the future. IOS is opportunity of the firm to grow in the future instead of real growth that has been achieved. The size of IOS usually correlated to gaining profitable project, company investment in

research and development, and fixed asset.

Literature Review on Study Variables and Formulation of Hypotheses

Leverage Policy

Some previous researches have been performed. Research about leverage among others committed by Uchida (2006) found that leverage or debt has positive influence and significant to value of firm (Tobin's Q). Andri and Hanung (2007) found that investment opportunity set and leverage influence firm value. In company with level of debt is too high, addition of debt causes firm value declines because investors concern that debt can add burden to the company.

H1: Leverage has negative influence to firm value

According to Brigham (1999: 87) proxy leverage is

Book Debt to Equity Ratio = Total Debt : Total Equity

According to Brigham (1999: 86) proxy leverage is

Book Debt to Asset = Total Debt : Total Asset

According to Brigham and Gapenski (1996: 543) proxy leverage is

Long Term Debt Equity Ratio = Total Long Term Debt: Total Equity

Following Brigham (1999: 87), this research uses Book Debt to Equity Ratio = Total Debt : Total Equity as proxy leverage.

Liquidity

Cash position is the proxy to measure liquidity. This factor is a manageable internal factor by management. Company which has enough cash can seize opportunity better compared to company with insufficient cash. Thus, the more a company seizes opportunities, the better the firm value.

H2: Liquidity has positive influence to firm value.

According to Helfert (1995), cash position can be counted based on comparison between year-end cash balances with net profit after tax. Following Helfert (1995), then this research used proxy cash balance / net profit after tax.

Profitability

Company profit is an indicator of company ability to fulfill obligation to its funder and also is an element in value creation of firm which shows company prospect in the future. Profitability ratio is ratio which measure ability of company producing profit at sale level, certain asset and capital stock. Carlson and Bathala (1997) and Uchida (2006) found that ROA has positive influence to value of firm.

H3: Profitability has positive influence to firm value.

Profit is earning ability measurement of a company. There are measurements to describe this variable such as Return on Assets (ROA), Return on Equity (ROE), Operating Profit Margin, and Net Profit Margin. Following Carlson and Bathala (1997), Uchida (2006) this research uses ROA.

Size

The size of company indicates how large the company is. Asset is a measuring tool of magnitude or scale of a company, usually large company has large asset. Large company has more certainty than small scale company which reduce level of uncertainty about company prospect. The size of company shows corporate activity which the company has. The size of a large company shows company development so investor will response positively and firm value will increase. Taswan and Soliha (2002) and Soepriyanto (2004) research indicated that company size is proven to affect value of firm.

H4: The size of firm has positive influence to firm value.

There are many proxies for size of a company such as total asset, sales, turnover, market capitalization, number of employees.

This research uses total logarithm of asset as proxy of size of firm.

Investment Policy

To reach firm goal, manager makes investment decision which produces positive net present value. Fama (1978) expressed that value of firm is solely determined by investment decision. Investment decision affects firm value at announcement time. (Mc Connell and Muscarella, 1984). Pasternak and Rosenberg (2002) found that investment has positive influence and significant to firm value.

Investment Opportunity Set/ IOS or value of investment opportunity is present value of company choices to make future investment.

IOS is a relation between current and future expenditure with value / return / prospect as result of the investment decision to produce value of firm's. Three IOS proxies: 1. IOS proxy based on price which is based on difference between assets and share market value 2. IOS proxy based on investment shows that high level investment activity has positive correlation to company IOS (Kallapur and Trombley 1999). 3. IOS proxy based on variant.

H5: IOS has positive influence to firm value

There are some indicators IOS like Book Value of Gross Property, Plant & Equipment to the Book Value of the Assets Ratio (PPE / BVA), Market to Book Value of Equity Ratio (MVE / BVE); Price Earning Ratio (PER); Market Value to Book Value of Assets Ratio (MVA / BVA).

This research uses PER as proxy of IOS

Activity

This ratio look at some assets and then determine how much level of assets activity at certain activity level. Low activity at certain sale level will result in higher excess fund placed in the assets. The excess fund will be better if it is invested at other more productive asset.

There are some proxies for activity like Inventory Turnover (ITO), Total Assets Turnover (TATO), Receivable Turnover (RTO). Inventory as main element of working capital is an asset which is always in circulation, which change continuously. To measure supply efficiency, it is necessary to calculate Inventory Turn Over (ITO) with comparing number of cost of goods solds with supply average value owned (Ross et. al., 2005). The higher the inventory turn over, the better the firm value which further will be assessed as good by investors. This research uses Inventory Turnover (ITO) proxy.

H6 : Inventory Turnover has positive influence to firm value.

Dividend Policy

Research about dividend policy to firm value under study by Hasnawati (2008,) the result of its research indicate that dividend policy influential positive to firm value.

H7: Dividend influential positive to firm value.

According to Smith & Watts (1992,) Kallapur & Trombley (1999), dividend proxy is dividend pay out ratio = dividend paid to be divided with the available profit for stockholder.

According to Smith & Watts (1992,) Kallapur & Trombley (1999,) dividend proxy is dividend yield = dividend percentage to price of previous period share which can be made as by proxy as its monetary magnitude.

According to Glen et al (1995) that company in the developing countries is more prioritizing dividend payout ratio than its monetary magnitude.

Following Smith & Watts (1992,) Kallapur & Trombley (1999,) dividend proxy in this research is dividend pay out ratio = dividend paid to be divided with the available profit for stockholder

The Firm Value

The firm value is defined as market value because company value can give maximal stockholder prosperity if price of share increases. The main purpose of company is to increase firm value through

increasing price of company share (Jensen and Meckling, 1976; Fama, 1978). Based on concept of capital structure, the firm value is market value of debt and equity based on market value (Modigliani & Miller, 1958). Masulis and Korwar (1986), the firm value is proxied with using price of share.

Wright and Ferris (1997) indicate that value of firm can be observed through stockholder prosperity. Stockholder prosperity is proxied from return obtained from daily share price change of a public company.

Fama & French (1998), the firm value is proxied through total excess market value of company and book value of assets is divided with book value of assets. Company market value is obtained from price of common share multiplied with share outstanding. Besides that other market value proxy is Price Book Value (PBV) and Tobin's Q.

This research use proxy Price Book Value (PBV) where PBV measure value which are given by financial market to management and organizational of company which is growing.

3. Research Method

This research is designed to test correlation between firm value and determinants of firm value. Sample is taken from Indonesian manufacturing company in period of year 2005 to 2010. This study is based on secondary data source to obtain variables, i.e., from Indonesian Capital Market Directory (ICMD).

Tables 1. Research Variable Measured

No.	Variables	Code
1	Leverage Policy	DE(X)
2	Liquidity	CAS(X)
3	Profitability	ROI(X)
4	Size	SZ(X)
5	Investment policy	PE(X)
6	Activity	IT(X)
7	Dividend Policy	DP(X)
8	Firm value	PB(Y)

This research considers Indonesian manufacturing company as samples with main requirements

that company must have required data from year 2005 to 2010. From the Indonesian Capital Market Directory (ICMD) and financial statement 151 manufacturing companies are obtained, however 32 companies are taken as sample which are companies with continuous dividend sharing.

Method

To serve the purpose of this research, regression analytical technique with panel data approach is used .

The Analysis of Panel Data Regression

Panel data is alliance between cross section and time series data, where the same cross section unit is measured at different time. Panel data regression analysis is a regression analysis which is based on panel data to observe relation between a dependent variables with one or more independent variables.

Model with Constant Coefficient Slope and Various Intercept as Result of Difference Cross Section Unit

This model pay attention to merger effect of different unit cross section while changing time is only as a transition.

$$Y_{it} = \beta_{1i} + \sum_{K=2}^K \beta_{kit} X_{kit} + \varepsilon_{it} \quad ; i=1,2,\dots, N$$

$$; \quad t=1,2,\dots,T$$

Equation above can be written as follows :

$$Y_{it} = (\alpha + \mu_i) + \sum_{K=2}^K \beta_k X_{kit} + \varepsilon_{it}$$

With $\beta_{1i} = (\alpha + \mu_i)$

$$\alpha = \frac{\sum_{i=1}^N \beta_{1i}}{N}$$

Y_{it} : dependent variable value region to-i year to-t

β_{it} : intercept regional to-i

- α : the average of intercept (constant)
- μ_i : the difference of average intercept with regional intercept
to-i
- β_k : slope coefficient variable to- k
- X_{kit} : independent variable value to-k for region to-i year to-t
- ε_{it} : population trouble element

Procedure suspect equation above depend on is μ_i assumed as fixed or random . If μ_i is assumed fixed , μ_i is a part of intercept then the equation above is Fixed Effect Model (FEM). If μ_i is assumed random, μ_i is a part of trouble or error element Random Effect Model (REM).

Fixed Effect Model and Random Effect Model

$$\text{Fixed Effect Model (FEM)} \quad : Y_{it} = (\alpha + \mu_i) + \sum_{K=2}^K \beta_k X_{kit} + \varepsilon_{it}$$

$$\text{Random Effect Model (REM)} \quad : Y_{it} = \alpha + \sum_{K=2}^K \beta_k X_{kit} + (\mu_i + \varepsilon_{it})$$

Fixed Effect Model has incomplete information due to difference in unit cross section is reflected with different intercept for each cross section unit. While in Random Effects Model, incomplete information is viewed as an error.

Fixed Effect Model is interpreted with Least Square Dummy Variable (LSDV) method. While Random Effects Model is interpreted with Generalized Least Square (GLS) method.

Fixed Effect Models Specification Test

Null hypothesis stated that intercept of each cross section unit is equal, this means cross section unit effect as a whole is insignificant in estimation model. As an alternative, cross section unit effect as a whole is significant in estimation model. If H0 is accepted, then pooled model is better than fixed effect model. In contrast, if H0 is rejected, then fixed effect model is better than pooled model.

Statistics hypothesis:

H0 : $\mu_1=\mu_2=...=\mu_i=0$ (cross section unit effect as a whole is insignificant)

H0 : there is minimum a $\mu_i \neq 0$ (significant effect area)

Statistics test

$$F = \frac{(e'e_{pooled} - e'e_{FEM})/(N-1)}{e'e_{FEM}/(NT-N-K)} = \frac{(R_{FEM}^2 - R_{pooled}^2)/(N-1)}{(1-R_{FEM}^2)/(NT-N-K)} \sim F_{(N-1),(NT-N-K)} \quad (11)$$

Reject null hypothesis if F count is larger that F in table

Random Effect Model Specification Test

Null hypothesis stated that all cross section variant error is zero, which means that cross section unit random is insignificant. If H0 is accepted, then pooled model is better than random effect model.

However, if H0 is rejected, then random effect model is more suitable. Statistics hypothesis that is used is:

H0 : $\sigma_{\mu i}^2 = 0$ All variances cross section errors are null, unit random effect does not mean / pooled model better than random effect model.

H1 : $\sigma_{\mu i}^2 \neq 0$ Not all variances cross section error are null, random effect cross section unit is not meaningful/ random effect model is better than pooled model.

Statistics test:

$$LM = \frac{NT}{2(T-1)} \left[\frac{T^2 \bar{e} \bar{e}}{e'e} - 1 \right]^2 \sim \chi^2_{(1)} \quad (15)$$

Where \bar{e} it is vector (nx1) of average of residual pooled model and $e'e$ are sum of square of residu from pooled model.

Test criteria

Reject null hypothesis (H0) if χ^2_{hitung} is larger than χ^2_{tabel}

Hausman Test

Hausman test is used to select the best model, i.e., between Fixed Effect Model (FEM) or Random Effect Model (REM). If H0 is received then Random Effect Model (REM) is more efficient, while if H0 is refused then Fixed Effect Model is fitter than Random Effect Model. Statistics Hypothesis:

H0 : $\rho_{\mu_i X_i} = 0$ Cross section effect does not relate to other regression (REM)

H1 : $\rho_{\mu_i X_i} \neq 0$ Cross section effect relate to other regression (FEM)

4. Results and Discussion

For data analysis of the below table, STATA version 11 is used.

1.Descriptive Statistics Data

Table 2. Research Variable Description

Variable	Mean	Median	Maximum	Minimum	Standard Deviation
DE(X)	1.052	.845	8.440	.080	.942
CAS(X)	3.084	1.276	199.344	-9.601	14.632
ROI(X)	10.395	8.405	40.670	-1.460	8.804
SZ(X)	14.402	14.302	17.445	11.282	1.336
PE(X)	17.546	10.980	288.090	-49.020	31.395
IT(X)	5.560	4.585	23.880	.240	4.077
DP(X)	35.568	27.960	264.230	.010	37.660
PB(Y)	2.970	1.335	35.450	.220	5.028

Based on table above it can be observed that value of PB variable has average of 2.970 with median value of 1.335. The large difference between average and median value indicates that the data has some variations.

After a descriptive analysis is performed then PB modelling on DE, CAS, ROI, SZ, PE, IT, and DP variables is performed by using panel data regression model because this research data structure is based

on crossection and time series data.

2. Estimation Pooled Model

First phase in panel data regression modelling is to anticipate value of regression model parameter with pooled modeling then it is compared to Fixed Effect and Random Effect Model to select the best research model.

The result of Pooled Model calculation is as follow:

Source	SS	df	MS	Number of obs = 192		
-----+-----				F(7, 184) =	52.39	
Model	3215.59328	7	459.370469	Prob > F	= 0.0000	
Residual	1613.42994	184	8.76864099	R-squared	= 0.6659	
-----+-----				Adj R-squared	= 0.6532	
Total	4829.02322	191	25.2828441	Root MSE	= 2.9612	
-----+-----						
pb	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
-----+-----						
de	2.078861	.2449691	8.49	0.000	1.595552	2.562171
cas	-.0803609	.0193634	-4.15	0.000	-.1185638	-.0421581
roi	.3763272	.0260342	14.46	0.000	.3249633	.4276911
sz	.2465323	.1727649	1.43	0.155	-.0943225	.5873871
pe	.0547882	.0091634	5.98	0.000	.0367093	.0728671
it	-.065012	.0571658	-1.14	0.257	-.1777967	.0477726
dp	.0204176	.0059339	3.44	0.001	.0087103	.0321248
_cons	-7.757492	2.376299	-3.26	0.001	-12.44579	-3.069194
-----+-----						

From the calculation result, Pooled Model regression model is obtained, which is as follow:

Based on result of hypothesis examination of each research variable DE, CAS, ROI, SZ, PE, IT, and DP to PB, at column p.value (P>|t|) it can be seen that SZ and IT variables have p. value bigger than 0.05 which indicates that both variables do not give significant influence to PB.

As a whole , Pooled Model has coefficient of determination 0.666 or 66.6% variances of PB variable

which can be explained by Pooled Model. But this model cannot be concluded before it is compared to Fixed Effect and Random Effect Model and classic assumption examination.

3. Estimation with Fixed Effect

Then calculation of Fixed effect model with Least Square Variable Dummy method is performed with output as follow:

Source	SS	df	MS	Number of obs = 192		
-----+-----				F(38, 153) = 22.62		
Model	4099.25451	38	107.875119	Prob > F	= 0.0000	
Residual	729.768715	153	4.76973016	R-squared	= 0.8489	
-----+-----				Adj R-squared = 0.8113		
Total	4829.02322	191	25.2828441	Root MSE	= 2.184	
-----+-----						
pb	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
-----+-----						
de	2.963734	.2883444	10.28	0.000	2.394084	3.533384
cas	-.0996252	.015563	-6.40	0.000	-.1303713	-.0688791
roi	.2883665	.0433138	6.66	0.000	.2027962	.3739368
sz	.0061778	.541177	0.01	0.991	-1.062966	1.075322
pe	.0450192	.0075109	5.99	0.000	.0301807	.0598577
it	-.1199476	.1156042	-1.04	0.301	-.3483342	.1084389
dp	.0214178	.0067006	3.20	0.002	.0081801	.0346555
_Iperush_2	-.1064647	1.447927	-0.07	0.941	-2.966974	2.754045
_Iperush_3	-2.535251	1.634162	-1.55	0.123	-5.763687	.6931842
_Iperush_4	-.5163743	1.810699	-0.29	0.776	-4.093573	3.060824
_Iperush_5	-1.195659	2.453188	-0.49	0.627	-6.042152	3.650835
_Iperush_6	-3.18946	1.718827	-1.86	0.065	-6.585158	.2062378
_Iperush_7	-.958057	1.846001	-0.52	0.605	-4.604998	2.688884
_Iperush_8	-5.58989	1.721834	-3.25	0.001	-8.991528	-2.188252
_Iperush_9	-1.849327	1.560529	-1.19	0.238	-4.932292	1.233639
_Iperush_10	.01373	1.766458	0.01	0.994	-3.476066	3.503526
_Iperush_11	-1.677663	1.767201	-0.95	0.344	-5.168928	1.813602
_Iperush_12	-4.541404	1.613743	-2.81	0.006	-7.729499	-1.353309
_Iperush_13	-3.56475	1.494628	-2.39	0.018	-6.517522	-.6119784
_Iperush_14	-1.570462	1.888399	-0.83	0.407	-5.301165	2.160242

_Iperush_15		-1.244359	1.923849	-0.65	0.519	-5.045096	2.556378
_Iperush_16		.339569	1.303568	0.26	0.795	-2.235747	2.914885
_Iperush_17		-3.470806	1.48155	-2.34	0.020	-6.397742	-.5438703
_Iperush_18		-.2345033	1.498848	-0.16	0.876	-3.195613	2.726606
_Iperush_19		-1.963412	1.539964	-1.27	0.204	-5.00575	1.078925
_Iperush_20		2.79064	1.615054	1.73	0.086	-.4000446	5.981324
_Iperush_21		-1.918417	1.730881	-1.11	0.269	-5.337929	1.501095
_Iperush_22		-.5100887	1.546968	-0.33	0.742	-3.566264	2.546087
_Iperush_23		-3.700756	1.706637	-2.17	0.032	-7.072371	-.3291412
_Iperush_24		-2.420839	1.586223	-1.53	0.129	-5.554565	.7128871
_Iperush_25		-3.953439	1.657169	-2.39	0.018	-7.227326	-.6795521
_Iperush_26		-1.176736	2.060272	-0.57	0.569	-5.24699	2.893518
_Iperush_27		.1710939	1.568344	0.11	0.913	-2.92731	3.269498
_Iperush_28		-3.943234	1.840214	-2.14	0.034	-7.578743	-.3077256
_Iperush_29		1.925665	1.563702	1.23	0.220	-1.16357	5.014899
_Iperush_30		-1.16171	1.508331	-0.77	0.442	-4.141554	1.818133
_Iperush_31		1.343443	1.731028	0.78	0.439	-2.076359	4.763245
_Iperush_32		8.155102	1.864495	4.37	0.000	4.471624	11.83858
_cons		-2.616063	7.442511	-0.35	0.726	-17.31941	12.08729

Based on result of calculation Fixed Effect Model is obtained as follow :

$$PB = -2.616 + 2.964DE - 0.0996CAS + 0.288ROI + 0.0062SZ + 0.04508PE - 0.1199IT + 0.0214DP + \gamma_{i+1}Perusahaan_{i+1}$$

i=1,2,3,...,32

With γ_{i+1} it is fixed effect cross section coefficient. The examination result of influence of variable DE, CAS, ROI, SZ, PE, IT, and DP to PB, at column p.value ($P > |t|$), shows that SZ and IT variables have p.value bigger than 0.05 which indicating that both variables do not give significant influence to PB.

4. Random Effect Model

After Fixed Effect model is performed, then Random Effect Model is performed as follow :

Random-effects GLS regression	Number of obs	=	192
-------------------------------	---------------	---	-----

```

Group variable: perush                Number of groups =      32

R-sq:  within = 0.5724                Obs per group: min =      6
      between = 0.6937                    avg =      6.0
      overall = 0.6495                    max =      6

Random effects u_i ~ Gaussian          Wald chi2(7) =      282.67
corr(u_i, X) = 0 (assumed)            Prob > chi2 =      0.0000
-----
      pb |      Coef.   Std. Err.    z   P>|z|   [95% Conf. Interval]
-----+-----
      de |    2.56253   .2580164   9.93  0.000   2.056827   3.068233
      cas |   -.0938539   .0158272  -5.93  0.000  -.1248747  -.062833
      roi |    .3406615   .0318029  10.71  0.000   .278329   .402994
      sz |    .193971   .258253   0.75  0.453  -.3121955   .7001376
      pe |    .0482358   .0075961   6.35  0.000   .0333477   .0631238
      it |   -.1013621   .0766188  -1.32  0.186  -.2515323   .048808
      dp |    .0218151   .006001   3.64  0.000   .0100533   .033577
      _cons |  -6.82944   3.565216  -1.92  0.055  -13.81713   .1582544
-----+-----
      sigma_u |  1.6953662
      sigma_e |  2.1839712
      rho |    .3760162   (fraction of variance due to u_i)
-----

```

Based on calculation result, Random Effect model is obtained as follow:

$$PB = -6.839 + 2.562DE - 0.0939CAS + 0.3407ROI + 0.1940SZ + 0.0482PE - 0.101IT + 0.0218DP$$

Examination of influence of variable DE, CAS, ROI, SZ, PE, IT, and DP to PB, at column p.value (P>|t|), shows that SZ and IT variables have p. value larger than 0.05 which indicates that both variables do not give significant influence to PB.

5. Fixed Effect or Random Effect Model Selection

After Pooled Model Fixed Effect, and Random Effect Model calculations are performed,, then hypothesis examination is perform to decide which model is more suitable, fixed effect or random effect. Then,

selected model will be compared to Pooled Model.

Hypothesis :

H0 : $\rho_{\mu_i X_i} = 0$ Cross section effect does not relate to other regression (REM)

H1 : $\rho_{\mu_i X_i} \neq 0$ Cross section effect relate to other regression (FEM)

To test this hypothesis, statistic by test Chi-Square is used with Hausman calculation testing as follow :

```
. hausman fixed random

      ---- Coefficients ----
      |      (b)      (B)      (b-B)      sqrt(diag(V_b-V_B))
      |      fixed      random      Difference      S.E.
-----+-----
de |  2.963734   2.56253   .4012044   .1287245
cas | -.0996252  -.0938539  -.0057714   .
roi | .2883665   .3406615  -.052295   .0294051
sz | .0061778   .193971   -.1877933   .4755817
pe | .0450192   .0482358  -.0032166   .
it | -.1199476  -.1013621  -.0185855   .0865672
dp | .0214178   .0218151  -.0003974   .0029809

-----+-----

      b = consistent under Ho and Ha; obtained from xtreg
      B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

      chi2(7) = (b-B)' [(V_b-V_B)^(-1)] (b-B)
              =      10.80
Prob>chi2 =      0.1477

(V_b-V_B is not positive definite)
```

Examination result gives value of Chi-Square 10.80 with p. value 0.14777. The p. value is larger than 0.05 so it is concluded that null hypothesis is received. This means that Random Effect Model is a better model according to Hausman's test .

5. Random Effect Model or Pooled Model Selection

Then choosing Random Effect model or Pooled Model is performed.

The hypothesis as follow:

H0 : $\sigma_{\mu}^2 = 0$ All varians of cross section errors variance are null, random effect cross section unit does not meaningful / pooled model better than random effect model.

H1 : $\sigma_{\mu}^2 \neq 0$ Not all varians of cross section errors are null, random effect of cross section unit does not meaningful/ random effect model is better than pool model.

The test method is Lagrang Multiplier with Chi-Square testing statistic as follow :

```

Random-effects GLS regression                Number of obs   =    192
Group variable: perush                      Number of groups =    32

R-sq:  within = 0.5724                      Obs per group: min =     6
      between = 0.6937                          avg =    6.0
      overall  = 0.6495                          max =     6

Random effects u_i ~ Gaussian                Wald chi2(7)    =   282.67
corr(u_i, X)      = 0 (assumed)              Prob > chi2     =    0.0000
    
```

pb	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
de	2.56253	.2580164	9.93	0.000	2.056827	3.068233
cas	-.0938539	.0158272	-5.93	0.000	-.1248747	-.062833
roi	.3406615	.0318029	10.71	0.000	.278329	.402994
sz	.193971	.258253	0.75	0.453	-.3121955	.7001376
pe	.0482358	.0075961	6.35	0.000	.0333477	.0631238
it	-.1013621	.0766188	-1.32	0.186	-.2515323	.048808
dp	.0218151	.006001	3.64	0.000	.0100533	.033577
_cons	-6.82944	3.565216	-1.92	0.055	-13.81713	.1582544

```

sigma_u | 1.6953662
sigma_e | 2.1839712
rho     | .3760162 (fraction of variance due to u_i)
    
```

. xttest0

Breusch and Pagan Lagrangian multiplier test for random effects

$$pb[perush,t] = Xb + u[perush] + e[perush,t]$$

Estimated results:

	Var	sd = sqrt(Var)
pb	25.28284	5.028205
e	4.76973	2.183971
u	2.874267	1.695366

Test: Var(u) = 0

chi2(1) = 71.47

Prob > chi2 = 0.0000

The result of calculation gives value of chi-square 71.47 with p. value 0.00 which is much smaller compared to 0.05, so null hypothesis is refused which means that Random Effect is better than Pooled Model.

After being decided that the best model is Random Effect Model then deeper analysis is performed in relation to Random Effect Model. At previous models, it is recognized that there are two variables that are not significant in affecting PB they are SZ and IT so that in the next modelling both the variables are eliminated or are not involved in models which explains PB.

6. Random Effect Diagnostic

After SZ and IT variables are eliminated from model then Random Effect model is obtained as follow :

Random-effects GLS regression	Number of obs	=	192
Group variable: perush	Number of groups	=	32
R-sq: within = 0.5692	Obs per group: min	=	6
between = 0.6869	avg	=	6.0
overall = 0.6440	max	=	6
Random effects u_i ~ Gaussian	Wald chi2(5)	=	279.99
corr(u_i, X) = 0 (assumed)	Prob > chi2	=	0.0000

pb	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
de	2.527132	.2522766	10.02	0.000	2.032679	3.021585
cas	-.0953722	.0157425	-6.06	0.000	-.126227	-.0645174
roi	.3466124	.0308056	11.25	0.000	.2862344	.4069903
pe	.0493249	.007516	6.56	0.000	.0345938	.0640559
dp	.021313	.0059834	3.56	0.000	.0095857	.0330403
_cons	-4.620707	.607928	-7.60	0.000	-5.812224	-3.42919

sigma_u	1.7222866					
sigma_e	2.1776825					
rho	.38480162	(fraction of variance due to u_i)				

After calculation is performed by eliminating variable SZ and IT a model is obtained as follow :

$$PB = -4.621 + 2.27DE - 0.0534CAS + 0.3466ROI + 0.0493PE + 0.02138DP$$

If it is observed, p. value of all variables have p. value that is smaller than 0.05, so all variables are significant in explaining PB. Result of determination coefficient calculation is $R^2 = 0.6440$ or 64.4% variable change can be explained by the PB model above.

However, this model cannot be generally concluded because it must first undertake examination process which covers normality, multicollinearity, autocorrelation, and heteroscedasticity testing.

a. Normality

Residual normality examination uses Shapiro Wilks test with hypothesis as follow :

$H_0 : F(\epsilon) = F(\epsilon_0)$ Data spreads normal

$H_1 : F(\epsilon) \neq F(\epsilon_0)$ Data does not spread normal

The result of its examination is as follows :

Shapiro-Wilk W normal test for of data						
Variable	Obs	w	V	z	Prob	
e	192	0.82600	25.05	-25.05	7.396	0.00000

The result of examination gives p. value 0.000 which is smaller compared to significance level of 5% so examination decision refuses null hypothesis which means that the data is not a normal distribution. Thus, to obtain a suitable model, Robust method will be used. But before that, we should perform multicollinearity, autocorrelation, and heteroscedasticity examination.

b.Multicollinearity

Multicollinearity is a case which is strong correlation happen among independent variables. The happening of multicollinearity causes magnitude of mistake in suspect parameter. The test use Variance Inflation Factor (VIF) value. VIF value which bigger than 10 indicate existence of multicollinearity.

Table 6 VIF Value Result

Variables	Collinearity Statistics	
	Tolerance	VIF
DE(X)	.863	1.159
CAS(X)	.572	1.748
ROI(X)	.874	1.144
PE(X)	.555	1.803
DP(X)	.919	1.088

The result of VIF calculation shows there are VIF value from each independent variables bigger than 10, so that there is no indication of the happening multicollinearity.

c.Autocorrelation Examination

Autocorrelation is the violation assumption related with existence of correlation between mistakes in the model. If this happens then it will cause unfavourable research model because having errors standard which tend to under estimate or value of model mistake valuation tend to small compared to the fact.

The hypothesis test is as follows:

$H_0: \rho = 0$ Does not happen autocorrelation

$H_1: \rho \neq 0$ Happened autocorrelation

To test this hypothesis, F test statistic is used with result of examination as follows :

```

xtserial lead de charge roi pe dp

Wooldridge test for autocorrelation in data panel

H0: no first order autocorrelation

F (1, 31) = 17.495

Pronging > F = 0.000-0.000

```

The result of examination gives F value 17.495 with p. value 0.0003 smaller than 0.05 which indicate existence of autocorrelation.

d.Heteroscedasticitas Examination

Heteroscedasticitas is the assumption violation related with trouble variance from model which is not homogeneous. If this happens then cause unfavourable research model because it will have errors standard which tend to big or value of model mistake valuation tend to big compared to the fact.

The hypothesis test is as follows :

H0 : $\text{var}(\epsilon) = \sigma^2$ Does not happen heteroscedasticity

H1 : $\text{var}(\epsilon) = \sigma_i^2$ Happened heteroscedasticity

To test this hypothesis, we used Chi-Square statistic test with result of examination as follows :

```

Modified Wald test for groupwise heteroskedasticity
in cross-sectional time-series FGLS regression model

H0:  $\sigma(i)^2 = \sigma^2$  for all i

chi2 (32) = 46957.59

Prob = 0.0000

```

The result of examination gives value of Chi_Square 46957.59 with p. value 0.0000 smaller than 0.05 which indicate existence of heteroscedasticity.

The model indicated unfavourable because there is heteroscedasticity and autocorrelation and data do not spread normally, although all variables significant. But individual significance influence of this variable possibly is sham influence caused by this assumption violation. So that to overcome this matter, we use Generalized Least Square regression approach join with Autoregressive first order (ARI) model with the following result :

```

Coefficients: generalized least squares
Panels:      heteroskedastic
Correlation: panel-specific AR(1)

Estimated covariances      =      32      Number of obs      =      192
Estimated autocorrelations =      32      Number of groups   =      32
Estimated coefficients     =      6      Time periods      =      6

                                Wald chi2(5)      =      261.09
                                Prob > chi2       =      0.0000

-----
      pb |      Coef.   Std. Err.   z   P>|z|   [95% Conf. Interval]
-----+-----
      de |   1.419685   .1805165   7.86  0.000   1.065879   1.773491
      cas |  -.0904566   .0173362  -5.22  0.000  -.1244348  -.0564783
      roi |   .2573728   .0177581  14.49  0.000   .2225676   .292178
      pe |   .0441354   .0059271   7.45  0.000   .0325184   .0557524
      dp |   .0063907   .0037513   1.70  0.088  -.0009616   .0137431
      _cons | -2.538309   .2966043  -8.56  0.000  -3.119643  -1.956976
-----

```

Based on result of calculation is obtained by model as follow :

$$PB = -2.538 + 1.420DE - 0.0905CAS + 0.257ROI + 0.0441PE + 0.0064DP$$

If p. value is observed, all variables have p. value smaller than 0.05 except for PE variable, the p. value is 0.08, so that DE, CAS, ROI and DP variable significantly affecting PB at level 5% and for PE has

significant influence at level 10%. The result of coefficient of determination calculation is obtained $R^2 = 0.6440$ or 64.4%. This means that all of the five measures used in this study influence the PB value at 64.4%.

The model above can be interpreted as follow :

- DE gives positive and significant influence to PB where the change of DE in one point will increase average 1.42 point of PB.
- CAS gives negative and significant influence to PB where changes in CAS in one point will decrease average 0.090 point of PB.
- ROI gives positive and significant influence to PB where the changes of ROI one point will increase average 0.257 point of PB.
- PE gives positive and significant influence to PB where the change of PE one point will increase average 0.0441 point of PE.
- DP gives positive and significant influence to PB where change of DP one point will increase average 0.0064 point of PB.

Hypothesis Examination and Solution

In Stata's program, the z value is the same as t value. First hypothesis examination to see influence leverage/ financing policy (DE) to firm value. The theory of pecking order predict that there is negative relationship between leverages and firm value. The regression shows that the greater the leverage, the higher firm value. The table shows that the coefficient is positive and significant ($z = 7.86$, $p = 0.0000$). Because value of p value $< 0,05$ then the influences are significant. This shows that leverage has a positive influence to firm value. Therefore H1 is refused as the previous study mentioned a negative association. So, this result is not in line with pecking order hypothesis but supports static trade-off hypothesis. According to static trade-off hypothesis (with assumption that target of capital structure is not optimal), leverage has positive influence to firm value. This positive influence supports

research of Uchida (2006.)

Second hypothesis examination is performed to see liquidity influence or cash position (CAS). The regression shows that liquidity is negatively associated with firm value ($z = -5.22$, $p.value = 0.000$). Because value $p. value < 0,05$ then it has a significant influences. Large amount of cash indicates less money is circulated by a company, that caused reduction in company return that further cause firm value decline.

Third hypothesis examination is to observe profitability influence (ROI) to firm value. The regression shows that profitability is positively associated with firm value ($z = 14.49$, $p = 0.0000$). Because value $p. value < 0,05$ then the influence is significant. Therefore H3 is accepted. This result supports research of Carlson and Bathala (1997) and Uchida (2006.) Company that produces profit, will be able to fulfill obligation so it is perceived favourable by investor, therefore it can increase the firm value.

Fourth hypothesis examination is to observe influence of size (SZ) to firm value. Based on dataprocessing result, it is obtained by value of statistical $z = 0.75$ with value $p. value$ of 0.453. Because $p. value > 0,05$ then its influence is not significant. Thus, size does not have a significant effect on firm value. This result does not support research of Taswan and Soliha (2002) and Soepriyanto (2004.)

Fifth hypothesis examination is to observe investment policy influence (PE) to firm value. The regression shows that investment decision is positively associated with firm value ($z = 7.45$, $p = 0.0000$). Because value $p. value < 0,05$ then its influence is significant. Therefore H5 is accepted. This result supports research of Pasternak and Rosenberg (2002) Company which has many investment opportunities will grow so that it is perceived as favourable by investor.

The sixth hypothesis examination is to observe activity influence (IT) to firm value. Based on data-processing result it is obtained statistical value of $z = -1,32$ with $p. value = 0.186$. Because $p. value > 0,05$ then its influence is not significant. So activity (IT) does not have significant effect on company value.

Seventh hypothesis examination is to observe dividend influence (DP) to firm value. The

regression shows that dividend is positively associated with firm value ($z = 1.70$ and $p. \text{ value} = 0.088$). Because $p. \text{ value}$ is < 0.10 then dividend influence is significant at level 10%. So dividend (DP) has significant positive influence to value of company. The result of research supports relevant dividend policy hypothesis and support research of Hasnawati (2008.) The result of this research supports theory of signalling. Dividend payment is expressed to have positive signal concerning company earnings prospect so it increases share price as one indicator of firm value.

5. Conclusion

This study explores determinants of firm value of manufacturing company sample in period of 2005 to 2010. Analytical technique multiple regression with panel data approach was used to discover associations among policy factor, performance factor, and size with manufacturing firm value.

Based on sample analysis which is taken from emiten group of manufacturing company, conclusion can be drawn as follow:

1. Leverage (DE) has positive influence to firm value. Thus, this result does not support pecking order hypothesis but supports static trade off hypothesis. According to static trade-off hypothesis, leverage has positive influence to firm value. This research supports research of Uchida (2006).
2. Liquidity (CAS) has significant negative influence to firm value. The hypothesis is refused. Increasingly large cash in a company will be assessed by investor that the company does not have investment opportunity or does not buy or trade goods so that it is assessed as unfavourable.
3. Profitability (ROI) has positive influence to firm value. This result supports Carlson and Bathala (1997) and Uchida (2006) research. Increasingly profitability in a company will be assessed by investor that the company is in a good condition.
4. Size (SZ) does not have an effect to firm value. The result of this research does not support Taswan and Soliha (2002) and Soepriyanto (2004) research.
5. Investment policy (PE) has significant positive influence to firm value. This result supports research of Pasternak and Rosenberg (2002).

6. Activity (IT) does not have a significant effect on firm value. This research supports Myers (1977) research.
7. Dividend (DP) has significant positive influence to firm value. The result of research supports relevant dividend policy hypothesis and support Hasnawati (2008) research.
Company which give dividend will be seen as a good company by the investors.

To increase firm value, company needs to consider financing, liquidity, profitability, investment, and dividend policy. In advanced research, external factors to firm value should be taken into consideration.

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