Business Administration and Business Economics

Ethics in the Institution of Consumers' Protection

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Abstract: This article aims at emphasizing the level of institutional ethics for the needs of an organization, which is the consumers' protection. By the means of this marketing research which has as a starting point the Fishbein- Rosenberg model, we wish to point out the importance of the main attributes specified by the Law of the Public Servant, whether these can be the basis of the relationship between consumers and economic operators. The institution of consumers' protection acts as an arbitrer in this case and we wish to find out whether these attributes follow the requirements of the relationship between consumer and the institution which protects them.

Keywords: high contact services; utilitarianism; management of ethics; ethical efficiency; Fishbein-Rosenberg model

JEL Classification: D18; K32; M21

1. Introduction

The bases of ethical principles are comprehensive but some aspects are relevant for this approach, such as: the utilitarianism, honesty and consumers' rights.

The utilitarianism

The utilitarianism is an ethical theory which has two essential dimensions:

- a criteria of good and evil, a moral necessity which maximizes good;
- a rule of assessing the moral action according to this criterion.

"*The theory has been developed for the first time by John Stuart Mill, for whom utility is the foundation of ethics. According to this principle, actions are directly proportional to the tendency of promoting happiness*" (Mureşan, 2003). Two aspects are desirable for both the utilitarianism and other doctrines:

- the pleasure itself and the means to obtain it;

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- ways to eliminate distress since people are different according to the way of reaching happiness.

"*There are those who fulfill their desires fast and completely so the level of aspiration is low, and the others, who have a higher level of aspiration and who will find happiness in a more difficult way but they will learn to endure imperfections wisely and calmly*" (Mureşan, 2003).

Honesty and justice

The approach of this subject traditionally belongs to Plato and Aristotle, the two Greek philosophers considered to be the originators of this endeavor. For them, justice is a social virtue, (Ştefănescu & Miroiu, (coordinators) 2003) in compliance with which values and advantages are distributed or redistributed according to a diagram considered to be fair and unprejudiced. "All citizens are entitled to equal treatment. Most codes are based on this philosophy" (Engel; Blackwell & Miniard, 1995)

"Fairness and honesty are the heart of a moral business representing the main values of the decision made by marketers. In such a sense, the minimum requirement for the business people is to apply the rules and laws. But behind the rules that need to be followed we do not have to expect a generalized disillusion of customers, a coercion act on the employees or discrimination when applying the rules". (Ferrel & All, 2010).

Consumers' rights

"*Promoting the principles and mechanisms of free enterprise ensures the coherences necessary for a modern society by the game of the prices, the freedom of consumers to make decisions, by orienting productive investments towards necessary and profitable production, reaching at the same time the balance and arrangements prerequisite for the economy*". (Albu & Nedelea, 2006)

Due to the evolution of commercial relationships among producers on the axis producer - consumer, the price as a mediation process between demand and offer does not always reflect quality, which will lead to the appearance of inaccuracy. Respecting consumers by the price asked and paid by them is based on "fairness as characteristic of a market economy which implies that both sellers and buyers involved in the action and each of them individually do not depend on a power that can distort the competition's game. There must be free access to the market, both the producers and the distributors should not be able to restrict the different fields of action in order to get the benefits, and each person's decisions must be made freely". (Albu & Nedelea, 2006)

At this time, economic operators that confront with difficult decisions linked to ensuring an optimal proportion between satisfying consumers' desires and asserting social responsibility are almost inexistent. "*Most economic agents race*

after a big profit to the detriment of consumers and they put on the market products and services which, in addition to the fact that they do not satisfy the explicit and implicit needs they have been created for, also attempt on consumers' life, health or security." (Albu & Nedelea, 2006)

Precisely in order to dilute these disparities, at the beginning of the sixties consumers' rights appears, starting from the idea that all people are consumers and hence, they have the same rights. All these rights have been formed and clarified over more than 50 years.

2. Management of Ethics in Public Institutions

Practice shows the existence inside public institutions of some aspects of immorality regarding both the economic agents controlled, the direct beneficiaries of the selling and buying documents, that is the consumers, but also other citizens within the free services made available by the government.

Official data that support such an endeavour shows the existence of public servants who have immoral behaviour. These have been signaled in the case of institutions which offer "high contact" (Lovelock et al., 2008) services to people or services that are delivered "in the arena" (Norman, 1994). We shall define these services as those needing qualified personnel without which the service can not be delivered. We should add that in the case of public servants within consumers' protection, the service can only be delivered as a result of ethical behavior.

The link between delivering the service and the ethical behavior of the service provider makes this to be framed in the terms of a model where we better understand the term "ethical efficiency", a coherent model of the "worker" we can identify ourselves with and we can be proud of, that we can perceive as being ideal (as the perception on the German working model or on the preciseness of Swiss watches).

Inside the institution of consumers' protection the ethical code of all controlling acts is written in the Law no. 188/1999 regarding the Regulations of Public Servants in conjuction with Law no. 7/2004 regarding the Public Servants' Code of Behavior. Since the beginning of the regulations it was considered that delivering public service must be "durable, professional, transparent, effective and impartial, in the interest of citizens as well as of the authorities and public institutions from central and local administration." (Law no. 188/1999 regarding the Regulations of Public Servants). At the same time, the same laws establish that "*public servants must abide by the law, fulfill their work responsibilities professionally and impartially and abstain from any deed that might prejudice legal or natural persons or the prestige of public servants' corps*" (Law no. 188/1999). They must also offer "moral integrity", principle according to which public servants "*are forbidden to ask or accept, directly or indirectly, for them or for others, any*

advantage or benefit with regard to their public position, or to exploit their position in any way " (Law no. 7/2004).

Under these circumstances, the institution of consumers' protection must ensure transparency, safety and morality in its relationship with both economic agents and citizens, even if this structure does not have a moral code.

Unlike social responsibility programs of the corporations, but also due to the fact that the services delivered are in the first line of contact, it is necessary to implement an institutional structure inside the organization which can deal with the administration of moral relationships from the inside, but especially when it comes to the relationships with the exterior: buyers or sellers, "*so that general risks generated by immoral behavior should be diminished or, in other words, negative effects should be held under control*." (Mureşan, 2013).

Consequently, the main attributes that create pressure on the institution are: moral responsibility, moral integrity, professionalism, impartiality, safety, empathy, transparency and efficiency.

3. Theoretical Notions

Differentiating a product or service is based on a series of attributes by which we obtain a distinct value from that of the competition on a targeted market. In the case of a free public service, the targeted market disappears but a series of attributes which are strictly connected to the public institution generates satisfaction or dissatisfaction and the institution of consumers' protection becomes a mediator between consumer ans seller.

As we have mentioned, any organization or brand must be differentiated from others. So, there is no product which is completely plain or even products of prime necessity that cannot be differentiated. It is wished to emphasize the differences destined to distinguish the offer of an enterprise from that of its competitors. Theodore Levitt suggested "*many possible ways of differentiating a product*" (Levitt, 1986). All these originate in the differences noticed among the needs expressed by market demand.

However, not all the differences are significant or sought after. A difference must create value for both the organization and for the market. In order to be effective it must equally satisfy numerous demands:

a. *Relevance*. In order to be relevant, a difference must offer a considerable advantage for a sufficient number of buyers;
b. *Distinction*. The difference must be distinct so that it can not be offered by any other organization;

c. *Superiority*. The differentiation made by positioning entails a level of superiority linked to the alternative solutions of the same problem;
d. *Communicability*. The difference must be able to be communicated and its advantages should be the object of a clear and visible demonstration;
e. *Protection*. The difference must be protected against possible copies or imitations;
f. *Acessibility*. The targeted buyer must use the necessary resources to accept the difference in price which could appear after the differentiation;
g. *Efficacity*. The income obtained from exploiting the difference must make the orhanization rich.

The differences can be concentrated by "attitudes formed by the customers' evaluation of the most important attributes" (Cătoiu & Teodorescu, 2004), which is in fact a characteristic of the organization's perceived image.

Consumers' perceptions of the association differentiation-perception must comply with the strategy chosen by the organization and especially with its communicating axis – which can be assessed by the positioning of a brand. In this sense, it is interesting to see "not only the associations themselves, but also their intensity" (Cătoiu &Teodorescu, 2004).

In order to decide which difference we should promote, we can draw Chart no.1 to choose the competitional advantages.

The organization by means of attributes is assessed with the help of scores from 1 to 10 (columns 2 and 3); the fourth column reveils the importance analysed for the customer with one of the following marks: high (R), average (M), or weak (S). Columns 5 and 6 indicate the possibility of improving these attributes and, finally, column 7 records the final recommendation (final observations), which will allow the orientation of the improving strategy.

Table 1. Choosing competitional advantages

Competitional advantage	Performance of the enterprise (1 –10)	Performance of the competition (1 –10)	Importance of improvement (R-M-S)	Feasibility and Celerity (R-M-S)	Improving competitional capacity (R-M-S)	Final observations
1	2	3	4	5	6	7
1						
2						
...	...	...	...	...	...	...

Source: Iacob Cătoiu – lecture notes

By using the Fishbein – Rosenberg model we ensure the analysis of similarities and preferences expressed by potential buyers/sellers regarding the quality features of all products/services in that category. The research carried out according to this model requires 2 steps:

1 *Step 1* – identifying and classifying characteristics according to their relevance;

2 *Step 2* – asking the investigated subjects to assess on an interval - like scale each of the chosen characteristics; the results obtained will be recorded in a matrix chart for the assigned relevance (chart no. 2)

Table 2. The matrix of the relevance assigned to the product/service

	p_1	p_2	...	P_j	...	p_n
c_1	n_{11}	n_{12}	...	n_{1j}		n_{1n}
...	...	...	...	...	...	...
c_i	n_{i1}	n_{i2}	...	n_{ij}		n_{in}
...	...	...	...	...	...	...
c_r	n_{r1}	n_{r2}	...	n_{rj}		n_{rn}

Where:

$P_1, p_2, \dots p_j, \dots p_n$ – represent the researched products/services;

$C_1, c_2, \dots c_i, \dots c_r$ – represent the attributes of products/services under research;

$N_{11}, n_{12}, \dots n_{ij}, \dots n_{rn}$ – represent the scores obtained.

The importance of each considered characteristic is established by the subjects of the sample by dividing 100 points among these characteristics, then the characteristics are classified decreasingly according to the average number of points obtained.

Then we ask the people questioned to assign scores from 1 to 10 for the way in which the product or brand to be positioned satisfies the established features.Thus, we obtain the average score recorded for each characteristic. The results obtained are recorded in a summarizing chart of assessing the attributes – (chart no. 3).

According to the linear additive model Fishbein- Rosenberg, the attitude of an individual towards a stimulus (in our case the attributes of a service) can be determined with the elp of the following ratio (Balaure Virgil. – Coord., 2002):

$$p_{jk} = \sum_{i=1}^{n} W_{ik} \cdot Q_{ij} \quad (1)$$

Where, p_{jk} is the attitude of individual “k “fot the brand “j “;

W_{ik} is the assessment made by the individual “k “ to the relative relevance of attribute”i “;

Q_{ij} is the proportion in which the brand (the product) “j “ is satisfactory regarding attribute “i “.

Table 3. Assessing attributes in Fishbein-Rosenberg model

Characteristic	W_i	Q_{iA}	Q_{jB}	...	Q_{iZ}

1	W_{i1}	Q_{i1A}	Q_{i1B}	...	Q_{i1Z}
2	W_{i2}	Q_{i2A}	Q_{i2B}	...	Q_{i2Z}
...	...		...	...	...
k	W_{ik}	Q_{ikA}	Q_{ikB}	...	Q_{ikZ}
...	...		...	...	...
n	W_{in}	Q_{inA}	Q_{inB}	...	Q_{inZ}

When we evaluate the attitude of individual "k " for the brand "j " we can also carry out a normalization (which makes the sum of attributes equal 1) on the basis of the following ratio:

$$p_{jk} = \frac{\sum_{i=1}^{n} W_{ik} \cdot Q_{ij}}{\sum_{i=1}^{n} \sum_{j=1}^{Z} W_{ik} \cdot Q_{ij}} \quad (2)$$

Finally, the attribute with the highest average holds the highest position in the consumers' preference. But this analytical representation is not relevant enough.

Consequently, we compensate this analytical methodology with a graphical representation (a positioning map). In order to obtain the graph we draw a chart with the distribution of characteristics that motivate the choice of the product – (chart no. 4).

Table 4. Distribution of characteristics that motivate the relevance of the service

No.	Characteristics considered	Frequency (%)	Angle corresponding to frequency
1			
2			
...	...	...	...
k			
...	...	...	...
m			
Total	-	100	360^0

In the end, we draw a positioning map which allows the researcher to observe visually both the "strong" and "weak" characteristics of the service compared to the relevance assigned by its beneficiaries... The positioning also ensures the possibility of global and comparative assessment of products/services among themselves.

4. Case Study

Our application is an example of the way the research of the main attributes perceived by the economic agents and consumers regarding the institution of consumers' protection in Vrancea can be done. The institution is a mediator between the final user and the seller of goods and services, thus the tool to collect data was a survey with 28 questions. The research was carried out from Spetember to Novemebr 2013with 200 questionnaires, only 175 being filled out. The respondents are both economic agents and consumers prejudiced by diverse unsuitable commercial practices.

The research, completed with the additive linear model Fishbein- Rosenberg started from the following hypotheses:

1. if there are aspects of immorality among the staff of the institution during thematic controls imposed or as a result of consumers' notifications;
2. if these aspects of immorality happen among men or women;
3. if consumers are satisfied with how fast they receive an answer to their notification and with the recovering of the damages;
4. if the coercive measures taken against economic agents who have defrauded customers by different practices have been transparent, impartial and fair;
5. if there are significant differentiations between the main attributes that regulate the morality of the institution's public servants, as well as a hierarchy according to the importance given by both the controlled economic agents and the consumers that are the direct beneficiaries of the services delivered by the institution.

These are the main considered attributes:

- ethical responsibility;
- moral integrity;
- professionalism;
- impartiality;
- safety;
- transparency;
- efficiency.

The scales used are either ordering ones with grades given from 1 to 10, or Likert scales with 5 levels (from 1 = "very unimportant" to 5 = "very important") or dichotomic scales. Analyzing the results obtained on the 6 dimensions from the research carried out within the consumers' protection Vrancea, we have found both positive and negative aspects, contrasting with the moral and ethical levels specified by the existing laws.

The first hypothesis emphasizes the existence of immorality cases. Due to the institution's protection policy, the data about the existence and nonexistence of immorality aspects cannot be made public, but we can consider they exist. The law demands that they do not exist at the level of the institution, but even if there are a

small number of cases, that does not mean that the management should not be held accountable.

The next point of the hypotheses reaches a sensitive spot – whether the affirmative answer for the first aspect concerns men or women.

According to international research "*it has been proven that men have a higher tendency than women to break their moral codes when they are forced by critical situations. These behavior patterns are stronger in societies where success is seen as a strictly male attribute, being considered to be a sign of manliness and expertise, while the lack of success represents weakness, cowardice or impotence*."[1]. In this case we couldn't set a clear difference, the proportion being of 53% in favour of males.

Analysing the third hypothesis we can conclude that the level of customer satisfaction as a follow up of the notifications greatly depends on the recovery of the damage (88%) and less, but not insignificantly, on the rapidity of the answers offered by the institution (12%). The offered answers made us split the hypothesis according to the following figure (figure no. 1):

Figure 1. The level of consumers' satisfaction according to the recovery of the damage and the rapidity of the answers offered for the notifications

An answer that contains three aspects of hypothesis 4 highlights a part of the attributes that set the foundation for morality within the institution. As it is known, as a follow up of the notifications, the responsible economic agents should "discover what consumers want and respond with products or services that offer satisfaction and value" (Kotler, Wong, Saunders, Armstrong, 2005), but most of the times this aspect is ignored. Within commercial policies some economic operators ignore the demands of ethics and deliberately act in a way to determine consumers to reach false conclusions. In this case, the intervention of Consumers' Protection is beneficient since the measures, often coercive, make the economic agents enter in the area of normal commercial practices (Economic operators are not often fined as a result of complaints. Statistics from 2013 in Consumers' Protection Vrancea show that 166 complaints of the total of 550 were not justified, 57 were justified and were solved with a fine or a warning, 54 could not be solved, 44 were forwarded to another institution, 26 were not pursued and the rest were

[1] http: // www. descopera. ro / dnews/9772671.

solved in an amicable way by the consent of both parties). In this sense, the three components (transparency, impartiality and fairness) were applied to only a part of the complaints. That was the reason why the answers given by the people interviewed did not offer a complete picture, their answers being questionable. The results can be seen in the following figure (figure no. 2):

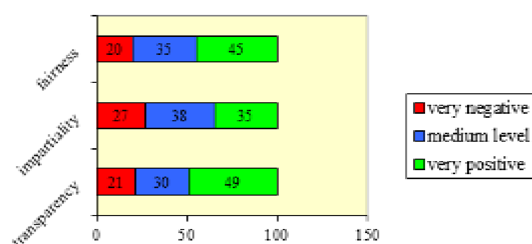

Figure 2. The level of coercive measures (%) on economic operators

Calculating the medium level for the three attributes we can conclude that the first place with an average of 43% is held by very positive attributes in the view of both the economic agents and the consumers, the other levels being of 34% for the medium level and 23% for the very negative.

The last hypothesis brings into foreground a positioning of the main attributes according to the existing laws which establish "public servants' prestige" seen through the eyes of both the economic operators and the consumers.

Analysing the answers we have drawn a map of positioning the next attributes taken into account:

- ethical responsibility;
- moral integrity;
- professionalism;
- safety;
- efficiency.

As we have already mentioned, the Fishbein- Rosenberg model means going through two steps. During the first step we identify the positioning characteristics according to their importance in the consumers' or economic operators' views.

After having interpreted the questionnaires we have obtained a frequency distribution of the answers which is illustrated in chart no. 5. The frequency distribution allows us to make calculations and rank the studied attributes according to the importance given to them by the surveyed people.

Table 5. Distribution of frequency answers on the attributes

Criteria / Points	Ethical responsibility	Moral integrity	Professionalism	Safety	Efficiency
0	0	5	7	62	25
5	0	0	9	17	17
10	7	31	32	72	66
15	2	2	5	5	11
20	38	55	68	17	44
25	17	17	14	2	5
30	32	32	27	0	7
40	40	11	7	0	0
50	21	17	2	0	0
60	9	5	2	0	0
70	2	0	0	0	0
80	5	0	0	0	0
100	2	0	0	0	0
Total	175	175	175	175	175

We show the calculation of the average number of points obtained by each characteristic. The calculations were made with the fixed ratio arithmetic average, as shown below:

$$\overline{x} = \frac{\sum_{i=1}^{n} x_i f_i}{\sum_{i=1}^{n} f_i} \quad (3)$$

In chart no. 6 there is the average number of points obtained by each charatcteristic.

Where:

- $\bar{x}$ – average number of points obtained;
- X_i – number of points assigned by each subject for criterion i;
- F_i – total number of subjects.

Table 6. Ranking the criteria taken into account by the respondents

Criteria	Average number of points	Rank in the view of the respondents
ethical responsibility	35,28	I
moral integrity	25,22	II
professionalism	20,11	III
safety	12,14	IV
efficiency	7,25	V

We can draw a first conclusion from this step of processing information and that is:

- ethical responsibility is at the top of the preferences, the institution having the obligation to show concern towards both competitiors on the market – consumers and economic operators;
- moral integrity holds a lower place in the preferences compared to ethical responsibility, which was to be expected from the moment of processing the first hypothesis (it signals the inobservance of the moral principles);
- public servants' professionalism is the third option of the respondents who offer an important signal, in compliance with the first two attributes, and it indicates the individual benefit, the moral choice being made by calculating the benefits of a situation;
- on the last place there are the safety and efficiency and we are surpised at this choice. Safety and efficiency should have made people trust the institution, to make it be accepted by the public, which is not happening.

The results obtained expressed only by numbers are little representative, and they increase the difficulty of drawing complex conclusions. In such a situation, making a positioning by means of graphical representation is beneficial. Therefore, the results take shape in a positioning map having 5 representation axes determined by the five researched characteristics. We shall draw a table with the distribution of the researched characteristics (chart no. 7) where we shall record the frequency occurrence of each characteristic and the corresponding angle of each frequency.

Table 7. Distribution of analyzed chatacteristics

No.	Characteristic	Frequency occurrence	Angle corresponding to frequency (°)
1	ethical responsibility	35,28	127
2	moral integrity	25,22	91
3	professionalism	20,11	72
4	safety	12,14	44
5	efficiency	7,25	26
	Total	100	360°

We complete the positioning map using these data, represented in figure no. 3.

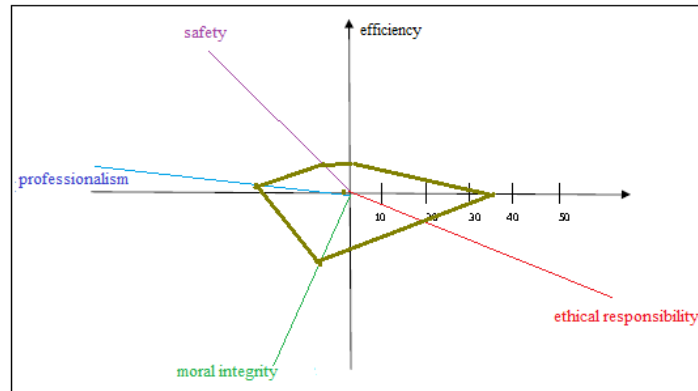

Figure 3. Positioning map

The analysis of the positioning map shows the complexity and the distinctiveness of this service offered to consumers, an institution with some isues in the smooth running of its activity. However, it is not to be ignored that the sum of the first two attributes considered during the research shows that the institution is open towards the community and that the perception of ethical responsibility and moral integrity (with a score above 60%) respects and integrates in its own activity the demands of social responsibility which is being perceived as reflecting contemporary reality.

5. Conclusion

The scientific undertaking has wanted to study the way of finding out the level of ethics and social responsibility within the Consumers' Protection Vrancea. We have analysed the complex aspects of some stated hypotheses in order to be able to envision certain phenomena and issues concerning the legislation, but also the level of social ethics and responsibility within this institution. If there is a legal demand concerning this fact, the actions taken place in the contemporary society on the whole show that the demands completing the moral and ethical profile of the public servant in this institution are only partially followed. Analysing the positioning map of the attributes considered, we draw the conclusion that demands of the social responsibility are strict, this being also due to the general interest of the society. With a percentage of over 60%, the significance of the first two components makes the institution's own activity to be perceived as beneficial by the community. However, a more coherent and practical system is justified either by imposing some legal regulations aiming at this particular activity, or setting up some ethical offices at the level of the regional structures.

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Evaluation and Effectiveness of Training Systems in Indian Industry [A Research Study in Greater Pune]

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Abstract: Training and Development as an HRD intervention plays an important role in the success of the organization. The purpose of Training and development is to increase the skills of the employees; therefore it is increasingly believed that the training expenditures are not the costs but an investment. Attracting and retaining talent becomes difficult task for the organization. It is also true that successful outcomes are possible only with the quality of the training provided to the employees. It is equally important to assess the need of the training, the nature of the training provided, the methods and the selection of the training programs and ultimately evaluation of the training programs are important for the sound health of the organization. A study was carried out in the City of Greater Pune with the industries in different sectors excluding Information Technology and Chemical Industry.

Keywords: training; development; talent development; assessment; evaluation

JEL Classification: J31

1. Introduction

HRD basically aims at improving the performance of employees through systematic training, career development and thereby organizational development. It is evident that if HRD issues are not properly handled, then organization may face decreased performance and may start a slow decaying. Productivity may suffer and cultural clashes may increase. Employees may suffer from low skills and low knowledge. Attracting and retaining talent becomes difficult task for the organization. It is also true that successful outcomes are possible only with the quality of the training provided to the employees. It is equally important to assess the need of the training, the nature of the training provided, the methods and the

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selection of the training programs and ultimately evaluation of the training programs are important for the sound health of the organization.

Training and Development as an HRD intervention plays an important role in the success of the organization. The purpose of Training and development is to increase the skills of the employees; therefore it is increasingly believed that the training expenditures are not the costs but an investment.

Fast growing companies have dedicated substantial amount of time to the professional development of their employees (Jacob et. al., 2003). In the context of globalization, human resource development with proper training to the workforce is required to meet the challenges in future and to win the global competitive advantage. The organizations spend huge amounts of money on imparting training to its employees. So it is very important to evaluate the efficacy of the training programmes conducted so far, and to find out whether the executives are able to implement the skills that they learned in the training and development process

2. Limitation of the Study

The survey which was presently conducted had its share of limitations. The limitations occurred because of scope of study and samples chosen, and the research methodology adopted. Hence it is a study specific to Greater Pune and we must not make the error of generalizing for the rest of the country there from.

1. Scope and the samples selected for the study;
2. The analysis is within the frame work of the selected organizations;
3. Research Methodology – The information on Training and Development activities conducted was obtained from the discussion with HR managers of the respective organizations However, the limitations were tried not to be restricted by attempting the following:
    a. HR managers were met personally and were interviewed.
    b. The study was limited to the organization in Pune City only. If we consider the geographical limitations, it is most likely that the finding may be drastically different in the other parts of the country as the generalization of the result may be more or less same in any part of the country. The industries around Pune are considered well developed and are fully aware of the Training and Development concept. Hence the HRD interventions that were mooted can be understood.
    c. Information Technology Sector and Chemical Sector have not been taken into consideration for this survey.

1. Statement of the Problem: Literature on Training and Development is very rich in the form of many books and the subject is mentioned in many journals. But after going through literature the authors were not very sure if HRD Managers had evaluated the impact of the interventions. It was also essential to note the training as process efficiency. There are number of organizations where this kind of support is not provided to the employees in spite of National Policy that training has to be provided to the employees to increase their skill sets and to gain through the training strategies. The organizations now have understood the importance of providing the training to their employees so as to get the edge in the area of competition. There is now growing recognition that training has a significant role to play in the firm gaining competitive advantage. Extensive research undertaken within the human resource area has found that majority of the organizations engaging in innovative practices include training and development as key elements to attaining best practices.

2. The Study: This study was conducted between 2009 and 2010 over a period of fifteen months. The region selected was Greater Pune. A pilot survey conducted in March-May 2009 showed that although HRD interventions had been generally mooted there was not systematic evaluation of training impact as a result of which HRD was playing "a blind man's buff". To confirm this initial prognosis we undertook a systematic investigation and selected 50 companies, ten from each sector as will be explained in the section on methodology. No doubt training offers many benefits to employees and to the organization as a whole. Employees become more confident, open to change and supportive of each other. Production and productivity increase and at the level of the person, the process and the product. In addition, employees are motivated to achieve improved performance as a result of training. The benefits employees' gains are personal, career oriented and job related knowledge. The availability of training to the employees make them committed for achieving performance and develop strong relations with the organization and stay longer in the organization. Therefore the purpose of this study is to analyze the Training and Development efforts within selected organizations, identifying T & D activities, its evaluation methods. To achieve this objective, the study identified what was presented by the literature and published studies as best practices in the area of training and development.

3. Definitional Premise: there is a lot of ambiguity about training and development in published literature and so for purpose of this investigation we adopted the following position. By no means are the two terms synonymous and are seen as follows.

Training is a process of learning through a sequence of planned and programmed behavior. It tries to improve present job performance and prepare employees for future or intended performance. It is therefore a short term process, an activity based concept, wherein skills are learned, unlearned or relearned. The aim is to

enhance individual effectiveness on the job and it involves practical application of programmed knowledge.

Development is a wider term than training that has job specific as well as culture specific improvement methods. Therefore it involves Personality development, is essentially a thought based concept, involves a long run intervention and relates individuals to the organization in terms of goals, skills, attitudes, behaviors and values. In a way, therefore training is a part of development.

4. Research Question: Based on a survey of literature we formulated the research question that can be succinctly stated as "*What are Training and Development objectives and what are methods of evaluation of the training programs?. It was also decided to find out whether these organizations extend permission to carry out research activities about their training and development programs".*

5. Research Objective: Born out of the question posed was the objective of this study. This was verified through personal interaction with managers and HRD personnel in companies**.** The authors wanted: (i) to know and understand the role and importance given to training and development activities in the organization under survey. This was to augment our knowledge and understanding of the problem at hand. (ii) To find out factors responsible for evaluation and effectiveness of training activities. This would imply that a comprehensive review of training activities had to be undertaken. (iii) To suggest ways and methods, if any to improve the training and Development activities in the organization, if permission were to be given to carry out research into their training and development programs. This would lead us to come up with the findings of our investigation and posit a set of recommendations.

Based on the pilot survey conducted, the following Hypotheses were formulated and they had to be tested: 1 - Evaluation of training is an essential requirement to understand the effectiveness of any HRD intervention and 2 - Evaluation is not based on a one single method but on a variety of methods.

6. Research Methodology: Method is the manner in which the investigation is conducted whereas methodology is the science of that method. This basic epistemological clarification was needed.

7. Sample Selection: We stratified the companies and selected only those organizations that employed 100 or more workers in a permanent capacity. Further only those organizations that conducted training and development were selected for the investigation. Information was gathered through questionnaires and followed up by focused interviews.

8. Research Instruments: The research instrument contained questionnaire which was developed by researcher after going through various literatures on T & D and HRD. The questionnaire contained 3 parts A, B and C. The questionnaire was

validated through consultation with experts in the field rather than using the Cronbach Alpha.

9. Research Method: While gathering the data, standardized open ended interviews were conducted. It was explained to the HR managers that the participation in the interview was purely voluntary and the response would be used purely for academic and research purpose. It was therefore, satisfying for the HR managers to come out with suitable answers.

10. Previous Studies / Literature Reviewed: Saks studied the relationship between training and outcomes for newcomers. A sample of 152 newly recruited entry level professionals completed a questionnaire after the 1st six months of socialization. Supervisor rating of job performance were obtained four months later. The result indicated that the amount of training received by newcomers was positively related to job satisfaction, commitment, ability to cope and several measures of the job performance, Newcomers perceptions of training were positively related to job satisfaction (Saks A.M., 1996).

Huselid studied the impact of high performance work practice by using survey data on 968 firms. The survey was completed in 1992 by senior human resource executive in the firm and solicited information about the firm's 1991 human resource policies, including the average number of hours of training received by the typical employee for the last 12 months. Huselid grouped the companies HR policies in two categories, the employee skills and organizational structure with employee motivation. It was found that organizational structure and employee skills were important for the rate of return on capital. Each one standard deviation increase in high performance work practices increased cash flow and raised the company's market value tenfold (Huselid Mark, 1995).

Manpower requirement in tourism sector, for instance, indicates that the training program needs modification to suit the requirement of operational skills. The need for infrastructure to create trained manpower requires finding out how to upgrade existing hotel management institutes and whether to set up new hotel management institutes or food craft institutes. Need for suggestions of measures to upgrade training courses that provide higher level of skills is required.
Colligan and Cohen have reported the benefits of the training showing how training objectives are met such as increased hazard awareness among the worker who are at risk of health hazards. Knowledge of safe working practices reduces the work related accidents and improves workplace safety. Lack of safety training may result into workplace hazards which may cost the company even more in terms of lost man-hours. In their reports the authors conclude how training resulted into reduced injury, reduced time for work, and reduction in the medical costs. Training outcomes were successful which were supported by management decision in supporting the safety training, whatever may be the job site. The issue is not so

much whether training is worthwhile but the factors beyond the training process which can make great impact (Kolligan et.al, 1998).

Jacobs and Washington has studied the effects of formal training courses. While conducting this study he has examined the work setting characteristics and the work outcomes. He used questionnaires to be completed anonymously by large sample of managerial and professional categories. All were the employees of one large single firm. Study findings indicated that training courses have tangible benefits in several important areas of perception and job satisfaction. The participation in both external and internal training programs were beneficial to the organization as well as individually. Employees who had a perception of greater value in their formal courses were more satisfied with their present jobs and felt comfortable about the firm as compared to other places where they could work. Thus these employees were less likely to leave the firm. Interestingly enough, the work setting also showed positive result as employees described the firms cultural value more positively, they rated the competence of their colleagues more highly, they indicated greater opportunities for on the job development and continuous learning, said that they participated in more training courses and found it very valuable for gaining skills and knowledge (Jacob R L *et al*, 2003).

Perdue *et a*l assessed the relative effectiveness of alternative training methods in private clubs across US. They used an e mail questionnaire and collected data from random sample of 123 private club mangers from across USA. The result indicated that one to one training method is considered the preferred method for all the objectives of training except for the objective of interpersonal skill development. The use of video ranked fifth best training method. Audio conferencing, paper and pencil, program instruction, audio tapes, computer conferencing, self assessments were considered least effective training methods (Perdue et al, 2002).

Harris examined the opinions of a sample of American directors of human resource as well as of training about their training methods and the quality of these methods. The result indicated that classroom training method was most used and useful. One on one and on the job training method was mostly preferred by smaller firms. The most preferred method was videotapes regardless of company size. The main barrier for using computer technology was high cost and obsolescence of computer technology. The author concluded by suggesting that computer based technology and multi media should be used for saving time and money Harrs Kimberley, 1995).

Klink and Streumer examined the effectiveness of on the job training and some possible factors that clarify effectiveness of two samples taken from two Dutch companies. The first sample was from 36 sales staff working in a telephone company. They were being trained to improve the quality of telephone sale call so as to increase the telephone sales. The 2nd sample consisted of 45 new counter

clerks of post offices, who were trained on how to behave and function independently at the post office counter. The results indicated higher level of effectiveness for telephone sales staff than counter clerks. The perception of telephone sales staff about the managerial support and their own experience as sales staff added to the high level of effectiveness. In case of counter clerks the work place atmosphere and their own efficiency was the main variable to determine the effectiveness of the training (Marcel et al, 2002).

Mann and Robertson studied trainees reaction and knowledge acquired in order to find out the effectiveness of the training program. Sample of about 29 trainees who were part of 3 day email and internet training program held in Switzerland. Each participant was asked to fill up a questionnaire before training, at the end of the program and after a month of the program. The result s showed that trainees increased their knowledge. The positive attitudes shown during training are not the indicator of actual work performance. Attitude and reaction measures were not linked to later performance. Therefore the authors advocate that such measures should be used with care for evaluating training programs (Mann et al, 1996).

3. Some Evaluation Models

Donald Kirkpatrick's 1975 book Evaluating Training Programs defined his originally published ideas of 1959, thereby further increasing awareness of them, so that his theory has now become the most widely used and popular model for the evaluation of training and learning. Kirkpatrick's four-level model is now considered an industry standard across the HR and training communities. The four levels of training evaluation model was later redefined and updated in Kirkpatrick's 1998 book, called *'Evaluating Training Programs: The Four Levels'*.

The four levels of Kirkpatrick's evaluation model essentially measure:

1. **Reaction of trainees** - what they thought and felt about the training;
2. **Learning** - the resulting increase in knowledge or capability;
3. **Behaviour** - extent of behavior and capability improvement and implementation/application;
4. **Results** - the effects on the business or environment resulting from the trainee's performance.

All these measures are recommended for full and meaningful evaluation of learning in organizations, although their application broadly increases in complexity, and usually cost, through the levels from level 1-4. In his 1994 book "Evaluating Training Programs: the Four Levels", Kirkpatrick suggests that the effort and overheads required to evaluate at successively higher levels requires a growing amount of effort and resource, so it is perhaps easier and cheaper to evaluate at Level 1 but this is unlikely to be the case at Level 4. This is the

argument (*made by Kirkpatrick himself*) for evaluating some 95% of training at Level 1 but perhaps only 5-10% of training at Level 4.

Evaluation approach suggested by Warr, Bird and Rackham (1970) have four levels the first letter of each level forms an acronym CIRO= that is

1) Context evaluation, 2) Input evaluation, 3) Reaction evaluation, 4) Outcome evaluation.

Reaction evaluation has the same meaning in both Kirkpatrick and CIRO. Outcome evaluation is further subdivided into 3 levels, corresponding to Kirkpatricks last three levels. Context evaluation is obtaining information on the operational aspects. This will be used to decide training needs and objectives. Objectives are set at three levels i.e *immediate, intermediate* and *ultimate*. Immediate is concerned with Knowledge, Skill and Attitude (KSAs) desired at the end of training; intermediate is related to changes in job performance, and ultimate are the desired changes in the organization.

A.C. Hamblin (1974) defined evaluation of training as any attempt to obtain information on the effects of training program and to assess the value of the training in the light of that information. He described evaluation as a training aid and identified four levels of evaluation. They are- the reaction level-the learning level-the job behavior level and the functioning level (Hamblin, 1974).

Peter Bramley (1996) defines evaluation as process of establishing the worth of something. The worth which means the value, merit or excellence of the thing, is actually someone's opinion. Evaluation of training is a process of gathering information with which to make decisions about training activities. It is important that it is done carefully so that decisions can be based upon sound evidence. Good decisions to introduce retain or discard particular training activities can make a major contribution to the well being of the organization. He suggested the following methods of evaluation (Peter Bramley, 1996).

Impact analysis – At the pre-training stage the stakeholders conduct a workshop to arrive at the ultimate outcome of training intervention. Evaluation after a year showed the results such as – positive movement in the profitability, reduction in the recruitment of technical staff, introduction of new training programs.

II) Aspects of organizational effectiveness. Here Peter Bramley uses following criteria- (a) Achieving organizational targets, (b) Attracting resources, (c) Satisfying interested parties (d) streamlining internal processes.

4. Findings

The Investigators selected 10 companies from each of the five sectors mentioned below. These were companies that satisfied the condition (i) of having more than 100 employees on any particular day during the year and (ii) regular training and development activities were initiated by HRD. The 10 companies were from Construction sector, manufacturing sector, and Hospitality sector (Hotels), Banking sector and Service Sector each totaling 50 in number. Selection of the companies for this investigation, after the two requirements were met, was based on convenience.

As the data given below will demonstrate, all the companies in the investigation had mooted training and development programs for enhancement of skill, knowledge and attitude as a part of their HRD intervention. Programs were conducted, experts were invited and participants attended. However, there was an acute paucity of evidence to show that the training programs that were conducted were actually and scientifically evaluated. There also existed a kind of opaqueness in respect of evaluation and all we found was a simple feedback on a single sheet taken at the end of the program and which had every chance of being biased as managers were afraid to criticize HRD efforts. This fact was evident when the companies refused to permit the investigators to see the feedback report or even discuss the feedback mechanism.

Part A, which contained following 8 close ended questions, were answered as below.

	PART A	Yes	No
1	Training need identification is considered primary task before designing training program.		
2	Performance appraisal is used as basis to identify training needs.		
3	There is a well defined mechanism for evaluation of training programs		
4	Evaluation is based on well defined objectives of training programs.		
5	Sufficient follow up on learning outcomes are made after the training		
6	Evaluation data is properly preserved for future use.		
7	Staff of the training department is properly trained in the evaluation methodology.		
8	Evaluation is an integral part of training process.		

Answers were as below:-

Construction Sector Companies	Manufacturing Sector Companies	Hospitality Sector	Banking Sector	Service Sector Companies
Yes to all 8 questions	Yes to all 8 questions	Yes to all 8 questions	Yes to all 8 questions	Yes to all 8 questions

Part B Consisted of the following questions.

1	Which of the following model is used in your organization for evaluation of training (Pl.tick) (a) ◯Kirkpatrick Model Because__________________________________ (b) ◯ CIRO model Because__________________________________ (c) ◯ AC Hamblin Model Because_____________________________ (c) ◯ Peter Bramley Model Because_____________________________ (e) ◯ Any other. Because____
2	As per YOUR opinion which model could be the best for evaluation of training (Pl.tick) (a) ◯ Kirkpatrick Model Because_____________________________ (b) ◯ CIRO model Because_____________________________ (c) ◯ AC Hamblin Model Because_____________________________ (d) ◯ Peter Bramley Model Because_____________________________ (e) ◯ Any other. Because____
3	What is the frequency of evaluation exercise? Once in a year ◯; Once in two years ◯; Once in three years ◯;

4	Following are some of the objectives of training evaluation. Please tick them in order of preference from number 1 to 5 (1 being the highest) ◯To evaluate the achievement of training objectives. ◯To determine the extent of acquisition of knowledge, skills and changes in attitudes because of training. ◯To make required improvements in training. ◯To determine the effectiveness of training staff. ◯To establish guidelines for future programmes.

The responses were as follows:-

Q no.1	Construction	Manufacturing	Hospitality	Banking	Service
A	Kirkpatrick Because easy to use	Kirkpatrick Because easy to use	Kirkpatrick Because easy to use	Kirkpatrick Because easy to use	Kirkpatrick Because easy to use
b,c,d, and e	Not ticked	Not ticked	Not ticked	Not ticked	Not ticked
Q.No.2 a	Kirkpatrick Because easy to use	Kirkpatrick Because easy to use	Kirkpatrick Because easy to use	Kirkpatrick Because easy to use	Kirkpatrick Because easy to use
b,c,d and e	Not ticked	Not ticked	Not ticked	Not ticked	Not ticked
Q.no.3	Company no.	Company no.	Company no.	Company no.	Company no.
a,b and c	1 a	1 a	1 a	1 b	1 a
	2 a	2 a	2 a	2 a	2 a
	3 a	3 a	3 a	3 a	3 a
	4 a	4 a	4 a	4 a	4 b
	5 b	5 a	5 a	5 a	5 a
	6 a	6 a	6 a	6 a	6 b
	7 a	7 a	7 a	7 a	7 a
	8 a	8 a	8 a	8 a	8 a
	9 b	9 a	9 a	9 a	9 a
	10 a	10 a	10 b	10 b	10 a
Option c	Not ticked	Not ticked	Not ticked	Not ticked	Not ticked

Q no.4 Part B: Following are some of the objectives of training evaluation. Please tick them in order of preference from number 1 to 5 (1 being the highest)

a) To evaluate the achievement of training objectives. ◯
b) To determine the extent of acquisition of knowledge, skills and changes in attitudes because of training ◯
c) To make required improvements in training. ◯

d) To determine the effectiveness of training staff. ◯
e) To establish guidelines for future programs. ◯

The answer to the above question was answered as below:-

1. Construction Sector Companies

Q.	Co. 1	Co. 2	Co. 3	Co. 4	Co. 5	Co. 6	Co. 7	Co. 8	Co. 9	Co.10
a	2	3	2	3	2	3	2	2	2	3
b	***1***	***2***	***1***	***1***	***1***	***1***	***1***	***1***	***1***	***1***
c	3	1	4	3	3	2	3	4	3	2
d	5	4	5	5	4	5	4	5	4	4
e	4	5	4	4	5	4	5	4	5	5

2. Manufacturing Companies.

Q.	Co. 1	Co. 2	Co. 3	Co. 4	Co. 5	Co. 6	Co. 7	Co. 8	Co. 9	Co.10
a	2	3	2	3	2	3	2	2	2	3
b	***1***	***1***	***1***	***1***	***1***	***1***	***1***	***1***	***1***	***1***
c	3	2	4	3	3	2	3	3	3	2
d	4	4	5	5	4	5	4	4	4	4
e	5	5	4	4	5	4	5	5	5	5

3. Hospitality Sector

Q.	Co.1	Co.2	Co.3	Co.4	Co.5	Co.6	Co.7	Co.8	Co.9	Co.10
a	2	3	2	3	2	3	2	2	1	3
b	***1***	***1***	***1***	***1***	***1***	***1***	***1***	***1***	***2***	***1***
c	3	2	4	3	3	2	3	3	3	2
d	4	4	5	5	4	5	4	4	4	4
e	5	5	4	4	5	4	5	5	5	5

4. Banking Sector

Q.	Bank 1	Bank 2	Bank 3	Bank 4	Bank 5	Bank 6	Bank 7	Bank 8	Bank 9	Bank 10
a	2	3	2	3	2	3	2	2	2	3
b	***1***	***1***	***1***	***1***	***1***	***1***	***1***	***1***	***1***	***1***
c	3	2	4	3	3	2	3	3	3	2
d	4	4	5	5	4	5	4	4	4	4
e	5	5	4	4	5	4	5	5	5	5

5. Service Sector

Q.	Co.1	Co.2	Co.3	Co.4	Co.5	Co.6	Co.7	Co.8	Co.9	Co.10
a	2	3	2	3	2	3	2	2	2	3
b	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*
c	3	2	4	3	3	2	3	3	3	2
d	4	4	5	5	4	5	4	4	4	4
e	5	5	4	4	5	4	5	5	5	5

6. Part C of the Question

1 In your organization measurement of effectiveness of training is determined by comparing pretest scores with post test scores

◯Yes; ◯No

2. For measuring the effectiveness of training, which of the following formulae is used in your organization? (Please tick.)

(a) $\frac{\text{Number of trainees Operating equipment to required standard}}{\text{Total number of people trained}} \times 100\%$ ◯

(b) $\frac{\text{Number of training courses achieving the required outcomes}}{\text{Total number of training courses delivered}} \times 100\%$ ◯

(c) $\frac{\text{Total benefits}}{\text{Total Costs}} \times 100\%$ ◯

(d) Any other method

3. Would you give permission to undertake detailed research on training and development activities in your organization ?

◯Yes; ◯No

The answer to the above questions were answered in variety of ways as below:-
Construction Sector

Q.	Co.1	Co.2	Co.3	Co.4	Co.5	Co.6	Co.7	Co.8	Co.9	Co.10
1	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes

Manufacturing Companies.

Q.	Co.1	Co.2	Co.3	Co.4	Co.5	Co.6	Co.7	Co.8	Co.9	Co.10
2	a	a	a	a	a	a	a	a	a	a

Hospitality Sector

Q.	Co.1	Co.2	Co.3	Co.4	Co.5	Co.6	Co.7	Co.8	Co.9	Co.10
2	b	b	b	b	b	b	b	b	b	b

Banking Sector

Q.	Bank 1	Bank 2	Bank 3	Bank 4	Bank 5	Bank 6	Bank 7	Bank 8	Bank 9	Bank 10
2	b	c	c	c	c	c	c	c	c	c

Service Sector

Q.	Co.1	Co.2	Co.3	Co.4	Co.5	Co.6	Co.7	Co.8	Co.9	Co.10
2	b	b	b	b	b	b	b	c	c	b

5. Conclusion

On the basis of responses obtained from *Part A of the questionnaire* we can say that all 5 sector companies:

1. Consider training need identification as primary task before designing training program.
2. Use performance appraisal as basis for training need identification.
3. Agree to well defined mechanism for evaluation of training program.
4. Have well defined evaluation objectives.
5. Make follow up for outcome after training programs
6. Preserve evaluation data for future use.
7. Have trained their staff for evaluation methods.
8. Consider evaluation of training as an integral part.

Responses from *Part B of the questionnaire* demonstrated:

1. It is evident that all the companies follow Kirkpatrick model of evaluation. The reason for following this model is because it is easy to use.
2. All the companies have suggested that Kirkpatrick model of evaluation is the best model. The reason for this is again easy to use.
3. It is evident from the answers that almost all the companies evaluate their training programs once in year.
4. 90% of the companies in the Construction sector,100% of the companies in the manufacturing sector,90% of the companies in the hospitality sector and 100% of Banks in the Banking Sector and 100% Service Sector companies have similar objective of training evaluation and that is “To determine the extent of knowledge, skills and changes in the attitude because of training”

Part C of the questionnaire:

1. All the construction sector companies measure the effectiveness of training programs by comparing pretest scores of trainees with post test scores and the difference is considered as knowledge and skills gained.
2. Manufacturing sector, on the other hand does not take into consideration the number of training programs delivered. It takes into consideration the number of people in the organization trained ***till*** they acquire the required standard of skill sets to perform as per standards laid down. Thus for example if the number of people trained were 250 for operating CNC machine to the correct standard and out of these 250, say 188 trainees displayed the correct standard, then the effectiveness of training is said to have achieved 75%.
3. All the hospitality sector companies measure the effectiveness of training in a different way. For example, if the number of training courses were 50 in a calendar year and the required skill sets acquired by the trainees in 40 training programs out of the 50, then the effectiveness achieved is 80%.
4. 90% of the banking sector organizations believed in total benefits gained out of the total cost incurred for the training programs. For example, if the training program for deposit mobilization incurred a cost of Rupees 1 lakh, and the trainees had mobilized deposit to the tune of Rupees 10 lakhs, the percentage of success could be said to be 90%.
5. The service sector companies were compatible with hospitality sector. 80% of the service sector companies measured the effectiveness by outcomes of the training programs from the total number of training programs undertaken.
6. All those companies did not have any other method of measuring the effectiveness of training programs except for the above mentioned methods.
7. Question 3 of this part C was "Would you give permission to undertake detailed research on training and development activities in your organization ? " Yes No

The answer to this question was an emphatic NO by all the companies except only one company in the manufacturing sector. This emphatic NO by other companies has really baffled the researcher and it is concluded that the training activities are kept classified from the academic researchers for number of reasons. Although evaluation is regarded as the integral part of the training system, the fact that there is no transparency in its disclosure led the investigators to conclude the possibility that the 50 companies or more specifically the HRD Departments possibly suffered from the following symptoms:

1. **The Avoidance Symptom**- Evaluation is perceived as a painful process that exposes the training departments' problems and individuals' shortcomings. It is avoided unless absolutely necessary.
2. **The Anxiety Symptom** - It induces anxiety in the minds of trainers.
3. **The immobilization Symptom-** The lassitude and lack of interest are symptoms of sickness.
4. **Lack of Theory and Guideline Symptom:** There is a lack of unified theory of evaluation.
5. The above sickness generally breeds following abuses of training evaluation.

6. **Eye Wash** – An attempt to justify a weak program by deliberately selecting only those aspects that look impressive on the surface. (appearance replaces reality)
7. **White Wash** –An attempt to cover program failure or errors by avoiding any objective appraisal. (vindication replaces verification)
8. **Sabotage-** An attempt to destroy program regardless of its effectiveness. (politics replaces science)
9. **Posture** – An attempt to use evaluation as a *gesture* of objectivity or professionalism. (ritual replaces research)
10.**Postponement**- An attempt to delay needed action by pretending to search for the facts (research replaces service).

6. Investigation's Impact

To recap, the investigators proceeded with the following hypotheses:

1. Evaluation of training is an essential requirement to understand the effectiveness of any HRD intervention.

2. Evaluation is not based on a one single method but on a variety of methods.

Every single company from the 50 studied agreed with H 1 in that evaluation of training is an essential requirement. This means that H # 1 stands proven.

Every single company moreover claimed to have used *only* the Kirkpatrick Model. This means that H # 2 is not proven.

However the lack of transparency precludes the investigators from making a conclusive remark on this issue.

Pune is often referred to as the "Oxford of the East". One would then assume that there was some symbiosis between the academia and industry reflecting what is taught with what is practiced. However, there seems to be little impact of what is taught in HRD upon what is practiced in the industry. This may be because many HRD Managers may have been educated outside Pune and/or maybe the prevailing corporate culture overshadows the HRD Manager's zeal to evaluate the training. In view of the opaqueness exhibited by the HRD Managers during the course of this investigation, it is hard for us to tell. But the fact remains that HRD *cannot* be an ongoing exercise unless evaluation of training is scientifically done. As S Sadri and S Jayashree have argued unless evaluation takes place HRD interventions will remain a Pie in the Sky and that is what seems to be happening most unfortunately. As an ancillary to this the feedback must be taken seriously to improve training deliverables and evidence on that front too was found wanting (Sadri *et al*, 2011). This definitely makes a strong case for promoting creativity and innovation on the one hand and generating trust, transparency and teamwork on the other. This being outside the scope of this paper a mere mention of it is enough.

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The Effect of Foreign Bank Presence on Domestic Banks Performance: An Evidence from a Developing Economy

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Abstract: This study examines the effect of foreign bank presence on the behaviour of domestic banks by using the annual data of 37 commercial banks comprising of 7 foreign and 30 domestic banks for the time period of 2007 to 2011. We investigated how net interest margin, return on assets, overhead costs, cost to income and nonperforming loans are effected by the foreign bank presence. We have used panel regression analysis employing bank specific fixed effect model. As a developing country case, the results suggest that the increase in foreign bank share effects the interest margins and profitability of domestic banks in a decreasing manner. It wouldn't be erroneous to express that foreign banks have a positive effect on the competitive environment of domestic banks increasing overall banking standard in Pakistan, the licensing policies should be further liberalized to let new entrants further improve the domestic financial intermediation system.

Keywords: Foreign Bank; Domestic Banks Performance; Developing Economy

JEL Classification: G21; P52

1. Introduction

The financial intermediaries are an integral part in facilitating the economic activity of any country. The banking industry has phenomenally grown since 1960's domestically and especially internationally due to increased trade flows, foreign direct investments, multinational companies expanding businesses irrespective of geographical boundaries. The major reasons for increase in banking activities are due to globalization of markets and liberalization of banking industry in many countries all around the globe. These reasons have caused banks to extend their activities in shape of penetration in other countries. The foreign bank entry and presence has increased phenomenally, especially in the emerging economies which has attracted the attention of researchers to study the influence of foreign banks entry on the domestic banks performance, efficiency and competition. A lot

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AUDŒ, Vol. 10, no. 2, pp. 36-50

of cross country studies such as (Levine, 1996; Claessens, Demirguc-Kunt & Huizinga, 2001; Walter & Gray, 1983), have been conducted which indicates towards the possible pros of foreign bank penetration on the domestic economy as well as for the domestic banking industry.

Due to increase in the foreign bank entry in domestic banking industry has raised a lot of questions regarding what types of impact do these international banking activities can have on domestic banking sector. In the studies conducted by different researcher some broad influences have been identified. First of all the foreign bank entry will influence the competition in the domestic country. Due to this the efficiency of the domestic banks will be affected. At last it will have influence on the domestic banking infrastructure. The aim of our study is that how is the domestic banks profitability effected by foreign bank penetration, what are its consequences.

The foreign bank entry increases competition, effects the efficiency and stability of economic system, these influences can be linked with the theory of market contestability given by Baumol (1982) the theory assumes that there are a few number of contestants and the market is competitive due to fear of new firms entering the market. One of the major assumptions of this theory is that the commodities traded or sold in a particular market are similar and the market is stable. Due to these reasons it creates a fear of new entrants in the market which leads to better performance and enhanced efficiency of existing firms to produce quality commodities. In case if the old firms increase the prices it will attract new entrants to enter the market and sell their products at lower prices, which leads to capturing market share and share of existing firms. In order to survive this situation existing firm should produce quality products at competitive prices. This leads to increasing the efficiency and performance of the existing firms this type of foreign penetration leads to stability and production of valued financial services.

This study has an importance in accordance to find out the relationship of domestic banks profitability being affected by the foreign bank entry due to some reasons. The Pakistani banking sector has undergone financial liberalization and deregulation in the 90's era the major cause of doing this was to increase the efficiency and performance of the state owned banks, due to which the banking sector has expanded. In the recent years the banking industry have seen radical changes in services quality and branches outreach to capture deposit market. This study will give us fresh insight with empirical justification whether the foreign bank entry has improved the domestic banks performance or not.

Most of the studies conducted on the foreign bank entry influence on the domestic banks performance are cross sectional such as (Claessens et al., 2001; Hermes and Lensink, 2003; Detragiache et al., 2008) which do not accommodate country specific economic and regulatory factors which leads us to establish empirical evidence for emerging economy such as Pakistan, studying a single country we can control for such economic and regulatory factors which can affect the authenticity

of empirical evidence. This empirical study uses the Claessens et al., (2001) methodology as a base and extends it to accommodate any country specific effects associated with the economic and regulatory factors, this would be the first study in Pakistan to use this extended method to check the effect of foreign bank entry on the performance of domestic banks. This study is based on all the commercial banks and foreign banks in Pakistan. The study is planned in four sections immediately preceding section 1 which is introduction is section 2 which gives the review of literature of the past studies regarding the research theme. Section 3 explains the methodology used and data employed, section 4 gives the results and interpretation, section 5 concludes the paper.

2. Review of Literature

In this section of the study we try to examine the literature regarding foreign bank entry and its influences on the domestic banks. First the arguments are given regarding the said issue and secondly studies giving empirical evidences regarding foreign bank presence and it consequences are discussed given by various researchers.

A lot of researchers (Cho, 1990; Levine, 1996; Buch, 1997; Berger and Hannan, 1998) have argued that the foreign bank entry portrays positive effects on the domestic banks which is discussed, firstly due to foreign bank entry the domestic banks feel pressure to reduce their costs and which leads to increase in efficiency. Due to new entrants in the market the domestic banks feel pressure to enhance the quality of services and the old fashioned banking practices come under pressure, in order to maintain the market share which leads to reduction or lowering of interest rates. Secondly the foreign bank presence may also have a spill over effect on the domestic banking industry in terms of introducing new techniques and financial services which are not known to domestic financial system which would lead them to imitate such services. This would lead to increase in efficiency and modernization of the banking techniques in the local banks. Furthermore the foreign banks may move to acquiring other banks which would contribute to more solid management and would enhance the bank supervision and regulation. These spill over's lead to the overall betterment of the local financial intermediation system.

The influence of foreign bank entry on the domestic banks has been empirically tested by researchers in different countries individually and in cross-country studies. Claessens et al., (2001) conducted a study comprising of 7900 transactions consisting of 80 countries for the period of 1988 to 1995, the variables considered for the purpose of checking the influence of the foreign banks on domestic banks by using measure as NIM, overheads, taxes paid, and profitability. There results suggested that the foreign banks yielded higher profitability in developing

countries as compared to developed countries. Due to higher foreign bank entry the profitability and interest rate are lower for domestic banks. The reason for the increase in efficiency is due to competition created by the foreign banks and this is subject to the entry of the foreign banks not the share captured by them. These results are also in accordance Denzier (2000) in which he empirically examined the foreign bank entry influence on the local banks. His results suggested that the foreign bank entry tends to reduce the interest rate and profitability of domestic banks due to high competitive pressure while also observing that the share of banks was only 5% from the period of 1980 till 1997.

Barajas, Salazar and Steiner (2000) examined the influence of foreign bank entry in the Columbian banking industry by employing data from 1985 to 1998. Due to foreign penetration the interest rate margin tend to decrease due to high competitive environment, which in due course increases the efficiency but at the cost of poor quality of loans. The overhead costs tend to increase due to increased competition because the domestic banks increase their costs to match or imitate the financial services of foreign banks. Overall it was concluded that foreign bank entry increases the costs of the domestic banks. Barth, Caprio and Levine (2004) discussed, the more strict the government regulations leading to restricting the foreign banks entry is a reason for the domestic banks lower efficiency which can be inferred as having higher overhead costs and higher interest margins. So it can be said that, due to foreign bank entry the efficiency of the local banks increases while decreasing the overhead costs and lowering interest margins these findings are aligned with the findings of (Denzier, 2000; Claessens et al., 2001). The foreign banks existence may have some spill over affect on the domestic banks for instance the foreign banks might launch innovative financial services or products which could motivate the local banks to adopt such innovative products or services which overall increase their efficiency. Furthermore foreign bank may introduce superior banking techniques which could enhance the supervision and regulations of overall banks. These measures can boost the efficiency and profitability of the financial intermediation system in the long run. The costs incurred on these areas reduce the profitability of the local banks upon the entry of foreign banks these issues are echoed in the results of (Claessens et al., 2001; Hermes and Lensink, 2003) which suggest the effect of foreign bank penetration have a negative influence on the domestic banks profitability.

As for the case of non-performing loans there are mixed empirical evidences found which suggest that the foreign bank entry can have a negative influence on the quality of advances. The foreign banks are considered to be in a superior position and are better equipped to attract the credit worthy clients to give advances, basically they "skim the cream" leaving the poor quality borrowers (Kim, 2004; Barajas et al., 2000). Due to enhanced credit evaluation strategy of foreign banks can also motivate the domestic banks to enhance or make their skills mature or

modify them according to foreign banks, for another view point the increased competition due to foreign penetration the domestic banks tend to reduce their risk by lending less. This reason can lead to a negative impact on the nonperforming loans. The expected relationships of the variables are given in table 2.1.

2.1. Banking Sector in Pakistan: Growth

Pakistani banking sector has witnessed a lot of changes since the birth of this country prior to 1974 the private banks were allowed to be formed and continue business in the country but due to unethical business and competition all the banks were nationalized, this lead to nationalization, the banking industry faced poor services quality and degraded products which lead to inefficient banking environment in the region. This deteriorated situation of the banking sector led to the banking reforms and liberalization of banking sector in the 1990's which lead to increasing the quality of services and increased number of banks in private sector. Currently Pakistani banking sector consists of local banks having private and public banks, foreign banks and specialized banks there are 5 public banks, 22 private sector banks, 4 specialized banks and 7 foreign owned banks making it a total of 38 banks. The Pakistani banking sector has grown as compared to previous year, the total assets increased from 7.2 trillion to 8.3 trillion in the calendar year 2011 than the previous year which gives 15% growth, increasing the profit before taxes to 49.1 % as compared to calendar year 2010. Total deposits rose 0.9 trillion as compared to 2010 which is 15% growth, the total deposits have an 85% share of the total liabilities. The lending to the domestic banks increased by 6.4 % in year 2011 while for foreign banks it decreased by 49.7 percent.

Table 2.1. Expected relationship between the dependent and independent variables

D V	I V	Expected Signs (Coefficients)
Net Interest Margin (NIM)	Foreign Bank Share*	(-)
Cost to Income Ratio (CIR)	Foreign Bank Share*	(+)
Overhead	Foreign Bank Share*	(-)
Return on Assets (ROA)	Foreign Bank Share*	(-)
Non-Performing Loans (NPL)	Foreign Bank Share*	(-) or (+)

** Foreign Bank Share is measured in three variables (i) Foreign Bank Assets (ii) Foreign Bank Number (iii) Foreign Bank Deposit.*

3. Methodology and Data

3.1. Data

The data is obtained for the financial statement analysis (FSA) files compiled by the State Bank of Pakistan (SBP) Statistics and DWH department, the data is of each year giving a comparison data for 4 previous years as well. The financial statement analysis files are compiled from the annual reports of all the banks which consist of commercial banks, investment banks, insurances companies , DFI's, exchange companies, mutual fund companies, modaraba companies, housing companies, leasing companies and venture capital companies. The data is regarding the income statements, balance sheets and profit and loss accounts in the form of ratios which are efficiency/ profitability ratios, liquidity ratios capital/leverage ratios, asset quality ratios and cash flow ratios. Our data constitutes of total of 30 banks out of 31 local banks, due to data inadequacy one bank was withdrawn from the sample. The data set contained total of 150 banking years. Data for 7 foreign banks was used to measure the foreign bank share variables.

3.2. Methodology

As to the previous work of researcher have found that the foreign bank entry is correlated with the changes in the profitability of the bank's profits which consists of any changes in the determinants of such profits which are the net interest incomes, income generated by fee or commissions, the overhead costs and the loan loss provisions. To check the influence of foreign bank entry on the domestic banks profitability and efficiency due to increased competition the following regression equation (1) is used following the Claessens et al., (2001) methodology.

$$Dit = \alpha 0 + \delta 1\ FBSit + \delta 2\ BSCit + \delta 3\ BICt + \delta 4\ CEt + \varepsilon it \quad (1)$$

Where "i" and "t" are the bank and year respectively, $\alpha 0$ is the constant and $\delta 1\ \delta 2\ \delta 3\ \delta 4$ are the coefficients of the explanatory variables. Dit is dependent variables for domestic bank i at time t, $FBSit$ is foreign bank share variable for i bank at time t. Where $BSCit$ are the bank specific controls from bank i at time t, $BICt$ is the banking industry control at time t, CEt are the macroeconomic factor at time t and εit is the error term for bank i at time t.

In this study accounting measures are used for profitability and income either using the rate of returns on stocks for the purpose of investigating any effect of foreign bank presence on the domestic banks performance, different researcher such as (Gorton & Rosen, 1995; Schranz, 1993) has used accounting measures for studying managerial entrenchments and bank acquisitions. The dependent variables employed in this study are in accordance with the studies of (Claessens et al., 2001; Hermes and Lensink, 2004) using net interest margin, return on assets, overhead, cost to income ratio and non performing loans, these variables have been discussed in literature for being the most appropriate measures to be affected by the foreign

bank presence. Three variables have been under taken for measuring the foreign bank presence which are the foreign bank number which particularly measure the physical presence of foreign banks in the country, where as the foreign bank assets measures the share of foreign banks in assets of overall banking assets in Pakistan and the foreign bank deposit measures the deposits captured by the of the foreign banks as compared to over all banking market of the country as a whole.

Three Banks specific controls are used in this study includes Size which hypothesizes that the local bank response to the foreign penetration is in relation to local banks size. In case of liquidity the domestic banks having more liquidity forgoes interest incomes in the short time span but are better equipped to compete via adopting new technology and products. Z-Score (Hesse and Cihak, 2008; Laeven and Levine, 2009) Altman Standard Model for Banks measures the risk at different levels which might affect domestic banks profitability due to foreign bank entry Z-Score is used instead of CAR (Capital Adequacy Ratio) which is commonly used as a measure of bank insolvency and risk, one of the major reason for doing so is that CAR does not properly classifies less risky asset class form high risk assets, the researchers discuss it as a major flaw in the BASEL accord regulatory framework regarding the CAR ratio and the classification of the risky assets is so called a bit naive in case the banks want to increase their returns they can easily switch their investments or increase their investments to more risky assets without moving out of the less risk weighed asset class which could lead to increasing the risk but on the same time does not affects the CAR, (Parinduri & Riyanto, 2011).

The Herfindahl index is used to measure the bank market concentration which might affect the local banks performance. To accommodate any noise from the economic development variables two dummy variables for GDP and RIR are applied. The complete formulation of the variables is mentioned in the table 3.1.

4. Results

The foreign bank penetration is measured in the form of three different variables, the effect of these variables is checked in three panels individually in the results table 4.3 including all the bank specific controls, competition and macroeconomic controls, each panel regression equation is estimated with fixed effect model for banks for the period of 2007 to 2011. Before the panel regression analysis table 4.1 gives the correlation matrix between the major variables used in the study for the purpose of identifying the multi co-linearity issue in the variables the values are almost below 0.95 for the variables apart from two foreign bank share variables, which does not concerns us due the use of each foreign bank share variables is used in three separate panel regression estimates, table 4.2 gives the descriptive statistics for all the variables employed in this study. Table 4.4 gives descriptive statistics for

all the dependant variables for state owned, private owned and specialized banks, NIM private owned banks lead their other counter parts as for the specialized banks have higher overhead costs which might be due to agricultural and industrial loans which require more resources to determine the authenticity of loans, also the none performing loans are higher than the private and state owned banks through which it could be inferred that the management is not as efficient as private owned banks which have a lot less percentage of nonperforming loans.

4.1. Foreign Bank Presence Effect on Domestic Banks Performance

The results of foreign bank share in panel A of table 4.3 represent that the foreign bank share is negatively related to net interest margin and return on asset at 1% and 14 % level of significance which is in accordance to our expected relationship. From these it could be inferred that due to a higher level of competition creates pressure for the domestic banks to lower their costs to be competitive in the market to maintain their market share due to foreign presence these results are in accordance to (Barajas et al., 2000). This also leads to the reduction of profitability of the domestic banks due introduction of new financial services and innovative products by the foreign banks which leads the domestic banks to in return to imitate or improve their efficiency to reduce the competitive pressure . As to the results of panel B where the foreign bank share is measured in the form of number of foreign banks the coefficients of the foreign bank share variable are positive and almost all of the values are insignificant except one these results are contrary to the results of Claessens et al., (2001) in this case it could be inferred that the size of the foreign bank and market share are associated with the competitive condition of the domestic banking industry more as compared to the number of foreign bank. The same is echoed in the results of panel C results that foreign bank share is negatively related to net interest margin and return on asset at 1% and 14 % level of significance. These results point to the same aspect for the importance of the foreign bank presence in terms of assets and deposits rather than number these results are in accordance to (Ghosh, 2012).

4.2. Bank Specific Controls

As for the bank specific control variables the bigger the size of the bank the performance of the domestic bank in terms of nonperforming loans is better due to inverse relationship, one of the reason for this can be that it has bigger asset base to absorb the bad debts as compared to small banks. As for the well capitalized banks have to maintain higher capital to maintain their spreads due to foreign bank, well capitalized banks have lower NPLs as compared to less capitalized banks which may be one of the reason that the overhead costs are also greater for well capitalized banks is due to they may require to exercise and depute more manpower or put more effort to control their NPLs.

4.3. Banking Industry Controls and Macroeconomic Factors

The Herfindhal Index for loan market share shows that for highly concentrated loan market share the banks can earn good interest margins but the tendencies of nonperforming loans will be more if the market is highly concentrated. The macroeconomic indicators lead us to infer that higher the real interest rates higher would be the net interest margins yielded by the domestic banks.

5. Conclusion

This study investigated the impact of foreign bank presence on the domestic banks performance using annual data of 30 domestic and 7 foreign commercial banks from the period of 2007 to 2011 comprising of 150 banking years data. The methodology used was an extension of the model employed by Claessens et al., in 2001. Five regression equations are estimated for each foreign bank share variable making it a total of three panels a, b and c using five dependant variables using the bank specific fixed effect model. The empirical results of this study suggest that there is a moderate explanation of the foreign bank presence effects observable in Pakistan's banking industry mostly the foreign bank share effect is only present in the case of net interest margin and return on assets as to the rest of the variables are less significant. In this scenario it can be deduced that in the local industry banks do feel pressure in terms of foreign bank entry and try to compete via imitating the financial innovations and new financial products and services introduced by the foreign archrivals. This in term improves the local financial intermediation system and enhances the overall skills of the local banking industry in terms of service quality, stability and supervision. As in the past, before liberalization era, the performance of the banks and the services quality has improved, and it can easily be observed. Overall the results would be much more fruit full if it is empirically tested on the post, pre liberalization and privatization era in Pakistan which is one of the limitations of the study due to limited data available and it would be a future direction for the research heading this direction in Pakistani context.

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Table 3.1 Construct of variables

Variables	Formulation of variables
Dependant Variables	
Net Interest Margin (NIM)	(Interest Income - Interest exp) / Total Assets
Return On Assets (ROA)	Net profit / Total Assets
Overhead Cost	Admin exp / Total Assets
Non Performing Loans (NPL)	Advances Non-performing / Total Assets
Cost-Income Ratio (CIR)	Admin exp / (Total income - interest exp)
Explanatory Variables	
Foreign Bank Assets	Assets of foreign banks / Total banking assets
Foreign Bank Number	Number of FB / Number of total commercial banks
Foreign Bank Deposit	Total FB deposits / Total Deposits of all banks
Bank Specific Control Variables	
Size	Natural Logarithm of bank assets
Liquidity	(cash in hand + balance with SBP) / TA
Z-Score(Altman Standard Model)	{(Total Equity/ Total Assets) + ROA} / SD(ROA)
Banking Industry Control variable	
Herfindahl Index	Sum of squares of loan market share
Macroeconomic control variables	
GDP	Dummy = 1 if GDP growth in a year exceeds sample median else 0
Real Interest Rate	Dummy = 1 if RIR in a year exceeds sample median else 0

Table 4.1 Correlation Matrix of Dependant and Foreign Bank Share Variables

	FB Asset	FB Number	FB Deposit	ROA	NIM	Overhead	CIR	NPL
FB-Asset	1							
FB-Number	0.1407	1						
FB-Deposit	0.9564	0.0315	1					
ROA	-0.1426	0.0163	-0.1589	1				
NIM	-0.1599	0.0691	-0.1904	0.5224	1			
OVERHEAD	0.0717	0.0362	0.0663	-0.4074	0.1927	1		
CIR	0.0641	0.1008	0.0751	0.1224	0.0884	-0.055	1	
NPL	0.0765	-0.0276	0.0779	-0.2437	-0.4144	0.284	-0.066	1

Table 4.2 Descriptive Statistics of variables

Variables	Obs	Min	Max	Mean	S.D
Dependant Variables					
Net Interest Margin (NIM)	150	-0.108	0.096	0.0205	0.0299
Return On Assets (ROA)	150	-0.093	0.037	-0.0002	0.0237
Overhead Cost	150	0.005	0.164	0.0351	0.0198
Non Performing Loans (NPL)	150	0.000	0.989	-0.6759	23.5613
Cost-Income Ratio (CIR)	150	-282.625	47.541	0.1727	0.1965
Explanatory Variables					
Foreign Bank Assets	150	0.031	0.042	0.0350	0.0039

Foreign Bank Number	150	0.261	0.296	0.2765	0.0136
Foreign Bank Deposit	150	0.027	0.035	0.0308	0.0031
Bank Specific Control Variables					
Size	150	15.453	20.866	18.2899	1.4660
Liquidity	150	0.029	0.357	0.1022	0.0502
Z-Score(Altman Standard Model)	150	-198.236	44.420	11.1482	35.4722
Banking Industry Control variable	150	0.067	0.072	0.0702	0.0017
Herfindahl Index					
Macroeconomic control variables	150	0.000	1.000	0.4000	0.4915
GDP					
Real Interest Rate	150	0.000	1.000	0.4000	0.4915

Table 4.4 Descriptive Statistics Ownership Wise of Dependant Variables.

Variables	Minimum	Maximum	Mean	S.D
Net Interest Margin (NIM)				
State Owned Banks	-0.097	0.065	0.014	0.043
Private Owned Banks	-0.052	0.072	0.022	0.022
Specialized Banks	-0.108	0.096	0.018	0.047
Return On Assets (ROA)				
State Owned Banks	-0.054	0.025	0.004	0.022
Private Owned Banks	-0.071	0.037	-0.0004	0.022
Specialized Banks	-0.093	0.033	-0.003	0.035
Overhead Cost				
State Owned Banks	0.010	0.050	0.025	0.011
Private Owned Banks	0.005	0.089	0.033	0.014
Specialized Banks	0.022	0.164	0.058	0.034
Non Performing Loans (NPL)				
State Owned Banks	0.001	0.516	0.169	0.144
Private Owned Banks	0.000	0.781	0.115	0.108
Specialized Banks	0.000	0.989	0.492	0.298
Cost-Income Ratio (CIR)				
State Owned Banks	-10.120	2.458	-0.003	2.875
Private Owned Banks	-282.625	47.541	-0.968	27.492
Specialized Banks	-10.138	3.478	0.256	2.705

Table 4.3 (Panel A) Effect on Domestic Banks Performance by Foreign Bank Share

Panel A	NIM	ROA	OVERHEAD	CIR	NPL
FB-ASSET	-9.7371	-5.4104	-0.4802	4575.2590	-5.6177
	(4.0147)***	(3.6452) *	(2.2784)	(4749.6460)	(21.3760)
FB-NUMBER	-	-	-	-	-
	-	-	-	-	-
FB-DEPOSIT	-	-	-	-	-
	-	-	-	-	-
SIZE	-0.0023	-0.0035	-0.0022	4.5926	-0.0754
	(0.0077)	(0.0070)	(0.0044)***	(9.1434)	(0.0412)**
LIQUIDITY	-0.0215	0.0105	-0.0308	65.8993	0.1019
	(0.0605)	(0.0549)	(0.0343)	(71.5228)	(0.3219)
Z-SCORE	0.0008	0.0000	0.0006	-0.1306	-0.0058
	(0.0002)***	(0.0002)	(0.0001)**	(0.2885)	(0.0013)***
H-Index	35.2554	15.8785	5.6606	-23086.6000	75.3892
	(18.2489)	(16.5694)	(10.3564)	(21589.7900)	(97.1658)
GDP	0.0757	0.0420	0.0041	-39.8588	0.0650
	(0.0365)**	(0.0331)	(0.0207)	(43.1476)	(0.1942)
RIR	0.0608	0.0246	0.0120	-53.3107	0.1906
	(0.0359)*	(0.0326)	(0.0204)	(42.4392)	(0.1910)
Constant	-2.1343	-0.8890	-0.3151	1408.6930	-3.5960
	(1.1284)**	(1.0245)	(0.6404)	(1334.9690)	(6.0081)
R2	0.6604	0.5538	0.7496	0.2346	0.7771

The data included is for the year 2007 to 2011 comprising of 30 banks with a total of 150 banking year. The Standard Errors (S.E) are in parentheses grouped with each bank variable individually.,** and*** indicates values at 10%, 5% and 1% significance level.*

Table 4.3 (Panel B) Effect on Domestic Banks Performance by Foreign Bank Share

Panel B	NIM	ROA	OVERHEAD	CIR	NPL
FB-ASSET	-	-	-	-	-
	-	-	-	-	-
FB-NUMBER	2.0443	1.1359	0.1008	-960.5680	1.1794
	(0.8429)*	(0.7653)	(0.4783)	(997.1802)	(4.4879)
FB-DEPOSIT	-	-	-	-	-
	-	-	-	-	-
SIZE	-0.0023	-0.0035	-0.0022	4.5926	-0.0754
	(0.0077)	(0.0070)	(0.0044)	(9.1434)	(0.0412)***
LIQUIDITY	-0.0215	0.0105	-0.0308	65.8993	0.1019
	(0.0605)	(0.0549)	(0.0343)	(71.5228)	(0.3219)
Z-SCORE	0.0008	0.0000	0.0006	-0.1306	-0.0058
	(0.0002)*	(0.0002)	(0.0001)*	(0.2885)	(0.0013)*
H-Index	5.2326	-0.8034	4.1799	-8979.5510	58.0680
	(6.4047)	(5.8152)	(3.6347)	(7577.2300)	(34.1017)***
GDP	0.0059	0.0032	0.0007	-7.0695	0.0247
	(0.0093)	(0.0084)	(0.0053)	(10.9965)	(0.0495)
RIR	0.0680	0.0286	0.0124	-56.6547	0.1947
	(0.0387)***	(0.0351)	(0.0220)	(45.7925)	(0.2061)
Constant	-0.9067	-0.2068	-0.2546	831.8581	-2.8878
	(0.6506)	(0.5907)	(0.3692)	(769.6868)	(3.4640)
R2	0.6604	0.5538	0.7496	0.2346	0.7771

The data included is for the year 2007 to 2011 comprising of 30 banks with a total of 150 banking year. The Standard Errors (S.E) are in parentheses grouped with each bank variable individually.,** and*** indicates values at 10%, 5% and 1% significance level.*

Table 4.3 (Panel C) Effect on Domestic Banks Performance by Foreign Bank Share

Panel C	NIM	ROA	OVERHEAD	CIR	NPL
FB-ASSET	-	-	-	-	-
	-	-	-	-	-
FB-NUMBER	-	-	-	-	-
	-	-	-	-	-
FB-DEPOSIT	-3.5839	-1.9914	-0.1767	1683.9860	-2.0677
	(1.4777)*	(1.3417)***	(0.8386)	(1748.1710)	(7.8677)
SIZE	-0.0023	-0.0035	-0.0022	4.5926	-0.0754
	(0.0077)	(0.0070)	(0.0044)	(9.1434)	(0.0412)***
LIQUIDITY	-0.0215	0.0105	-0.0308	65.8993	0.1019
	(0.0605)	(0.0549)	(0.0343)	(71.5228)	(0.3219)
Z-SCORE	0.0008	0.0000	0.0006	-0.1306	-0.0058
	(0.0002)*	(0.0002)	(0.0001)*	(0.2885)	(0.0013)*
H-Index	3.7393	-1.6332	4.1063	-8277.8910	57.2065
	(5.8734)	(5.3328)	(3.3332)	(6948.6700)	(31.2728)***
GDP	0.0101	0.0055	0.0009	-9.0341	0.0271
	(0.0107)	(0.0097)	(0.0061)	(12.6476)	(0.0569)
RIR	0.0013	-0.0085	0.0091	-25.3275	0.1562
	(0.0139)	(0.0126)	(0.0079)	(16.4310)	(0.0739)***
Constant	-0.1012	0.2407	-0.2149	453.3984	-2.4231
	(0.3794)	(0.3445)	(0.2153)	(448.8523)	(2.0201)
R2	0.6604	0.5538	0.7496	0.2346	0.7771

The data included is for the year 2007 to 2011 comprising of 30 banks with a total of 150 banking year. The Standard Errors (S.E) are in parentheses grouped with each bank variable individually.,** and*** indicates values at 10%, 5% and 1% significance level.*

The Effect of Corporate Governance on Capital Structure Decisions – A Case of Saudi Arabian Banking Sector

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Abstract: The aim of this empirical study is to analyse the impact of Corporate Governance on Capital Structure Decisions in Saudi Arabian commercial banking sector. The components of corporate governance whose impact has been analysed on the capital structure are board size, independence of directors, ownership structure, ownership of management, board meetings. Multiple regression analysis, Correlation matrix and Descriptive Statistics is used to assess the relationship among corporate governance components and capital structure of Saudi commercial banks for the years 2010 and 2011. The results shows that ownership structure and board size are positively correlated which is coherent with most of the previous studies. Managerial ownership and board independence are negatively correlated and board meeting held in a year is also negatively correlated but is statistically insignificant. Moreover the study found that on average the Saudi banks uses 68 % debt capital. The research study is supposed to facilitate regulatory authorities like CMA for improving the implementation of rules and regulations in order to make corporate governance tools work more efficiently in the Kingdom of Saudi Arabia. The research study evaluates the effects of corporate governance components on capital structure decisions of Saudi commercial banks.

Keywords: Commercial Banks; Capital Structure Decisions; Corporate Governance

JEL Classification: G21; G32; G34

Introduction

Corporate governance is a widely researched topic in the literature due to the fact that many corporate scandals such as Enron, Asian financial crises and recent credit crunches occurred due to lapses in governance. Corporate governance is a set of rules and regulation through which an organization is directed and controlled.

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Corporate governance describes the rights and responsibilities of all the stake holders in an organization. Structure of corporate governance consists of a wide range of practices, policies and foundations which include accounting standards related to fair financial disclosure, executive compensation, size and composition of corporate boards audit committees.

Corporate governance of banks seems to be more important than other industries because the banking sector plays a crucial financial intermediary role in any economy, particularly in developing countries. Poor corporate governance of the banks can drive the market to lose confidence in the ability of a bank to properly manage its assets and liabilities, including deposits, which could in turn trigger a liquidity crisis and then it might lead to economic crisis in a country and pose a systemic risk to the society at large (Cebenoyan & Strahan, 2004; Basel Committee on banking supervision, 2008; Garcia-Marco & Robles-Fernandez, 2008). Therefore, it is important to examine the effect of corporate governance mechanisms in the banking sector. Research on corporate governance has tried to examine its impact of the financial performance of business entities (Rebeiz and Salameh, 2006; Fosberg and Nelson, 1999; Kenourgios et al., 2007).

A lot of research work has been carried out about bank stability, accounting performance, efficiency, ownership structure, agency issues, board structure and even corporate governance as whole impacts on the performance of banks, but corporate governance and the performance in the country like Saudi Arabia the banking sector is remotely touched. Taking this fact into consideration this study focusses on the relationship between corporate governance and the capital structure decisions of Commercial banks Listed in Saudi Arabian Stock Exchange (TADAWUL).

Corporate Governance in Saudi Arabia

The crash of TADAWUL in 2006 and subsequent suspension of trading for two firms created a serious question about the usefulness of monitoring procedures that were supposed to protect the investors in the country. In response to these events and to further strengthen the investors' interests the Corporate Governance Regulation were designed and issued by the Capital Market Authority (CMA) in November the same year. These regulations comprises though the rules and standards that control the management of companies that are listed in TADAWUL to confirm their agreement with the best governance practices in order to safe guard the investors' rights. These directives addressed the issues of right of stockholders, disclosure requirements, boards of director's features and audit committees specifications. These regulations were taken from the best practices around the world with a point of view of their easy and flexible implementation in the Saudi companies in the later years. This flexibility created dissimilarities among corporations with regard to the implementation of these regulations. Still

there are many voluntary requirements exist with regard to the implementation of corporate Governance regulations in the firms as the implementation of best practices are in the hands of chief executive and board directors which can create further agency issue in some cases. Although the Banking sector is strictly managed with regard to monetary regulations and international BASEL agreements but still the area ofCG requirements fulfilled by the sectors is under researched. This study is an effort in this direction to find out the impact and relationship of Corporate Governance on capital structure of Commercial banks in the country.

Literature Review

Corporate Governance and Capital Structure Decisions

Corporate governance and capital structure relationship has been studied by a number of researchers such as Berger et al(1997) in which They Found positive relationship between board size and leverage level. Wen et al (2002) and Abor (2007) also found positive relation between board size and capital structure. Berger et al (1997) and Abor (2007) found positive correlation between board composition and capital structure. Wen et al (2002) found negative relation between number of external directors and leverage level.

Many empirical studies have shown that some corporate governance features which have influence on the financing decisions of Company include board size, Independent directors, ownership concentration and structure, ownership managerial control and meeting attended during the year (Anderson et al., 2004; Bokpin and Arko, 2009; Choe and Lee, 2003; Fosberg, 2004; Friend and Lang, 1988, 2006; Mehran, 1992). All of the above mentioned components of corporate governance are briefly discussed below in the light of previous literature.

Size of Board of Directors

Most of the Researchers are of the view that effective and efficient board is vital to the success of a company. It is the responsibility of the board to provide strategic direction to ensure the company's development and maximize the shareholders wealth. Boardis also charged with the duty of supervising and monitoring the senior management of the corporation. In the view of Adams and Mehran (2003) it is easy for bigger board to effectively monitor the actions of management and to deliver better performance. While Lipton and Lorsch (1992) proclaims that large boards are less operative compared to small boards because the conflict and disagreement that can arise among the members. The available literature on board size and capital structure harvests mixed findings where Berger et al. (1997) found a significant and negative correlation between board size and Financing decisions and Wiwattanakantang (1999) established that board size is negatively correlated with capital structure but this association is statistically insignificant. Anderson et

al. (2004) established the same relationship. On the contrary Abor (2007) and Bokpin and Arko (2009) found a significant positive relationship between size of the board and capital structure of corporations.

Independence of Directors

Independent directors on the boards are more privileged as they are normally considered to have better knowledge, vision and Independence from management. If there are more independent directors it means they can monitor the actions of the management more closely and take appropriate actions specially in respect of implementing corporate governance regulations.

The top managers face more dynamic checking when their performance is measured by independent or outside directors (Weisbach, 1988). There is another factor that with more needs for entrance to the capital market it is expected to have greater number of independent directors for the companies.

There are mixed results yielded in the literature regarding board composition where Berger et al. (1997) have shown that debt is significantly lower when a there is a low percentage of independent directors. While, Wen et al. (2002) stated a significant negative relationship between board composition and capital structure that means the managers are reluctant to take more loans in presence of more independent directors. This negative association is also found between board independence and leverage by Anderson et al. (2004). In another study Abor (2007) established a positive correlation between debt and independent directors while Bokpin and Arko (2009) found a positive and insignificant relationship between board independence and the leverage in the company.

Ownership Structure

The ownership concentration may also help to alleviate the agency problems between managers and stockholders. Many institutional investors and large shareholders have more ability than ordinary shareholders to influence the managerial decisions and actions. According to Brailsford et al. (2002) there is statistically significant relationship between ownership concentration and capital structure with respect to debt financing and Fosberg (2004) established that the amount leverage in the capital structure is directly related to the proportion of ownership structure and concentration. Mehran (1992) stated a positively statistically significant correlation between ownership by large investors and debt in the firm.

Ownership of Management

Research studies have found diverse outcomes about the relationship between managerial ownership and capital structure. A study by Berger et al. (1997) has

found a positive and significant relationship between debt capital and CEO's ownership telling that managers whose financial benefits are associated with external stockholders will adopt more debt capital structure to raise the worth of the organization.

Mehran (1992) also found a positive correlation between managerial ownership and capital structure proposing that ownership in company induce the manager to increase firm debt capital. Organizations with higher managerial ownership have more debt capital than firms with lower managerial ownership (Kim and Sorensen, 1986). A study conducted by Brailsford*et al.* (2002) found that the correlation between managerial ownership and debt capital could be nonlinear if the managerial ownership decreases the agency conflicts will reduce, arising a higher debt capital. But if the management already hold a significant ownership of firms' equity, then an increase in managerial ownership will lead to more managerial opportunism and it will cause lower debt.

Some studies such as Wiwattanakantang (1999), Bokpin and Arko (2009) found insignificant relation between ownership and capital structure, while others such as Bathala et al. (1994) negative relation between managerial ownership and capital structure.

Methodology

Total population of listed commercial banks which consists of 10 banks Listed in Saudi Arabian stock exchange (Tadawul) is selected for this study. The study covers two years data from 2010 and 2011 to study the impact of Corporate Governance components on capital structures of the listed banks. In the model the capital structure of the commercial banks is taken as a dependant variable while components of corporate governance are taken as independent variables. Various components of Corporate Governance which were in inculcated in this study include Board Size and Independence, Ownership structure the ownership of Management and meetings held during the year.

To calculate the dependant and independent variable following reliable measures have been used to find the relationship of Corporate Governance and Capital structure.

Capital Structure of banks= Total Liabilities- Current Liabilities/ Total Assets – Current Liabilities

Board size= the Number of Directors in the bank

Independence =Non-executive directors/ Total number of Directors

Ownership Structure= Top shareholders / Total number of shares outstanding

Ownership of Management= Share held by board members and their close relative/ Total number of shares outstanding

Board Meetings Held = Meeting held during the year

The data was collected from the Audited Annual reports of the banks and an analysis was conducted on the basis of above mentioned criteria. Following Hypothesis has been developed to study the relationship.

H1: there is a strong effect of Corporate Governance on Capital Structure of commercial banks in Saudi Arabia.

H0: there is a weak effect of corporate governance on capital structures of commercial banks in Saudi Arabia.

The Empirical Model:

Multiple regression approach of OLS model is applied to find the strength of the above mentioned hypothesis. Panel data was used to decrease the chances of error and to improve the overall efficiency.

The model is as under:

$CSB=\beta 0+\beta 1BS+\beta 2I+\beta 3OS+\beta 4OM+\beta 5BMH+\mathcal{E}i$

The Model denotes that intercept is β0 having a fixed effect on capital structure while Ɛi is the standard error in the model. CSB is the dependant variable used in the above model.The coefficients of independent variables are from β1 to β5 while BS, I, OS, OM and BMH are independent variables in the model.

In order to better explain the required relationship the study uses the correlation matrix and descriptive statistics by using the Excel Spread sheet.

Results and Analysis

The table1 below shows the results of multiple regression analysis. The OLS Model gives the coefficient of determination R square which is equal 57.6% which means a reasonable proportion

Of dependant variable (Capital structure of banks, CSB) is explained by Independent variables (BS, I, OS, OM and BMH). The overall significance of the regression model which is measured by F –statistic shows relatively weak about 48% of regression results can be by chance. Moreover the Probability values or P-values are above the significance level of 5% which shows weak relationship between dependant and independent variable. This is also evident from the smaller values of t Statistic. While the beta coefficients shows some positive and negative values of independent variables.

The table 2 is about the correlation matrix which tells the individual relationship among various variables of the study. The results show that only Ownership Structure and Board size are positively correlated with the capital structure of banks. While Independence, Managerial ownership and Board meetings held are negatively correlated with the dependant variable. Ownership structure has a significant positive correlation with Capital structure of the banks as 1 unit change OS will lead to more 40% change in capital structure while 1 unit change in board independence will negatively affect the capital structure by almost 50%. The correlation between OS and OM Has a very high negative correlation which means the ownership structure is negatively affected by increase or decrease in ownership of management.

In Table 3 the summary of descriptive statistic is mentioned which has the some key information. On average the banks uses 68% debt to finance its operations. It is quite low when compared to international standards where it is more than 80% for banking industry. This is due to bank Al Rajhi An ALINMA where both the banks uses more equity finance, Al Rajhi has 65% and ALINMA has 76% of equity financing generally due to support its Islamic banking operations.

Board Size consists of 10 members on average. Board Independence is about 41%. The Ownership structure shows 51% shares are held by few large shareholders mostly institutional investors. The Ownership of Management is about 13% which is high due to al Rajhi bank having more than 40% of control of its own board members. The meetings are 6 to 7 in a year on average.

Regression Statistics	
Multiple R	0.758952689
R Square	0.576009184
Adjusted R	0.046020665
Standard Error	0.195403088

	df	*SS*	*MS*	*F*	*Sig F*
Regression	5	0.207489342	0.041497868	1.086833324	0.481276528
Residual	4	0.152729467	0.038182367		
Total	9	0.360218809			

	Coefficients	*Standard Error*	*t Stat*	*P-value*
Intercept	1.431238792	1.169150949	1.22416938	0.288058887
OS	0.739700377	0.557161019	1.327624064	0.255001445
I	-2.438714475	1.283380136	-1.900227693	0.130204652
OM	0.728242559	0.760634683	0.957414348	0.392575461
BS	0.013895459	0.101027917	0.137540783	0.897248954
BMH	-0.056441379	0.052052179	-1.084323079	0.33920669

	CSB	*OS*	*I*	*OM*	*BS*	*BMH*
CSB	1					
OS	0.418100474	1				
I	-0.493036706	0.032642534	1			
OM	-0.268462604	-0.733750064	0.034737492	1		
BS	0.053057438	0.331084339	0.340459108	-0.250655823	1	
BMH	-0.014734034	-0.317028416	-0.558550138	0.545472091	-0.3811274	1

Descriptive and
Correlation Statistics

	CSB	OS	I	OM	BS	BMH
Mean	0.67651	0.51691	0.4127	0.13168	10.1	6.5
Standard Error	0.063264771	0.0586802	0.023259908	0.05328498	0.23333333	0.6871843
Median	0.7485	0.5075	0.4	0.075	10	6
Mode	0.74	N/A	0.4	0.01	10	5
Standard	0.200060771	0.185563086	0.073554288	0.168501901	0.73786479	2.1730675
Sample	0.040024312	0.034433659	0.005410233	0.028392891	0.54444444	4.7222222
Kurtosis	1.473985752	-0.510524505	-0.328710377	1.261628345	-0.7336229	-1.240336
Skewness	-1.691801325	-0.583202966	0.23903243	1.5881175	-0.1659504	0.4872483
Range	0.5681	0.549	0.24	0.47	2	6
Minimum	0.26	0.173	0.3	0.01	9	4
Maximum	0.8281	0.722	0.54	0.48	11	10
Sum	6.7651	5.1691	4.127	1.3168	101	65
Confidence	0.143114854	0.132743835	0.052617568	0.120538999	0.52783667	1.5545188

Conclusion

This research study tried to find the effects of corporate governance on the capital structure of all the ten listed commercial banks of Saudi Arabia for the years 2010-2011. Capital Structure (total debt-current liabilities/total asset-current liabilities) is taken as a dependent variable while corporate governance components are taken as independent variable, which include board size, independence of board, ownership structure, ownership of management and board meeting held in a year.

The results shows that ownership structure and board size are positively correlated which is coherent with most of the previous studies. Managerial ownership and board independence are negatively correlated and board meeting held in a year is also negatively correlated but is statistically insignificant. Moreover the study found that on average the Saudi banks uses 68 % debt capital. The average is low because bank Al Rajhi and Bank Alinma uses mainly equity capital. About 51% shares in Saudi commercial banks are held by large mainly institutional owners. Furthermore the study reveals that 13% shares in Saudi commercial banks are held by the management and their close relatives, again it relatively high due to Bank Al Rajhi. The findings suggest that more studies should be conducted to investigate the weak relationship between corporate governance and capital structure in Saudi banks and more variables for corporate governance such as role of Committees, auditor independence, foreign ownership and minority ownership should be added. The study has limitations especially regarding data availability which covers two years and the small size of total population in the banking sector of the country.

There are also some policy issues that should be addressed on the basis of this study about the extent and nature of the regulation of the corporate governance in

banking sector of Saudi Arabia by CMA and other regulatory bodies like Saudi Arabian Monetary Agency (SAMA). The empirical findings state to there is insignificant relationship between corporate governance and capital structure that suggests more regulations are required so that corporate governance can play appropriate and desired role in the commercial banking sector of Saudi Arabia.

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PLS Based Financing for SMEs: Returns to IFIs

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Abstract: Profit and loss sharing (PLS) based financing without collateral and interest rate could ease the financing difficulty of small and medium enterprises (SMEs). However, this PLS based financing is not widely offered by Islamic financial institutions (IFIs). This exploratory study illustrates that PLS based financing to SMEs is viable for IFIs. Using financial information of SMEs to calculate profit sharing ratio and net income under PLS based financing context, this study determined the profit margin ratio of IFIs from extending PLS based financing to SMEs. The findings show that extending PLS based financing to hypothetical diversified portfolios of SMEs generate higher profit margin compared to conventional lending at low risk based on the Markowitz portfolio theory of diversification. Moreover, as the number of SMEs in the portfolio increases, the risk of insufficient returns from the portfolio when an enterprise suffers a loss reduces.

Keywords: Profit and loss sharing; SME financing; Islamic financing; diversification

JEL Classification: G21; H25

1. Introduction

In Islam, no organization (including IFIs) or individual own any assets in this world because the ultimate ownership lies with the one and only Allah. Mankind (including IFIs) is only given the responsibility to manage assets according to the objective of the Shariah principles (*Maqasid al-Shariah)* (Al-Ghazali, 1937 as cited in Chapra, 1985; Ayub, 2007). Thus, for IFIs, the Shariah principles govern their operation, values and philosophy (Lee & Detta, 2007) and unlike conventional banks, their main objective goes beyond just wealth maximization. They have religious and social obligations to fulfill (Chapra, 1985; Dusuki, 2007). A survey on the stakeholders (Shariah advisors, regulators, local communities, customers, depositors, employees and managers) of Bank Islam Malaysia Berhad and Bank Muamalat Malaysia Berhad shows that they share this view of IFIs (Dusuki, 2007).

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Given that SMEs contribute significantly to the country but had difficulty accessing financing from collateral-based conventional financing, IFIs can promote socio-economic justice and equitable distribution of wealth by extending financing to SMEs. At the same time, social justice in Islamic banking and finance (IBF) also means that IFIs should not suffer any injustice by extending financing to SMEs. IFIs should profit from extending financing to SMEs.

There are two types of financing contracts offered by IFIs; profit-sharing contracts and sale contracts (Samad, Gardner & Cook, 2005). Profit and loss sharing (PLS) based financing could help alleviate SMEs' financing constraint. This financing mode will allow more SMEs access to finance their activities since the running business of the SME itself is the collateral. Unfortunately, PLS based financing contracts are less popular compared to sale contracts (Khan, 1995; CIBAFI, 2010a; CIBAFI, 2010b; KFH Research Ltd, 2010), particularly for the needy SMEs. Amongst reasons for this lack of PLS are higher risk exposure (Fabianto & Kasri, 2007), information asymmetry problems, agency problems, moral hazard problems (Dar & Presley, 2000; Samad et al., 2005; Farooq, 2007) and higher monitoring costs (Al-Harran, 1999; Maniam, Bexley & James, 2000; Sarker, 1999). As a result, IFIs have been focusing on the needs of corporations and individuals in the top third of the economy (Divanna, 2009). However, as these markets are maturing and increasingly saturated, IFIs will need to focus on other segments such as the vast and profitable SMEs market (Divanna, 2009).

This study attempts to address the lack of PLS based financing to SMEs by applying the Markowitz portfolio theory of diversification to four hypothetical portfolios. This study wish to illustrate that IFIs are not worse-off in extending PLS based financing to SMEs compared to conventional interest-based lending. IFIs perceive the application of this diversification concept as complex (Ascarya, 2009) and costly although in actual fact it is much easier and cost-effective.

2. IBF Financing Contracts: Theory and Practice

Profit-sharing contracts and sale contracts share a few notable characteristics. First, there is no interest payment. Second, funds from these contracts cannot be used to finance non-permissible (*Haram*) activities. Third, these contracts ensure that IFIs are only rewarded after taking some risks and responsibilities. Fourth, these contracts must be just and fair to all parties to the contract (Ayub, 2007). The main distinguishing feature between profit sharing contracts and sale contracts is the risk sharing attribute in profit sharing contracts.

In profit sharing contracts, IFIs share the risk of the funded project to share the rewards based on a predetermined ratio (profit sharing ratio) of net income from the project agreed upon at the beginning of the partnership (Ayub, 2007; Samad et

al., 2005). There are two types of profit sharing contracts; mudharabah and musyarakah (Samad et al., 2005). Mudharabah is a contract between one party who contributes capital (*rabbul mal*) and another party who provides skill and labour (*mudarib*) (Ismail, 2010). Monetary losses are borne by the *rabbul mal* while *mudarib* loses time and effort, except when the losses occurred due to breach of trust by *mudarib* (Ismail, 2010). In return, both parties share expected profits at a pre-determined ratio (Ismail, 2010). On the other hand, in musyarakah, both parties to the contract contribute capital and share expected profit based on capital contribution ratio (Ismail, 2010). Both parties have the right to participate in management and bear monetary losses (Ismail, 2010).

For sale contracts, Bay' al Murabahah, Bay' Bithaman Ajil, and Al- Ijarah are the three most popular types of contracts (Samad et al., 2005). Bay' al Murabahah is a contract between one party (seller) who purchase goods from a supplier on behalf of the other party to the contract (buyer) and sell those goods to the buyer at a higher price than the cost price. The difference between the selling price and the cost price is the profit margin, made known at the beginning of the contract (Segrado, 2005). This short term financing facility is a source of working capital financing and trade financing (Ismail, 2010). Bay' Bithaman Ajil is a contract in which one party to the contract (seller) finances the purchase of assets of the other party to the contract (buyer) who wish to defer payments for the assets (Ismail, 2010). The buyer will make deferred installment payment for the asset to the seller (Ismail, 2010). The difference between this contract and Bay' al Murabahah contract is that this contract has a longer time period (medium and long term) thus is widely used to finance house purchases in Malaysia (Ismail, 2010). Al- Ijarah, on the other hand, is similar to a lease contract.

In 2009, 40.1% of total assets from IFIs worth USD 748.5 billion are financing activities (CIBAFI, 2010b). However, the majority of these financing activities (64.7%) were murabahah (CIBAFI, 2010b). In Gulf Cooperation Council (GCC) countries (i.e. Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, UAE) which have the largest IFIs in the world, 57.6% of their financing activity were also murabahah financing (CIBAFI, 2010a). PLS based financing, although is the ideal financing contract, is not widely offered. Only 7.9% and 7.7% of their financing activities were mudharabah financing and musharakah financing respectively (CIBAFI, 2010a). Similar situation can be observed in Malaysia. Figure 1 below illustrates that IFIs in Malaysia did not offer much PLS based financing over the past years.

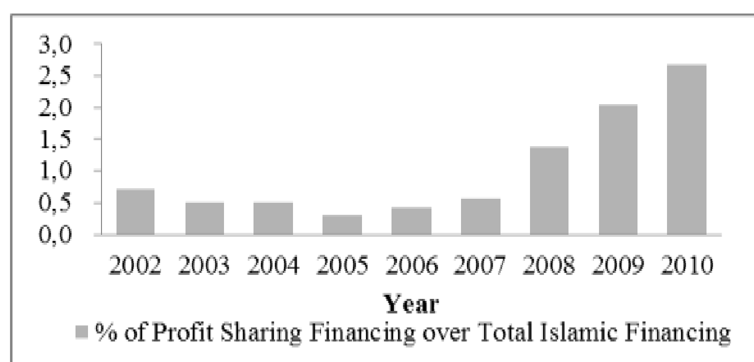


Figure 1. Percentage of PLS Based Financing over Total Islamic Financing by Malaysian Banking System from Year 2002 to 2010

Source: Bank Negara Annual Report 2002-2010

The profit sharing principle (mainly mudharabah and musyarakah financing) offered by IFIs was on a decline from 2002 till 2005 but increased from 2005 to 2010. Despite this increasing trend, the amount of PLS based financing was only 2.66% of the Islamic financing extended by Islamic banking system in 2010. Bai' Bithaman Ajil (at 33.73%), ijarah (at 29.80%) and murabahah (at 16.8%) were the major financing concepts offered by the banks (KFH Research Ltd, 2010). In addition, the Malaysian Islamic financing sector concentrated more on the household sector (at 60.8%) for the purchase of passenger vehicles (at 29.5%) and residential (at 17.9%) compared to SMEs, probably due to better rewards per unit of investment (Bank Negara Annual Report, 2010; KFH Research Ltd, 2010).

Figure 2 highlight the amount of Islamic financing extended to SMEs and the percentage of Islamic financing over total financing extended to SMEs (both conventional and Islamic financing) by the Malaysian banking system.

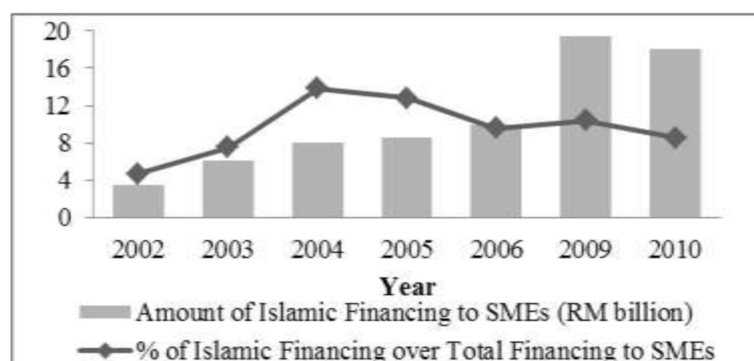


Figure 2. Islamic Financing for SMEs

Source: Bank Negara Annual Report 2002-2010

In Figure 2, there was an upward trend in the amount of Islamic financing extended to SMEs from Year 2002 till Year 2006. The highest amount of Islamic financing extended was RM 19.4 billion in 2009, five-fold the amount extended in Year 2002. However, this amount only represents 10.4% of the total financing (both conventional and Islamic financing) extended by the banking system to SMEs. The remaining 89.6% was conventional financing by the banking system to SMEs. Although the amount of Islamic financing extended to SMEs was increasing each year, this amount was not even a quarter of the total financing provided to SMEs. Based on Figure 1 and 2, one can conclude that PLS based financing to SMEs are negligible. This conclusion is consistent with Osman and Ali's (2008) findings that only 3% of the SMEs respondents utilized mudharabah financing and 4% utilized musyarakah financing.

3. Lack of PLS Based Financing: Reasons and Solutions

An important reason why PLS based financing is not popular among IFIs is the lack of qualified personnel in IBF system and Shariah principles (Al-Harran, 1999; Sarker, 1999; Maniam et al., 2000). To effectively facilitate IFIs in providing and gaining market share in PLS based financing (Maniam et al., 2000), there must be a pool of knowledgeable personnel who could appraise, monitor, evaluate and audit the proposed projects (Sarker, 1999). As a solution, IFIs can either conduct research and development activities that concentrate on project appraisal, implementation and follow-up (Khan, 1995) or establish an Islamic consultancy house that identifies feasible, profitable projects and educates entrepreneurs in project financing (Al-Harran, 1999).

Next, IFIs do not favour PLS based financing because of the risk sharing attribute (Farooq, 2007). However, Fabianto and Kasri (2007) felt that the increased risk exposure is the result of discrepancy between theory and practice. Theoretically, IFIs should have a well-diversified mixture of assets. For example, short term assets (trade financing contracts like murabahah and salam), medium term assets (like ijarah and istisna) and long term assets (like musharakah partnership) (Fabianto & Kasri, 2007). However, in practice, IFIs have more short term assets with less risk (Aggarwal & Yousef, 2000; Fabianto & Kasri, 2007). In addition, IFIs should have PLS based contracts as the basis between them and investors/depositors so that the pass through mechanism from IFIs to investors/ depositors will ensure that any losses from the asset side will also be passed to investors/depositors (Sarker, 1999; Fabianto & Kasri, 2007).

Furthermore, PLS based financing can be in a partnership or equity-financing form, both of which are not popular with IFIs and SMEs. Partnership is the least popular form of business organization compared to corporation and sole proprietorship (Farooq, 2007). A survey showed that 59% of the United States respondents

viewed partnership as bad due to conflict of interest, failure of partner to live up to expectations and shared control of management and decision making (Caggiano, 1992 as cited in Farooq, 2007). In PLS based financing, IFIs would prefer to play a larger role than just a silent equity investor but SMEs prefer to be the only party actively involved in management of the project (Farooq, 2007). Because IFIs could not play an active role, this lead to information asymmetry problems, agency problems and moral hazard (Dar & Presley, 2000; Samad et al., 2005; Farooq, 2007). Agency problem stems from the reluctance of the enterprise to report actual profit i.e. SMEs may understate profit (Sarker, 1999; Dar & Presley, 2000). If a detailed disclosure is made compulsory, the demand for PLS based financing might reduce since SMEs are usually reluctant to disclose detailed information about the operation and profitability of the business (Sarker, 1999; Samad et al., 2005).

To overcome these issues, Samad et al. (2005) suggests that IFIs actively participate in selecting the Board of Directors that will look out for IFIs' interest and minimize agency problems. In addition, IFIs should have a concise and clear contract that states the limited liability of IFIs to the extent of not exceeding the liabilities borne by any partner who had cause the liability in violation of any predetermined condition in the contract (Farooq, 2007). The profit sharing ratio and status of business assets registered (whether under co-ownership or joint ownership) should also be included (Samad et al., 2005). In Malaysia, the contracts are comprehensive and concise because IFIs are stringent in extending PLS based financing.

Khan (1995) suggests that IFIs would not require additional monitoring if they have an efficient contract. An efficient contract could be achieved by increasing the ownership stake of the other party to the contract in order to increase the cost of the other party to the same level as the benefits reap from any non-pecuniary benefits (Khan, 1995). IFIs could also increase the ratio of profits for the other party if the project reports net income above a certain level (Khan, 1995). If IFIs prefer a lower cost of additional monitoring, they could observe the performance of another project that has similar characteristics with the project funded or through market information (Khan, 1995).

4. Methodologies

This study determined the impact of PLS based financing extended to 30 SMEs out of 645 136 SMEs in Malaysia for IFIs (in terms of profit margin) from Year 2002 to 2010. These SMEs have at least nine years of operation and debt financing from financial institutions.

4.1 Markowitz Portfolio Theory and Hypothetical Portfolios

In PLS based financing, the profit of SMEs is shared between IFIs and SMEs based on the profit sharing ratio. If the SME makes a loss, IFIs will also yield a loss (i.e. zero return) from the PLS contracts. This loss is one of the reasons why IFIs shy away from offering PLS based financing to SMEs without any guarantee or collateral. The Markowitz portfolio theory suggests portfolio diversification to reduce the variance of the portfolio without sacrificing return (Reilly and Norton, 2006). This diversification effect works best when the securities in the portfolio are negatively correlated. The variability of total return from the portfolio reduces.

This Markowitz portfolio theory can also be applied to loan portfolios of SMEs. To apply the insights of this theory, four hypothetical portfolios were created consisting of different numbers (five, ten, fifteen and thirty) of SMEs. These enterprises are selected from 14 different sectors to manage unique risk associated with a particular sector. In theory, Markowitz portfolio theory of diversification will result in almost no risk or negligible risk. However, in practical, there will still be a considerable amount of risk. This research intends to show that IFIs can make sufficient return that more than compensates the risks involved from extending PLS based financing to SMEs.

4.2. Profit Margin of IFIs from PLS Based Financing to SMEs

This study calculated the profit margin ratio of IFIs to determine the profitability from each ringgit extended as PLS based financing to each portfolio. The higher the ratio is, the higher the return is to IFIs for each ringgit extended to SMEs. The PLS profit margin ratio was compared with conventional lending profit margin ratio to determine whether PLS based financing yield higher returns than conventional collateral-based lending.

For PLS based financing, the formula is as follows:

$$IFIs\ Profit\ Margin = \frac{\sum[(\sigma)(NI_{PLS})]}{\sum LTD} \quad (1)$$

where σ is the profit sharing ratio for each SME, NI_{PLS} is the net income in PLS context for each SME [both σ and NI_{PLS} were calculated based on the formula shown in Promwichit, Mohamad and Hassan (2013)] and *LTD* is the long term debt from financial institutions for each SME

Profit margin is calculated by dividing total returns from PLS based financing contracts of each portfolio with total amount extended to SMEs as PLS based financing contracts. Total returns from extending PLS based financing for each portfolio was calculated by summing up the individual returns from each SME in

the portfolio. The individual returns from each SME in the portfolio for the IFIs is the net income when the SME engage in PLS based financing (instead of debt financing), NI_{PLS} distributed to IFIs based on the profit sharing ratio, σ. The profit sharing ratio and net income in PLS context for each SME were calculated based on the formula shown in Promwichit et al. (2013). The total amount of PLS based financing extended to SMEs was assumed to be the total long term debt of all SMEs in the portfolio because IFIs are merely extending financing in the form of PLS contracts in place of interest-based loans.

For conventional lending, the profit margin is as follows:

$$IFIs\ Profit\ Margin = \frac{\sum II}{\sum LTD} \qquad (2)$$

where *II* is the interest income (interest income is paid by SMEs to IFIs hence is reported as interest expense in the SME income statement)

5. Results and Discussions

5.1 Implementation Challenges

This study shows that IFIs could determine returns from PLS based financing to SMEs based on profit sharing ratio. Thus, the calculation of profit sharing ratio is very important to IFIs because this ratio will determine the amount of net income redistributed between them and SMEs. The higher the ratio, the higher the portion of net income redistributed to IFIs and the lower the portion of net income redistributed to SMEs. This might provide a motive for SMEs to report a higher capital than the actual capital that the enterprise has to reduce the profit sharing ratio.

Thus, the first problem for IFIs is to determine the real amount of capital that each SME has. As shown in Promwichit et al. (2013), the profit sharing ratio is estimated by taking the sum of SMEs' long term borrowings divided by SMEs' total capital. The long term borrowings are used in the calculation because the research assumed that IFIs will offer PLS based financing in place of these debts. These figures can be determined directly from the current liabilities and non-current liabilities section of the balance sheet of the enterprise. Unlike the profit sharing ratio that is estimated from published financial information, the value of total capital of the SME cannot be determined directly from the balance sheet due to unrecorded or undeclared information on hidden liabilities or assets. Hence, the calculation requires the judgment of IFIs.

The second problem is to determine the actual cause of any losses made by SMEs. IFIs receive returns when SME reports a profit but receive no returns when SME reports a loss for the financial year. Thus, SMEs may intentionally report a loss to avoid distributing net income to IFIs or to increase its personal wealth. Hence, when an SME reports a loss for any financial year, IFIs must determine whether there is an actual loss. In the event that the enterprise purposely reports a loss, there is an automatic correction mechanism in place through the banking system and procedures. When IFIs identify that the loss is intentional, IFIs will blacklist the enterprise and this will appear in the banking system. Thus, other IFIs will be reluctant to extend financing to this enterprise when the enterprise needs financing in the future. In short run, IFIs will face a reduction in the revenue from the capital extended and incur some additional monitoring costs but in the long run, IFIs would not incur any additional monitoring cost to monitor this intentional loss. The drawbacks for SMEs to show intentional loss is being blacklisted and denied financing in the future. These drawbacks will not compensate for reporting intentional loss to avoid distributing profits to IFIs in the short run. Thus, SMEs will avoid intentional loss to avoid financing difficulty in the future.

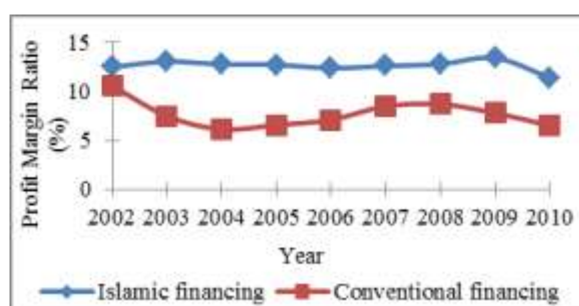
If SME does make a loss, then IFIs must determine whether the loss was due to negligence of the SME. If the loss is due to negligence such as mismanagement, SME must be held accountable. In conventional lending, Bank Negara Malaysia has established a Small Debt Resolution Scheme (SDRS) to restructure non-performing loans for viable SMEs in an effort to reduce poor financial management of the enterprise (Alhabshi, Khalid & Bardai, 2009). Among poor financial management practices include using enterprise's money for personal use (Alhabshi et al., 2009). Similarly, there must be built-in mechanism for PLS based financing for effective regulatory, supervision and enforcement that protects the rights of IFIs i.e. the rights to proper disclosure and transparency and the rights to rewards after sharing risks with SMEs.

5.2. Empirical Results

PLS based financing achieve the just distribution of wealth objective through profit sharing ratio that distributes higher share of profits to the party who borne a higher liability. Currently, IFIs have determined their share of profits when they enter into the agreement, not influenced by the profitability of the SME. First, IFIs calculate the expected amount of return from the financing contract and next, they divide that predetermined amount by the total expected return of the SME to arrive at the profit sharing ratio (Sadique, 2012). In this study, four hypothetical portfolios were formed to determine the distribution of profits to IFIs that varies according to the profitability of the enterprise. Overall, PLS profit margin ratio was higher compared to collateral-based lending profit margin ratio, indicating that returns for each ringgit extended under PLS contracts were higher than collateral-based

lending. All years (except for certain years), returns from PLS contracts extended to each SME were higher than the interest income from loans to each SME.

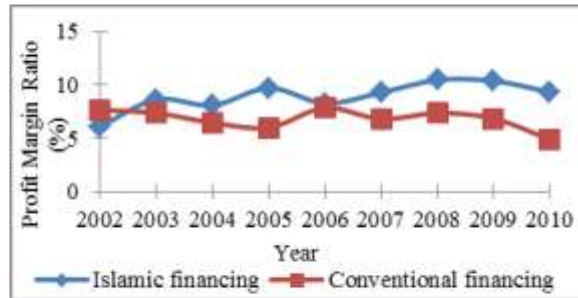
Figure 3 illustrates the profit margin ratios for all four portfolios. Out of the four portfolios, only the five SMEs portfolio consistently has higher PLS profit margin ratios compared to conventional lending profit margin ratios, indicating that returns per ringgit extended under PLS based financing was higher than returns per ringgit extended as loans for all years.



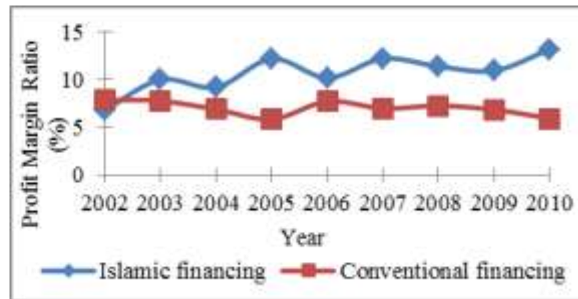
(a) Five SMEs portfolio

Figure 3. Profit margin ratio for SMEs portfolio

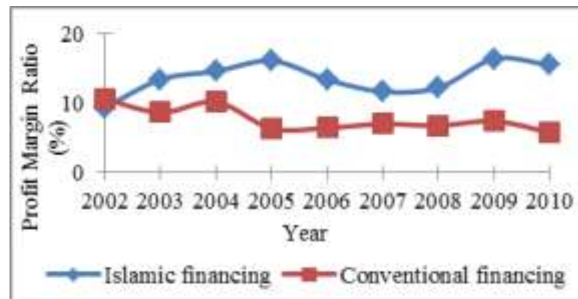
Unlike the five SMEs portfolio, the ten, fifteen and thirty SMEs portfolios have higher PLS profit margin ratios compared to conventional financing profit margin ratios from Year 2003 till 2010. In Year 2002, these portfolios have higher returns from each ringgit extended as loans.



(b) Ten SMEs portfolio



(c) Fifteen SMEs portfolio



(d) Thirty SMEs portfolio

Figure 3. Profit margin ratio for SMEs portfolio

In Year 2002, IFIs received lower returns from PLS contracts from a number of SMEs in the portfolio due to a low profit sharing ratio and/or reported loss in the income statement. First, IFIs have a low profit sharing ratio when an enterprise had low debt, usually in the initial few years of operation. As a result, IFIs received a lower portion of the net income under PLS based financing when the net income was redistributed between IFIs and SME[1]. Second, when an SME made a loss under conventional financing, the SME could have profits or losses under PLS

[1]Amount redistributed to IFIs = Profit sharing ratio x Net income under PLS based financing

based financing. If the SME still suffer a loss under PLS based financing, IFIs receive zero returns. If the SME is profitable under PLS based financing, IFIs receive returns from PLS based financing, although these returns were lower than the interest income from loans extended to the SME.

In Year 2002, IFIs received lower returns from PLS contracts from two SMEs out of five SMEs in the five SMEs portfolio. However, the difference between returns from PLS contracts and interest income for the remaining three SMEs more than offset the huge difference between the returns from PLS contracts and interest income for the two less profitable SMEs in the portfolio. When five new SMEs were added to the portfolio to form the ten SMEs portfolio, IFIs received lower returns from PLS contracts compared to interest income from three out of these five new SMEs in Year 2002. Similar situations were reported for the fifteen and thirty SMEs portfolios. In the fifteen SMEs portfolio, IFIs received lower returns from PLS contracts from seven out of the fifteen SMEs in the portfolio, two of which are the new SMEs added to the portfolio. As for the thirty SMEs portfolio, IFIs received lower returns from PLS contracts from sixteen SMEs. However, higher total returns from PLS contracts compared to the total interest income from conventional financing from Year 2003 till 2010 for the ten, fifteen and thirty SMEs portfolios had more than compensated for this lower total returns for the portfolio in Year 2002.

Furthermore, increasing the number of SMEs in the portfolio reduces the impact that each SME has on the profit margin of the portfolio. To illustrate, in Year 2009, seven out of the thirty SMEs in the thirty SMEs portfolio had lower returns from PLS contracts compared to the interest income. Despite this situation, IFIs still received a higher total returns from PLS contracts compared to total interest income for the portfolio, a difference of RM8 576 971. This difference in total returns was the biggest difference across all nine years. Even when the PLS profit margin ratio decreased in certain years in the five, ten, fifteen and thirty SMEs portfolio, these ratios were still higher compared to the corresponding conventional lending profit margin ratios. For example, the PLS profit margin ratio for the five SMEs portfolio decreased from 13.42% in Year 2009 to 11.42% in Year 2010. Hence, IFIs earned about 11 cents for each ringgit extended to SMEs under PLS contracts in Year 2010. However, the corresponding conventional lending profit margin ratio in Year 2010 was only 6.51%. Thus, financial institutions earned about 6 cents from those five enterprises. The difference between the returns per ringgit from PLS contracts and returns per ringgit from conventional financing for the five SMEs portfolio in Year 2010 is about 5 cents per ringgit. This shows that increasing the number of SMEs not only increases returns from PLS contracts but also reduces the risk that IFIs will receive a lower returns from these contracts compared to loans extended to SMEs when an SME did not perform well for a

particular period. Hence, Markowitz portfolio theory does work in this alternative mode of financing for portfolios of SMEs.

6. Conclusion

In conclusion, this study illustrates that IFIs could profit from PLS based financing to SMEs without any collateral in terms of higher returns per ringgit extended. PLS based financing will help alleviate financing constraints for SMEs while creating a win-win situation for both IFIs and SMEs. As the number of SMEs in the portfolio increases, the return of each SME has less impact on the total return of the portfolio. The risk of the portfolio is reduced through diversification and IFIs would be able to operationalize the PLS contracts without losses. Besides IFIs, mutual fund managers can apply this Markowitz portfolio theory of diversification to invest in this portfolio of SMEs instead of buying shares of companies.

In addition, IFIs can provide training to their staff to increase the number of knowledgeable personnel to appraise, monitor, evaluate and audit PLS contracts (Al-Harran, 1999; Sarker, 1999; Maniam et al., 2000; Ascarya, 2009) since returns from PLS based financing extended to a diversified portfolio of SMEs will more than cover the cost of training. By improving the infrastructure, IFIs can reduce the cost of providing PLS contracts in the long run. Through training too, top management of IFIs can improve their understanding about IBF (Ascarya, 2009).

However, the findings of this study are subjected to some limitations. First, the hypothetical portfolios consist of only 30 SMEs. Second, the cost of providing PLS based financing is assumed to be similar to the cost of providing debt financing. The costs of providing debt financing to SMEs include the cost of organising loan, processing loan application, appraisal, processing payment, enquiry and maintaining account (Nanda, 1999). There are also service charges and processing fees like the reimbursement of actual pocket expenses incurred by IFIs, legal fees and stamp duties (Nanda, 1999). However, in reality, IFIs might incur higher costs for PLS contracts due to higher human resource management cost, partially because of lack of knowledgeable personnel about the IBF and Shariah principles to appraise, monitor, evaluate and audit any proposed projects (Al-Harran, 1999; Maniam et al., 2000; Ascarya, 2009; Sarker, 1999).

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XBRL-Based Projects for Financial and Prudential Reporting – an Empirical Analysis in European Banking System

Cristina Stefanescu[1]

Abstract: Our paper approaches the extensible economic reporting language for collecting information on business processes, namely XBRL by analyzing its implementation in the European banking environment, closely related to the adoption of International Accounting Standards and Financial Reporting (IAS/IFRS). Our research problem mainly came from the accounting development issue, which is an evolutionary process dependent upon several factors. On the other hand, improving banking supervision on information reporting is a problem that needed special attention in order to increase its efficiency and effectiveness, especially in the latest period sprinkled with various banking failures. The results of the performed analysis using various statistical tools (descriptive statistic and correlation tests) reveal that the implementation of both XBRL-based projects (FINREP and COREP) is independent of a fully or partially adoption of IAS/IFRS, while the financial and prudential reporting frameworks are mainly inter-related. Thus, our paper came to point out XBRL's major role in facilitating information communication in a homogeneous way that will allow the interchange of data between software applications, as well as the automatic analysis of financial information in a particular business field, the banking one.

Keywords: XBRL; financial reporting; prudential reporting; banking system; European Union

JEL Classification: M10; G30

Introduction

eXtensible Business Reporting Language (XBRL), the universal standard for global business reporting, is considered an emerging technology that has the potential to play an important role in the production and consumption of financial information (Doolin and Troshani, 2004). Even the world leaders of accounting profession - the International Accounting Standards Board (IASB) and the Financial Accounting Standards Board (FASB) agreed that XBRL is the best solution to electronically express certain aspects of existing accounting standards, in an organized manner that is understandable to individuals and computer programs (Lin, et al., 2005). Thus, by providing interactive financial data through a "tagging" process, XBRL gradually became a standard for the distribution of business reporting data (Piechocki, et al., 2009), offering as well cost savings, greater efficiency and improved accuracy and reliability to all those involved in

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AUDŒ, Vol. 10, no. 2, pp. 76-86

supplying or using financial data.

In banking environment, XBRL language was chosen in 2004 by the Committee of European Banking Supervisors (CEBS) as a way of communication between financial entities and national supervisory authorities, aimed "to promote stability and solvency of the financial system at European level." (Bonson, et al., 2007) Being appreciated as a widely known and technically tested digital standard, XBRL supports this new approach of "transition from an information economy to a knowledge-based economy, providing the necessary platform" (CEBS, 2012).

Introducing the two XBRL-based projects called COmmon REPorting (COREP) and FINancial REPorting (FINREP) came as a need for banking environment where good quality, timely and relevant information needs to be available to all interested parties for ensuring market discipline.

Basing on this background, our paper proceeds as it follow:

Firstly, we briefly review prior literature concerning eXtensible Business Reporting Language (XBRL), by pointing out its strengths and benefits, as well as impediments encountered along with its worldwide adoption. Than, by highlighting its major role in ensuring appropriate financial and prudential reporting through FinRep-CoRep project, we defined our research goal - to provide an analysis of both financial and prudential reporting frameworks implementation in banking system at European Union level, by reference to international standards. After providing information about the sample of our analysis and explaining the research methodology used, consisting of correlation and descriptive analysis, we provide our research findings and discuss their implications.

Literature Review

Our research problem mainly came from the accounting development issue, which is an evolutionary process dependent upon several factors and interwoven with economic development. Anyway, the need of accounting harmonization and convergence through a unique set of international accounting standards it is widely recognized, but unfortunately it is still an on-going process. Besides the unique way of structuring the information provided by companies, another issue arose – the dissemination of accounting information by means of Internet, which became one of the most discussed research topic in this field.

On the other hand, improving banking supervision on information reporting is a problem that needed special attention in order to increase efficiency and effectiveness of surveillance process, especially in the latest period sprinkled with various banking failures.

Thus, reporting in banking environment has to meet the requirements of various users implied in decision making process and consequently, information provided has to face up multiple dimensions, a digital standard to support this environment being absolutely necessary.

eXtensible Business Reporting Language (XBRL) is one variant of XML (eXtensible Markup Language) for business reporting, that supports both financial and non-financial data, which distinguishes it from traditional financial documents (Debreceny, et al., 2005), thus being appropriate for prudential banking reporting, too. Consequently, for revolutionizing the way that information is both gathered and accessed (Wallace, 2001), the Committee of European Banking Supervisors started two XBRL-based projects called COmmon REPorting (COREP) and FINancial REPorting (FINREP) to ensure homogeneous financial reporting and specific supervisory requirements regarding solvency control of financial institutions and investment firms.

The FINREP framework was designed to lead to a common European reporting based on International Financial Reporting Standards (IFRS). The COREP framework was designed to contribute to market discipline, by enhancing transparency and supporting proper risk management. It aimed "to reduce the reporting burden for credit institutions that operate cross-border, and lower barriers to the development of an efficient internal market in financial services" (CEBS, 2007).

Even if at the beginning of XBRL adoption, there were evidences (Nel and Steenkamp, 2008; Pinsker, 2003) that show low levels of awareness and understanding from information users, including accountants and auditors, mainly due to their low knowledge or experience, along time they succeeded to perceive the intended benefits that XBRL usage provides (Steenkamp and Nel, 2012). Thus, adopting XBRL facilitates communication, increases transparency through timely presentation, accurate, reliable, continuous and uniform reporting (Zabihollah and Turner, 2002; Bovee, et al., 2002), thus ensuring better auditing (Hodge, et al., 2004; Richards and Tibbits, 2002). In an indirect way, it will also have positive economic consequences and capital market benefits materialized in a decrease of capital cost and an increase of the stock price, due to the reduced levels of information asymmetry, as a result of increased disclosures (Debreceny et al., 2010; Premuroso and Bhattacharya, 2008; Bartley et al., 2011).

According to prior literature, implementation of XBRL and its power to increase transparency and efficiency in business reporting was often a research topic in a single country analysis (e.g. USA, Australia, the Netherlands, South Africa, Italy) (Steenkamp and Nel, 2012; Bharosa, 2011; Debreceny et al., 2010; Premuroso and Bhattacharya, 2008; Majid and Koo, 2008; Diego and Michele, 2011). Moreover, while most research studies have examined the factors that influenced the degree of

XBRL adoption (Locke and Lowe, 2007; Pinsker and Li, 2008; Bonson, et al., 2008), there is a lack of research both on comparative and evolutionary analysis of XBRL implementation.

Basing on this background, and considering the main objective of our paper - to provide a comprehensive analysis of financial and prudential reporting frameworks (FINREP and COREP) implementation in banking system at European Union level, by reference to international standards and their scope of application, the following research questions aroused, a comprehensive empirical analysis being performed for providing justified answers:

- RQ1: "Do the adoption of International Accounting Standards and Financial Reporting (IAS/IFRS) influence the application of financial reporting framework (FINREP)?"

- RQ2: "Is there any relationship between the application of financial reporting (FINREP) and prudential reporting (COREP) frameworks?"

Empirical Design and Results

The aim of our study is to provide an answer to our research questions by assessing possible relationships between the adoption of accounting standards and XBRL-based projects for financial and prudential reporting in banking system at European level.

Consequently, two sets of variables for performing the correlation analysis were needed:

- variables expressing the scope of application of accounting reporting, namely for listed / unlisted entities, respectively at individual / consolidated basis (IFRS_I_Unlist; IFRS_I_List; IFRS_C_Unlist). Each variables takes "0" value for not applied, "1" value for permitted and "2" value for required;
- variables revealing the use of XBRL-based projects for financial / prudential reporting (FINREP_Non_core; FINREP_Core; COREP). Each variables takes "0" value for takes "0" value for not applied, "1" value for partially used and "2" value for fully used. For measuring the use of prudential reporting, we assessed all components of COREP reporting: capital adequacy, group solvency, credit risk, market risk and operational risk.

The sample of our analysis consisted of all 27 European Union member states, data collection being based on information provided by European Central Bank (ECB), Committee of European Banking Supervisors (CEBS) and European Banking Authority (EBA) websites.

For achieving our main goal, firstly, we briefly presented an overall image upon the adoption of both accounting standards and XBRL-based projects for reporting.

Thus, we assisted at a continuous process of international harmonization and convergence of accounting for a very long time, the progress in achieving this goal being slow. Anyway, between 1973 and 2001, a series of 41 accounting standards ordered numerically have been issued by the International Accounting Standards Committee (IASC). Since 2001, the new International Accounting Standards Board (IASB) took over from the IASC its responsibility of standards settler and continued to develop the so-called "IFRS" (International Financial Reporting Standards).

By now, more than 100 countries and regions over the world have permitted or even required their domestic listing companies to adopt IFRS to different extent. Since 2005, all listed EU credit institutions are required to submit consolidated reports according to IAS/IFRS, a detailed imaged of their existent scope of application at European banking system level being presented in Figure 1.

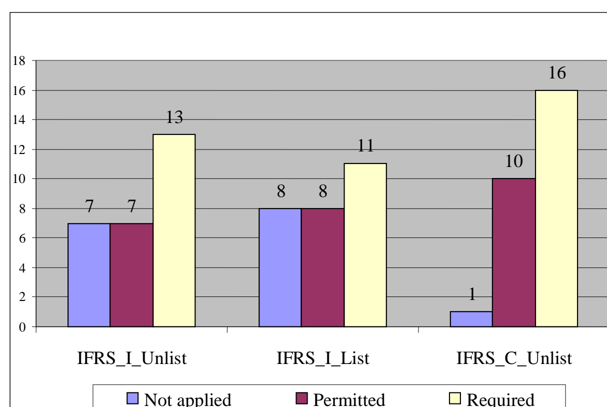

Figure 1. Scope of application of IFRS

Source: own projection

On the other hand, a new framework for financial reporting (FINREP) applicable to credit institutions was issued by the Committee of European Banking Supervisors (CEBS) in 2005, aiming to increase the level of financial reporting to Central banks, so that the supervisory process to be more effective. FINREP is not mandatory, but once an authority decides to apply the framework it should, as a minimum, require the core information (see Figure 2).

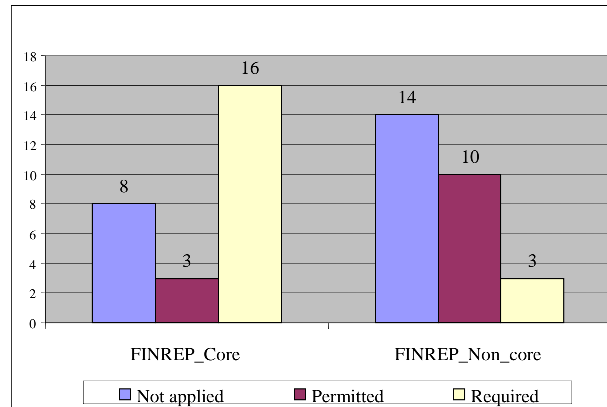

Figure 2. FINREP Adoption

Source: own projection

Because banking activities are by definition riskier than any others, additional reporting for enhancing transparency and market discipline in financial environment were needed. Consequently, in 1988, Bank for International Settlements (BIS) issued the so-called Basle Capital Accord to apply common minimum capital standards in banking industry, several improvements being made along time related to risks addressed and calculation methodologies.

Basing on these requirements, a new framework for prudential reporting (COREP) was issued by the Committee of European Banking Supervisors (CEBS) in 2006, aiming to create a harmonized framework for the regulatory reporting of the capital ratio. It is divided into five parts: capital adequacy (CA), group solvency (GS), credit risk (CR), market risk (MR) and operational risk (OR), a detailed presentation of their implementation level in European Union banking system being emphasized in Figure 3.

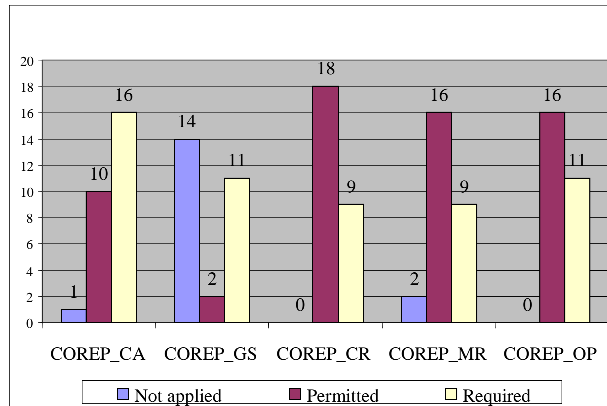

Figure 3. COREP Adoption

Source: own projection

Considering the continuous development of reporting frameworks for banking institutions in Europe, we were wondering if there is a relationship between their levels of adoption in EU member states, thus raising our research questions: RQ1 and RQ2.

For performing the correlation analysis designed to answer our questions, whose results are detailed in Table 1, we calculated Pearson coefficient that is usually used for measuring the strength of linear dependence between two variables, giving a value between "1" describing the perfect direct relationship and "-1" revealing an indirect one, "0" value meaning that there is no linear correlation between variables.

Pearson coefficient values reveal the existence of a positive correlation between variables tested, but not all of them are statistically significant.

Thus, despite our expectations that the adoption of International Accounting Standards and Financial Reporting (IAS/IFRS) is linked to the application of financial reporting framework (FINREP) our results reveal that there is not any relationship between the two financial reporting frameworks in European banking system.

The only correlation identified that met our expectations was between the two XBRL-based project FINREP and COREP, but its intensity is a medium one (0,389) and its probability of significance is only of 95% (Sig. <0,05).

Table 1. The correlation matrix between variables

		IFRS_I_Unlist	IFRS_I_List	IFRS_C_Unlist	COREP
FINREP _Non_core	Pearson Correl.	.011	-.044	.260	.296
	Sig.(2-tailed)	.956	.827	.191	.134
FINREP _Core	Pearson Correl.	.094	.080	.299	.423*
	Sig.(2-tailed)	.639	.692	.130	.028
FINREP	Pearson Correl.	.052	.010	.306	.389*
	Sig.(2-tailed)	.796	.959	.120	.045
	N	27	27	27	27

*. *Correlation is significant at the 0.05 level (2-tailed).*

Source: calculations made using SPSS software

In conclusion, the implementation of both XBRL-based projects (FINREP and COREP) is independent of a fully or partially adoption of International Accounting Standards and Financial Reporting (IAS/IFRS). Also, the correlation tests performed led to the conclusion that financial and prudential reporting frameworks are mainly inter-related. Moreover, irrespective of the degree of implementation of international accounting and financial reporting at individual level for listed/unlisted credit institutions or on consolidated bases for unlisted ones (48,14% / 40,74%), the rate of applicability of XBRL frameworks for financial and prudential reporting is relatively high (59,25%).

Findings and Conclusions

XBRL proved to be an electronic format for communication of either financial or general business information revolutionized reporting all around the world. By reducing the cost of analyzing and reporting business information, increasing the speed and efficiency of business decisions, enhancing dissemination of data and simplifying its presentation, XBRL bring benefices to most participants in any business process, whether they are preparers, transmitters or users of information.

When focusing on financial environment, the Committee of European Banking Supervisors (CEBS) found XBRL as a powerful tool for harmonization and standardization of reporting structure across countries, so that reported data have same meaning across the member states, and thus decided to develop common reporting standards for solvency (capital) ratios and financial reporting (COREP and FINREP).

Unlike prior research studies, which were mainly focused either on pointing out the role and dimensions of XBRL, its advantages and weaknesses, or on assessing the impact of implementation on a certain country and more frequently on companies' environment, our paper comes to add value to research literature through various perspectives.

Firstly, our main objective goes beyond analyzing XBRL as a technological language, focusing on its application through an evolutionary analysis. Secondly, by approaching XBRL concept in a particular business field, namely the banking system, considering all European Union countries for performing the proposed analysis, our paper provides comprehensive conclusions, thus being a useful as a source of reflection to both practitioners and academic environment.

For performing the proposed analysis we used various statistical tools (descriptive statistic and correlation tests), thus allowing us to provide a comprehensive analysis of the development of reporting frameworks implementation in Europe, as well as to identify possible correlations among them, when putting the data into SPSS software. The use of statistical software for performing our analysis ensures transparency and relevance to our results, while data processing is accurate and controllable.

The results of the performed analysis reveal that the implementation of both XBRL-based projects (FINREP and COREP) is independent of a fully or partially adoption of International Accounting Standards and Financial Reporting.

Also, the correlation tests performed led to the conclusion that financial and prudential reporting frameworks are mainly inter-related. When analyzing data in progress we concluded that generally there was a positive evolution on the adoption process of both XBRL-based frameworks at European Union level.

In conclusion, by approaching an extensible economic reporting language for collecting information on business processes, namely XBRL, our paper comes to underline the importance of technology in enhancing a unique framework for reporting. Thus, by analyzing the implementation of XBRL in the European banking environment, closely related to the adoption of International Accounting Standards and Financial Reporting (IAS/IFRS), we pointed out its major role in facilitating information communication in a homogeneous way that will allow the interchange of data between software applications, as well as the automatic analysis of financial information.

In the end, being aware of our study's limitations, coming from the sample selected and the fact that only one years' data were considered for analysis, as well as from the statistical methods used based only on descriptive analysis and correlation tests, we are appreciating these as a challenge that give us outlooks for future research.

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Analyzing the Impact of Globalization on Economic Growth

Farid Ullah[1], Abdur Rauf[2], Nasir Rasool[3]

Abstract: Globalization is a buzz word that catches significant importance as a reform agenda post 1980. The current study is an attempt to analyze the impact of globalization on economic growth of Pakistan. The sample period for this study ranges from 1980-2009. For empirical analysis of the study, Autoregressive Distributive Lag model is employed while for data analysis Augmented Dicky Fuller test is applied. It is found that all the variables are stationary at first difference. The empirical findings of the study suggest that economic globalization in long phase of time increase growth in case of Pakistan economy, social globalization has negative impacts on growth and political globalization is insignificant which mean that it will not increase or decrease the growth of Pakistan economy. While in short run economic globalization at lag 1 and social globalization decrease the pace of growth. It is suggested to the government that as overall globalization helps in increasing the growth of economy therefore government should formulate such a policy that helps the economy to be globalized.

Keyword: globalization; growth; bound test/ARDL

JEL Classification: C22; H77; F43

1. Introduction

In the last decade of the 20th century globalization emerged as a reform agenda around the different countries of the world. It has various dimensions like political, economic and social. No common consensus is found while defining the phenomenon of globalization, amongst the researcher and scholars. Garry (1998) define the globalization as a process that helps in coordinating political systems and called it a west cultural installation in the world economy. Peter (2002) is of the view that it helps in bringing the investment, consumption and saving decision closer. By globalizing the economy a country get enable to attract investment from abroad, labor can move freely in a globalize economy, capital flow and trade increase considerably.

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Considering all these assumption related to globalization this paper attempts to find out the impacts of globalization on economic growth in Pakistan. This paper is unique in the sense that it employs relatively advance methodology of cointegration called Bound Testing Approach. It is believed that by using this relatively new methodology the results will improve and capture the true picture of the impacts of globalization comparing to the previous studies.

Rest of the study is divided into following section. Section two provide literature review, data and methodology is discussed in third section. Fourth section is about empirical results and discussion while conclusion and policy recommendation is discussed in fifth section.

2. Literature Review

Anwar (2002) told that openness and growth has no strong relationship. Although Pakistan has liberalized its trade policies but yet its trade performance is poor because they reduced tariff rate more than bound tariff under WTO. Foreign direct investment which is a main factor of growth does not increase up to the satisfactory level due to poor law and order and political instability in Pakistan.

Stiglitz (2004) highlighted that globalization impact on growth is different across the world. Globalization give benefits to developed countries and adversely affects the performance of developing countries because less developed countries keep high foreign reserve and provide low or interest free loan to the developed countries and Globalization also compel less developed countries to accept different kinds of risk (risk that are associated with exchange rate and interest rate changes) and enhance income of those countries which have comparative advantage. Karras (2003) argued that trade openness promote growth. He also suggested that global and national policies should be developed so that trade among different countries becomes easy.

Aka (2006) used share of international trade as a proxy for globalization. He argued that globalization, openness and growth are interrelated with each other. He also told that globalization reduces growth of Cote D'Ivoire both in short and long run and openness enhance growth only in short run. Dreher (2006) developed an index for 123 countries from 1970-2000. He told that globalization is the main engine that improves growth and reduces poverty inside a country. He also argued that globalization helps in providing employment and thus improve living standards of people while political globalization does not have any impact on growth. Alfaro et al (2006) stated that growth in financially stable economies is twice more than unstable economies in presence of foreign investor. They told that market structure plays an important role to attract foreign investor in order to achieve higher growth. Zhang (2006) argued that FDI has increased export and

productivity in China and it has contributed more to China's economic development.

Feridun et al (2006) analyzed the impact of Public investment, government investment, trade openness and financial openness on growth. They found that public investment show positive and significant relationship with growth. Government investment shows no relationship, trade openness play no role in promoting growth and financial openness reduces growth. Afzal (2007) used financial integration and trade openness as proxies for globalization. He argued that there exist linear relationship between financial integration, trade openness and economic growth in long run. Karagoz (2009) told that remittances impact on growth is negative and significant. FDI has no impact on growth while domestic investment and export impact is positive.

Mutascu and Fleitcher (2011) told that economic position of a country will boost up if it is more globalized. Loto (2011) found that total trade reduces growth in Nigeria, FDI helps in promoting growth. He also told that sound policies and improvement in trade with other countries will help Nigeria to get beneficial results from globalization and Nigeria should be focus on producing portfolio of product that has international demand.

Alimi and Atanda (2011)suggested that globalization increase trade, technology transfer, foreign direct investment and living standards in a country and reduces poverty and bring employment which ultimately leads to enhance growth. Neupani (2011) concluded that both globalization and education show highly significant and positive relationship with growth. He also added that economic growth will be more of those countries that are more globalized and has high education rate as compare to those countries that are less globalized and has low education rate. Kakar et al (2011) recommended that globalization as an important tool in the hand of developing country to raise growth.

As it is clear from the above analysis of the previous literature that there are although found abundant of literature describing globalization and growth relationship but still the researchers cannot come up with the common findings as some view that the globalization helps in growth of the economy while others tells the different story. Therefore a need for a study to analyze the globalization and growth relationship was felt so that the check the said relationship.

3. Data and Methodology

3.1. Data

To analyze the impact of globalization (Economic, Social and Political globalization) on economic growth, current study used time series data from 1980

to 2009.The data on GDP which is used as a proxy for growth is taken from State Bank of Pakistan (SBP). The data on KOF index which is used as a proxy for (Economic, Social and Political globalization) is taken from http://globalization.kof.ethz.ch.

3.2. Methodology

It is a well-known fact that usually there exist a unit root problem in the time series data and thus if such data is analyzed it will leads to a wrong conclusion (Granger & Newbold, 1974), the ordinary OLS application results will be spurious (Thomas, 1997). We adopt the Box and Jenkins (1970, 1976) methodology to avoid this problem and take the data at its difference form D until it became stationary. By doing so although on one hand we will be lead to the right conclusion but some degrees of freedom will be lost (Davidson et al, 1978).

Various methods have been suggested by the literature for the elimination of unit root but this will adopt Augmented Dicky Fuller (ADF) test.

Generally the ADF can be written as;

$$\Delta Zi = cons. + \varphi Z_{i-1} + \sum_{j=1}^{p-1} \Omega j \Delta Z_{i-j} + \mu i \ldots\ldots\ldots(1)$$

Here the μ is the error term and $\Delta Z_{i-j} = Z_{i-1} - Z_{i-2}$

When the time trend is included it will become;

$$\Delta Zt = cons. + \varphi Z_{t-1} + \sum_{j=1}^{p-1} \Omega j \Delta Z_{t-j} + \mu t \ldots\ldots\ldots(2)$$

In the above equation "2"time trend is represented by"t" and null hypothesis for this equation is $\varphi = 0$. If series is stationary then we reject null hypothesis.

The current study will employ ARDL/Bound test for Cointegration to make cointegration analysis. This technique is suggested by Pesaran et al (2001), and on the following reasons we select this particular technique for the analysis;

I- This technique is simple and can easily be used. After knowing that the variables are integrated of order 1 or stationary at level then the ordinary least square is applicable.

II- This technique does not need a prior test for unit root.

III- The main advantage of this technique is, it give best result at small sample.

Three steps are involved in ARDL approach:

a- In the first step cointegration amongst variable is tested in long run and for this Pesaran et al (2001) suggest F-statistics.

General form of long run cointegration is as:

$$\Delta Y_t = con. + \sum_{i=0}^{p} \alpha i \Delta Y_{t-i} + \sum_{i=0}^{p} \beta i \Delta N_{t-i} + \lambda 1 Y_{t-1} + \lambda 2 N_{t-1} + \varepsilon_t \ldots \text{(3)}$$

Co-integration is tested among "Y_t" and "N_t" in the above equation.

The null hypothesis in the above case is;

$Ho : \lambda 1 = \lambda 2 = 0$

$H1 : \lambda 1 \neq \lambda 2 \neq 0$

For making decision about long run cointegration existence, we compare the values of F-statistics which we obtained from our model with the F-statistics critical value suggested by Pesaran et al (2001). There are three possibilities about long run co-integration. (a) If the calculated value of F-statistics which we obtained from our estimation is less than lower bound of F- statistics tabulated value. It means that no long run co-integration exist among variables. (b) If F-statistics lies in between the lower and upper bound of F-statistics critical value, it means inconclusive results. (c) If F-statistics calculated value is greater than upper bound of F-statistics at 5% significance level, it shows that long run co-integration exists among variables and we can move forward to estimate long run and short run relationship (Pesaran et al, 2001).

b- In case there exist a long run cointegration then in the second step we estimate the long run elasticities of the selected model by applying OLS (Ordinary Least Square) technique.

$$Y_t = Con. + \sum_{i=0}^{p} + \lambda 1 Y_{t-1} + \sum_{i=0}^{p} \lambda 2 N_{t-1} + \varepsilon_t \ldots\ldots \text{(4)}$$

In above model $\lambda 1, \lambda 2$represent long run coefficients.

c- In the third and final step it is attempted to extract the short run dynamics through Error correction model (ECM). Our short run model for this step is as;

$$\Delta Y_t = con. + \sum_{i=1}^{p} \alpha i \Delta Y_{t-i} + \sum_{i=1}^{p} \beta i \Delta N_{t-i} + \varepsilon_t \ldots\ldots\ldots\ldots\ldots\ldots \text{(5)}$$

$\alpha i, \beta i$shows coefficient of short run in above model.

3.2.1. Econometric form of the Model

General econometric form of this model is as following;

$$\ln RGDP_t = \beta 0 + \beta 1(EGI)_t + \beta 2(PGI)_t + \beta 3(SGI)_t + \varepsilon_t \ldots\ldots\ldots\ldots\ldots (6)$$

Where

lnRGDP= natural log of Real Per Capita Gross Domestic Product.

lnEGI= natural log of Economic Globalization Index.

lnSGI= natural log of Social Globalization Index

lnPGI= natural log of Political Globalization Index.

ε_t = error term

Here we take real gross domestic product as a proxy for economic growth. Alimi and Atanda (2011) used RGDP as a proxy for growth to investigate the impact of globalization and business cycle on economic development in Nigeria. For globalization KOF index has been used here. This index was first of all developed by Dreher (2006) for 123 countries to analyze the impact of globalization on growth. KOF index shows three dimension of globalization which are economic social and political. Mutascu and Fleitcher (2011) also used KOF index for Romanian economy to analyze the relationships between economic growth and globalization.

The above stated general econometric model will be estimated through application of ARDL and thus we will convert it into ARDL form as following;

For long run co-integration

$$\Delta \ln RGDP_t = \propto 0 + \sum_{i=1}^{t} \alpha 1 \Delta \ln RGDP_{t-i} + \sum_{i=1}^{u} \alpha 2 \Delta \ln EGI_{t-i} + \sum_{i=1}^{v} \alpha 3 \Delta \ln SGI_{t-i} + \sum_{i=1}^{w} \alpha 4 \Delta \ln PGI_{t-i} + @\ln RGDP_{t-i} + \upsilon \ln EGI_{t-1} + \sigma \ln SGI_{t-1} + \theta \ln PGI_{t-1} + \varepsilon_t$$

----------(7)

For Long run coefficient

$$\ln RGDP = \alpha 0 + \alpha 1 \ln EGI_{t-1} + \alpha 2 \ln SGI_{t-1} + \alpha 3 \ln PGI_{t-1} + \varepsilon_t \ldots\ldots\ldots\ldots (8)$$

For Short run dynamics

$$\Delta \ln RGDP_t = \alpha 0 + \sum_{i=1}^{x} \alpha 1 \Delta \ln EGI_{t-i} + \sum_{i=1}^{y} \alpha 2 \Delta \ln SGI_{t-i} + \sum_{i=1}^{z} \alpha 3 \Delta \ln PGI_{t-i}. (9$$

4. Results and Discussion

4.1. Data Analysis

The unit root analysis of the data is made through applying Augmented Dicky Fuller (ADF).Unit root analysis is made by once using intercept alone and then used both trend and intercept. First the data is analyzed at level and it is found that all the variables are non-stationary at level by using once intercept alone and then using both intercept and trend. It is clear from the table (4.1a) that the entire variable selected for this particular study became stationary at first difference.

Table (4.1a). Unit Root Analyses by Applying ADF Methodology

Variables	At Level		At 1st Difference	
	Intercept	T+I	Intercept	T+I
***ln*RGDP**	-1.0406	-1.9731	-4.0497	-4.0414
***ln*EGI**	-0.7178	-2.9997	-6.6502	-6.4907
***ln*SGI**	-0.0063	-1.5351	-3.5897	-3.5807
***ln*PGI**	-0.8837	-1.1723	-4.7653	-4.7483

Note: the Critical Values at 5% level of significance at level are -2.96 and -3.57 while at first difference the critical values are -2.97 and 3.58 respectively.

4.2. Long Cointegration Analysis

In order to analyze the impact of globalization on economic growth, here we take RGDP as a growth proxy. While regressing equation (7) it is found that long run co-integration exist between globalization and growth as per suggested by Pesaran et al (2001) that for long run cointegration amongst the variables the calculated value of F-statistics must be greater than the tabulated value at 5% level of significance, the table (4.2a) below shows that in our model the calculated value is 8.07 and the critical value for this particular model is 4.35 and thus null hypothesis for no long run cointegration is rejected. In opposite case when we normalize the Economic globalization as dependent variable it is found that that the result is inconclusive as suggested by Pesaran et al. (2001) that if the calculated values lies in between the upper and lower critical values then the results will be inconclusive on the other hand when Social globalization and Political globalization taken as a dependent variable it is found that there is no long run cointegration as suggested by Pesaran et al (2001), See Table (4.2a).

Table (4.2a). Long Run Cointegration Analyses

Equation	F-calculated	Critical values at 5%		Remarks
		I(0)	I(1)	
1.f_{rgdp}(*ln*RGDP/*ln*EGI,*ln*SGI,*ln*PGI)	8.0789	3.23	4.35	co-integration exist
2.f_{rgdp}(*ln*EGI/*ln*RGDP,*ln*SGI,*ln*PGI)	3.6634	3.23	4.35	Inconclusive
3.f_{rgdp}(*ln*SGI/*ln*RGDP,*ln*EGI.*ln*PGI)	1.5442	3.23	4.35	No co-integration
4.f_{rgdp}(*ln*PGI/*ln*RGDP,*ln*EGI,*ln*PGI)	2.9552	3.23	4.35	No co-integration

Note: *Critical values are taken from Pesaran, M, H., Shin, Y &Smith, J (2001).*

4.3. Analysis of Long Run Estimates

As stated above that long run cointegration exists between globalization and economic growth. Therefore we can move forward to estimate long run relationship between them. For this purpose we estimate equation (8) based on ARDL (1,2,0,0) selected on Schwarz Bayesian Criterion at Lag length 2. While estimating this equation we found highly significant relationship between the two. The coefficient value of the economic globalization suggests that with every 1% increase in openness of the economy the growth will be increased more than unity. The findings of this study support the results of Dreher (2006), Mutascu and Fleitcher (2011), Neupani (2011).

Social globalization shows negative and significant relationship with economic growth. it shows that 1% increase in social globalization decline growth by 32%. This negative effect of social globalization is due to social factor which may be literacy, culture and international tourism. By increasing the literacy rate the labor will become skilled and thus will be able to contribute positively. Pakistan has a diverse cultural country which can be used as a determinant of growth if channelize, explore and expose in a proper way. Currently the cultural differences created hurdles in the way of growth of the economy and thus it has to be addressed properly. Similarly tourism can also contribute to the growth of economy but at the moment because of ethnic problems and terrorism, tourism contributes nothing to the economy. Government should tickle this problem with 100% commitment and as suggested before there is a lot of room for the development of this aspect. Political globalization shows insignificant relationship to the growth of Pakistan. Dreher (2006) also found insignificant impact of political globalization on growth.

Table (4.3a). Long run relationship Dependent variable: *ln*RGDP

Regressors	Coefficient	Standard Error	T-Ratio	Prob
***ln*EGI**	2.8975	.7592	3.8167	(.001)
***ln*SGI**	-.3211	.1695	-1.8952	(.073)
***ln*PGI**	-.24436	.4631	-.5278	(.603)
C	7.2808	.7361	9.8913	(.000)
R-Square	.78	**Adj-R^2**	.69	
F-stats	**18.29(.004)**	**DW-Statistics**	2.06	
Test statistics	**CHSQ**	**LM version**	**F-Version**	
Serial correlation	**1**	1.0509 (.305)	.7799 (.388)	
Functional Form	**1**	.0151 (.903)	.0107 (.919)	
Normality	**2**	.2593 (.878)		
Heteroscedasticity	**1**	.8929 (.345)	.8564 (.363)	

Note: Serial correlation is tested through Breuch-Pagan test, Ramsey RESET test for functional form, Normality is tested through Jarque-Bera and white test is performed for Heteroscedasticity

4.4. Short Run Analysis

Equation (9) has been estimated in order to show the impact of globalization on economic growth in short run and its results are displayed in the table (4.4a). This model is selected on the basis of SBC lag length 2 whose ARDL specification is (1,2,0,0). It is found that economic globalization shows insignificant relationship to economic growth while on the other hand economic globalization shows negative and significant relationship at lag 1. Social globalization shows negative and significant relationship with growth and 1% increase in social globalization reduce growth by 3%. ECM value is negative and significant and it clearly state slow speed of adjustment to long run equilibrium.

Table (4.4a). Short run Elasticities

Regressors	Coefficient	Standard Error	T-Ratio	Prob
d*ln*EGI	.10530	.073249	1.4376	(.165)
d*ln*EGI 1	-.22662	.080628	-2.8107	(.010)
d*ln*SGI	-.038921	.020225	-1.9244	(.067)
d*ln*PGI	-.029538	.043634	-.6769	(.505)
dC	.88012	.43187	2.0379	(.049)
Ecm(-1)	-.12088	.062810	-1.9246	(.067)
R-Squared	.4359		**Adj-R^2**	.2748
F-stat	7.2455 (.014)		**DW-statistics**	2.09

Dependent variable is *dlnRGDP*

CUMSUM and CUSUMSQ are presented in Figure 1 and the line indicates that this model is structurally stable because the lines fall between critical bound at 5%.

Figure 1

The R^2 (.54) and Adjusted R^2 (.30)suggested the model is well specified and for the detection of serial correlation, functional form, heterosecedasity and normality the current study employs various diagnostic tests and the results (Table 4.5a) suggest that no such problems lies in our selected model.

Table (4.5a). Diagnostic Test

Test statistic	*CHSQ*	LM version		F version	
		Value	**Prob.**	**Value**	**Prob.**
Serial correlation	1	2.4514	(.117)	1.5978	(.224)
Funtional form	1	.2133	(.644)	.1274	(.726)
Normality	2	.0092	(.995)		
heteroscedascity	1	.4056	(.524)	.3813	(.642)

Note: The above table displays the results of long run cointegration analysis

5. Conclusion and Policy Recommendation

The phenomena of globalization emerged on the globe during the last decades of 20th century. In the current study the impacts of globalization on economic growth has been addressed by using KOF index (See Appendix “A” for KOF Index). The empirical findings of the study suggest that, in long run economic globalization shows positive and significant relationship with growth. Social globalization has negative impact on growth. Political globalization shows insignificant relationship with growth. In short run economic globalization shows positive relationship at lag 1. Social globalization has negative and significant relationship with growth and political globalization has no impact on growth. In light of the findings of the study it is suggested to the government that she should open its economy to the international market because that will not only help in a better allocation of resources by competing with external market but also is a source of importing

advance technologies. Although the social globalization has negative impacts but once addressing seriously can be mould back its impacts from negative to the positive influences. Literacy which is one of the most important social indicator can be increased by following the policy of "each one teach one", launching awareness programs at various levels, a comprehensive plan has to be chalked out for bringing it upto the desired level. Similarly by preventing the cultural heritage and exchange of cultures delegation with other countries will helps in promotion of own culture.

6. References

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Appendix A

2012 KOF Index of Globalization

Indices and Variables Weights

A. Economic Globalization	**[36%]**
i) Actual Flows	(50%)
Trade (percent of GDP)	(21%)
Foreign Direct Investment, stocks (percent of GDP)	(28%)
Portfolio Investment (percent of GDP)	(24%)
Income Payments to Foreign Nationals (percent of GDP)	(27%)
ii) Restrictions	(50%)
Hidden Import Barriers	(24%)
Mean Tariff Rate	(27%)
Taxes on International Trade (percent of current revenue)	(26%)
` Capital Account Restrictions	(23%)

B. Social Globalization	**[37%]**
i) Data on Personal Contact	(34%)
Telephone Traffic	(25%)
Transfers (percent of GDP)	(4%)
International Tourism	(26%)
Foreign Population (percent of total population)	(21%)
International letters (per capita)	(25%)
ii) Data on Information Flows	(35%)
Internet Users (per 1000 people)	(33%)
Television (per 1000 people)	(36%)
Trade in Newspapers (percent of GDP)	(32%)
iii) Data on Cultural Proximity	(31%)
Number of McDonald's Restaurants (per capita)	(44%)
Number of Ikea (per capita)	(45%)
Trade in books (percent of GDP)	(11%)
C. Political Globalization	**[26%]**
Embassies in Country	(25%)
Membership in International Organizations	(28%)
Participation in U.N. Security Council Missions	(22%)
International Treaties	(25%)

Source:

Dreher, Axel, 2006, Does Globalization Affect Growth? Empirical Evidence from a new Index,Applied Economics 38, 10: 1091-1110.

Dreher, Axel; Noel Gaston and Pim Martens, 2008, Measuring Globalization-Gauging its Consequence, New York: Springer.