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From the prosperity illusion to reality constraints

The economy of last 50 years has created its own tools of deception that tried to prove that the stock systems can (just through themselves) solve the real economy problems. Pseudo ratings and influence games have created mechanisms that are hard to monitor, hard to control and evaluate with precision even for those who have designed it.

The real economy cannot be anymore monitored, controlled and measured accurately by specialized bodies that work alongside in other plans; other components often parasitize the progress even if they were originally created to catalyze its activity.

We consider here the monetary economy and exchange systems that have lost their original meanings making from money not a mean (catalyst of economic reaction) but a purpose. Thus, the 80 years have created the illusion of prosperity and educated generations in worshiping this illusion and in 2000 this illusion has collapsed forcing future generations to think more and more to the constraints of reality. Those who created the „illusions industry" will pay, but unfortunately, like always, those who will suffer are the one that credited the system (the past and the future generations)

Prof. Ph.D. Paul Marinescu

Operative methods for crisis management in public organizations

~ **Cristiana Nicoleta Mihăila** *(The Bucharest Academy of Economic Studies)*

Abstract: *This research is based on the operative methods for crisis management in public organizations. Crisis is a necessary evil, a sine quo non. In the process to satisfy needs, people and organizations engage in different activities and as a result, crisis emerges. These crises that emerged posed a lot of problems to the society. The objective of this research was to investigate the cause of crises and examine the ways in which crises can be avoided. This paper encourages the use of a macroeconomic approach while analyzing the conditions that can generate a crisis. The management within the public sector has a determinant role. This role relates to increasing the efficiency in which the public funds are being used as well as increasing the performance within the public sector. The article will therefore present the importance of the objective methods that a public organization can use when a crisis management situation occurs. This paper aims to conclude that there are several ways in which the management within the public sector can be improved, in case a crisis occurs. The decision to overcome the crisis can be used either together or separate and the final decision is left with the manager. The research recommends that these crises should be carried out through public relations enlightenment programs, using the operative methods, which will be discussed*

Keywords: crisis management, operative methods, public organizations, objectives, budget
JEL Clasification: H12 (Crisis Management)

1. Introduction

Crisis management is a critical organizational function. Failure in understanding the crisis management can result in serious harm to stakeholders, losses for an organization, or end to its very existence. This paper will outline the importance that the intervention of the state and of the entire society has on ensuring the protection against the influence of conditions generating a crisis. The research

will discuss the different operative methods that can be used when trying to avoid a management crisis. The management based on budgets will focus on planning as well as controlling the financial execution; the management by objectives is going to discuss the defined steps used in the planning system; the management by alternatives will be used to discuss the importance of improving the quality of the decisions; the management by exception is going to rely on the efficiency of managers' time budget; the management based on projects will focus on organizations in periods of crisis and will describe the necessary stages; and the plan management is going to outline the key subsystems components, in terms of economic efficiency.

The purpose of this paper is to increase the efficiency of public funds and to improve the performance within the operative methods a public institution can use during a management crisis.

The hypothesis identified is "The current budgets substantiation method, "plus over last year", is reliable in a time of crisis".

2. Literature Review

Both practitioners and researchers have written volumes about crisis management from many different disciplines making it a challenge to synthesize what we know about crisis management and public relations' place in that knowledge base. The best place to start this effort is by defining critical concepts. A crisis is defined as a significant threat to operations that can have negative consequences if not handled properly. In crisis management, the threat is the potential damage a crisis can inflict on an organization, its stakeholders, and an industry. A crisis can create three related threats: (1) public safety, (2) financial loss, and (3) reputation loss. As Dilenschneider (2000) noted in The Corporate Communications Bible, all crises threaten to tarnish an organization's reputation. A crisis reflects poorly on an organization and will damage a reputation to some degree. Therefore, every public organization need to focus on methods to prevent the opportunity of a crisis occurring.

Effective crisis management handles the threats sequentially. The primary concern in a crisis has to be public safety. A failure to address public safety intensifies the damage from a crisis. Reputation and financial concerns are considered after public safety has been remedied. Ultimately, crisis management is designed to protect an organization and its stakeholders from threats and/or reduce the impact felt by threats.

Crisis management is a process designed to prevent or lessen the damage a crisis can inflict on an organization and its stakeholders. As a process, crisis management is not just one thing. Crisis management can be divided into three phases: (1) pre-crisis, (2) crisis response, and (3) post-crisis. The pre-crisis phase is concerned with prevention and preparation. The crisis response phase is when management must actually respond to a crisis. The post-crisis phase looks for ways to better prepare for the next crisis and fulfills commitments made during the crisis phase including follow-up information.

During the research undertaken for the research thesis, a number of Romanian and foreign publications about cost management in public sector units have been studied and listed in the bibliography. Among them were the management and the methods used in certain periods of time, in some organizations.

Thus, HL Tosi and S. Carroll have identified six advantages of programs on the management by objectives (MBO). Moreover, Florin Rau, in his "SMART objectives - Practical examples" made a scale of SMART objectives, used in analyzing the MBO: if individual goals are not aligned to the fundamental ones, the risk of starting a "collapse of the ladder" is becoming increasingly obvious. Each stage has its well-established role. Not fulfilling one of these, leads them to an unwanted direction, and therefore some of the objectives will remain untouched.

In an attempt to demonstrate that the MBO fails to lead to improved performance, J.N. Kondrasuk made a review of the research available in this field. He found that, out of 141 case studies, 123 were positive, 8 had uncertain results, and only 10 had negative results. Most studies were focused on three aspects of MBO: setting goals, feedback on performance and participation of subordinates in decision-making.

In terms of management on budgeting, Ch.T. Horngren, S.M. Datar, G. Foster, in the book entitled "Cost accounting, a managerial approach", budget is viewed as: "a) quantitative expression of a proposed action plan management for a specific period and b) support the coordination of actions needed to implement that plan. "

Former chief executive of General Electric, Jack Welch, describes the development of ambitious budgets as key energizing, motivating and rewarding for bringing managers and employees.

Budgeting involves setting budgets and forecasts of the organization to submit all the figures. Within that, autonomous subsystems are created, called "centres of expenses, to be concerned with optimizing resource use and profit."

Centre budget is defined as "a segment of an entity to which control can be exercised and which can prepare a budget."

Another notion seen in Ch T. Horngren is the "responsibility accounting", which is "a system of measuring plans and results of each responsibility center." Following the same authors, there are four types of responsibility centers:

- Cost Center - manager is responsible for costs;
- Center of income - income manager is responsible;
- Profit center - the manager is responsible for revenue and costs;
- Investment Center - Manager is responsible for investments, revenues and costs.

The operative methods within the public institutions in terms of crisis management are of an extreme importance and the ways through which crisis can be avoided will be described below.

3. Paper body

The methods applied in the crisis management have no local or microeconomic character, and require a macroeconomic approach. This means that the intervention of the state and of the entire society can ensure the protection against the influence of conditions generating a crisis.

Operative methods may be grouped based on their characteristics and will be outlined below.

3.1 Management based on budgets

The budget is an essential tool for planning but also a control tool for the financial

execution, with such tools the manager can fundament and realizes the financial indicators and assumes the responsibility for the efficient use of resources.

No matter how many types of budgets exist in practice (continuous budget, periodic budget, project budget, responsibilities budget, operate budget, fixed or variable budget), the public organizations prepare periodic budgets per calendar year, broken down by trimester and months.

The drafting of a budget involves several logical steps. Initially, gathering information about what the organization should achieve, which are her limits and what internal and external influences will affect her. It is essential to focus on the types, volumes and terms of earnings and costs, for a better estimation of revenue and expenses. A special importance should be given to the types of costs and behaviour, by associating spending budgets of investment capital with incomes and expenses, top managers will have a clear picture of the feasibility of the budget.

By prognosis of the potential conflicts of interest, a realistic budget may be established. Planning a soliciting budget may lead to exaggerated figures, by annealing the motivation of staff and by attracting poor performance. Budgeting in general, especially in crisis situations, requires the application of corrective measures, without which the conflicts may become acute. The proposed budget can be a mean to achieve the objectives of the organization, to measure the performance and to evaluate the managers but also to motivate the staff.

The principle that should guide any manager is: "budgeting is the way to achieve the goal, and not goal itself." Thus, the final aim of the manager is to create a budget system to support actively the organization, based on a clear, consistent strategy, where the real results lead to the ideal. In this case, the SWOT analysis (advantages, weaknesses, opportunities and threats) is the starting point for clarifying the objectives and for the budget planning.

The objectives of a public institution consider a whole entity and can only partially be quantified. Some objectives are general; others are associated with some interests of the organization, financial or political.

At this moment, under completely unfavourable conditions the budgets of public institutions already approved by laws, suffer undergo changes from one day to the other, especially related to personal costs and investments. In such circumstances, the principles and methods of calculation which were at the basis of planning in the precedent year of the budget for this year have proven to be inaccurate, irrespective of the influences of external factors.

As such, in such crisis situations planning the expenses is crucial for a correct forecast of cash flow. The financial department has an important burden, along with the procurement department in gradation of payments to the suppliers against opening the credit established by the Ministry of Public Finance. Thus, the hierarchy of the specific current costs, of the common and of the unique costs must be conducted with the highest seriousness and professionalism in order not to jeopardize the trust of people in that organization.

Within the public institutions, planning the budgets is made by the method "plus over the past year" by adding or subtracting of a percentage of the expenses in the budget of last year. This method, easily to apply,

does not take into consideration some changes that may arise in the approach of costs, and especially the future economic forecast. That is why the budget of public institutions has many changes during the application year, which disturbs all calculations and estimations of the previous period. The role of the top managers is very important by planning and approving a realistic budget.

3.2 Management by objectives

Like any planning system, the management based on objectives used in public institutions is based on running series of clearly defined steps: setting up the objectives (including their definition), planning to achieve them, using self control and periodical review, and performance evaluation , steps that can be structured using the Scoreboard.

But any manager should pay attention and time for analysis of the rapport between costs and effort involved and potential benefits before taking a strategic decision. The efficiency of this process is given by the objectives identified on three organizational levels: high level, operational level and individual level. This last step is the core of the programs and represents establishing the objectives through collaboration between departments.

The Scoreboard has a different content from a managerial level to another, being filled and transmitted sequentially "bottom up", starting from the basics, where the primary models are made. In "2nd Floor" – the operational level – the information have a higher degree of aggregation, allowing substantiation and taking the strategic and tactical decision. The top manager, at the last level, receives summary information, with a high managerial and economical load, designed to plan and to take a strategic decision with direct impact directly on the future of the ministry.

Planning, which is an activity oriented towards the future, is the main tool that managers can use to face the frequent changes in the organization he leads.

At the level of a ministry, the implementation but and especially the attainment of objectives requires a considerable period of time, given that the targets set by the government through the government programs, through the public political documents and through the budget programs changed the attitude of managers involved. It was reconsidered the time dimension of the work of managers at all levels, by according a special attention to the diagnosis as a source of information regarding the strengths, weaknesses and the causes that generate them. Individual tasks and goals, specific to the post, were reviewed, by regarding in a new way the related information needs.

Top managers of the public organization have as responsibility to set up specific goals, measurable, accessible, relevant and time according. They must be properly defined for each level of the organization.

The advantages of using management-based objectives, as a modern management tool in the public institutions, such as:

- Increase of the responsibility of managers at every level, for their activity;
- Ensuring a high quality and efficiency of reporting to different agencies;
- Taking management information at a high level in a complex view, systemic, facilitating the function of the organization with efficiency and effectiveness;

- Use of assessment criteria for objective and ensuring fairness in the process of evaluation by using a set of performance indicators specific for each position;
- Elimination of redundancies, the stable control and the easy communication in real time, at all levels of decision-making in the institution and with all categories of public;
- Achieve the "general interest", which implies interdependence of actions depending on the political interest, of the allocation level of resources, of social relations;
- Increased management and economic decentralization within the organization;
- Professionalizing the management to the lower levels of it.

As a result, the public management seeks to improve the quality of his actions, by exploiting new management tools, to alleviate some rigidity in the organization and to improve the communication system with the outside. Compared to private organizations, the public administration must use as well as possible the affected methods. The effectiveness is evaluated, first of all, by reporting the degree of achievement of objectives set by the elected and not by the simple financial "productivity".

3.3 Management by alternatives

Management by alternatives is closely tied to the management by objectives, since choosing the best alternative is based on a specific objective.

The method is used primarily to improve the quality of the decision. Before taking the decision, the manager studies the optional variants, choosing the best, which meets the requirements.

3.4 Management by exception

Management by exception is a simplified management system, based on the ascendant transmission of information which represents deviations from the preset limits of tolerance in order to simplify the management processes and for a better exploitation of resources.

This can be approached as a way of rationalizing of the information system but also as an important way to efficient use time budget of the managers.

Each manager "has" tasks, responsibilities and competences precisely delimitated, regarding solving positive and negative deviations (exceptions). Application of this type of management in the public sector involves the application of management measures like:

The information system should be focused on creating and maintaining the functioning of its components – information, flows and circuits, procedures, etc. – which shall permit the achievement of the fundamental objectives of the organization;

The most important structural components of the public institution must be "equipped" with appropriate personnel, both quantitatively and, in particular, qualitatively;

Information that "feeds" upward the flows and circuits must be exceptions, deviations from the so-called tolerance limits. They run on the vertical of the management system selectively, by providing a full correlation between the degree of aggregation of

the information and the hierarchical position of the beneficiaries thereof (managers on different hierarchical levels);

The objectives, rules, regulations etc. depending on which deviations are determined must be realistic.

Using the management by exceptions in the public institutions may be a solution in the application of the management by objectives while pursuing the degree of achievement of goals and deviations from the budget of them. In order that this management system is functional it is necessary first of all to set up the objectives and the other aspects of the characterization of the public institution.

The intervention of the managers is concretised – when appropriate – in the decision of correction or updates, focused on the causes generating exceptions.

3.5 Management based on projects

The management based on projects is specific to organizations in periods of crisis, and is applied, generally, within complex activities, requiring a broad and interdisciplinary collaboration. Applying this type of management involves crossing stages as follows:

First of all is settled up the team for analysis, corresponding to the specialties needed to develop the project. For the purposes of the activity, the research team prepares a working plan, which is submitted to the approval of the general manager.

In phase II is established the form of the organizational structure in which the project will be written, by drawing a catalogue of responsibilities.

In phase III – the realisation of the project, there are performed tests, experimentation, allocation of resources, it is followed that each activity is fulfilled.

The last phase – the delivery of the project – is characterized by drawing the financial protocol, by comparing the effective costs of achieving and with the planned ones and preparing the evaluation sheets of the personnel.

3.6 Plan Management

This management method can be defined as all processes through which are determined the indicators of the organization and the key subsystems components, but also the resources allocated for their realization, in terms of economic efficiency.

The need to reduce the budget expenses, and implicit the production costs for the public services determined the public managers to use a system of performance indicators. This is used for the evaluation of activities and to express the result of policies used in various forms: the volume and quality of the services, the efficiency and economic profitability, the efficacy.

The determination of the performance indicators is complex, due to the fact that the public services are, in the opinion of specialists, somewhere "on the border between competition logic and social logic, between which is necessary to obtain a balance."

The quality indicators measure the opportunity and accessibility of public services; they depend in the most part on the extent to which the quality of the service meets the client expectations.

The plan management is based on the forecast institution – environment. Quantitative and qualitative indicators, expressing in a systemic approach, the purpose

for which the organization operates, indicate the objectives of the public institutions.

4. Conclusions

Conclusions from the study of literature demonstrate that economic and financial analysis based on these methods allow the development of reasoning which makes assessments on efficiency and effectiveness within the public institutions. The public organizations only manages public funds, so normally is required to direct those resources into their system so that the results of taking them to return to the environment from where the resources were derived.

The "plus over the past year" method is considered to be the closest to reality when compared to the different methods. Even though it does not ensure a real dimension in terms of indicators, it is the best option in this context. Therefore, the paper managed to prove the theory of the hypothesis, through which the current budgets substantiation method, "plus over last year", is reliable in a time of crisis and should be used by the managers employed in public organizations.

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Enron and the domino effect

~ *Ph. D. Professor* **Paul Marinescu** *(Faculty of Bussines and Administration, University of Bucharest, Romania)*

Abstract: *This paper aims to present the effects of Enron's 2001 collapse has had on the business environment looked upon systemically, analyzing the interdependencies the American giant had with other components of this environment especially those that should have played and important system control role such as audit firms, financial analysts and investment banks. The premises from which we start are that exactly the failure of these control instruments has led to the escalation of the situation up to the point in which the fall becomes inevitable. I believe that this analysis can offer relevant lessons for the key on how the current situation of Greece must be judged, a subject of utmost importance.*

Keywords: Enron, Bankruptcy, Fraud, Stakeholders, Budgets

If you look closely at the situation in which Greece is in, a subject of major topicality in the European context, we notice many similarities with the Enron bankruptcy case in 2001; although fundamentally different, both structures falling in the same trap of "sweeping something under the rug", of embellishing financial reports in the ridiculous hope that this will pass by unnoticed and that the method would work indefinitely. In both cases, a major fault for the current situation falls on the shoulders of the socio-economic systems who although having developed control tools did not use them only rarely for that they endangered their political interests. The manner in which they have acted shows that they have fully deceived the confidence invested in them by the stakeholders in the market, causing them damage of tens of billions of dollars and triggering a wave of mistrust that calls into question even the basic assumptions upon which the contemporary economic system is built.

In early 2001 few could have imagined what would happen with Enron in just a few months. Things seemed to go as good as it

gets for the company: if between 1990 and 1998 Enron's stock share quotation increased by about 300% (a not so staggering percentage), 1999 had marked a turning point, things starting to have an accelerated upward trend, the exchange quotation of the company increasing by 56% in 1999 and by 87% in 2000; the share price stood at around 82 U.S. dollars; the market capitalization exceeded 60 billion dollars (more than six times the book value of assets); Enron won six consecutive years the title of world's most innovative company in the prestigious ranking Forbes top rated companies; in brief, investor's confidence and public opinion was at its peak. [1]

Since its creation in 1985, by Kenneth Lay through the merger of two natural gas transmission companies, Enron grew almost continuous activity. Its main field of activity, natural gas transportation has encountered and important growth along with the U.S. market liberalization that took place in the 80s, and one of the main beneficiaries of this growth was Enron, which had at that time the largest network of pipelines.

This was and remained for a long time the main "cash cow" of Enron, a business based on solid assets (the pipeline network that the company owned), on a steady market that did not promise any dramatic nor present major challenges, natural gas demand being if not steady then at least constantly increasing. As long as the company has kept focusing attention on this sector, it did not encounter any financial problems regarding neither the development of the owned pipeline nor concerning providing liquidity for the current activity.

In the 90s Enron decided to change their strategy even more, in the attempt to get a more accelerated growth than the natural gas distribution could provide. Thus, the company began to replace the focus on this sector by diversifying their activities through different market entries. Firstly, in the sector they were already activating, they have ceased to be only a carrier in order to become a major trader of natural gas by creating the Enron Online platform as well. Over time this platform was extended, becoming a complex tool for online commodity trading. It should be noted that the development model chosen was based on the creation of numerous special purpose entities which led to the increase of the financial reporting system complexity and has made the real situation of the company more difficult to track. It is hard to say whether fraud was originally one of the reasons for applying this model, but it is clear that it was made possible by this type of organization.

Enron also aimed at increasing its international presence, in this respect starting various projects in Europe, South America, Asia and the Caribbean, ranging from construction and operation of power plants, to various other infrastructure projects. All these projects regardless of their success or failure, have required significant financial resources and, because of long construction periods of time (during which they would only absorb funds without generating any income), have brought the company into an almost chronic liquidity crisis.[2]

To address this challenge, the company has resorted to two methods that have hastened its end. Enron was at this point

[1] Data source: *The Fall of Enron*, **P. M. Healy, K. G. Palepu**, Journal of Economics Perspectives, American Economic Association, Vol 17, No. 2, pp 3-26

[2] „**The Other Enron Story**", Mack, Toni, (2002-10-14), Forbes.com

dependent on public perception; as long as it was seen as a solid company with a rising equity price and growth prospects, things could be controlled, Enron being able to access funding which would enable "rolling debts" until some of the projects in progress could be completed, starting to generate income, which in turn could be used to settle debts. Public perception is mainly dependent on financial reports that a stock exchange listed company is required to publish periodically, upon which their performances are judged by the public. Taking advantage of nontransparent accounting practices that they already have been using3 and of the existing loopholes in the financial reporting system that publicly traded companies are required to comply4, Enron's top management decided to embellish reports so that they would provide a positive image of the results achieved.

Because such a maneuver can only work as long as it ensures complete secrecy, and once rumors about such practices reach the market reaction is immediate and devastating, we can consider this as the first capital mistake.

In the rush to ensure enough liquidity to allow the continuous operation of the business and debt roll, Enron began to sell a part of their held assets. Of course the most popular thus the easiest to sell from all their owned businesses were the ones that had the most potential to ensure a potential buyer a higher profit, in a quick and safe manner. For this reason Enron sold its "cash cows", which denotes a combination of downright shocking panic and lack of vision on the behalf of the top management, thus committing the second capital mistake.

It has to be stated that at least at a theoretical level, even at that last hour, Enron could have been saved. A truly inspired management which ensured activity restructuration based on solid arguments, exiting projects that had proven to be financial failures, combined with continuing debt rolling until seemingly viable projects were completed, could perhaps have saved the giant.

Instead of such an approach that could have probably saved at least some of the tens of billions of dollars lost by investors and tens of thousands of jobs dissolved, Enron CEO Jeff Skilling started the domino effect, giving the fatal blow to the company on 14 august 2001, just six months after taking office, he resigned sold all the shares he held. This was, for Enron, the point of no return.

The end of the illusion cam pretty unspectacular. In its report to customers from August 23rd, 2001, Daniel Scotto, a financial analyst at BNP Paribas changed the Enron recommendation from BUY to NEUTRAL5, suggesting that Enron's shares could be considered source of funds which, in specific terms, means that they must be sold because they do not longer posses growth potential. It is hard to know if Scotto's recommendation was based on a very deep analysis of Enron for which the resignation of Sklling could have represented a good opportunity to expose the fraud, or if, as in many cases from

[3] *The Fall of Enron*, **P. M. Healy, K. G. Palepu**, Jurnal of Economics Perspectives, American Economic Association, Vol 17, No. 2, pp 3-26

[4] *Does Corporate Law Protect the Interests of Shareholders and Other Stakeholders?: Enron and the Dark Side of Shareholder Value* (PDF), **Bratton, W. W.** (May 2002). Tulane Law Review

[5] E*x-Analyst at BNP Paribas Warned His Clients in August About Enron*, **Rebecca Smith,** The Wall Street Journal , 29 January , 2002

the Wall Street financial analysts worlds, was based on some information leaked from inside Enron.

The latest variant seems to be supported by the fact that Enron Vice-President Sherron Watkins was, at that same time, expressing concerns regarding the company's accountancy situation, first through an anonymous email sent to the CEO of that time, Kenneth Lay, then through a conversation with a former colleague who was back then working for the audit firm Andersen. 6

One of the questions which are obsessively addressed when the Enron case is in question is how nobody realized for so long what was really going on. I believe that one possible explanation deals with financial analysts; although highly trained and motivated to see the essence beyond the illustrated image the listed stock companies want to provide and hired to provide the best possible investment advice, they often find themselves in interest conflicts because the banks they work for have commercial relations with companies they should objectively evaluate. Fear of losing a large account can often be a serious self-censorship reason. It is in this sense at least curious why BNP Paribas decided to dismiss Daniel Scotto at the end of 2001, under the circumstances that, regardless of his source of "inspiration", he saved his clients huge sums of money by his August recommendation7.

Another victim of the Enron scandal was the auditing company Arthur Andersen, which as it turned out over the investigation, has destroyed incriminating documents pointing at Enron. For this reason and based on records found, Andersen was accused and found guilty for obstructing justice. Under U.S. law, a convicted person or entity may not audit other companies, so that Arthur Andersen was forced to surrender their license. Although it was eventually declared innocent by the U.S. Supreme Court, the scandal created was enough for losing the most customers and went bankrupt. This side of the scandal shows us how another system component that had both the means and obligation to discover and report Enron's serious irregularities, failed in its mission.

Taking this into consideration, I think the image of the Enron scandal is now complete: greed, cowardice, conflicts of interest, inoperative control instruments, total lack of ethics. Here are the ingredients that made possible the largest U.S. bankruptcy until its time and the malignant components attacking the modern economic system. If you replace greed with clinging to power, we could probably declare the same statement in the case of Greece and other EU countries. It becomes clear that a fundamental change of paradigm is necessary for the recovery of the global economic system and that this is necessary to be based on the notion of morality, this being in no way antithetical to the idea of profit.

It is clear that forms of synchronizing real economy with the monetary economy have to be found. Also, the tax collection system should be improved because budget deficits cannot be mitigated only through loans but they can be rather minimized by improving business results, through actions made in order to dissolve the black economy and through policies aiming to increase gray

[6] *The Fall of Enron,* **P. M. Healy, K. G. Palepu**, Exibit 1

[7] *Ex-Analyst at BNP Paribas Warned His Clients in August About Enron*, **Rebecca Smith,** The Wall Street Journal, 29 January , 2002

economy contribution to the state. We are referring to the tax system quality, the consistency of the tax collection system and about motivating economic agents to pay taxes, thus avoiding tax evasion. System reliability is not only the image casted by decision makers but by their actual performance.

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Information technology innovation – a genuine driver of improving customer relationship management in romanian companies

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Abstract: *Consolidating the IT field of the company represents a target for most IT responsible, nowadays. At the same time, organizations expect their IT expenditure to increase in the next decade. This paper aims to underline the new generation of information technology and how to use them to make better business decisions in managing enterprise resources and improve customer relationships. The alternative goal is to place the focus not only on developing new software but also on achieving business results, placing particular emphasis on customer relationship management. The purpose of technology is to solve practical business problems, and one of them is the necessity to understand and maintain relationships with the customers. The paper will reveal the companies' responses to the latest dramatic changes in the informational technologies, in order to cope with the persistence of the global economic crisis and to assure increase of organizational efficiency and profit.*

Key words*:* customer relationship management (CRM), information technology, strategic decision-making process, consolidating IT, business alignment, IT innovation

JEL classification: *O33 - Technological Change: Choices and Consequences; Diffusion Processes*

Introduction

This paper aims to underline the new generation of information technology and how to use them to make better business decisions in managing enterprise resource and improve customer relationships. Today, many companies' portfolio of application includes managing and using customer-related databases, customer portfolio management, CRM and customer experience applications.

Thus an enterprise would plan strategies designed to win share of customers and to measure its success on retention and

customer equity. Companies measure the customer's profitability and put customer managers in charge of portfolios of customers. More and more, the enterprise bring products to customers, not just customers to products.

Today we are seeing more and more organizations oriented to develop profitable and long term relationships with customers, as a way of ensuring sustainable development and increase market competitiveness. It is also underlined that IT solutions support these objectives of the customer relationship management. Hoewer, in order to ensure effective and efficient fulfillment of their objectives, organizations need to harmonize their CRM goals with IT strategies and alignment, by designing strategies to automate tasks for sales, service, marketing and communication, to analyze information and to measure the performance of organization relationships.

Literature review

According to the marketing and CRM specialists, the first requirement is to identify customers: to tag them so that each one can be identified through any channel, across transactions and interactions over time. Once an individual customer can be seen as one complete customer across the company, the company can differentiate customers by both the different values that customers have to the company and the unique needs that each valuable customer has from the company. To learn enough to differentiate customers, the company will interact with customers and keep track of these individual dialogs, learning a bit more with every interaction, at every touch point. Finally, the company will embark upon the hardest strategy: customization, or treating different customers differently, often by automating the personalization process in a way that increases customer loyalty even as it almost inevitably reduces the cost of operations. These steps are tough. Those companies that can achieve the first three - identify, differentiate, and interact -can claim to have achieved CRM and database marketing (Newel, 2001).

Lately, we could assist to the broaden of understanding of CRM and its role in enhancing customer value and, as a result, shareholder value. Customer Relationship Management (CRM) is placed more and more at a strategic level and enhanced within the company. We could identify five key cross-functional CRM processes: a strategy development process, a value creation process, a multichannel integration process, an information management process, and a performance assessment process.

Achieving success with CRM strategy and implementation also means that the company would pay attention to:

- customer acquisition, customer retention and development;
- managing the customer life cycle;
- creating value for customers;
- managing networks for CRM performance.

The unprecedented developments of web based technologies allow the companies to put in place new ways of performing better CRM activities.We cold mention, among the newest companies' preferences, the digital branding and online advertising ; boundary rationality and impact on making decisions in business and organizations; cross-cultural behavioral variation with impact on business and organizations.

The IT resources are now becoming the engine of successful enterprises, representing not only the operational base, but also the means for management, marketing and communication strategies. The modern management is mainly based on information technology, human resources, strategy and organizational behaviour. This type of managements considers both clear and implicit knowledge as important strategic resources and aims to ensure within the company a better use of knowledge in terms of individual, team or organization as a whole. The result is positive: extraordinary results in innovation, product and service quality, cost decrease and continuous update, according to the market's requests. In order to face new challenges, the companies must improve their digital and technological knowledge and capacities, in spite of all financial restraints.

The technology world has changed dramatically during the last decade. Organizations seeking to find a better way of differentiating themselves from theirs competitors is taking advantages of these information and technologies in order to improve their competitiveness, efficiency, profitability, brand awareness, and many more. To address the enterprise needs, this paper explores the way of how companies approached this modern problem and embrace the new technologies, as foundation of their success.

The indubitable fact is that companies are looking to transform and improve their IT processes and operations, which are involving increasing levels of complexity. For example, IT organizations have started by taking a concerted approach to rolling out collaborative or mobile technologies across the enterprise, to managing their portfolio of applications, also progressing to data center consolidation and migration to cloud-based services.

The high volume of information that a company has, coming both from endogenous and exogenesis sources, is in continuous change, with multiple positive effects on the business. The company's informational resources are connected to those external, through different methods: email, Internet, websites, portals resulted to the fact that the stakeholders have access to more and more informational resources. They need to manage a higher data volume coming from separate sources, to understand and relate more informed clients, to apply and adapt to upgraded complex instruments and technologies, without forgetting the company's financial resources. Dedicated digital applications are developed, and in the same time they are included in complex integrated systems.

The enterprises want to get useful information from their data to transform business operations and to remain competitive in their area of activity. The challenge is aggravated by new advanced applications that require instant access to new types and high volume of data generated by social networks, sensors and mobile devices, as well as the exponential increase of data within business applications.

One of the main changes referred to the fact that 80% of the world's information is unstructured. At the same time, access to information has been democratized, as the information is (or should be) available for all. In the new era, the companies need to improve their traditional IT approaches with technology that allow enterprises to benefit from the big data era.

The big data era will be led by the

enterprises that could have at their disposal new platforms containing: exploration and development toolsets, visualization techniques, native text analytics, machine learning, cloud computing, virtualization and mobility, all based on enterprise stability and security, among other requisites. The point of inflexion created by social media represents a permanent change in the approach of the organizations. Almost 90% of the information in real time created now is unstructured data. The companies that use this new source of relevant information are in a very good position to increase the income, to reinvent the relationships with the clients and to create a new brand value. Clients share their experiences in online, providing increased control and influence over brands. This changed balance of power from enterprises to clients also requires new approaches in the marketing process, new instruments and new challenges, in order to stay competitive. The organizations that are open to getting relevant information from social media will be much more prepared to anticipate future changes in the market and technology.

But the increase of the information technologies comes along with the democratization of information and the consumerization of the IT services, at the same time. Democratization of information should make the information available to broad masses of the people, leading to social equality. The technology influenced the spread of information and at the same time, the dissemination of information influenced the individuals and the communities, as well as the way companies are doing business. We are witnessing a real data explosion. This volume is so huge, that 90% of the global data were created during the past two years. The volume, the variety and the frequency of the information available on digital sources (such as social networks, among traditional sources – sales and market researches) represent actually the most important challenge that the companies have to face. The market is changed by the influence of new generations, with different access points and information consumption. Companies need to adapt their strategies and to answer the new Millennia's generation's requirements.

The drivers of the decisions concerning implementation of new information technologies

The new technologies are there and could be implemented. The question is: are these organizations ready to adopt the new revolutionary technologies? Who are the drivers of this IT transformation? Which part of the organization should be in charge with innovation and adopting new technologies and how they could assess the strategic advantages and threats which come along with a new technology? Who is responsible, for example, for the acquisition of new CRM software and application, well as well for the related databases?

Chief Executive Officer (CEO) is the highest-ranking corporate executive of a company, in charge of total management of an organization. The CEO must lead the interests of the company, also take the lead in the innovation path and develop a management culture at the organization level that recognizes the need to implement corporate initiatives to achieve corporate earnings goals. Most CEOs agree on the importance of IT innovation to business strategies. Still, most executives say it is difficult to allocate

appropriate resources to strategy and innovation. A recent study indicates that the money spent on the IT innovation budget is moving away from innovative business solutions, and moving toward maintaining the day-to-day IT environment.

Chief information officer (CIO) is responsible for the information technology in an organization. The CIO responsibilities include anticipating trends in the market place with regards to technology as it is about ensuring that the business navigates these trends through expert guidance. At the same time, the general strategy of the organization should be followed and aligned with the proper strategic IT planning. CIO should be a consistent contributor in establishing strategic goals for an organization. The CIO manages the implementation of the useful technology to increase information accessibility and integrated systems management. The prominence of the CIO position has significantly increased as the information technology has become more and more important in the modern organization. The CIO should lead the technological progress of the organization.

According to latest studies, CIO mentioned as their concerns the followings:

- Understand the IT needs of the business side of the company, their preferences and trends, such as CRM
- Reveal to the CEO and to the board the link between IT, business strategy goals and budget formation
- Obtain good knowledge with respect to company's vertical and country markets and challenges
- Identify key business drivers for the adoption of crucial IT solutions
- Involve in the process of business IT related decision-making processes.

The main topics of the decade, with respect to business development, are as follows:

- Setting up the business priorities to be assessed by IT
- IT strategic priorities
- IT spending dynamics and sourcing
- IT strategy execution and operations management preferences, new software and hardware solution penetrations and investments priorities.

Knowing the correct trends of IT market and making the right investment choices and decisions are very important for every company. IT strategies and execution plans and measures of technology adoption are present in many large companies. Therefore, many of these are facing the powerful and divergent interests of the organizations: CEO and business managers, the business service managers (such as HR, finance, legal and supply chain) and the IT side of the company. Ensuring these interests are in alignment is critical to the success of the strategically IT decisions being made.

While business and IT executives agree on intent, they often disagree on delivery and execution. Both business executives and chief information officers (CIOs) say IT is a critical component of their business and that new technologies will continue to change the competitive landscape. Technology invades all aspects of current business operations and is considered a critical innovation tool that can help support future growth. Delivering on that promise is the challenge for the IT organization. But when it comes to execution, IT professionals and business executives have very different perceptions. Business leaders are less likely than their IT counterparts to

say that IT contributes to various aspects of business strategy. In fact, nearly half of CEO agrees that the IT department focuses primarily on day-to-day IT requirements.

Business strategy should emphasize how organizations enable both businesses and IT people to execute their responsibilities in support of business/IT alignment and the creation of business value from IT enabled corporation investments.

Establishing the general strategy of the company should always provide good insights into the management and contribution of IT within organization. It also takes into consideration gaining business value from IT. Today, many organizations use Information Technology in their planning and execution of strategy, in order to ensure that IT brings value to their businesses.

In our opinion, a correct assessment of new technologies and an early implementation, in line with the general strategy of the company, could gain an important advantage for the company, leading to success or failure of the entire organization.

The list of the newest challenges concerning the emerging technologies could include: mobile workforce, smarphones and tablets penetration and usage areals, mobility strategies, cloud penetration.

The technology innovation combined with the increased business demands, have led to the migration of traditional computing systems towards the smarter computing. The companies could have different approaches of this migration, from client-tuned systems, to the world of appliances, till the adoption of the entire new technology and philosophy of cloud. Some of them could appreciate the IAAS concept (Infrastructure as a Service), PAAS (Platform as a Service) or SAAS (Software as a Service) depending on their organizational capabilities and characteristics, their needs and resources, as well as their expertise and IT behaviour.

IT executives must be able to move beyond fixing the past and participate more actively in planning for their companies' future by focusing on the following actions: maximizing the value of IT assets, reducing IT complexity, focusing innovation efforts on the customer and creating a more strategic IT organization.

Companies that fail to transform their IT organizations and functions will lag behind their competitors and put their future growth at risk.

The use of social media in modern Customer Relationship Management – a new approach

Thanks to social media, any customer can now become an editor, a broadcaster or a critic. Facebook has announced reaching over 900 million of active users, and each user posts about 90 announcements per month. Twitter users send over 200 million messages every day. Modern companies use social networks to communicate (56% of the executives consider social networks an important communication channel), but face difficulties in obtaining relevant information from the many unstructured data provided by clients and potential clients. A big number of companies and organizations are present in these networks, creating and offering relevant and official information.

Therefore, social media means any tool or service that uses the Internet to facilitate conversations. Social media is the quintessence of the democratization of information,

transforming people from contents readers into publishers. But it is much more than that, because social media is not all about Facebook and LinkedIn. Social media is an on-line environment that facilitates the mass collaboration. It is about social networking, social creation, social publishing and social feedback. And all these are powered by social technologies.

So, as we mentioned before, mass collaboration makes the difference. This collaboration includes the employees, the customers and prospects, as well as all partners. The community has now something to say about a company's marketing and communication, customer support, innovation and R&D.

The companies discovered that they could engage their worth clients to participate in developing their current and future products and services, for marketing strategies for increasing loyalty and improved sales. Therefore, one could say (Gartner, 2011) that the great social media success is about mobilizing communities around a defined and common purpose.

There are many applications of these developments of social media in business and organizations. The news arises from the fact that the individuals and their online behavior - interests, aversions, passions - influence the making of economic choices and decisions. Practically speaking, there are numerous applications at a business and organizational level, with a special focus on the effects of technology implementation and usage on economic agents' behavior and decision-making processes.

We could describe the main impacts of new technological changes over the businesses as follows:

- social media is influencing the branding and advertising issues of the companies,
- social media is dramatically changing the customers relationship management, as we know it,
- Consumers' online behavior deeply influences both marketing and digital marketing in this globalization age.

By using new technologies and analysis methods, the information can offer many advantages. For example, the so-called "Oscars Senti-meter" has combined the daily number of tweets with the language recognition technology, in order to identify positive, negative and neutral opinions included in the 140 characters messages, about the most probable Oscar movies. This process is called "the feelings' analysis". A similar project was developed for the Super bowl in USA and its results have influenced the players' contracts and the value of sponsorship contracts. Besides this analysis of feelings, the companies study the posts from social networks and measure their influence. This is a proof that companies start to pay an increased attention to the voices that can influence. In the same time, they offer equal attention to the "feelings" tendency, to predict the consumer's opinion on a shopping season, for example.

Social media is a tool of an increased importance, very relevant when it comes to creating a brand, having a relationship with clients, and increasing clients' loyalty. All these factors can be combined to increase brand awareness and create new business. "Social culture" is more and more talked about, and the culture and management of change represent the base of a real transformation of a business. Many companies organize a special agenda for social media, by

preparing an integrated plan to be more competitive and to have a measurable ROE.

The social component is included in business processes. For a good evolution, enterprises must encourage social behaviour of thinking and technology within the company's strategy, in areas such as client service, human resources, marketing, and operations. Many companies hire a strategist for the social media zone. This very important person acts like a lawyer of social media, and works with the employers to make them understand the importance of social mass media. They are also responsible for the brand protection in the online environment.

The idea is for a company to develop activities in those fields that are interesting and important for the community. There is such an increased activity in social media, that it can be very difficult for the CEO to pay attention to the company's relationship with the customer in social media.

Just like people tend to use more and more social media in their personal lives, companies must include these communication channels in their plans, to allow their clients to discuss about – and with – brands in a real dialogue.

An IBM study, in which over 1700 marketing directors from 64 countries and 19 industrial sectors took part, has shown that most of the marketing directors admit a relevant and on-going change in the way we interact with clients. In the same time, the research shows that the methods used to evaluate the marketing process are also continuously changing or updating. The IBM research has shown that while 82% of the marketing directors want to increase the usage of social media instruments in the next 3 up to 5 years, only 26% constantly read blogs, 42% follow independent analysis and 48% read consumers' analysis, to change the marketing strategies.

The point of inflexion created by social media represents a permanent change in the approach with clients, according to the study. The marketing directors that use this new source of relevant information are in a very good position to increase the income, to reinvent the relationships with the clients and to create a new brand value. Clients share their experiences in online, providing increased control and influence over brands. This changed balance of power from enterprises to clients also requires new approaches in the marketing process, new instruments and new challenges, in order to stay competitive.

New terms have been embraced by the companies; such is "social marketing", described as marketing performed on social media platforms. Still, the marketers do not agree whether social marketing should definitively become an integral part of the sales and marketing mix. The idea that transcended is whether social marketing is worthy of an investment. Today's questions are more sophisticated, exploring scalable, proven ways to build social media presence and engagement with our prospects and customers. The enthusiasm for the potential of social marketing remains strong, as many of the responsible expect to improve their social media practices and link them to tangible business results in 2012.

Many companies have plans to solidify their social marketing strategy, grow their social footprint and engage with the audiences for maximum return. Many allocate resources for social media activities and discover the top social platforms and social media management tools they use to make their

jobs easier, more efficient and impactful.

The truth is also, that executives and senior managers are looking for best results in the following key areas – ROI, integration of social with lead generation and sales and expansion of social presence and reach. While social marketers feel they do not have the necessary resources to execute initiatives successfully, they must meet the expectations of senior management who demand to see tangible business value. Many and many companies gain experience in social marketing moving beyond growing social presence and reach. Their focus will shift to active social media management for increased lead generation and sales.

Social presence is measured by a number of metrics, such as: number of followers & fans, social mentions across platforms, traffic to website, share of social conversations, lead generation, volume of sales and other.

The main social media platforms which try to get the attention of the individuals and companies are: Facebook, Twitter, LinkedIn, Blogs, YouTube, Forums, Flickr, SlideShare, foursquare, Trumblr . It worth mentioning also: Google +, Bestvendor, Getapp, QQ, Renren, Wiebo (Chinese Social Media), Podcasts, Pinterest, Proprietary communities.

Conclusion

As some conclusions need to be drawn, we could underline that there is an indubitable fact that companies are looking to transform and improve their processes and operations based on information technology. For many organizations, increasing efficiency, adding improved business value, reducing costs and enhancing business-IT alignment have become the permanent core mission.

No doubt than the technologies contribute and add sustainable value to businesses and customers. One could say, at the same time, that many companies, caught in operational mode, are not well positioned to help create or implement the types of strategies that set a business apart. IT can move beyond fixing the past and more actively plan for the future, by closing the gap between the needs of business and the ability to deliver the requested efficiency, integrity, availability of the company's business.

In this view, the customer relationship management activities could only benefit from the development of information technologies.

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Credit Crisis with focus on level three valuations and FAS 157: Analysis and Recommendations for Change

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Abstract: *The paper examines the effect of level three valuations and FAS 157 implications on investors, auditors' work, valuation disclosures and gives recommendations for improvements based on best practices. The aim of this research is to demonstrate that the fair value measurements should not be suspended. The standards provide for measurement of fair value in all market conditions. Therefore, level 3 measurements or mark-to-model is an answer for many issuers that are not sure how to measure their assets and liabilities at the fair value. The paper concludes that fair value measurement has not caused the current crisis and has no pro-cyclical effect and suggests several recommendations for policy makers and regulators.*

Keywords*:* Level three valuations, FAS 157, financial reporting, mark-to-mark accounting

1. Background information

1.1. Fair value and the Crisis

As the financial crisis started to show up, financial market stakeholders reacted defensively. Namely, they reacted by selling or trying to sell their financial and other assets that were purchased as a result of 'Housing Bubble'[1]. Consequently, a lot of assets, especially real estates, were available for sale on the market, creating an oversupply of houses against demand for the same. As a result, housing prices started to drop, as opposite of the bubble when they went up rapidly. For a high number of individuals who had mortgage loans, house price was lower than what they owed to the banks. Therefore, those individuals were not willing to pay their future installments so banks had to take those houses under their custody and try to sell them as foreclosures.

[1] **Dean Baker**, "*The Housing Bubble and the Financial Crisis*", real-world economics review, issue no. 46, 20 May 2008, pp. 73-81.

Downturn in the housing prices did not affect only the real estate market. It had a high negative impact on the financial markets as well. Value of the all types of securities was negatively affected. In particular, Mortgage Backed Securities (MBS), securities whose cash flows are backed by pools of mortgage loans, collapsed and dropped in value. It was a result of bad performance of mortgage loans as there were a lot of subprime loans included in those MBSs. Although there was a higher historical price paid for the MBS, their value sank as no market participant was willing to buy them. As a result, businesses holding such securities had to revaluate them in order to represent the fair value (market value) of those assets in their financial statements.

As the future share price of a business is determined by its current income and the future earnings and cash flows, decrease in the value of the assets held by businesses and inability to produce earnings and positive cash flow was reflected on their share prices. Share prices of the businesses holding MBSs fell down thus making firms look less valuable than before the crisis.

Marking-to-market of the assets that dropped in value does not have a negative effect only to the businesses holding them (DAVIS-FRIDAY, P. Y., 2004). It has also a negative effect to all the investors, shareholders and creditors of those particular companies. And, as the shareholders and other security holders reacted by offering their securities for sale, financial markets were flooded by available-for-sale securities. Therefore, decrease in the value of the assets had a chain effect to all financial market participants. As the financial turmoil was going on, determining the fair value of assets and liabilities in the distressed markets was of a big concern of the financial analysts, auditors and investors.

Determining the fair value of assets and liabilities in a stable financial market would not represent a big challenge. However, determining the fair value of the assets and liabilities in distressed and illiquid markets, it is rather difficult whereas the process faces a lot of challenges. In this regard, FAS 157 sets guidelines on the methods that firms should use when determining the fair value of their assets and liabilities. According to FAS 157, there are three levels in the evaluating hierarchy which are used for measurement of the fair value of assets and liabilities. Further, the FAS 157 hierarchy is described.

1.2. FAS 157 Hierarchy

FAS 157 on Fair Value Measurement aims to set standards regarding the asset and liability fair value measurement which would be consistent amongst different industries and business sizes. Its primary objective is that all assets and liabilities shown in the balance sheet should be presented at their fair value.

Based on the information available pertaining to the assets and liabilities, each particular asset or liability may fall under level 1, level 2 or level 3 valuation techniques. It is the information availability and its reliability pertaining to each asset or liability that decides whether it falls under level 1, level 2 or level 3 valuation techniques.

• Level 1 inputs are all the inputs which can be taken from the active market for the identical assets and liabilities. Such inputs are quoted prices of identical assets and liabilities in the markets where there is

enough frequency of transactions and the quoted price is taken as the basis for valuation. However, if there is no quoted price in an active market for the identical assets and liabilities, than the asset or liability would be evaluated based on level 2 inputs.

• Level 2 inputs are all the observable inputs pertaining to the assets and liabilities to be evaluated. In addition, inputs from the active markets for similar assets and liabilities are used in case there is no active market for the identical assets and liabilities. Further, these inputs are additionally adjusted in order to come up with the fair value of the assets and liabilities. Any significant adjustment needed would move the asset or liability up to level 3 measurement.

• Level 3 inputs are all the inputs which do not fall under level 1 and level 2 inputs. Namely, level 3 inputs are all the unobservable inputs used in order to determine the value of an asset or liability when there is no active market for the identical or similar assets or liabilities and there are no observable inputs available. As a result, business entities should come up with the most suitable valuation model for each asset and liability. These models should reflect the market participant assumptions about the assets or liabilities for which the fair value determination is intended. In these models, they should use all the available information which can be reasonably collected without incurring undue costs.

2. Reliability of level three measurements

2.1. Weaknesses

Level 3 valuation models are based on using unobservable information, i.e. firm-supplied estimates in determining the value of an asset or liability. Having considered the current market condition there are several questions that need to be addressed before applying the level 3 measurements or mark-to-model method. The first question is how to actually determine when markets become inactive; second, how to determine if a transaction or group of transactions is forced; third, how, when and to what extent should illiquidity be considered in the valuation of an asset or liability; fourth, how should the impact of a change in credit risk on the value of an asset or liability be estimated; fifth, when should observable market information (e.g. discount rate) be supplemented with unobservable information in the form of management estimates; sixth, how to confirm that assumptions utilized are those that would be used by market participants and not just by a specific entity?

As a result of the level 3 valuations the fair value of an asset or liability is derived using models which are mainly based on fundamental value concept (e.g. discounted cash flow) and the value in-use concept. The inputs used in the level 3 models are based on the assumptions of the market participants would have used in measuring the fair value of those assets or liabilities.

However, there are two main weaknesses of the mark-to model that we have observed. First, the market assumptions on the expected future cash flows may not be the same with the assumptions of the management (IMHOFF, E.A., 1991). Second, what is the adequate discount rate to be used in the model? This question is crucial to the extent that it serves to determine the ratio between two components of the risk associated with the fair value determination i.e. the liquidity risk that is present in distressed markets and

the credit risk that is associated with uncertainty of future cash flows. Determination of the discount rate in determining the fundamental value presents a serious problem. If the current risk rate is used to discount future cash flows, the fundamental value tend to converge the present value. On the other hand, if a lower discount rate is used level 3 measured fair values may become a tool for "window dressing" in which the real credit risk is hidden.

As a consequence of the above weaknesses, the level 3 or mark-to-model is to be used in combination with full disclosure. It ensures that investors and other users of financial statements are made aware of the assumptions used in establishing the fair value of assets or liabilities.

2.2. Impact on Auditor's work

Another impact of the level 3 valuation model is on the complexity and volume of the auditors work. We need to stress that auditors should be aware that when they audit clients that are using level 3 valuation models, they should be more cautious when performing audit procedures.

As the level 3 valuation models are based on the unobservable inputs, they involve a lot of judgments and assumptions. Involving judgments in creating valuation models certainly increases the complexity of the work that auditors should perform. In addition to that, auditors should challenge the managements' judgments and assumptions used to determine the value of the assets based on mark-to-model method.

Moreover, auditors should pay more attention to the information disclosed on the notes to financial statements as they contain all the judgments, assumptions and data used by the management on determining fair value of the assets[2]. As a consequence, auditors will be spending more time on notes to financial statements and will try to test the reasonability behind the assumptions used by the management.

2.3. Impact on Investors

It is the general consensus among the investors that the application of the fair value measurement concept in financial statements as provided in FAS 157 should not be suspended. Vast majority of investors share the opinion that the fair value allows them to assess the value of their investments and take necessary decisions. Most of the investors also do not think that the fair value measurement has a pro-cyclical effect on the market. In other words fair value measurement is only a reflection of economic events that occurred with relation to financial markets (FASB). Therefore, the fair value measurement has actually helped them in taking investment decisions. However in the light of level 3 model measurements the investors expect more transparency in disclosures i.e. full transparency with regard to assumptions used in determining the fair value using this mark-to-model method. Full disclosure is important especially having in mind the current market situation that for the most of

[2] According to the research paper "Recognition v. Disclosure, Auditor Tolerance for Misstatement, and the
Reliability of Stock-Compensation and Lease Information" by Robert Libby, Mark W. Nelson and James E. Hunton, auditors allow more misstatement and tolerate higher materiality thresholds in disclosed amounts (disclosures) than in recognized amounts.

market participants is considered to be an inactive or distressed. Financial statements need to incorporate the assumptions used for building the model and clear definition of risk components (Dechow, Patricia M., et. al 2009). The investors expect clear picture on the measurement of the liquidity and credit risk incorporated in the mark-to-model fair value measurement for assets and liabilities. Besides, full disclosure in the notes to the financial statements it is expected from the management of the issuers to analyze and further disclose details on the inputs used in applying mark to model measurement method in the annual MD&A.

2.4. Level three valuation disclosures

FAS 157 requires issuers to annually disclose the inputs and techniques used to measure fair value. It also requires disclosure of the discussions regarding the changes in the inputs and techniques in case any change occurred during the reporting period. We deem the required disclosure as a value relevant variable[3] because users of the financial statements properly place their primary reliance on the published financial statements. Besides investors, financial analysts as well predict future earnings based on issuer's published financial statements (NELSON, M. W., et al 2002). However, we believe that current disclosures requirements are not be sufficient to address the issue of inactive markets, where level 3 valuations must be used by issuers who hold "hard-to-value" assets or liabilities (AICPA). Our opinion is based on the following facts:

• FAS 157 does not require disclosure of the controls in place regarding the valuation of assets or liabilities in financial statement (notes or MD&A). As a consequence some of the big financial institutions such as AIG, Morgan Stanley, etc, have disclosed restatements[4] of fair value measurements due to the lack of controls in place associated with these measurements. Restatements of the financial statements may have great influence on investors and analyst. As a result they will decrease their expectations about the companies earning quality (loss of credibility on the fair value process) consequently affecting company's stock price.

• FAS 157 also does not require companies to perform sensitivity analysis of fair value estimates and disclose them into the notes of financial statements, respectively in the risk management part. Since fair value estimates rely on input assumptions, the fair values derived are highly sensitive to potential changes in some of the assumptions made. The disclosure of these analyses is highly important for investors, financial analysts and other interested parties. It provides them with the additional information which helps measure the real effect that change in these inputs (e.g. increase or decrease in the discount rate) has on the overall performance of the issuer. Such disclosures should be mandated as it increases the reliance that current and potential investors have on the mark-to-model valuations.

3. Recommendations

Having considered the need for additional application guidance for determining fair value in inactive markets using the level 3 measurements, the standard setter should consider the following:

[3] A variable is considered value relevant if it is informative for evaluating firms' performance and assessing firm's future earnings.

[4] http://www.ft.com/cms/s/0/06245606-e99c-11dd-9535-0000779fd2ae.html

• Additional requirement for full disclosure and presentation of the assumptions used in the model when determining the fair value and their effect in financial statement.

• Requirement for explicit quantification of risk components used in mark-to-model measurement i.e. liquidity vs. credit in order to ensure full transparency for financial statements users.

• Consider suspension of application of the OTTI for a limited period of time (in our opinion one reporting period) for assets and liabilities measured at fair value due to uncertainties in market i.e. there is no possibility to estimate the liquidity risk and credit risk and use level 3 measurement in order to protect the companies from having to book OTTI that may be caused by illiquidity. This measure has to be implemented carefully, accompanied with full disclosure by issuers and has to be closely monitored by SEC for compliance to avoid any "window dressing" tendency.

• It is proposed that some of the reservation to adopt Level 3 of FAS 157 comes from references in the standard to "management judgment." But, as discussed earlier in this paper, it is recommend that FAS 157 be revised and include two additional disclosure requirements which will increase the quality of information to the public regarding level 3 measurements. Disclosure of controls regarding fair value measurements should be mandatory for all firms holding assets and liabilities at fair value which are significant to the financial statements. Lastly, disclosure of the effect of alternative assumptions used in valuation models for unobservable inputs. In other words, issuers should disclose the results of the sensitivity analysis, which currently are mandatory for companies following IFRS 7.[5]

4. Conclusion

In this research I considered the market conditions, weaknesses of the mark-to-model, the effect on users of financial statements as well as possible improvements to be implemented by standard setters. As a conclusion, it is considered that the fair value measurements should not be suspended. The standards provide for measurement of fair value in all market conditions. Therefore, level 3 measurements or mark-to-model is an answer for many issuers that are not sure how to measure their assets and liabilities at the fair value. Therefore, fair value measurement has not caused the current crisis and has no pro-cyclical effect. It only reflects the substance of the economic events and transactions in the financial statements. Blaming the fair value measurement for reflecting the bad news is not correct. Calls for suspension of the standards requiring use of fair value would only deepen the crisis and temporarily hide losses. Even though this temporary relief would help some market participants, it would diminish the transparency which in long run would discourage the investors. That would, in turn, cause greater crisis with enormous threats to global economy what we may call the "the calm before the storm".

[5] See the appendix A

Appendix A.

Effect of Changes in Significant Non-Observable Assumptions to Reasonably Possible Alternatives

	Reflected in Profit/(Loss)		*Reflected in Equity*	
At December, 31, 2007	*Favorable Changes*	*Unfavorable Changes*	*Favorable Changes*	*Unfavorable Changes*
Derivatives/Trading assets/Trading liabilities	*602*	*(415)*	*-*	*-*
Financial Assets/Liabilities Designated at Fair Value	*30*	*(30)*	*-*	*-*
Financial Investments: Available-for-Sale	*-*	*-*	*529 (591)*	
At December, 31, 2007				
Derivatives/Trading assets/Trading liabilities	*69*	*(72)*	*-*	*-*
Financial Assets/Liabilities Designated at Fair Value	*16*	*(16)*	*-*	*-*
Financial Investments: Available-for-Sale	*-*	*-*	*165*	*(165)*

Note:

The table above shows an example of sensitivity analysis of fair values for reasonably alternative assumptions used. This additional disclosure is currently not required by FAS 157.

Source:

HSBC Holdings PLC, Form 20-F for the fiscal year ended December, 31, 2007

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Business intelligence and deicion making tools - New trends on romanian market

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Abstract: *Despite the limits imposed by the computer's impossibility to perfectly duplicate the human reasoning, the information systems that assist decision making and the business intelligence components are considered nowadays compulsory instruments of the modern manager; most of the daily decision procedures, the information required by the decision making process together with the information search and retrieval techniques are taken over completely by these systems. Furthermore, their continuous development, doubled the improvement of computers' performances, offer increased possibilities to take over major parts of some of the most intense reasoning activities performed by humans.*

Keywords: business intelligence, database, decision making, warehouse

1.Introduction

The Decision Support Systems (DSS) and business intelligence solution are based on an assembly of components, technologies, server solutions, as well as on different instruments of informatics system projection and development. Another important thing that we want to emphasize is the exposure to Web and Internet of all the applications that are parts of the entire system. In this manner, all the programs that are part of DSS solution are Web-enabled, and this feature allows and easy and uniform access to information resources. The Web-oriented characteristic of the informatics system was applied, as a response to contemporary business needs:

• Decentralized access to information from Intranet or through Internet access;

• Mobility and uniform access to resources.

From a different perspective, the Web-oriented informatics systems present a series of advantages in terms of administration processes:

• The data level and applications are centrally stored on one or several servers. In this manner, the back-up processes and application configurations are much easier.

• Because applications and data are stored on some part of the server, the system can integrate "thin clients". Only the Web browser is used for adding clients, without having to install new applications or other components on the working servers.

2. Literature review

The category of information systems that assist in the decision making process can be defined as business intelligence. This term refers to the assembly of informatics instruments that bring added „intelligence" to the business process. The integration of traditional operational applications, with a wide range of data analysis programs or the expert systems ensures an efficient support to the assistance of decision maker.

With regards to the decision making process based on the business intelligence solutions; we can identify the following main stages:

• Analysis – The selection of useful information (in accordance with the business model) from a large number of data and the identification of the performance indicators. The processing of information in different contexts, in order to be able to identify tendencies. Business intelligence means the to offer information to all departments in the enterprise, so that each manager is able to make his own set of analysis and to watch the evolution of the performance indicators in a specific area of interest;

• The discovery of those factors that influence the decision making processes – Explaining the causes of certain occurrences that do not correspond to the business model;

• Action – The decision process is based on all the studies pieces of information. These decisions are based on the projection of future effects of a certain action (for e.g. increased product sales after a promotional campaign). Again, the human component plays an important role: it is able to judge which action can lead to the desired result. Business Intelligence assists the decision maker with the simulation of different results (What If analysis);

• Measuring results– In this final stage we can see if the decisions were correct or, when the results are different from the ones that we expected, this stage can show us where we need to act, to improve the results.

3. Research about DSS on Romanian companies

The research was realized for 38 companies that are between the first 200 from Romania considering the 2010 turnover and its main purpose was to identify how the interoperability technologies were implemented. The enterprises come from different fields, such as financial-banking, telecommunications, retail and industry.

The study was developed during December 2011-February 2012 and included a set of questions, from which we mention the most important.

1) Did you implement Decision Support Systems (DSS)?

85% of the companies implement solutions for the interoperability of informatics systems, and the rest of 15% plan to implement these solutions within one year.

2) Did DSS solution improve substantially decision making process?

Those companies that use the DSS solution have come to the conclusion that these technologies lead a major role for the improvements of processes. 90% of the companies have registered increased efficiency. More than 55% of the companies have registered an increased performance within the company.

3) Is your IT strategy align with the general business strategy of the company? (the question was addressed to Chief Information Officer - CIO)

More than 70% of companies surveyed said that IT strategy is aligned with company strategy.

4) If IT majored projects and implementation of the newest Information Technologies are driven by business or IT side of the company?

Also, a fairly large proportion (60%) of respondents said that new technologies are aligned with the business organizations.

5) Do you use balanced scorecard components?

Although most of the companies apply IT systems destined to the decision support, the usability of balances scorecard is extremely reduced. Only 35% of the companies use components that allow developing balanced scorecard.

4.The drivers of the decisions concerning implementation of new information technologies

The new technologies are there and could be implemented. The question is: are these organizations ready to adopt the new revolutionary technologies? Who are the drivers of this IT transformation? Which part of the organization should be in charge with innovation and adopting new technologies and how they could assess the strategic advantages and threats which come along with a new technology?

Who are supposed to be in charge with this unprecedented IT transformation? This paper will assess the IT and management responsible actions towards the alignment of IT both to general trends of IT world and to general strategic goals of the company.

The top management team characteristics, such as international experience, nationality, skills, organization characteristics such as size and performance, are deeply influencing the process of making strategic decisions in IT field. The use of information technologies especially those Internet-related, have a direct impact on business strategic decisions.

Chief Executive Officer (CEO) is the highest-ranking corporate executive of a company, in charge of total management of an organization. The CEO must lead the interests of the company, also take the lead in the innovation path and develop a management culture at the organization level that recognizes the need to implement corporate initiatives to achieve corporate earnings goals. Today's CEO has a near impossible task of having to keep path to the changing technologies, legislation and business demands, managing both internal and external resources to deliver the improved business

performance.

With the above in mind any CEO needs to think carefully about its current IT investments and delivery capability. Is the company really maximizing the financial returns on IT investment? If not, why not? Does the company have all the specific skills, knowledge and expertise to determine with confidence how best to apply future IT investments to maximize benefits to the business? Is the CEO confident that the IT management understands and successfully aligns the IT to enable the strategic goals to be achieved by the company?

Most CEO agrees on the importance of IT innovation to business strategies. Still, most executives say it is difficult to allocate appropriate resources to strategy and innovation. A recent study indicates that the money spent on the IT innovation budget is moving away from innovative business solutions, and moving toward maintaining the day-to-day IT environment.

Chief information officer (CIO) irresponsible for the information technology in an organization. The CIO responsibilities include anticipating trends in the market place with regards to technology as it is about ensuring that the business navigates these trends through expert guidance. At the same time, the general strategy of the organization should be follow and aligned with the proper strategic IT planning.CIO should be a consistent contributor in establishing strategic goals for an organization. The CIO manages the implementation of the useful technology to increase information accessibility and integrated systems management. The prominence of the CIO position has significantly increased as the information technology has become more and more important in the modern organization.

CIO is involved with driving the analysis and re-engineering of existing business processes, identifying and developing the capability to use new technologies, keeping up-to-date and also up-and-run the enterprise's physical infrastructure and network access, and with identifying and exploiting the enterprise's knowledge resources. Also, in the knowledge based organizations, CIO lead the companies' efforts to integrate the web technology into both its long-term strategy and its immediate business plans. CIO's often tasks are managing crucial IT projects which are essential to the strategic and operational objectives of an organization. The CIO is evolving into a role based on creating and monitoring business value from IT assets, more than managing day-to-day tasks. By developing new skills and widening their responsibilities, CIOs can take a leading role in the pursuit of technological and organizational change.

The questions is: how can CIO/ CTO help their organizations respond to the demand for sustainable change? Many companies create a new leadership role for CIOs, since any fundamental change a company makes today depends increasingly on IT. Therefore, the CIO faces the challenges of the new nature of company change. Fortunately, CIOs are well positioned to support their enterprises with the tools that are (or at least should be) at their disposal, which include the following: a comprehensive perspective on the change portfolio, information management and analytics capabilities, communication and collaboration tools, a portfolio and program management discipline and also process improvement capabilities.

CIOs must be proven leaders of change in their own organizations and respected

for their knowledge of business operations. Finally, CIOs must play a proactive role in the planning process for enterprise change initiatives, culminating in leadership of the portfolio of change.

According to latest studies, CIO mentioned as their concerns the followings:

- Understand the IT needs of the business side of the company, their preferences and trends
- Reveal to the CEO and to the board the link between IT, business strategy goals and budget formation
- Obtain good knowledge with respect to company's vertical and country markets and challenges
- Identify key business drivers for the adoption of crucial IT solutions
- Involve in the process of business IT related decision-making processes.

The main topics of the decade, with respect to business development, are as follows:

a) Setting up the business priorities to be assessed by IT
b) IT strategic priorities
c) IT spending dynamics and sourcing
d) IT strategy execution and operations management preferences, new software and hardware solution penetrations and investments priorities.

Improving the IT side of the company is the declared goal of most of the CIOs. These include reducing the IT costs, by consolidating, virtualization, automatization, optimization of applications and hardware, outsourcing of IT activities. Also, alignment with general business goals and risk management are the next in rank concerns of CIOs knowing the correct trends of IT market and making the right investment choices and decisions are very important for every company. IT strategies and execution plans and measures of technology adoption are present in many large companies. Alignment of IT strategies with the general business line is a must.

While business and IT executives agree on intent, they often disagree on delivery and execution. Both business executives and chief information officers (CIOs) say IT is a critical component of their business and that new technologies will continue to change the competitive landscape. Technology invades all aspects of current business operations and is considered a critical innovation tool that can help support future growth. Delivering on that promise is the challenge for the IT organization. But when it comes to execution, IT professionals and business executives have very different perceptions. Business leaders are less likely than their IT counter parts to say that IT contributes to various aspects of business strategy. In fact, nearly half of CEO agrees that the IT department focuses primarily on day-to-day IT requirements.

Business strategy should emphasize how organizations enable both businesses and IT people to execute their responsibilities in support of business/IT alignment and the creation of business value from IT enabled corporation investments.

Establishing the general strategy of the company should always provide good insights into the management and contribution of IT within organization. It also takes into consideration gaining business value from IT. Today, many organizations use Information Technology in their planning and execution of strategy, in order to ensure that IT brings value to their businesses. One lesson learned through IT governance is that realizing value from IT requires a mature organization

that can deliver such value. Performance measurement and management, therefore, is a key element in realizing business value through IT.

The information systems that assist in the decision making process, defined as business intelligence, are extremely important for bringing added „intelligence" to the business process. The integration of traditional operational applications, with a wide range of data analysis programs or the expert systems ensure an efficient support to the assistance of decision maker. These could lead to an improved operational processes and operational excellence within the organization.

No need to emphasize that this unprecedented development of information technologies have led to different changes in the business environment: the appearance and development of knowledge-based organizations, and of the knowledge-based management within the organizations.

Within the total resources of a knowledge-based organization, the informational resources register a spectacular dynamic. The IT resources are now becoming the engine of successful enterprises, representing not only the operational base, but also the means for marketing and communication strategies. The organizations based on such systems are able to extract, label, organize, file, apply and share knowledge, experiences and surveys to make superior performances possible. This can be translated in: better business solutions and decisions, a better collaboration and share of information, more capable and qualified jobs.

The result of such implementation is, no doubt, positive: extraordinary results in innovation, product and service quality, cost decrease and continuous update, according to the market's requests.

In order to face new challenges, the companies must improve their digital and technological knowledge and capacities, in spite of all financial restraints. At the same time, organizations must review the relevance of business to operational managers within.

Many businesses are missing out on similar opportunities for leveraging new technologies to radically change the way they compete. Most IT departments cannot effectively explore innovative uses of technology because they are stuck in the daily operational jobs. This way, IT side is a tactical department focused on cutting costs and maintaining day-to-day operations and not a key resource for achieving strategic business goals.

IT executives must be able to move beyond fixing the past and participate more actively in planning for their companies' future by focusing on the following actions: maximizing the value of IT assets, reducing IT complexity, focusing innovation efforts on the customer and creating a more strategic IT organization.

5. Conclusions and implications

Information analysis is a must in our world, nowadays. The term "Information society" has everyday new and various meanings, because knowledge is a key element that can determine the evolution of our society.

The rough information (that looks like a huge data volume) gets no special interest, probably just because it cannot offer an efficient and detailed analysis. The things change when we talk about integrated and centralized information that offers a good assistance for the decision maker and also

about the data analysis that is a must for an efficient management.

Given the target study, the target represented by large companies in Romania (in the top 200 companies by turnover), we conclude that this level of adoption of decision support solutions is satisfactory.

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Effect of consumer behaviour and perception on car purchase decision: Empirical Evidence from Lagos - Nigeria

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Abstract: *In recent days Nigeria is witnessing a change in consumerism. The market is now predominantly consumer driven. The focus is shifting for product based marketing to need based marketing. Consumer is given many options to decide. Passenger car segment is no exception to this general trend. An effective market communication is imperative for reaching the target audience. So it is important that we study the consumer perceptions and behaviour of the car owners which will give us feedback on how marketing strategies can be worked. Victoria Island in Lagos State, which is in the Southern part of Nigeria, has a progressive and growing market for cars. This area was selected for this study.Pre-testing was done by an interview schedule which was developed and administered to a convenient sample of twenty five car owners. A simple random sampling technique was adopted in the study to select the sample respondents. As the size of the universe is restricted, the study has been conducted on the respondents who are the owners of all the segments of passenger cars. A total of 350 interview schedules were prepared and out of this, only 327 interview schedules were filled up and collected. Data were collected through an interview schedule regarding reception of the respondents on the usage of cars. The following tools were used in testing the hypotheses and in the analysis of data. Descriptive statistical tools such as percentage, mean, median and standard deviation have been used to describe the profiles of consumers, preferred product attributes and level of satisfaction. ANOVA, T- Test and F- test have been used to test the significant differences between the groups of respondents in their perception and satisfaction for selected independent variable like age, sex*

and income. Chi-square test has been used to test the association between the consumer demographic characteristics and preferred product attributes and satisfaction. Multiple regression analysis has been used to study the influence of income and lifestyle on overall satisfaction level of the respondents. Correlation analysis has been used to establish the relationship between the factors which influenced the purchase' and ' the factors which favoured the level of satisfaction. Factor analysis is employed to identify the key factors responsible for the consumers' purchase of cars and level of satisfaction after purchase. Cluster analysis has been used to identify the consumers with similar tastes and preferences with respect to purchase of car. The study throws light on various features that the manufacturers should concentrate on to attract the prospective buyers. This study concludes that consumer behaviour plays a vital role in marketing cars and there is more scope for extensive research in this area.

Keywords: Behaviour, Consumerism, Consumer driven, Passenger cars, Marketing communication, Target audience, Consumer perception

Introduction

Human beings in general, are complex creatures who often do not seem even to know their own minds. It is seldom easy, and sometimes impossible , to generalize about human behaviour. Each individual is a unique product of heredity, environment and experience. Predicting such a strange behaviour of people is a difficult and complicated task, filled with uncertainties, risks, and surprises. Accurate predictions can yield vast fortunes and inaccurate predictions can result in the loss of millions of naira. Today, business around the world recognizes that" the consumer is the king" .Knowing why and how people consume products helps marketers to understand how to improve existing products, what types of products are needed in the market place, or how to attract consumers to buy their products. The era of liberalization, privatization and globalization has brought changes in society and life style of people.

Marketers can justify their existence only when they are able to understand consumers' wants and satisfy them. The modern marketing concept for successful management of a firm requires marketers to consider the consumer as the focal point of their business activity. Although it is important for the firm to understand the buyer and accordingly evolve its marketing strategy, the buyer or consumer continues to be an enigma- sometimes responding the way the marketer wants and on other occasions just refusing to buy the product from the same marketer. For this reason, the buyer's mind has been termed as a black box, which should be opened by the seller to be a successful marketer. The study of consumer behaviour also includes an analysis of factors that influence purchase decisions and product use. Understanding how consumers make purchase decisions can help marketing managers in several ways. For example, if a manager knows through research that fuel mileage is the most important attribute for a certain target market, the manufacturer can design the product to meet that criterion. If the firm cannot change the designing the short run, it can use promotion in an effort to change consumer's decision making criteria. For example , an automobile manufacturer can advertise a car's maintenance- free features while downplaying fuel mileage.

Literature review

Mandeep Kaur and Sadhu(2006)attempted to find out the important features which a customer considers while going for the purchase of anew car. The study covers the owners of passenger cars living in the major cities of Lagos. The respondents perceive that safety and comfort are the most important features of the passenger car followed by luxuriousness. So the manufacturers must design the product giving maximum weightage to these factors. Chidambaran and Alfred(2007) postulates that there are certain factors which influence the brand preferences of the customers. Within this framework, the study reveals that customers give more importance to fuel efficiency than other factors. They believe that the brand name tells them something about product quality, utility, technology and they prefer to purchase the passenger cars which offer high fuel efficiency, good quality, technology, durability and reasonable price. Satya Sundaram (2008) analyzed how the competition makes the automobile manufacturer to launch at least one new model or variant of the model every year. This survey also pointed out that diesel cars are becoming popular in India and the announcement of reductions in excise duties by the government has helped to some extent to boost the demand. Clement Sudahakar and Venkatapathy (2009) studied the influence of peer group in the purchase of car with reference to Coimbatore district. It was also found that the influence of friends is higher for the purchase of small sized and mid sized cars. Brown et al (2010) analyzed the consumers' attitude towards European, Japanese and the US cars. The country of origin plays a significant role in the consumers' behaviour. The brand name, lower price and distributor's reputation completely have a significant impact on the sales of passenger's car. However, the present study differs from the above, in that, the buyer behaviour in Nigeria is sought to be analyzed here. The scope and the area of the study are unique in nature.

Statement of problem

Due to emergence of globalization and liberalization there is a stiff competition among the variety of car industries which are focusing attention in capturing the Nigerian markets. Cars though considered as luxury once, now occupies a part of day- to day life and has become a necessity. Victory-Island ,Lagos which is selected for the study, is one of the main growing markets for car manufacturers. People who were not ready to spend their money on luxuries have now changed their attitude that " Yesterday's luxuries are today's necessities" .To be a successful marketer it is absolutely essential to read the minds and perceptions of the prospective buyers of cars. In addition to the above, the due weightage which is given by the government for the growth of passenger car industry and the involvement of the consumers in the selection of a particular brand of car have also made the researchers to undertake a study on the passenger car industry with special reference to the perceptions, behaviour and satisfaction of owners of cars.

Objectives of the study

The purpose of this research is to study the behaviour of consumers, their importance in the aspects of lifestyle, perception of product attributes and level of satisfaction. Hence, the study is aimed at the following objectives.

1) To evaluate car owners' perception and behaviour pertaining to the purchase and use of cars.
2) To identify and analyze the factors influencing the purchase of cars.
3) To analyze the level of satisfaction among the respondents and to identify the switch over brand option, if any and
4) To make suggestions in the light of the findings of the study.

Scope of the study

Nowadays, car has become a necessity and forms a part of life. Therefore, there is a significant scope to examine the perception and purchase behaviour of the consumers of cars. The study is restricted to Victoria Island, Lagos. Which is economically the richest area. Due to their increasing purchasing power, the people of this area have started to buy cars for business or personal use or the prestige and maintenance of social status. Knowledge of the buying behaviour of the different market segments helps a seller to select their target segment and evolve marketing strategies to increase the sales. Advertisers and marketers have been trying to discover why consumers buy and what they buy. This study tries to analyze the influence of perception in the consumers' mind and how this information can be used successfully by marketers to gain entry into the minds of the consumers. The scope of this research has a very good future.

Methodology

Before beginning to carry out the present study, the researchers initially conducted a pilot study in order to find out the feasibility and the relevance of the study. The present study is based on the perceptions, behaviour and satisfaction of the consumers for passenger cars. Sources of the primary and secondary data are discussed. The researchers has used interview schedule for the purpose of collecting primary data. It took four months for the researchers to complete the process of collection in person. As the universe of the study is large, the researchers have decided to select sample respondents by adopting the simple random sampling technique. The secondary data have been collected from the companies' bulletins, annual reports and webites. Further, the researchers has used national and international journals in the field of management, as well as marketing, business magazines, business dailies, referred textbooks in marketing management as well as consumer behaviour and academic studies conducted in the related areas for the purpose of building a strong conceptual background including the review of literature for the study.

Sampling design

This study was conducted among the car owners residing at Victoria Island, Lagos. A simple random sampling technique was adopted in the study to select the sample respondents. As the size of the universe is restricted, the study has been conducted on the respondents who are the owners of all the segments of passenger cars. A total of 350 interview schedules were prepared and out of this, only 327 interview schedules were filled up and collected. A scrutiny of these schedules led to the rejection of 27 interview schedules on account of incomplete responses. Thus 300 completed interview schedules

were used for the present study. Data were collected through an interview schedule regarding perception of the respondents on usage of cars. The collected data are analyzed through descriptive statistic tools such as percentage, mean, median and standard deviation have been used to describe the profiles of consumers, preferred product attributes and level of satisfaction. The ANOVA, t-Test and F- test have been used to test the significant differences between the groups of respondents in their perception and satisfaction for selected independent variables like age, sex and income. The chi-square test has been used to test the association between the consumer demographic characteristics and the preferred product attributes and satisfaction. Multiple regression analysis has been used to study the influence of income and life style on the overall satisfaction level of the respondents. Correlation analysis has been used to establish the relationship between the factors which influenced the purchase and the factors which favoured the level of satisfaction.

Factor analysis is employed to identify the key factors responsible for the consumers' purchase of cars and level of satisfaction after purchase .Cluster analysis has been used to identify the consumers with similar tastes and preferences with respect to purchase of car.

Analysis and Interpretation of Data

The results of the analysis of the collected data are presented below :

Table 1 : Average ratings for the influencing factors

S/no	Factors	Mean	Standard deviation	Median	Rank
1.	Driving comfort	3.5500	1.1247	4.0000	1
2.	Fuel economy	3.3667	1.0275	3.0000	2
3.	Availability of spare parts	3.3167	1.1078	3.0000	3
4.	Price	3.3067	1.0816	3.0000	4
5.	Pick up	3.3033	0.9562	3.0000	5
6.	Attractive model	3.2867	1.2767	3.0000	6
7.	Road grip	3.2733	1.0076	3.0000	7
8.	Brand image	3.1733	1.2227	3.0000	8
9.	Internal space	3.1033	1.1476	3.0000	9
10.	After sales service	3.0533	1.0492	3.0000	10
11.	Maintenance cost	3.0333	1.0144	3.0000	11
12.	Status symbol	2.9933	1.3111	3.0000	12
13.	Latest technology	2.9100	1.2572	3.0000	13
14.	Resale value	2.4100	1.0920	2.0000	14

Source : Field survey, 2010.

"Driving comfort" indicates that most of the respondents have given their responses in the category of " moderate influence" and " more influence". The factors of fuel economy, availability of spare parts, price, pick up, attractive model, road grip, brand image, internal space, after sales service and maintenance cost with their obtained mean values indicate the most of them have favoured for " moderate influence". The obtained mean values 2. 9933, 2.9100 and 2.4100 for the factors status symbol, latest technology and resale value, which are close to the scale value of " moderate influence" indicating that these factors moderately influenced the respondents in their purchase decision.

Factor Analysis- factor influencing purchase

The general purpose of factor analysis is to find s method of summarizing the information contained in a number of original variables into a smaller set of new composite dimensions(factors) with minimum loss of information. It usually proceeds from the correlations matrix formed out of the selected variables included in the study. The appropriateness of the factor model can be calculated from this. Next, factor extraction, the number of factors necessary to represent the data and the method of calculating them must be determined .At this step, how well the chosen models fits the data is also ascertained. Rotation focuses on transferring the factors to make more interpretable and following this, scores for each factor can be computed for each case. These scores are then used for further analysis. For our study, it is interesting to study the factors which can be derived out of several variables which contribute in influencing the purchase of a car. There are 14 variables under the heading " factors influencing purchase". These variables were subject to correlation analysis first.

Table 2: Correlation Matrix

variables	*B1*	*B2*	*B3*	*B4*	*B5*	*B6*	*B7*	*B8*	*B9*	*B10*	*B11*	*B12*	*B13*	*B14*
Price	-	*.458*	*.260*	*.134*	*.021*	*-.116*	*.040*	*-.085*	*.048*	*.136*	*.190*	*-.168*	*.212*	*.097*
Fuel economy	-	-	*.273*	*.248*	*.136*	*.076*	*.199*	*.119*	*.247*	*.220*	*.258*	*-.015*	*.118*	*.127*
Driving comfort			-	*.239*	*.433*	*.261*	*.077*	*.283.*	*.249*	*.361*	*.348*	*.238*	*.275*	*.080*
Maintenance cost				-	*.222*	*.081*	*.167*	*.165*	*.184*	*.265*	*.250*	*.040*	*.196*	*.116*
Attractive model					-	*.565*	*.182*	*.575*	*.424*	*.213*	*.217*	*.197*	*.166*	*.044*
Status symbol						-	*.313*	*.407*	*.257*	*.140*	*.098*	*.245*	*.051*	*-.100*
Resale value							-	*.310*	*.285*	*.159*	*.111*	*.092*	*.095*	*.003*

Latest technology								-	.524	.215	.199	.204	.092	.011
Brand image									-	.381	.347	.223	.13o	.137
Pick up										-	.674	.313	.287	.228
Road grip											-	.297	.321	.255
Internal space													.304	.193
After sales service													-	.587
Availability of spare parts														-

Source : Field survey, 2010

Key

B1=Price
B2=Fuel economy
B3=Driving comfort
B4=Maintenance cost
B5=Attractive model
B6=Status symbol
B7=Resale value
B8=Latest technology
B9=Brand image
B10= Pick up
B11=Road grip
B12=Internal space
B13=After sales service
B14=Availability of spare parts

Correlation matrix for the variables from "price" to "availability of spare parts" (totally 14 items) was analyzed initially for positive inclusion in factor analysis.

Table 3: KMO and Bartlett's Test

Kaiser- Meyer- Olkin measure of sampling Adequacy		*.747*
	Approx. Chi-Square	*1211.497*
Bartlett's Test of Sphericity	*Degrees of freedom*	*91*
	Sig.	××

Bartlett's test of sphericity is used to test whether the correlation matrix is an identify matrix. The test value (1211.497) and the significance level (p<.01) which are given above indicate that the correlation matrix is not an identity matrix, i.e, there exists correlations between the variables. Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy or KMO measure is closer to 1, and then it is good to use factor analysis. If the KMO is closer to 0, then the factor analysis is not a good idea for the variables and the data. The value of test statistic is given above as 0.747, which means the factor analysis for the selected variables is found to be appropriate to the data. The Principal Component Analysis (PCA) is used to extract factors. The PCA is a method used to transform a set of correlated variables into a set of uncorrelated variables (here factors) so that the factors are unrelated and the variables selected for each factor are related.

Table 4: Component Matrix

	Component			
Variables	*1*	*2*	*3*	*4*
Pick up	*.670*	*.255*	*-.133*	*-.481*
Road grip	*.659*	*.327*	*-.113*	*-.451*
Brand image	*.656*	*-.207*	*.043*	*-.067*
Attractive model	*.653*	*-.444*	*.059*	*.161*
Driving comfort	*.626*	*.057*	*.145*	*-.110*
Latest technology	*.605*	*-.506*	*.022*	*.105*
After sale service	*.492*	*.472*	*-.359*	*.451*
Maintenance cost	*.437*	*.149*	*.233*	*.030*
Resale value	*.394*	*-.259*	*.203*	*.278*
Status symbol	*.479*	*-.590*	*-.007*	*.145*
Availability of spare parts	*.332*	*.534*	*-.412*	*.458*
Price	*.227*	*.522*	*.594*	*.108*
Fuel economy	*.430*	*.294*	*.588*	*.070*
Internal space	*.451*	*.-056*	*-.582*	*-.127*

Source: Field survey,2010

These are all coefficients used to express a standardized variable in terms of the factors. These coefficients are called factor loadings, since they indicate how much weight is assigned to each factor. Factors with large coefficients (in absolute value) for a variable are closely related to that variable. These are all the correlations between the factors and the variables, since all the factors are uncorrelated with each other. Hence the correlation between variable" pick up" and factor 1 is 0.670. Thus the factor matrix is obtained and presented in the above table. Most factors are correlated with many variables. Since the idea of factor analysis is to identify the factors that meaningfully summarize the sets of closely related variables, the rotation phase of the factor analysis attempts to transfer initial matrix into one that is easier to interpret. It is called the rotation of the factor matrix.

ANOVA Technique age group and influencing factors

Table 5 and 6 give the results of the ANOVA conducted to test for significant different if any, between the respondents of different age groups on the various influencing factors.

Null Hypothesis : The average scores of influencing factors among the respondents of the different age groups do not differ significantly.

Table 5 Average scores of the influencing factors for different age groups

	Influencing factors								
Age groups	*N*	*External*		*Technical*		*Cost*		*Service*	
		Mean	*SD*	*Mean*	*SD*	*Mean*	*SD*	*Mean*	*SD*
<25 years	*31*	*15.48*	*4.18*	*12.39*	*3.84*	*9.87*	*2.43*	*6.23*	*2.29*
25-35years	*63*	*15.00*	*4.28*	*13.13*	*2.84*	*9.67*	*2.24*	*6.56.*	*1.88*
36-45years	*103*	*14.60*	*4.50*	*13.34*	*2.95*	*9.78*	*2.29*	*6.27*	*1.78*
46-55years	*65*	*14.74*	*4.41*	*13.49*	*3.09*	*9.55*	*2.19*	*6.35*	*2.01*
>55years	*38*	*14.34*	*4.72*	*13.34*	*2.99*	*9.71*	*2.25*	*6.45*	*1.93*

Source: Field survey, 2010

ANOVA on the influencing factors for different age groups

factors	Sources of variation	Sum of squares	Degree of freedom	Mean square	f-value	Table value	Sig.
External	Between groups	29.059	4	7.265			
	Within groups	5791.528	295	19.632	.370	2.402	NS
	Total	5820.587	299				
Technical	Between groups	28.885	4	7.221			
	Within groups	2770.245	295	9.391	.769	2.402	NS
	Total	2799.130	299				
Cost	Between groups	2.961	4	.740			
	Within groups	15117.225	295	5.143	.144	2.402	NS
	Total	1520.187	299				
Service	Between groups	4.437	4	1.109			
	Within groups	1099.493	295	3.727	.298	2.402	NS
	Total	1103.930	299				

Source : Field survey ,2010 *NS- Not Significant*

The analysis of variance test is applied to test for significant difference among the different age groups for each influencing factor separately. The results of the ANOVA are given in the above table. It is found from the results of ANOVA that influencing factors-external, technical, cost and service do not differ significantly among the respondents of the different age groups . Hence, the null hypothesis with respect to all the four influencing factors is accepted.

Educational Qualification and Influencing Factors

Table 7 and 8 bring out the results of the ANOVA conducted to test for significant difference if any, between the respondents of the different educational qualifications on the various influencing factors.

Null Hypothesis : The average scores of the influencing factors among the respondents of the different educational qualifications do not differ significantly.

Average scores of the Influencing factors for different Educational Qualification

		Influencing factor							
Educational qualification		External		Technical		Cost		Service	
	N	Mean	SD	Mean	SD	Mean	SD	Mean	SD
No formal education	24	14.71	5.22	14.04	3.24	8.88	1.65	7.04	1.65
School level	60	15.58	3.90	13.60	2.85	9.55	2.11	5.98	1.78
Graduate level	116	14.95	4.44	13.33	2.96	9.83	2.35	6.59	1.90
p/graduate level	46	13.65	4.21	12.41	3.09	9.87	2.46	6.20	2.01
Professional qualification	54	14.48	4.61	12.94	3.31	9.85	2.24	6.17	2.07

Source: Field survey, 2010

Table 8 ANOVA on the influencing factors for different educational qualification

factors	Sources of variation	Sum of squares	Degree of freedom	Mean square	f-value	Table value	Sig.
External	Between groups	105.439	4	26.360			
	Within groups	5715.148	295	19.373	1.361	2.402	NS
	Total	5820.587	299				
Technical	Between groups	60.234	4	15.059			
	Within groups	2738.896	295	9.284	1.622	2.402	NS
	Total	2799.130	299				
Cost	Between groups	22.18	4	5.532			
	Within groups	1498.059	295	5.143	1.089	2.402	NS
	Total	1520.187	299				
Service	Between groups	29.292	4	7.323			
	Within groups	1074.638	295	3.643	2.070	2.402	NS
	Total	1103.930	299				

Source: Field survey, 2010 *NS- Not Significant*

From this ANOVA table, it is observed that the f ratios calculated are 1.361 , 1.622, 1.089 and 2.010 for all the influencing factors which are less than the table value 2. 402 and so it is not significant. Hence the hypothesis formulated is accepted and it is inferred that there is no significant difference among the difference educational qualification of the respondents on the influencing factors.

Occupational status and influencing factors

Table 9 and 10 analyze for the existence of any significant difference between the various occupational status and the influencing factors.

Null Hypothesis : The average score of influencing factors among the respondents of the different occupational status do not differ significantly.

Table 9 Average scores of the influencing factors for different occupational status

		Influencing factor							
Occupational status		*External*		*Technical*		*Cost*		*Service*	
	N	*Mean*	*SD*	*Mean*	*SD*	*Mean*	*SD*	*Mean*	*SD*
Agriculture	*13*	*15.92*	*4.09*	*11.85*	*2.27*	*9.62*	*1.56*	*6.54*	*1.33*
Business	*159*	*14.91*	*4.55*	*13.57*	*3.09*	*9.40*	*2.07*	*6.42*	*1.89*
Employed in government service	*34*	*14.00*	*4.92*	*12.29*	*2.90*	*9.91*	*2.73*	*6.53*	*1.83*
Employed in private organization	*47*	*15.34*	*3.74*	*13.13*	*3.08*	*10.38*	*2.63*	*6.02*	*2.12*
Housewife	*16*	*14.44*	*4.27*	*13.75*	*2.38*	*10.81*	*1.52*	*6.69*	*2.12*
Others	*7*	*14.14*	*3.44*	*13.86*	*3.98*	*9.00*	*1.73*	*7.43*	*1.99*

Table 10 ANOVA on the influencing factors for different occupational status

factors	*Sources of variation*	*Sum of squares*	*Degree of freedom*	*Mean square*	*f-value*	*Table value*	*Sig.*
External	*Between groups*	*91.923*	*6*	*15.321*	*.784*	*2.140*	*NS*
	Within groups	*5728.663*	*293*	*19.552*	*1.361*	*2.402*	*NS*
	Total	*5820.587*	*299*				
Technical	*Between groups*	*85.731*	*6*	*14.289*			
	Within groups	*2713.399*	*293*	*9.261*	*1.543*	*2.140*	*NS*
	Total	*2799.130*	*299*				
Cost	*Between groups*	*60.967*	*6*	*10.161*			
	Within groups	*1459.220*	*293*	*4.980*	*2.040*	*2.140*	*NS*
	Total	*1520.187*	*299*				

Service	Between groups	22.706	6	3.784			
	Within groups	1081.224	293	3.690	1.026	2.140	NS
	Total	1103.930	299				

Source: Field survey, 2010

The above table highlights the results of the ANOVA for different occupational status of respondents on the influencing factors. The calculated f values of 0.784, 1.543, 2.040 and 1.026 for the external, technical, cost and service factors are insignificant. Therefore, the stated hypothesis has been proved.

Family income and influencing factors

The ANOVA table 11 and 12 given below the mean table tests for any significant difference between the different family income of the respondent and the influencing factors.

Null hypothesis : The average scores of influencing factors among the respondents of the different family income do not differ significantly

Table 11 Average scores of the influencing factors different income groups.

		Influencing factor							
Monthly family income		External		Technical		Cost		Service	
	N	Mean	SD	Mean	SD	Mean	SD	Mean	SD
<10000	21	14.43	4.55	12.95	2.60	9.71	2.61	6.10	1.76
10000-15000	55	13.67	4.27	12.53	3.24	9.64	2.61	6.05	2.08
15001-20000	60	14.87	4.36	12.80	3.31	9.95	2.42	6.53	1.75
20001-25000	63	15.11	3.86	13.48	2.95	9.54	2.07	6.43	1.97
>25000	101	15.18	4.18	13.77	2.90	9.70	2.00	6.47	1.95

Source : Field survey, 2010

Table 12 ANOVA on the influencing factors for different income groups

factors	Sources of variation	Sum of squares	Degree of freedom	Mean square	f-value	Table value	Sig.
External	Between groups	93.387	4	23.347			
	Within groups	5727.200	295	19.414	1.203	2.402	NS
	Total	5820.587	299				
Technical	Between groups	73.392	4	18.348			
	Within groups	2725.738	295	9.240	1.986	2.402	NS
	Total	2799.130	299				

Cost	*Between groups*	*5.584*	*4*	*1.396*			
	Within groups	*1514.603*	*295*	*5.134*	*.272*	*2.402*	*NS*
	Total	*1520.187*	*299*				
Service	*Between groups*	9.793	*4*	*2.448*			
	Within groups	*1094.137*	*295*	*3.709*	*.660*	*2.402*	*NS*
	Total	*1103.930*	*299*				

Source: Field survey, 2010

From the above table, it is observed that the obtained f values for the influencing factors are 1.203, 0.660. These values are less than the table value of 2.402. Hence, they are insignificant and so the above stated null hypothesis has been accepted.

Family size and influencing factors

Table 13 and 14 describe the results of ANOVA for significant difference between the various family sizes of the respondents on their influencing factors.

Null Hypothesis: The average scores of influencing factors among respondents of different family sizes do not differ significantly.

Table 13 Average scores of the influencing factors for different family size

		Influencing factor							
Size of the family		*External*		*Technical*		*Cost*		*Service*	
	N	*Mean*	*SD*	*Mean*	*SD*	*Mean*	*SD*	*Mean*	*SD*
1-3 members	*72*	*15.43*	*4.67*	*13.43*	*3.02*	*9.90*	*2.26*	*6.11*	*2.09*
4-6 members	*190*	*14.26*	*4.23*	*13.06*	*2.97*	*9.72*	*2.29*	*6.48*	*1.90*
Above 6 members	*38*	*16.11*	*4.46*	*13.71*	*3.54*	*9.29*	*2.05*	*6.32*	*1.68*

Source : field survey, 2010

Table 14 ANOVA on the influencing factors for different family size

factors	*Sources of variation*	*Sum of squares*	*Degree of freedom*	*Mean square*	*f-value*	*Table value*	*Sig.*
External	*Between groups*	*148.992*	*2*	*74.496*			
	Within groups	*5671.595*	*297*	*19.096*	*3.901*	*3.026*	×
	Total	*5820.587*	*299*				

Technical	*Between groups*	*17.298*	*2*	*8.649*			
	Within groups	*2781.832*	*297*	*9.366*	*.923*	*3.026*	*NS*
	Total	*2799.130*	*299*				
Cost	*Between groups*	*9.399*	*2*	*4.699*			
	Within groups	*1510.788*	*297*	*5.087*	*.924*	*3.026*	*NS*
	Total	*1520,187*	*299*				
Service	*Between groups*	*7.193*	*2*	*3.596*			
	Within groups	*1096.737*	*297*	*3.693*	*.974*	*3.026*	*NS*
	Total	*1103.930*	*299*				

Source: Field survey, 2010

(×Denotes 5% level of significance)

The above table represents the ANOVA for significant difference between the various family sizes of the respondents with respect to the influencing factors. From the analysis it is found that the f- value of 3.901 with respect to the external factor differs significantly at 5% level of significance. Therefore the null hypothesis is rejected. Hence, it is concluded that there is significant difference between the various family sizes and the influencing external factor. The f values of the other three influencing factors technical, cost and service of 0.923, 0.924 and 0.974 respectively have no significant difference. Hence the hypothesis with respect to these three factors is accepted.

Life style dimension and influencing factors

The ANOVA table 15 and 16 analyze for significant difference if any between respondents of difference life style dimension on various influencing factors. The following hypothesis is framed for this purpose.

Null Hypothesis : There is no significant difference among the groups of the respondents of the different life style dimensions in the average level of influence exhibited by the factors – external, technical , cost and service.

Table 15 Average scores of the influencing factors for different life style dimensions

		Influencing factor							
Life style dimensions		*External*		*Technical*		*Cost*		*Service*	
	N	*Mean*	*SD*	*Mean*	*SD*	*Mean*	*SD*	*Mean*	*SD*
Compact drivers	*110*	*14.71*	*4.29*	*13.29*	*2.93*	*9.53*	*2.23*	*6.34*	*1.97*
Travel lovers	*42*	*14.12*	*4.35*	*12.83*	*2.97*	*9.93*	*2.47*	*6.24*	*1.85*
Reserved affluent	*69*	*15.30*	*4.42*	*13.14*	*2.91*	*9.67*	*2.17*	*6.43*	*1.94*
Luxury relishes	*79*	*15.75*	*4.63*	*13.43*	*3.43*	*9.87*	*2.27*	*6.43*	*1.89*

Source: field survey, 2010

Table 16 ANOVA on the influencing factor for different lifestyle dimensions

factors	*Sources of variation*	*Sum of squares*	*Degree of freedom*	*Mean square*	*f-value*	*Table value*	*Sig.*
External	*Between groups*	*37.946*	*3*	*74.496*			
	Within groups	*5782.641*	*296*	*12.649*	*0.647*	*2.635*	*NS*
	Total	*5820.582*	*299*	*19.536*			
Technical	*Between groups*	*10.688*	*3*	*8.649*			
	Within groups	*2788.442*	*296*	*3.563*	*0.378*	*2.635*	*NS*
	Total	*2799.130*	*299*	*9.420*			
Cost	*Between groups*	*7.915*	*3*	*4.699*			
	Within groups	*1512.271*	*296*	*2.638*	*0.516*	*2.635*	*NS*
	Total	*1520.187*	*299*	*5.109*			
Service	*Between groups*	*1.433*	*3*	*3.596*			
	Within groups	*1102.497*	*296*	*0.478*	*0.128*	*2.635*	*NS*
	Total	*1103.930*	*299*				

Source: field survey,2010 *NS- Not Significant*

The Analysis of Variance test is applied to test for the significance difference among the lifestyle dimensions for each influencing factors separately. The results of the ANOVA are given in the above table. It is found from the results of the ANOVA that influencing factors- external, technical, cost and service do not differ significantly among the respondents of the different lifestyle dimension. Hence, the hypothesis will respect to all the four influencing factors is accepted.

Brand of car and influencing factors

Tables 17 and 18 bring out the ANOVA results for significant difference between the various brands of cars possessed by the respondents and the factors which influenced the purchase of those brands among the respondents.

Null Hypothesis: There is no significant difference between the difference brands of cars owned by the respondents and the factors which influenced the purchase of that specific brand of car.

Table Average scores of the influencing factors for different brand of car

		Influencing factor							
Brand of car		*External*		*Technical*		*Cost*		*Service*	
	N	*Mean*	*SD*	*Mean*	*SD*	*Mean*	*SD*	*Mean*	*SD*
Hyundai	*42*	*16.02*	*4.21*	*13.50*	*3.12*	*9.71*	*1.95*	*6.48*	*1.94*
Toyota	*108*	*13.11*	*3.96*	*12.71*	*2.98*	*10.42*	*2.53*	*6.71*	*2.26*

Fiat	22	14.36	4.62	12.36	2.92	9.86	2.27	5.82	1.47
Nissan	49	16.31	3.90	13.78	2.84	9.08	2.02	6.35	1.68
Gallant	44	15.30	4.58	13.18	3.13	9.18	1.83	5.93	1.59
Others	35	15.86	4.84	14.34	3.24	8.94	1.92	6.11	1.57

Source: Field survey, 2010

Table 18 ANOVA on the influencing factors for different brand of car

factors	Sources of variation	Sum of squares	Degree of freedom	Mean square	f-value	Table value	Sig.
External	Between groups	536.000	5				
	Within groups	5284.587	294	107.200	5.964	3.080	××
	Total	5820.587	299	17.975			
Technical	Between groups	106.475	5				
	Within groups	2692.655	294	21.295	2.325	2.245	×
	Total	2799.130	299	9.159			
Cost	Between groups	106.670	5				
	Within groups	1413.517	294	21.334	4.437	3.080	××
	Total	1520.187	299	4.808			
Service	Between groups	30.639	5	3.596			
	Within groups	1073.291	294	6.128	1.679	2.245	NS
	Total	1103.930	299	3.651			

Source: field survey, 2010 *NS -Not Significant*

(× Denotes 5% level of significance)

(×× Denotes 1% level of significance)

The above table outlines the brand of car possessed by the respondents namely Hyundai, Toyota, Fiat, Nissan, Gallant and others including brands of General motors, Skod, Ford, Honda and Daewoo motors. From the above table, it is clearly known that the calculated value of the influencing factor " service' of 1.679 is less than the table value of 2.245 at 5% level of significance. Therefore, the above formulated null hypothesis is

accepted with respect to service only. T is inferred that there is no significant difference between the brand of car and the influencing factors with respect to service. It is seen that the "f" values of 5.964 and 4.437 for the influencing factors external and cost are much higher than the table values. Therefore, the proposed null hypothesis is rejected at 1% level of significance and it is concluded that there is a highly significant difference between brand of cars with respect to external features of the car and the cost of car among the respondents.

It is also observed that the "f" value of 2.325 for the influencing factor "technical" is higher than the table value of 2.245. Hence the above stated null hypothesis is rejected at 5% level of significance and it is concluded that there is significant difference between the brand of car and the influence of technical features of car on the the purchase of a particular brand.

The analysis of influencing factor "external" highlights the respondent of Nissan brand with the highest mean value of 16.31. They think that Nissan brand is a successful one in effectively influencing the respondents on the purchase with respect to external features of car. The car owners of Toyota with less mean value of 13.11 feel that external features is less successful than the other brands in increasing interest in purchasing Toyota brand.

The analysis of influencing factor " technical" indicates the respondents of various brands of General motors, Skoda, Honda and Daewoo with the highest mean value of 14.34. The feel that the above brands are successful in influencing the respondents on their purchase with respect to the technical features of car. The Fiat car owners with the least mean value of 12.36 perceive that the technical features are not successful in creating interest in the purchase with respect to Fiat owners.

The analysis of influencing factor " cost" represents the respondents of Toyota brand with the highest mean value of 10.42. They judge that Toyota brand is much successful in effectively influencing the respondents on the purchase of car based on cost. It is also highlighted that the owners of other brands like General motors, Skoda, Honda and Daewoo with least mean value of 8.94 think that "cost" is not successful in creating interest in the purchase of these brands.

The analysis of influencing factor " service" discloses the respondents of Toyota brands with the highest mean value of 6.71. They perceive that Toyota brand is very much successful in effectively influencing the respondents on purchase with respect to the services available in the usage of cars. The car owners of Fiat with least mean value of 5.82 judge that service factor is not encouraging the respondents in the purchase of Fiat brand.

Conclusion

Consumer behaviour consists of human behaviour that goes in making purchase decisions. An understanding of the consumer behaviour enables a marketer to take marketing decisions which are compatible with its consumer needs. There are four major classes of consumer behaviour determinants and expectations, namely, cultural, socio-economic, personal and psychological. The socio-economic determinants of consumer behaviour consist of age, marital status, occupation, education, income, family size etc. Realizing

the importance of passenger car industry in the present economic situation, the researcher has analyzed the perceptions, and behaviour of consumers related to this product. It is rightly said ; yesterday's luxuries are today's necessities. Hence in this digital world, car is no longer a luxury. From the discussions made in the previous chapters, there are certain product attributes which are identified in the study as influencing the purchase decision and satisfying the consumers. The growth in the population of Nigeria and the increasing number of middle class consumers has attracted the attention of car manufacturers and marketers. The manufacturers and marketers who study the behaviour of consumers and cater to their needs will be successful. It may be concluded that consumer behaviour has a greater role to play in the era of economic activities for which a necessary survey and research should be conducted in an efficient manner.

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Legislation and management fund for Mosque in Manado, Indonesia

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Abstract: *This paper aims to analyze the development of religious institutions as foundations or agencies virtue (Non-profit Organizations), which manage funds mosques and churches under the Act No. 28 of 2004 (Act 28/2004). The problem, though these agencies manage the funds mosques and churches as houses of worship, but still apply some cases broken trust and abuse in care funds. Content analysis will be made based on two data sources. First, it is the secondary data obtained than the Law 28/2004 and reports inscribed. Second is the primary data obtained from fieldwork. Revenue study is expected to back up the bodies of virtue for the management of funds increased more mosques in Manado, Indonesia. Conversely, if the enactment cases of study broken trust and misappropriation of funds in a thin, it acts in accordance with the laws that exist in Indonesia can be taken.*

Keywords: foundations, funds, management of funds, mosque and law

1. Introduction

Foundation (Foundation) is better understood as a virtue nonprofit entity or for-profit activities. If someone is going to conduct a full of idealism as well as for social and humanitarian aims, the organizational form chosen is the foundation. Selected social activities primarily related to health, education, religious and social parlors. Container foundation used by its founders to perform

a variety of social activities for the public interest. Historically the Foundation as a forum for social activities has been around since the beginning of history. The Pharaoh, more than 1000 BC, it have separated property for religious purposes. At that time the Foundation was established by donating land and buildings for the temple to worship the god Artemis, the provision of food and beverages for those who need, and animal sacrifice. Plato before his death in 347 BC share of agricultural land than it has, to be donated for students who cannot afford. This is probably the first educational foundation in recorded history. The habit has been established by private foundations or individual's is usually done with certify from notary. Wealth that is separated rather than belonging to the founder or trustee of concerned, the deed is registered in the District Court Clerk's Office local. In Article 7 Armenwet 1854 (no longer valid) the requirement to register to the township within different for the foundations of existing or newly established, with the threat of losing its authority to do such laws. Thus, the position of agency law is obtained together with the establishment of the foundation. In practice the laws and customs can prove that in Indonesia have established a foundation and it was the position of agency law. In fact, foundations were established in the association have recognized legal rights and obligations of its own, as one position in conjunction with the subject of other legislation and based on jurisprudence, then the foundation is considered as a body of law.

Based on this foundation after all this time only in a society governed by custom and jurisprudence of the Supreme Court, the Government of the Republic of Indonesia on August 6, 2001 enacted Act (Act) of the Republic of Indonesia Number 16 Year 2001 on the Foundation. In its development then was transformed with the Act (the Act) of the Republic of Indonesia Number 28 Year 2004 regarding Amendment Act (Act) of the Republic of Indonesia Number 16 Year 2001 on the Foundation. The law on foundations is intended to provide a correct understanding of the public about the foundation, ensuring certainty and order legislation and restore the function of foundations as institutions legislation in order to achieve certain objectives in social, religious and humanitarian. This law asserts that the foundation is a body of legislation which has the sole purpose is social, religious and humanitarian, was established by considering the formal requirements specified in this law. Law on Foundations has brought significant changes in the regulation of foundations in Indonesia. One is the ratification of the foundation as a mechanism Agency Act. Certificate establishment of the Foundation is done by a notary and obtain the status of law after obtaining approval certificate stance than the Minister of Justice and Human Rights Republic of Indonesia. To obtain approval as an agency of the founders of the law or their proxies request to the Minister through a notary deed that makes the foundation, it is stipulated in Article 11 paragraph (2) Law of the Republic of Indonesia Number 28 Year 2004 concerning Amendment to Law Republic of Indonesia Number 16 Year 2001 on the Foundation.

2. Methodology

This research were used a qualitative approach as a research method. Primary data which was used is based on law number 28 Year 2004, the object of research data. While the secondary data was direct observations.

3. Status of law foundation in Indonesia Law System

The Foundation is a virtue laws that exist in law in Indonesia has been recognized by the community based on the reality of the positive laws that live and thrive in Indonesian society. However, the rules governing legislation as a foundation primacy agency has been no legislation to date. Tendency for people to choose form the foundation for virtue among other agencies because of reasons:

1) Establishment process is simple,
2) without requiring ratification rather than government,
3) Rather than the public perception that the foundation is not subject to tax (Setiawan, 1992).

Recognition of the foundation as a body is legislation as an independent subject of legislation as much as anyone, theoretically, in fact, only be based, among others: because of separate property, not shared his wealth or his income to the founders or managers, have a particular goal, have an organization that regular, established by notary deed (Tobing, 1996, Pitlo, 1986, Ali, 1987). Such traits are matched with the characteristics of bodies in general law, namely the existence of separate property, the existence of a specific purpose, the existence of its own interests and the organizations that regularly (Pramono, 1947), (Rido. 1977). Under the laws of habit and assumption of law generally accepted in the community, then it can be argued traits foundation as a major portion of the legislation as follows:

1. Foundation of existence as an entity law in Indonesia is not based on legislation applicable regulations,

2. Recognition of the foundation as the agency law has been no firm legal basis unlike the case with the Limited Liability Company (PT / Sdn Bhd.), Cooperatives and agencies of other legislation,

3. The Foundation was formed by splitting property for the purpose of cloning the founder of nonprofit, for the purpose of religious, social, religious, humanitarian and ideals of others,

4. The Foundation was established by notary deed or by a decree officials concerned with the establishment of foundations,

5. The foundation has no members and is not owned by anyone, but have management or organ to realize the purpose foundations,

6. Foundation, has an independent position, as a consequence of the existence of a separate wealth rather than wealth or cloning founders and managers have their own objectives differed or off rather than the establishment or management approach for cloning purposes,

7. The Foundation is recognized as an agency of the law as much as anyone who that he was recognized as an independent subject of legislation that can assume the rights and obligations of an independent, established by deed and registered at the secretariat office of the local Court,

8. The foundation can be dissolved by the court when goals conflict with the foundation's statute, may be declared bankrupt and liquidated (Sri Rejeki, 1999; Tobing, 1990).

With the issuance of Law no. 16 of 2001 and amended by Law no. 28 of 2004, it can be concluded that the foundation has been recognized as an agency of ordinary legislation, which subjects recognized means independent statute than the position of the subject matter law of the founders or managers.

As the subject of legislation is independent foundations have rights and responsibilities, may be a debtor and creditor, in other words, the foundation can have sex any legislation with a third party. When he became the agency law under the Act since the deed founding the Foundation is made before notary authorized by the Minister of Law and Legislation and Human Rights. For foundations that have been registered in the District Court and have permission to do the activities rather than institutions, is still recognized as a body of laws, with provisions in the period later than 5 (five) years from the entry into force of the new Foundation Law. At least 1 (one) year after the adjustment shall be notified to the Minister. Foundations that do not fit within the Articles of Association 5 (years) may be dissolved by court decision on the request of the Prosecutor or the interested parties.

The foundation of his wealth comes from part of than State aid, foreign aid and / or community contributions are obtained as a result of enactment of legislation required to announce a rule ikhtisar sec-annual reports referred to in Article 52 Paragraph (1) of the Foundation and which includes a wealth during the 10 (ten) years before the Foundation Act was passed. This announcement does not remove the right rather than the authorities to conduct inspection, investigation and prosecution if there are allegations of violations of law.

4. Foundation for Law Layman Courant

Judging than the way of establishment or formation, the foundation can be divided into two types namely foundation established by the ruler or government, including State-Owned Enterprises (SOEs) and the Regional-Owned Enterprises (enterprises) and the foundation established by individuals or private. Foundation established by the Government prior to discharge of Law Foundation, there are established only by decree rather than competent authority for that and there is established by notary deed. Initial wealth of the foundation like this can be taken than the wealth of nations "separated" or "released ruler" than the government and rather than cloning their own wealth. Foundation established by private or individual is usually done by notary deed, and according to the new Foundation Law precisely should the notary deed. Separated wealth comes instead of belonging to the founder or trustee concerned. A habit that happen deed is registered at the local District Court Clerk's Office. Often found in community foundation established for the purpose of social, religious, educational and others are established by private parties. With the issuance of the Law Foundation of the existence of the Foundation as portion legislation lay not matter anymore or not be doubted. It was the common law agency that already has a strong juridical basis. According to Law number. 28 of 2004, consisting instead of Foundation Am: Patrons, Trustees and Administrator. When viewed in a Limited Liability Company (PT / Sdn Bhd), the position of the Board of Trustees is the same as the AGM, the Trustees as well as Commissioners and Board of Directors is the same as.

Terms Establishment of Foundation:

1. Foundation composed of administrators and supervisors of Trustees

2. Foundation established by one or more persons with a separate property part of stance as the initial wealth.

3. Established of certificate of the foundation is done by a notary and made in the Indonesian language

4. Foundation will be established under the wills

5. Foundation established by foreigners or with strangers, on terms and procedures stipulated by government regulation stance.

6. Foundation to obtain the status of agency law after obtaining the foundation deed endorsement of the minister

7. Foundations should not use the name:

a. has been used legitimately by other foundations

b. contrary to public order and / or morals

c. behalf of the foundation must be preceded the word "foundation"

d. foundation can be established for a specific term or indefinite period stipulated in the articles of association.

Wealth that separated it for the Foundation earmarked for the achievement of certain goals in the social, ideal rights, humanitarian and religious. Thus the foundation is essentially:

(1). The assets are separated,

(2). Property is given the status of legislation,

(3). Its existence to achieve certain goals in the social, humanity and the religious.

Theoretically, the Foundation may be established by one person, two persons or more. The foundation has no members (such shareholder in PT) and the existence destined to achieve certain social, humanitarian and religious are. Therefore all foundation activities should be devoted to achieving that goal. Law Foundation confirmed this by banning results of operations to the Foundation, as well as criminal threats. The foundation is placed on the juridical status as it should. It was the agency that serves the law of social and religious virtue. He may run business activities, It have many of net income but should not be profit oriented as well as PT. Tray results of operations may exist, but should not be distributed to the organs of the foundation. He may set up business entities, such as PT, but not all Foundation assets are used as working capital. Only two percent of the asset is allowed for that purpose. The Foundation shall make such books and It was to be examined by a public accountant a person. It was for the foundations that have assets of 20 billion or more and can help 500 million upwards. Bookkeeping should be announced and a copy must be submitted to the Minister. This provision is by some considered burdensome.

5. Source of Weakness Management Foundation

The main source of weakness rather than the management of the foundation is the absence of rules governing the foundation. Foundations can be administered freely without any regulations must be observed. The existence of the foundation so far only based on practices that are preserved. The power law rather than practice is certainly very weak. Another result is not guaranteed certainty of legislation considering that one practice is different from other practices. The absence of setting the foundation also that's mean absence of reference that can be used to say that something should or should not. In addition, the absence of provisions regarding transparency of the management of the foundation is often misused by the founders as well as trustee. In fact, many foundations that

raises fund than enough free society rather than an obligation to be auditing. The public does not know whether funds donated to a foundation is really for social purposes or precisely for the interests of others, even to fraud. Another drawback is the foundations are not professionally managed. Founder of the foundation is also caretaker. Role than the supervisor who was appointed to watched activities and financial foundation is not his job seriously, even impressed they made the appointment as a mere formality.

6. Religious Foundation in Manado

Religious Foundation in Manado is very much its existence to accommodate agencies virtues of Islam. The houses included in the category Foundation. Because of this is to establish a house of worship there should be agencies or foundations of virtue that must be responsible for the establishment of houses of worship in Indonesia. Manado airport itself a lot of bodies surrounding the virtues of religious activities such as mosque and church. An example for the religious foundations of Islam, they established schools and junior secondary Madrasah and Charities are also embodies acceptance of Zakat. Infq and Sodaqoh. Mosques in Manado Airport is also included in the category of the Foundation. Consisting than High School (SMA) of Islam as busy as 5 pieces, and Junior High School (SMP) as busy as 9 units. Mosque in Bandar Manado as busy as 157 pieces. (CBS, 2008).

7. Financial Mangement Mosque

Financial Management Guidelines Mosque arrange financing organizations that include the source of funds, budgeting, financial activities and traffic. The money in and out must be lawful, clear the source, recorded with a neat and reported periodically. Similarly, income and expenditure procedures should be laid out and implemented properly.

The mosque is a agencies / institutions that are economically not aim for profit (profit), even in many cases provide subsidies to people in need. Rightly, the mosque has a productive business (cash machines) that can produce financial benefits that are used to provide subsidies to people in need. Because of its profit, the mosque has the ease in collecting funds in the trust software used to run its business units. One of the funds raised in addition to zakat, infak, and Sadaqah, are endowments which in this case is waqf endowments in cash or in the form of money.

The mosque which is the same whether there is a mosque which has the function of the vertical (hablum minallah) and horizontal functions (hablum dominant unlucky) as at the time of the Prophet Muhammad. People go to the mosque not only to worship but also get the benefit mahdhah worldly (work, trade, get compensation for the indigent and the poor) so that the mosque is a pillar of the welfare of Muslims. To achieve this required the mosque which has strong financial resources. Instead, the mosque is not just relying on the funds that are giving (infak, shodaqoh, and others) but also have sources of income derived rather than productive enterprises. In other words, the mosque must have productive business units to make money. Small businesses are productive can be supported by an intermediary institution that existed at the mosque. Intermediary institutions layman can use the funds to run its business units. Intermediation may be done by nadzir (zizwaf manager). Lay the proper

funds to move the business the mosque is a cash waqf waqf cash by definition must be used productively (there is no possibility for the consumer). To run the scheme for cash waqf must be met first its waqf pillars, namely:

1. Al-Wakif, namely those who perform deeds endowments, let in a state of spiritual health and not in urgent situations, or in a depressed state of his soul.

2. Al-Mawquf, namely property, should clear the form or substance and is eternal. It means that the property does not run out of disposable and can be taken advantage for a long period of time.

3. Al-Mawquf 'alaih, namely targets are to receive the results or the benefits of endowments that can be grouped into two: waqf kahiry and dzurry. Waqf endowments that Khairy is no limit wakifnya wakafnya target for a particular party but to the public interest. Waqf endowments that waqif dzurry is limiting target waqf benefits for certain parties, namely the family descendants.

4. Sighah or statements giving endowments, both with lafadz, writing, and gesture.

Cash waqf-based financing schemes require high professionalism in its management. Even though under the management structure / takmir mosque, the position of manager of cash waqf (nadzir) should have the freedom / authority in everyday policy-making. Nadzir have a reciprocal relationship with business units. Nadzir serves as the intermediation of funds, namely public funds and endowments rather than distribute it in the mosque of business units to develop business. Instead of providing benefits to business units, nadzir can hire employees and sympathize the poor in need. In institutions, financing contained in the above model are:

1. Wakif, is a party providing waqf funds.

2. Al Mawquf alaih, is the party receiving the benefit than the funds diwakafkan.

3. Mosques or madrassas, in which consists instead:

4. Nadzir, is the agency mandated to managed waqf.

5. The business unit, is an institution that was mandated by nadzir to run a lawful and profitable business with existing waqf funds.

6. Institute of guarantor, is a financial institution that guarantees the integrity of the waqf funds.

8. Source of funds

Mosque activities require funding not less. Lack of funding may well lead to inhibition of the activities that have been reserved. By that this problem needs to be taken seriously. Several fundraising activities can be done, namely:

a. Donors remain, namely the contribution rather than the congregation or others who periodically provide infaq.

b. Donors are not fixed, namely the contribution rather than the various parties is done by applying, for example to government or government agency, private agencies, donor agencies or sympathizers.

c. Donors are free, namely the contribution that the environment is obtained rather than the congregation itself, or outside parties that are urgent. This is done by providing a Box Charity and fundraising community.

d. Economic enterprises, namely the funds obtained by activity economic, trademark and trade in services.

9. Expectances Financial Activities

Financial planning to implement the Work Programmed conducted periodically. This plan includes expenditures and receipts of funds in detail, so the operating costs and fulfillment purposes, can be estimated.

10. Budgeting Mechanisms

a. Each of these areas of work outlining the results of the Work Programmed for the annual event Deliberation.

b. Identify the activities and scheduling.

c. Do the costing and funding of each activity.

d. Propose budgets that have been prepared in each field on the Work Meeting of the Board.

e. Perform integration and acceptance with the overall financing of the scale of priorities.

11. Budgeting

Through the Working Meeting of the board Ta'mir budget expenditure and income funds according to the activities to be held. Cultivated in the preparation of the budget committee has a clear source of funds to avoid a deficit. Some to consider include:

a. Doing prioriti activities tailored to the needs of funds.

b. Items of expenditure and income are clearly indicated.

c. Tolerate a budget of (+) 10% or more as a safety factor.

d. Total expense each field declared figures.

e. Doing the integration of the entire field in compiling the budget by setting the Work Plan and Budget Management (RKAP).

f. Finance Circulation

11.1. Collection

Fundraiser coordinated by the Executive Ta'mir Field and Equipment Fund which seeks to meet the funding needs for the entire activity. Board to do some fundraising activity, among them a proposal, make charity boxes, activity services and the economy, and so on.

11.2. Income and expenditure

Sector funds already collected funds and equipment provided to the Treasurer subsequent to the Chairman of the unknown. This is done by the Fund Submission Form. By the Treasurer of the fund then entered and stored in a mosque or Ta'mir Financial Cash Bank Account. When stored in the Bank, Bank Syariah should use the General Chairman and Treasurer as signatories or checks or cash collection. For spending funds to consider the suitability of the budget has been set for each field. The field in question applies for funding to the Chairman by filling out Form Request for Advances. If approved, the Treasurer issued according to the requested funds. Similarly, the use of these funds accounted for by the relevant field in the accountability report of activities by attaching the Financial Statements, or accounted for by filling out Form Accountability Advances.

11.3. Mosque Fund Supervision

Fundraising activity by Field and Equipment Fund or the management of funds by the Treasurer needs to be controlled. This is done among others through:

a. Proof sheet. Several pieces of evidence that could be used include: receipts, memorandum, declaration, coupons and more.

b. Information Sheet. Information collection and management of funds each month presented by Field and Equipment Fund and the Treasurer.

c. Bulletin boards. Mosque attached financial information on a bulletin board.

d. Routine reports. Field and Equipment Fund Board and the Treasurer submit regular reports on fund management forum General Meeting and Annual Report of the Board. Also delivered in an Accountability Board at the Council Jamat.

e. Forum / watchdog. Some boards or agencies that could perform direct supervision are:

1. General Meeting.
2. Plenary Meeting.
3. Shura Council.
4. Deliberation Jama'ah.

11.4. Punishment for Managers

The penalty for the manager will be adjusted according to the laws in force. If this applies to the management of zakat funds it will be seen in accordance with Law No. 38, 1999. As for the Endowments will be governed by Law No. 41 of 2004. Shodaqoh Infaq and regulated in the legislation the mosque itself. If there is someone steward of these funds who do abuse it will be punished according to the sentence rather than the mosque that based on than the Act mentioned above. Only the mosque committee usually does not take a guess, this caused a problem morality. But if the action will be taken within the domestic court will be punished to the laws of waqf and zakat and laws that go in the Book of Criminal Justice Act (Penal Code).

12. Conclusion

This research is an investigation to see the maintenance of reserves than fund mosque funds. According to the law Mosque Foundation in the category referred to in Law No. 28 of 2004. Stooge crucial foundation for success in dealing Fund and Am Mosque. The source of funds than the mosque is zakat, waqf, infaq, sodaqoh and charity boxes at mosques. In order to avoid things that are not desirable in the care of the mosque should fund need to be equipped with science knowledge management officers, chosen rather than a good-hearted and honest. For the punishment can be taken action against people who do fund namely the diversion of funds was brought to court and be punished in accordance with the Law of the Republic of Indonesia applicable. But generally the mosque did not report abuse the member case to the authorities because of moral responsibility. This is what makes many of cases broken trust and abuse in the synagogue and his foundation is not much in defending in court.

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Developing the Decision Making Matrix in Solid Waste Management

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Abstract: *A majority of local governments and urban institutions identified the subject of solid waste environmental problem has reached proportions requiring practical solutions. It can be noted three main trends governing the matter of solid waste:*

- *An increase in the size waste generated from urban housing*
- *Change in the quality of waste generated.*
- *The discharge process of the wastes collected.*

Consequently, these trends play an important role in determining the nature of the solid waste management and decision making process, including its various dimensions and levels. This research include an analytical study for the decision making matrix of Solid Waste Management(SWM) in different dimensions and levels .The dimensions consist of social ,economic ,technological ,political ,and administrative. The levels contain household ,neighborhood, city, and nation. Three cities (Hilla,Najaf,and Kerbala) had been taken as case studies for analyzing these dimensions and levels in decision making of solid waste management. where it is through the use of audit fieldwork and the use of experts in the field of jurisdiction.

After studying the issues in these three cities and operations of waste minimization, waste recycling and waste disposal, so as to indicate defect and gaps in the nature of the decisions and actions existing in the solid waste management of these cities at both the dimensions(social, technological, economic, political, and management), or in terms of levels (family, residential neighbored, city, nation) of these decisions

and actions. After analyzing the results, a matrix for solid waste management had developed by percentages which represent rates of defect in every relationship. Two kinds of conclusions(general and specific) had been stated.

Keywords: Decision making matrix, Solid Waste Management(SWM), Social, Economic, Technological, Political, Administrative Dimensions

1. Introduction and objectives

Municipal solid waste" (MSW) is a term usually applied to a heterogeneous collection of wastes produced in urban areas, the nature of which varies from region to region. The characteristics and quantity of the solid waste generated in a region is not only a function of the living standard and lifestyle of the region's inhabitants, but also of the abundance and type of the region's natural resources. Urban wastes can be subdivided into two major components -- organic and inorganic. In general, the organic components of urban solid waste can be classified into three broad categories: putrescible, fermentable, and non-fermentable. Putrescible wastes tend to decompose rapidly and unless carefully controlled, decompose with the production of objectionable odours and visual unpleasantness. Fermentable wastes tend to decompose rapidly, but without the unpleasant accompaniments of putrefaction. Non-fermentable wastes tend to resist decomposition and, therefore, break down very slowly. A major source of putrescible waste is food preparation and consumption. As such, its nature varies with lifestyle, standard of living, and seasonality of foods. Fermentable wastes are typified by crop and market debris.

The primary difference between wastes generated in developing nations and those generated in industrialized countries is the higher organic content characteristic of the former. (United Nations Environment Programme, 2005).

Solid waste managers in developing countries tend to pay little attention to the topic of reducing non-organic wastes because the wastes they collect are between 50% to 90% organics, dirt and ashes. These municipal wastes, however, are amenable to composting or digestion, provided they contain very low levels of synthetic materials. Solid waste departments thus have an interest in promoting diversion of synthetic recyclables from the waste stream.

Each household generates garbage or waste day in and day out. Items that are no longer needed or do not have any further use for fall in the category of waste and we tend to throw them away. There are different types of solid waste depending on their source. In today's polluted world, learning the correct methods of handling the waste generated has become essential. Segregation is an important method of

municipal solid waste. Segregation at source can be understood clearly by schematic representation. One of the important methods of managing and treating wastes is composting.

As the cities are growing in size and in problems such as the generation of plastic waste, various to try and resolve these problems. One common sight in all cities is the rag picker who plays an important role in the segregation of this waste. Garbage generated in households can be recycled and reused to prevent creation of waste at source and reducing amount of waste thrown into

the community dustbins.

• Key concepts in municipal waste reduction:

Waste reduction: All means of reducing the amounts of waste that must be collected and disposed of by solid waste authorities. It ranges from legislation and agreements at the national level for packaging and product redesign to local programs to prevent recyclables and compostable organics from entering final waste streams.

Source reduction: Any procedure to reduce wastes at the point of generation, in contrast to sorting out recyclable components after they have been mixed together for collection.

Source separation: Keeping different categories of recyclables and organics separate at source, i.e. at the point of generation, to facilitate reuse, recycling, and composting.

Waste recovery, materials recovery, or waste diversion: Obtaining materials/organics (by source separation or sorting out from mixed wastes) that can be reused or recycled.

Reuse: Reusing a product for the same or a different purpose.

Recycling: The process of transforming materials into secondary resources for manufacturing new products is called recycling.

Redemption center: Waste trading enterprise that buys recyclable materials and sells to brokers. Sometimes also called "buy-back centre".

Producer responsibility: Producers of products or services accept a degree of responsibility for the wastes that result from the products/services they market, by reducing materials used in production, making repairable/recyclable goods, and/or reducing packaging.

• **Promoting waste reduction and materials recovery at the national and local levels:**

Action for waste reduction can take place at both national and local levels.

At the national level, the main routes to waste reduction are:

- redesign of products or packaging;
- promotion of consumer awareness; and
- promotion of producer responsibility for post-consumer wastes (this applies mostly to industrialized countries).

At the local level, the main means of reducing waste are:

- diversion of materials from the waste stream through source separation and trading;
- recovery of materials from mixed waste;
- pressure on national or regional governments for legislation on redesigning packaging or products; and
- support of composting, either centralized or small-scale.(Prakriti, 2006)

A majority of local governments and urban institutions identified the subject of solid waste environmental problem has reached proportions requiring practical solutions. It can be noted three main trends governing the matter of solid waste:

- An increase in the size waste generated from urban housing
- Change in the quality of waste generated.
- The discharge process of the waste collected.

Consequently, these trends play an important role in determining the nature of the solid waste management and decision

making process, including its various dimensions (social, economic, technological, political, and administrative). The development of decision-making matrix to ensure the absorption of these dimensions and different levels of resolution will be one of the objectives of the research, In addition to the application of this matrix in the cities of the case study, namely, (the city of Hilla, Najaf, Karbala) and thus know the nature of the interrelationships of the solid waste management in these cities.

2. The dimensions and levels of decision-making in the management of solid waste:

It may be difficult to choose a general approach to the development of a practical framework for Solid Waste Management (SWM), and that this framework includes social dimensions, economic, technological, political and managerial. For example, the social dimension of solid waste management includes the process of reducing waste (Waste Minimization).The economic dimension of the management of solid waste contains the recycling process of waste (Waste Recycling). The technological dimension of the solid waste management contains disposal of waste process (Waste Disposal). While the political and administrative dimensions include all the above three issues(minimization , recycling and disposal)(Srinivas, Hari ,2006) .

The Figure (1) illustrates the nature of these dimensions.

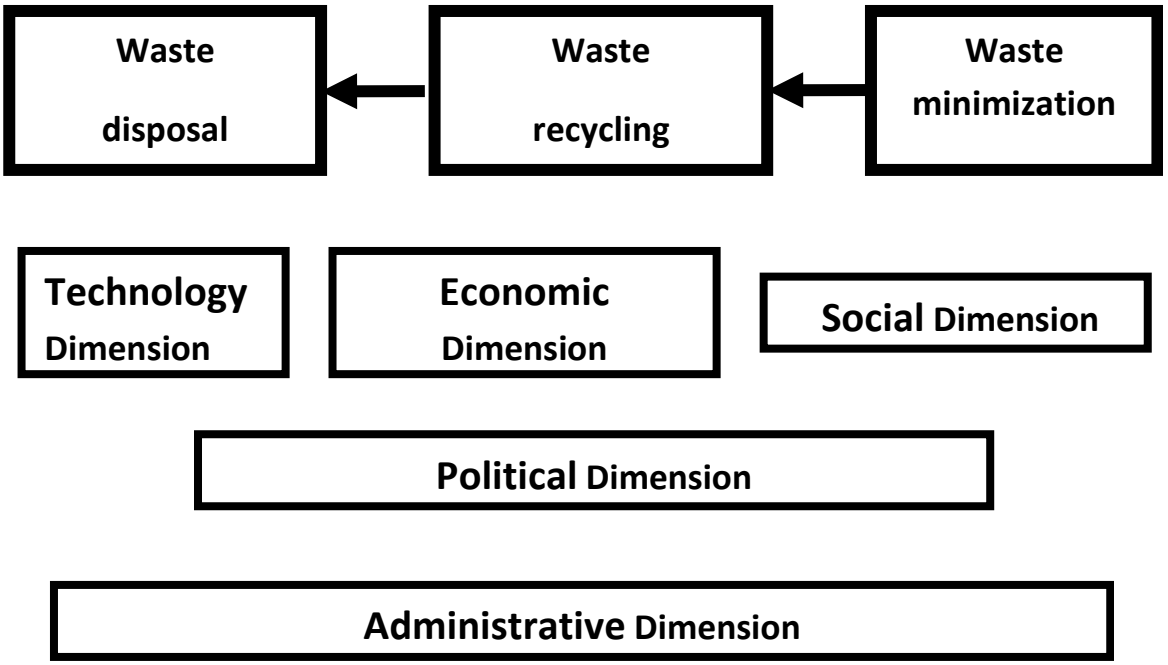

Fig (1) illustrates the social, economic, technological, political and administrative (SWM)

The management of solid waste is not an isolated phenomenon so that it can be easily fragmentation and resolved by technological and engineering creativity, so, it is a complex urban issue related directly and indirectly to number of issues: --

-issue of urban life patterns
- issue of resource consumption patterns
- issue of income levels and business
- social and economic issues
- cultural issues

These issues must be placed together on the plane to be insure long-term solutions to urban waste.

There went a civilized waste management requires that the study is placed in every touch, from (Micro level) the family and residential neighbored to the (Macro - level) the city, state, and nation.

The scientific hypothesis here is that the solid waste management (SWM) must be performed at the city level (City level) .

End – of –Pipe refer to finding solution to a problem at the final stage of its cycle of causes and effects in the case of urban waste . it means focusing on waste disposal rather then waste recycling or waste minimization . Instead of taking a holistic approach to long-term, this approach lacks the comprehensive and gradual solutions to the problem of wastes.

In fact, there are a range of actions required at all levels, family, residential camp, country, and that the procedure to be accomplished can have a nominally social, technological, economic, political, and administrative.

It is necessary, that the decision (action) the right to be taken when performing the right level. In the sense that the action at the household level is essentially social, technological, and economic in nature and the action could be taken at the state or nation level is necessarily economic, political, and administrative in nature. Any action at the levels of residential neighbored and city, contains the five dimensions above(Srinivas, Hari ,2006)

.

3. Matrix of dimensions and levels of decision-making:

The matrix connect between the dimensions of the decision-making (social, technological, economic, political, administrative) and decision-making levels (family, residential neighbored, city, nation) to help classification decisions, procedures and related activities, which are to be carried out.

The Fig (2) shows the matrix that links between the dimensions and levels of decision-making in (SWM).

Nation	*City*	*Neighbored*	*House hold*	*Levels / Dimension*
	*	*	*	*Social*
	*	*	*	*Technology*
*	*	*	*	*Economic*
*	*	*		*Political*
*	*	*		*Administrative*

Fig (2) shows the matrix of solid waste management (SWM matrix)

The above matrix has been field tested in the cities of Nepal ,China, Philippine, and Japan. Experts from these countries, had classify activities and different procedures for solid waste management in their cities within the matrix, which helped to identify the defects, shortages, gaps and points of lack of awareness in the decisions policy, programs and projects (Srinivas, Hari ,2006) .

4. The case study: application of the matrix on some cities in Iraq :

For the purposes of application, three cities (Hilla, Najaf and Karbala) has been selected within the Middle Euphrates region of Iraq to its proximity to the researcher's location and the availability of the security side, where it is through the use of audit fieldwork and the use of experts in the field of jurisdiction.

After studying the issues in these three cities and operations of waste minimization, waste recycling and waste disposal, so as to indicate defect and gaps in the nature of the decisions and actions existing in the solid waste management of these cities at both the dimensions(social, technological, economic, political, and management), or in terms of levels (family, residential neighbored, city, nation) of these decisions and actions.

After analyzing the results, a matrix for solid waste management had developed by percentages which represent rates of defect in every relationship.

For example: a 100% defect amounted to the gap and lack of awareness in the decisions and actions, and the percentage of 0% the absence of any defect in the decisions and actions and the gradual descent in the other disorder (Al-Anbari, Mohammad Ali, 2000).

The figure (3) shows the matrix applied to the case study cities.

Nation	*City*	*Neighbored*	*House hold*	*Levels* / *Dimension*
	65%	*70%*	*93%*	***Social***
	52%	*93%*	*35%*	***Technology***
	88%	*88%*	*85%*	***Economic***
68%	*68%*	*67%*		***Political***
68%	*68%*	*67%*		***Administrative***

Fig (3) shows the matrix of (SWM) case study cities

5. Conclusions

• General conclusions:

a - One benefits of (SWM) matrix is to allow simple and easy to understand the suitability of different standards of social, political and cultural attitudes. The gaps in current programs and initiatives for solid waste management can be set and known. The matrix helps to understand the interrelationships and the link between the various issues.

b - There is a gradual shift from remedial solutions (End - of - Pipe Solution)which focuses on the disposal of waste, to theprecautionary approach, which focuses on the source (Source Based Approach) and whose job is to analyze Life - Cycle Analysis. This places the responsibility not only families but also to manufacturers and businesses.

The more awareness at the level of local communities and business have forced manufacturers to take their turn to more environmentally friendly including the quality management of the waste that produced and using a more holistic assessment of the life (More Holistic Life-Cycle).

c- As a result of the above in a, b, the process of compiling and conducting operations on the rest of the waste is not confined to local government, and call now to a comprehensive partnership between the community and local government each of them a role to play towards the reduction of waste, recycling, and disposal of waste.

d - The (SWM) is a process not an isolated municipality problem solved by the local government, but there is need for more comprehensive measures. Thus, within this approach, the integration of solid waste management activities must be part of a larger process of urban environmental management (Urban Environmental Management).

• **Specific conclusions:**

It may be obvious conclusion of the matrix of decision-making in the management of solid waste of the case study cities as follows:

1. That there is a large defect in the process of reducing solid waste, both at the household level, residential neighbored level, or the city level.

2. That there is a large defect in the process of recycling waste at the household level, residential neighbored level, or the city level.

3. That there is defect in the process of disposal of waste at the household level, residential neighbored level, or the city level.

4. Of the points above are found, the existing trend is still focused on the remedial approach in solving the problem which is waste disposal. Either reduce the waste and recycling is still a curriculum is not used effectively.

5. The precautionary approach, such as the prevention or reduction of waste is still an approach is not implemented in the cities of Iraq / Case study, and needs to find legislation and regulations and procedures necessary to make it a realistic approach through the use of the most comprehensive method to assess the life cycle of solid waste (Holistic Life Cycle Assessment of the Solid Waste).

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Financial Structure and Economic Development in Nigeria

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Abstract: *In this study , the measurement of the Nigerian financial interrelation ratio was considered in line with the structure and development of financial system between 1999 and 2008 with a view to examining the incidences of the financial liberalization . The financial intermediation role for Nigeria on current basic prices was computed to determining the extent of stability and /or positive cum negative changes. This is to ensure the involvement of government as well as the degree of financial institutions' involvement in the economic growth and development of the country. In essence, the results of this study will be of relevance to formulate and execute policy formulation in its entirety. The result of the study revealed a pure neglect in the country with emphasis on financial intermediation. The earlier we put an enhanced financial structure in place, , the better for the economy.*

Keywords: economic development, Nigeria, emerging market

1. Introduction

One major challenge in this regard is the inability to arrive at a convincing platform to quantify efficiently and effectively the Nigerian financial market . It is an hub for financial transaction in the whole of Africa considering the size and population which was put at 150million by the International Labour Organization in 2009. However, the financial system is not well developed unlike what obtains in a place like South Africa. It is on record that only in South Africa and Egypt could one have access to derivatives market operations for hedging in the whole of Africa continent. In fact, the stock market in Nigeria experienced a major shift in paradigm due to the 2005 bank consolidation exercise..

The objective of this study is to assess the financial structure in Nigeria in line with the financial interrelation ratio. The aim is to determine the level of changes over time. In line with global requirements as well as the impact on the level of economic development and growth. There is little empirical evidence concerning the subject matter in literature and this study on the Nigerian financial structure is expected to fill this gap. For the purpose of this work, the method of analysis adopted by Raymond Goldsmith (1969) forms the method of analysis while the scope for this study covered the period between 1988 and 2008.

In the light of the above, the problem of the study is to examine the financial interrelation ratio of Nigeria during the study period and also to actually assess the level of involvement of financial institutions in the nation's quest to achieve economic development.

This is to ensure the involvement of government as well as the degree of financial institutions' activities in the economic focus of the country. In essence, the results of this study will be of relevance to formulate and execute policy formulation . this will go a long way to chart a positive course for the country in an effort to follow required procedural requirements in achieving excellence.. In this light, the viability or otherwise of the nation's financial structure il linkage with FIR becomes imperative. When operational, it is expected to change the face of financing on one hand and improved living conditions on the other hand.

2. Review of Relevant Literature

In the light of this, the level of financial intervention however substantial has not been really felt in the larger economy and this could be attributed to the high level of corruption and mismanagement that permeates through the polity. This made the immediate past civilian administration to set up the Economic and Financial Crime Commission (EFCC) and by extension the current reform in the banking industry which has been hinged on poor corporate governance, inefficient risk management structure and week liquidity position. The bond market in Nigeria is at the lowest ebb while the market capitalization and the AA Share Index has been on the decrease since 2007 aftermath of a major boost. When compared with the economy of an emerging market such as Japan it is evident that while Japan is still referred to as an archetype of a bank-based system, Tokyo is one of the leading financial centers in the world. In 2003, Tokyo was ranked first in market capitalization of newly listed domestic shares. Moreover, the Japanese corporate bond market is small, but the Japanese Government Bond (JGB) market is the largest in the world. At first sight, one can interpret this as evidence of the convergence of the Japanese financial system toward a capital market-based system. But it seems more interesting to see it as evidence of a close connection between banks and capital markets in the financial system.

Beyond the empirical problem, a more fundamental issue challenges the ground of the traditional approach. The latter considers markets and intermediaries as two substitutable and opposite modalities. In essence, one should not ignore the important interactions between markets and intermediaries: the services provided by each may overlap, and it is very likely that there is cross fertilization between markets and intermediaries(Levine,2005).

By nature, the traditional approach cannot cover the whole variety of financial systems. Moreover, this dichotomous vision of financial systems is gradually being replaced by theoretical analyses that underline the complementary quality of financial services. Bodie (1995) and Merton, (2004) argued in favor of a functional approach instead of an institutional one; in this case, banks and capital markets are in opposition, but assume largely identical functions such as financing, portfolio management, risk management, liquidity insurance, portfolio insurance and so on, although in different ways. Moreover, numerous studies challenge the convergence hypothesis by highlighting the role of historical or institutional characteristics such as the legal system, the political context, the cultural and religious legacies, the geographical endowments or the social capital that may shape national financial systems. In any case, these conflicting analyses highlight the need for better empirical measures of financing structure.

In the work of Capelle-Blancard, Couppey-Soubeyran and Soulat (2006) a unique style of measurement was adopted in the computation of financial intermediation ratios. In the breakdown of external financing, direct and indirect financing were not considered. The total financial intermediation ratio was sub-divided into the sum of the credit intermediation ratio and the market intermediation ratio. This finer breakdown allows for the modalities and the changing nature of the financial intermediation to be properly captured.

It was found that the Japanese intermediation ratio remained stable overall between 1979 and 2004 as a result of two opposite trends: a decrease in the share of credits in the domestic non-financial sectors' external financing (i.e. the credit intermediation ratio) and an increase in the share of investments in claims carried out by banks and other financial Intermediaries (i.e. the market intermediation ratio).

3. Method of Data Collection and Analysis

The Financial data were got from both the Central Bank Annual Accounts (various editions) and Statistical Bulletin for 2008. The financial interrelation ratio (FIR) explains the determinants as well as the changes in the national accounts vis-à-vis the involvement of the financial institutions with emphasis on the financial development variables and real variables, coupled with the financial assets , tangible assets et cetera. In essence, FIR is a ratio of measurement in relation to development and real development over time. It is the ratio of the aggregate market value of all financial instruments in the country to the value or ratio of the tangible net wealth. The R. W. Goldsmith Financial Inter-Relations Model was used for the study. This was represented in the following model specification.

$$FIR = a \times b^{-1} \times m \times k \times e \times f \times v$$

Where:

$$a = (p + q + pq)^{-1} + 1$$

a is the average rate of growth @ current basic prices. It can further be broken down into the following;

q stood for real gross national product

p is the rate of changes in general price level

m is the monetization ratio

k is capital formation ratio

e represented new issues

f is the financial transfers
v is the effect of changes in prices
b is the capital output ratio

4. Results

The results and discussions on the above data are presented below and also in the appendix relates with the intent to achieve a reasonable leverage in the quest to move the nation forward. This will enable a level of capability required as scale economies being fallout of financial sectoral intervention. This is expected to bring about the required positive changes. The results showed that successive government had neglected the normal operational flow of the economy. The data collected revealed that from 1988 to 1999, the financial interrelation ratio was in a state of comatose. A fresh breath of live manifested between 1999 and 2000, thus, no meaningful financial changes was expected in the lives of Nigerians. On the other hand, the health of the financial institutions was not even guaranteed. This could have been responsible to a spate of bank failures the nation has experienced. It might also be a key factor to a continuous financial institutions' failure due to a faulty foundation in terns of poor or weak financial intermediation role and structure.

Correlation Coefficient (see Table 6 in the appendix)

Fir components	*p*	*q*	*b-1*	*m*	*k*	*f*	*e*	*v*
Correlation coefficient	*(0.69165)*	*0.019027*	*(0.49325)*	*0.486161*	*0.507058*	*0.848657*	*0.792705*	*(0.28761)*

Source: Central Bank of Nigeria Statistical Bulletin

In a nutshell, the above indicated that FIR is inversely related to price level changes. However, it was not inversely related to the growth rate in terms of the real national product labeled as q. The correlation is near negative. In essence, the capital output ratio is inversely related to the financial interrelations ratio (m) while the FIR is positively related to monetization ratio (m).

Both the capital formation ratio and new issues ratio constitutes a positive relationship to FIR. Thus, there exists a negative correlation between FIR and value adjustment (v) when compared with the position in literature.

The correlation coefficient in this work explained the relationship in terms of the instances earlier explained further strengthens the trend factors. Consequently, the general behavior of the financial inter relation ratio also determines the growth and development concept of the economy.

5. Discussion of Results

Raymond Goldsmith posit that the FIR should be within 1:1.5 in developed economy while it is usually within 0.6 : 1 in developing economies. Thus, the general findings in this work were at variance with the position of

Goldsmith in this regard. The positive index that characterized the banking capitalization programme in 2005 brought about positive impact on the FIR and as such enhances the level of financial development in the economy. From the records, it was crystal clear that the FIR was better the years between 2006 and 2008. This may likely be due to efficient operations as fallout of economic growth and development indicators.

The study highlighted the fact that ratios calculated in the early periods prior to 2002 were somehow below the standard for developing economies. In other vein, the ratios of 2002 to 2004 were in consonant with the position of Raymond Goldsmith in this regard. The predominance of deposit money banks in the Nigerian economy could have accounted for the trend of the ratio during this period of study. In addition, the emergence of other financial institutions such as pensions fund, insurance companies, savings and loan schemes and other relevant ones is of note. This probably brought out a reversal in the ratio of the asset compositions of banking institutions to that of non-bank financial institutions. In this instance, a firm impact is made on the FIR in the following period of time.

The results recorded between 1999 and 2000 implies that the democratic dispensation constitutes a major turn around for the FIR because the previous military regimes lacked the required focus for an enhanced economic flow and economic blueprint which is expected to jump-start the economy. It has been noted in literature that military regimes as an aberration has failed to help the nation advance in all sphere. This also impact significantly the economic growth and development position of the country.

However, the result above vividly showed why Nigeria has been experiencing growth in all economic indices but with no real development economically. It was in 2007 that the country achieved the peak in terms of financial inter-relations ratio (FIR) at 2.24 and this also nosedived significantly in 2008 to 1.99. This showed the attitude of the government in this regard. Thus, the inability to reflect on the economic development of the country and improved living conditions for the citizenry comes to the fore. In essence, we experienced economic growth in all economic indices but failed to convert such to economic development, since this did not reflect in the living conditions of the nationals. The FIR over the period covered did not follow a particular pattern; between 1999 and 2000, there was a slight sign of a positive turnaround or change and this slight change was not sustained because the FIR again dropped in 2003. From 2004 through 2007, it was an encouraging result and trend. After this, the fall crept in from 2008. The unstable position of the financial ratio indicated instability in the polity which became evident.

It could be inferred therefore that the banking sector still predominates in the economy and the negative effect of this control is the lack of circulatory tendencies with other sectors of the economy which invariably impedes growth and development within the framework of the economy. The total assets of the financial institutions were on the increase, deposits and number of other financial institution increase in figures. The population figure is on the increase also. In essence, financial development which is expected to move faster than economic development is being called to questioning such that the increase occurred at a decreasing rate.

In the light of the above, there are certain differences which were noted in the result and thus subjected to a critical discussion. Such factor as differential level of per capital income in which the minimum wage is less than one US dollar per day or in some instance per month is not good enough for the citizenry. In the light of this, our over reliance on external financing which turns such a nation to beggar nation and subject such to the whims and caprices of the lender. It is both insulting and a clog in the wheel of progress of a nation's financial and economic development.

In Nigeria of today, we import practically every item produced anywhere globally with our hard earned money and in this regard, the country has been be experiencing unfavorable balance of payment position in all its ramifications. The government's insincerity particularly in the areas of money and capital market development is not helping matters and as such the level of sound monitoring and control is absolutely nonexistent. The high cost of doing business in Nigeria has made all profitable firms in the country to relocate to other more friendly economy and this will create a negative effect on our earnings and product in the long run since in such a situation, the growth being experienced now will definitely be wiped -off if care is not taken.

6. Conclusion

This work has been able to provide a vivid illustration of the financial structure of Nigeria as an emerging market with the aim of bringing out the salient requirements relevant for this study . Thus, the ability to give a link to a forward movement as a nation becomes imperative. The ratio according to Raymond Goldsmith in to be in the range of 1 to 1.5 for developed and mixed economies and between 0.6 and 1.0 for developing economies like Nigeria. However, the FIR in Nigeria does not really follow a definite pattern and this could be attributed to the high level of imperfections in the financial system as earlier noted under discussion of findings.

7. Recommendations

1. A very sound and reliable supervisory framework that is trackable (i.e. capable of being improved upon) should be on ground at all times.

2. Creation and sustenance of an awareness process particularly in the money and capital markets as well as among all stakeholders in the form of early warning signals coupled with an efficient failure resolution system is imperative.

3. Build and operate a strong credit culture which is Information Technology based to reflect the global trends and best practices.

4. An efficient banking system thrives under a stable polity and this involves a virile and stable economy. This is not negotiable and must be sustained in Nigeria with selfishness syndrome being a thing of the past..

5. Transparency fairness and accountability in all facets of the economy must be held in high esteem by both the government, the governed and all other stakeholders.

6. All relevant business information must be released to the public at will so as to discourage situations of undue advantage over others due to the sensitive nature of the banking industry and the stock market as a pivot and barometer to the Nigerian economy.

7. A very strong and operative legal framework devoid of manipulation must be put in place, enforced and sustained with no sacred cow.

8. All these will enable the positive indices to be turned to positive and an enhanced standard of living for the Nigerian people.

9. The genuine enforcement of the prudential guidelines by the regulators should be paramount. This will enable all flaws to be checkmated. It will therefore help the economy to advance positively for the benefit of all.

Appendix

Table 1: Financial Inter-relation Ratio Components

1999	*01*	*3.02*	*.001*	*.001*	*1.2*	*.001*	*3.2*	*0.00*
2000	*0.83*	*0.012*	*.72*	*.024*	*.57*	*.15*	*.104*	*0.1*
2001	*0.58*	*.01*	*.18*	*.12*	*.49*	*0.1*	*.22*	*0.24*
2002	*0.94*	*.05*	*.64*	*.13*	*.47*	*.21*	*.5*	*0.6*
2003	*0.74*	*.04*	*.44*	*.12*	*.38*	*.77*	*.11*	*0.22*
2004	*6.8*	*.96*	*.06*	*.12*	*.49*	*.67*	*.2*	*0.9*
2005	*0.45*	*.97*	*.81*	*.2*	*.76*	*0.6*	*.24*	*1.3*
2006	*0.6*	*.97*	*.81*	*.81*	*.75*	*1.5*	*.12*	*2.22*
2007	*0.44*	*.97*	*.06*	*.09*	*.08*	*.23*	*.051*	*2.24*
2008	*0.45*	*.03*	*.49*	*.11*	*.77*	*.69*	*.176*	*1.99*

Source: Central Bank of Nigeria

Table 2: Financial Indicators

Year	*p%*	*q%*	*NNP*	*GNP*	*TGCE*	*New Issues*	*Fin Inst. Instr.*	*Non Fin Instr.*	*Cap. Form.*	*Equities*	*Total Fin Instr.*
1990	*13.3*	*4.4*	*220.3*	*269.4*	*219.5*	*301.8*	*1.2.9*	*224.3*	*291.1*	*17.2*	*322.1*
2000	*14.53*	*5.4*	*319.26*	*323.25*	*239.5*	*35.5*	*170.93*	*301.37*	*331.06*	*28.15*	*472.3*
2001	*16.49*	*4.6*	*327.79*	*330.88*	*438.7*	*38.0*	*218.66*	*443.84*	*372.14*	*57.65*	*662.5*
2002	*21.14*	*3.48*	*421.72*	*444.13*	*321.4*	*68.6*	*245.27*	*519.63*	*499.58*	*59.40*	*764.9*
2003	*23.84*	*10.24*	*471.73*	*489.88*	*241.7*	*185.0*	*374.06*	*985.24*	*549.54*	*113.88*	*1,359.3*
2004	*10.01*	*6.58*	*541.39*	*521.90*	*351.3*	*235.5*	*691.98*	*1,420.52*	*609.99*	*223.77*	*2,112.5*
2005	*15.00*	*6.51*	*552.31*	*536.66*	*519.5*	*295.8*	*1,250.17*	*1,649.33*	*640.49*	*254.68*	*2,900.1*
2006	*8.57*	*6.03*	*596.79*	*578.53*	*552.4*	*833.94*	*2,198.15*	*2,922.85*	*678.92*	*468.56*	*5,121.0*
2007	*6.56*	*6.45*	*675.87*	*654.57*	*759.3*	*1,700.0*	*6,909.13*	*6,391.47*	*719.65*	*1,074.88*	*13,294.6*
2008	*15.10*	*6.41*	*656.36*	*679.30*	*1,123.5*	*779.8*	*4,133.72*	*5,382.48*	*755.63*	*1,675.61*	*9,516.2*

Table 4: Variance Chart of FIR Components

year	a	b-1	m	k	f	e	v	FIR
1999	+	-	-	-	-	-	-	-
2000	-	-	+	+	-	-	+	+
2001	-	+		+	-	+	+	+
2002	-	-	-	-	-	+	-	-
2003	+	+	+	-	-	-	+	+
2004	-	+	+		+	-	+	+
2005	+	-	+	+	+	+	-	+
2006	+		+	-	+	+	-	+
2007	-	+	-	+	-	-	+	-
2008	-	+	+	-	-	-	-	+

Table 6: Correlation Coefficients of FIR Components

FIR Components	p	q	b-1	m	k	f	e	v
Correlation Coefficient	(0.69165)	0.019027	(0.49325)	0.486161	0.507058	0.848657	0.792705	(0.28761)

ILLUSTRATION A - KEY:

FIR = a x b^{-1} x m x k x e x f x v

Where:

a= $(p + q + pq)^{-1} + 1$

a is the average rate of growth @ current basic prices. It can further be broken down into the following;

q stood for real gross national product

p is the rate of changes in general price level

m is the monetization ratio

k is capital formation ratio

e represented new issues

f is the financial transfers

v is the effect of changes in prices

b is the capital output ratio

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Methodology development for implementation of quality management system within SME from the products' lifecycle point of view

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Abstract: *This paper is focused on the latest development of ISO 9000 family quality standards, Quality Management Systems (QMS) and how these relate with each phase of product lifecycle, within initial number of 50 small and medium-sized enterprises (SMEs) from Czech Republic. This paper also aims to analyze the problems encountered by quality managers when implementing QMS, in particular the ISO 9000 series standards, and tries to find answers to these problems, all in connection with the final product and its lifecycle. The product lifecycle is analyzed from three points of view, which the author considers are the most important for quality managers, i.e. serviceability, IT/IS and total costs.*

The final purpose and objective of the research is to develop a methodology, based on the results from the empirical study, which can form a base for future ISO 9000 standards improvement and thus when applied will help the quality managers, by reducing the delays of implementation and thus increasing the quality of the product, in a faster and more productive way, in order to fulfill the continuously changing requirements of the customers and of the market.

Keywords: ISO, methodology, QMS, SME, lifecycle.

1. Introduction

Through this paper, the author wants to show the connections between the QMS of the company and the product lifecycle and how managing each phase of the product lifecycle can influence the customer quality requirements for the final product. Taking in consideration that ISO 9000 and ISO 9001 certifications are widely spread quality models and that SME are an important part of the manufacturing industry, the research focuses on the relation between SME, ISO 9000 family standards and product lifecycle from three points of view: IS/IT, serviceability and costs.

SME all over the world have very heterogeneous characteristics in sector, geographical area, internal structure, where they do business as well as the experience of the workers and management training differ from one industry to another. Thus SME from the manufacturing industry were considered in this study, which is one of the most dynamic and continuously changing industries due to the technological advance but also due to the economic crisis which influenced managers to cut costs and invest in technology and quality, in order to keep their initial market share, if not to expand to other markets. In the manufacturing industry, quality is needed by SME and plays an important role because SME supply big companies with processed material, semi-finished products or even finished products which will be part of another final product (e.g. battery for the car).

Quality in today's economy is part of the firms' long term strategy and means compliance with standards, but the standards are continuously changing (improving) according to the market requirements and thus the level of quality is continuously increasing.

The Management of Product Lifecycle is aimed in driving all the particular areas, which have a direct influence on some of the lifecycle stages such as maintenance, quality, information systems, costs, R&D, production management, etc. Among the lifecycle management, there are a number of methods and techniques with different approaches regarding the necessary data input and as well as the results we get from them. The common element is the valuable information supporting the management, which helps us make the right decision and choose the optimal way of solving the economic problem, i.e. in our case the managing of the product lifecycle to correspond among others to the required quality level.

The paper is structured in two parts. The first one shows a literature review with focus on the pros and cons why a company should implement ISO 9000 series standards from the product lifecycle point of view. The second part focuses on the research which is still underway, i.e. a questionnaire was made and structured interviews were taken to key people within SME from Czech Republic where lifecycle is analyzed from three individual points of view: costs, serviceability and IS/IT and a forth, overall point of view: quality in each phase of the product lifecycle. Some starting questions which also represented the reference guide for data collection and the development of the structured interviews were:

- What do SMEs understand by "qualitative product/service"? What is their approach to quality?
- Which factors affect the quality within each phase of product lifecycle?
- Which implications can have a QMS in SME regarding the lifecycle of the product?

In the end a methodology is proposed from the abovementioned points of view with the main purpose of assuring the "right" level of quality for the final consumer.

Until now were created many tools, methods and techniques for managing the lifecycle or the quality of the product, but these tools are limited to the evaluation of certain selected specific tasks. The models have a number of assumptions and initial conditions, in order to allow universal applicability for a wide range of users. The aim of the research activities is to explore the degree of the usage of these methods and to develop comprehensive tools for design, analysis, evaluation and management of engineering products in terms of their lifecycle and quality level, as well as to eliminate the discrepancies between theory and practice for lifecycle management, with a direct focus on the level of quality required by the customer.

There are however no scientific papers which refer to the development of a methodology for implementing QMS, in direct connection to product lifecycle and the level of required quality and how one can manage the level of the quality from managing each steps of the lifecycle, from the above mentioned three points of view: serviceability, IS/IT and costs.

2. Literature review

Every day we hear the word "quality" in different areas or media. But what does "quality" mean? There are a lot of research papers from different authors where they present numerous success stories from companies which established and implemented quality programs. In their studies, authors like Garvin supported even more the early models of quality developed by the gurus of quality (Deming, Ishikawa, Juran, Shewhart, Taguchi, Feigenbaum and Crosby) by identifying five major approaches to defining the ideal meaning of quality (transcendent, product-based, user-based, manufacturing based and value-based) that however generate differences in attitude and perspective among managers, departments and even customers [1]. These models however were inconclusive and failed because of the wrong definition of the term of "quality".

In today's market "quality" is equal to the phrase "compliance with norms and standards". In this manner the ISO standards were created and more and more companies are investing money and time in getting the ISO certification as well as in finding ways of improving the productivity and efficiency of their production systems using Lean and/or Sig Sigma methods.

The definition of "quality", "quality control" and "quality management" are from the ISO 9000 family standards as follows:

• Quality is the totality of characteristics of an entity that bear on its ability to satisfy stated and implied needs.

• Quality Control is the operational techniques and activities that are used to fulfill requirements for quality.

• Quality Management is the sum of all activities of the overall management function that determines the quality policy, objectives and responsibilities, and their implementation by means such as quality planning, quality control, quality assurance and quality improvement within the quality system.

Quality has also been part of the companies' long term strategy and plays an important role in the level of competitiveness on the market [2].

Among the benefits the companies can achieve as a result of ISO 9000 certification we can mention: improved documentation ([3]-[5]), quality improvement ([3], [6]-[9]), productivity improvement as well as cost and waste reduction ([3],[4]), employee motivation ([9]-[12]), etc. But some authors mention also the problems encountered through the certification process. These can include: cost and time-consuming (which can discourage particularly small companies), an increase in paperwork, an improper documentation system and poor communication among personnel ([13-17]). IT/IS solutions like: Soft computing and Internet technology were researched to solve these kinds of problems ([18], [19]).

Regarding the product lifecycle there are several research papers and books, which propose methods and tools for lifecycle management. From these we can mention the design cost, LCA - Life Cycle Assessment, LCE - Life Cycle Engineering, LCC - Life Cycle Costing, WLCC - Whole Life Cycle Costs, PDM - Product Data Management, etc ([20]-[22]).

At the time of this research there were an approximate number of 23 papers taking into consideration quality and lifecycle but not even one considering direct connection with SME from the above mentioned points of view.

Some authors consider that in tomorrow's market the product lifecycle will face some significant changes as follows:

- In order to satisfy the ever-increasing demands in product variety, quality and delivery time, both the product/process development time and launch time must be shorten significantly [23]. And this will be due to the market pressure on shortening product and process realization cycle time with a focus on the ever changing quality requirements of the customers and taking in consideration the Research and Development phase of the product, which will have to be more flexible and adaptive to the new conditions.
- Design and quality of the product should be right from the first time and the number of "improved versions" of the old product should be cut to zero. In this way Lean Six Sigma manufacturing will be possible at another level due to the total elimination of waste (rework, repair, scraps, delay in starting production, low production yield, etc.).
- Reduction of launch time for new product. Accelerating the ramp up of a manufacturing line involves rapid identification of root causes of manufacturing errors. New production launch time is crucial for the new lifecycle product management. Major efforts during launching of the new product on the market are focused on identifying root causes of the process faults. However, current industrial practice in launch time reduction is far less than satisfactory [22].
- Quality of the products should be according to the requirements and new products will be appearing on the market when a new level of quality will be requested. Thus quality and innovation will be interconnected and companies in order to innovate they should be able to increase the level of their products or services to a higher level of quality.
- The recycle phase together with the Research and Development phase will have to be as short as possible. During recycling the old product is taken out of the market and its materials are further used for a new product, but due to the environmental

problems and the fact that resources are limited, the recycling phase should be shorten to minimum, to make possible the new product to be manufactured.

Already exist a number of new manufacturing strategies in the area of product and production system development, such as, flexible manufacturing systems (FMS) [24], reconfigurable manufacturing systems (RMS) ([25],[26]), agile manufacturing (AM) [27] and quick response manufacturing (QRM) [28], which are increasingly being proposed, developed, adopted in manufacturing industry in the last decade. However, due to lack of confidence in manufacturing a quality product (here new ISO 9000 standards come in place to answer the question regarding the required level of quality by the customers!) and system performance (launch time, expected yield, and relatively long time necessary to reach it) throughout the whole product lifecycle, there was, before the worldwide spread of ISO 9000 standards, a big resistance to implement advanced technology or innovations in new product development [29].

3. Methods of research

During this research study, a number of initial 50 small and mid-size manufacturing companies were identified in Czech Republic and according to the time and availability of each target person who could have given relevant answers; accordingly a questionnaire or a structured interview was taken. A method of feedback between the interviewer and interviewee was used in order to get more relevant results and to reduce the potential subjectivity of the study related to the researcher's bias. Thus a preliminary report was written and sent by e-mail to the interviewees in order to verify whether the conclusions of the research were in line with the interviewees' comments. Also due to the great amount of manufacturing companies, it was difficult to find the right number of companies which to correspond to the initial conditions, i.e. to be a manufacturing company where serviceability and maintenance of their products is an important part of their business in order to be able to fill in the third part of the questionnaire.

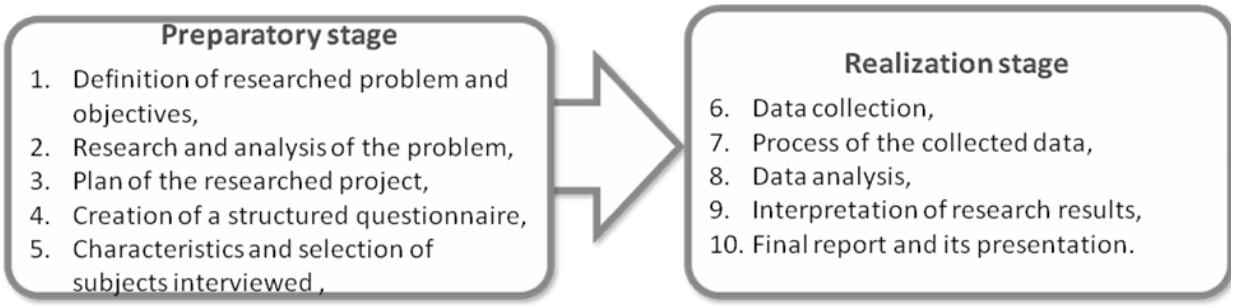
In order to define SMEs, I took as reference the definition of the European Commission, which defines micro, small and medium-sized firms as employing less than 10, less than 50 and less than 250 staff or by having turnover of not more than 2, 10 and 50 million Euros, i.e. 50, 250 and 750 million Czech Crowns (1 Euro = 25 CZK).

The survey was carried out in two phases. The first phase contained the research of domestic and foreign literature, journal articles and other information sources thematically focused on life cycle management, life cycle costs, maintenance, failure and use of information systems in the life cycle management. Based on this previous research, a structured questionnaire was created which is the main result of the first phase of our research. The second phase consisted of conducting a survey aimed in assessing the relative importance of these areas in the application of selected approaches and their relation to quality assurance and control and methods to support product lifecycle and quality management in practice. The questionnaire was made in combination with a structured interview to the responsible employees of selected industrial enterprises. The relevant data obtained by this questionnaire

are further statistically worked and according to the answers received a chart will be made from which one could easily read the usage of the present tools and methods used in the management of the product lifecycle. This research is also part of the doctoral dissertation papers of the PhD. students from the Department of Management and Economics within Faculty of Mechanical Engineering, Czech Technical University in Prague.

All the process of this unique research made at the Department of Management and Economics within Faculty of Mechanical Engineering, Czech Technical University in Prague can be structured in the following steps:

1. Definition of researched problem and objectives
2. Research and analysis of the problem
3. Plan of the researched project
4. Creation of a structured questionnaire
5. Characteristics and selection of subjects interviewed
6. Data collection
7. Process of the collected data
8. Data analysis
9. Interpretation of research results
10. Final report and its presentation.



Picture 1 – The process of research of lifecycle product management

In present the research is in the phase of data processing and interpretation.

In order to obtain information from interviewed subjects a structured questionnaire was established. This served both to collect data directly from respondents of the survey and also as a support for conducting the interview. Two methods of data collection were used:

- Questionnaire
- Structured interview

According to a survey from International Standardization Organization, Czech Republic was placed on the 7th place in the Top 10 countries worldwide with ISO 9000 growth in 2010 with a number of 2211 companies. In our survey all the companies were ISO 9000 certified and the questions were aimed in trying to find a direct correlation between the ISO requirements and product lifecycle management in order to develop a better methodology for future versions of this norm.

The data collection stated in February 2011 and is still undergoing until December 2012 when the target number of companies

is assumed to be reached. According to the initial data a methodology is proposed which will be further perfected in the future when new data is received from SME targeted people.

4. Proposed development of the methodology

The original edition of the ISO 9000 standards consisted of five documents: ISO 9000, ISO 9001, ISO 9002, ISO 9003 and ISO 9004 and from all these ISO 9000 had the instructions on how to use the rest of the documents while ISO 9004 contained guidelines on how to establish a quality management system according to the requirements from the other ISO 9001, 9002 and 9003. From 1987, when these standards were created, they have been in a continuous change and now counting all the latest versions we have the new standards ISO 9000:2005, ISO 9001:2008 and ISO 9004:2009. Although ISO 9000 is only one of the documents in the set of standards, the entire set is often referred to as "ISO 9000 (family) standards".

The standards acknowledge eight principles of quality management that can help the top management to lean an organization toward improved performance:

- Customer Focus
- Leadership
- Involvement of People
- Process Approach
- System Approach to Management
- Continual Improvement
- Factual Approach to Decision Making
- Mutually Beneficial Supplier Relationship

For future, improved versions of the standards I would add also:

- Lifecycle Approach, where according to each phase and the length of each phase the standards should be flexible in order to correspond to the products' required properties.
- Employee's Motivation Approach – due to shortening of the Research & Design, Production as well as Recycle phase, the product should be good "the first time" and the employees should be directly responsible for the quality of their work. In this manner I can suggest a more motivational approach from the management and from HR department, in order to employ the right people, the ones who are fond of their future work, because in this way they will achieve the required level of quality from their hearts and not because they are told so.

The proposed methodology is aimed not to disagree with ISO 9000 methodology but to support it and wants to prevent the possible problems with which quality managers will meet, by predicting the product quality requirements in the next decade. This methodology is proposed from three points of view regarding product lifecycle: serviceability, IT/IS and costs, which I consider are the most important areas of lifecycle management which can directly influence the quality of the final product.

According to the three points of view and to the results from the survey, where we focused on 50 SME manufacturing companies from Czech Republic, some baselines and prevention steps are drawn in the following sections.

4.1 Serviceability

This part of the questionnaire is focused on the maintenance and management of manufacturing and logistics of the firm. The

questions relate primarily to the management and maintenance planning and monitoring and evaluation costs associated with maintenance.

From the quality point of view, this is an important part of the product lifecycle because is concerning the part of the process which can be reduced if the products are qualitative enough. In other words if the product is "right the first time" the service will not be required, because it would not break so often, or even not at all. The cost associated with the maintenance will be cut off and the money could be used by the Research and Development department to innovate the product. In order to reduce or even eliminate the maintenance of the products, SME should:

- Manage the serviceability of their products by implementing maintenance in the long term strategy of the company. Maintenance should be part of the strategy of the enterprise, especially for SME, where quality should be 100% (or at least to meet the Six Sigma conditions and to allow a maximum of 3.4 defects per million opportunities!).
- Strategic maintenance can drive faster the innovation of the products, customers will be willing to pay for innovated, better, with a higher degree of free offered maintenance even faster and due to the technological innovation the manufacturing costs will be lower and companies will be forced to innovate faster the product.
- Through maintenance SME should learn from the defects which their products have in time and a feedback should be established between maintenance and R&D. Here a decisive role plays the human factor (from workers to top management), but if the strategic maintenance is fully integrated in the informational system, other departments can learn from the appeared defects and thus improve their processes, improve and innovate the product.

4.2 Information System/ Information Technology used in the company

This part of the questionnaire was about software support of product life cycle management (PLM) processes. Product lifecycle, or its management, respectively, includes many areas of enterprise management. Level of utilization of product life cycle management software support tools is closely related to company's overall IS/IT level in general. To take this into account, the questionnaire deals with aspects expressing the company's overall IS/IT level. These aspects include for example unified IS/IT strategy, centralized IS/IT management and purchase, etc.

The following part of the questionnaire was subsequently directly related to some selected tools for PLM software support - these tools include for example Knowledge Management tools, CAD/CAM, tools for maintenance planning (CMMS) and some others. Besides discovering which tools are in use, within the company, this part also emphasizes finding out main benefits and drawbacks of the abovementioned software tools with focus on a perspective of developing a portfolio of software tools related to PLM.

In the 21st century, markets when companies sell and buy using virtual shops (e-shop), the quality of their products or services must be managed through Information System using different software tools. The requirements for the IS in the future will be higher in order to: receive/buy/sell faster,

easier and worldwide. Everyone should have access to data within their work specifications and quality data will be a must in the short term strategy of SME.

First we should decide what "quality data" really means and only then we will be able to improve the IS within our enterprise. Some of the attributes of data quality should contain the answers to the following questions:

- Validity and integrity: are the data correct?
- Accessibility: are the data readily available to the right people?
- Timeliness and location: is the data available when needed and in the right department?
- Accurate content: is the data accurate and was the system accordingly updated?
- Temporal reliability: does the meaning or intent of the data collected remain consistent over time?
- Completeness: do the data contain all relevant information?
- Precision: how well do the data reflect the full details of the product lifecycle and the company's processes?
- Credibility: how credible and reliable is our Information System? Can top management rely on the information there regarding the costs of the material or maybe a worker from the Supply Department forgot to enter in the system some material or entered wrong data?

4.3 Costs of the company

This section of the questionnaire was aimed at the costs of products throughout their whole life cycle. This is an unconventional approach to costs where the costs of products are perceived as a complex of producer and consumer costs including the costs connected with the end of product life-cycle (recycle). The questionnaire wanted to verify to what extent the SME assesses and evaluates the Product Life Cycle Cost and how it uses these costs in Product Portfolio Management.

From the quality point of view, costs play an important role also because quality can be quantified according to the company in total costs for quality. They are divided in: costs for prevention (of defects), costs for quality control and quality testing and costs for inadequate work. We got the following percentage for these quality costs (approx.): 9-15%, 37-43% and 42-54%.

The following prevention steps should be implemented:

- The costs for inadequate work (rework) drop very fast if the prevention is improved. This can be done either by employing the right personnel or by investing in an Information System which eliminates the defect right after the process was finished and doesn't allow the semi-finished product to pass to the other production stage. The second option requires a big initial investment in such a system and there is little possibility for SME to do it. However the first one can be put in place if the Employee Motivational Approach is put to work.
- If the costs with prevention are very low (less than 5%) then the costs with rework will be over 60%, so a prevention system should be implemented in SME. A solution besides other already methods or tools which exist (Root-cause analysis, Lean, etc) is given by the eight principles for QMS, by implicating the top management and the process and lifecycle approach where if the organization

and its activities are analyzed as processes, it helps in gaining a good understanding of the individual processes and their interdependencies. This improves the chances of discovering possible defects within the lifecycle processes, which were missed by the quality control, and making them both effective and efficient.

• The costs for quality should be better managed by the quality department in order to be able to improve the actual state of products' quality and to be able to better manage the phases in their lifecycle, especially the Research and Development as well as Recycle part. For e.g. if the level of quality is met, when innovating the product we could be able to reuse some parts of old product, without being recycled (because they already are quality enough to be directly implemented in the new product).

5. Conclusions and implications

The main outcomes of this study show that there is a direct connection between the serviceability, IS and total costs and the quality system used in the SME but other aspects should be researched regarding the connection of the other phases of product lifecycle. In this study internal factors and external factors which could have affected the results of the questionnaire and interviews were not taken in consideration (the great amount of time and resources put in creating the questionnaire, lack of support from different people within the same company, fear to loose their jobs and willing to answer "the right way", the differences between SME regarding the technology used and level of knowledge and skills who influenced the results in a good or bad way, etc.).

To sum up I can say that quality will always be an important characteristic of the products or services the SME will offer and the standards will be in a continuous improvement process according to the ever changing conditions and requirements of the customers. In this way, this paper tried to develop a methodology for implementation QMS, on an empirical case study of 50 Czech companies, but due to the small number of SME in comparison with worldwide SME, where geographic, cultural and economic aspects can influence the results, future research should take place.

The methodology is in a continuous improvement and perfection according to the results received from the SME from Czech Republic and it will be used by the participants in the improvement of their QMS.

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Human capital investment

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Abstract: *Once with the development of the human capital theory, the education received an economic value. Leading theorists and specialists in the field have shown that the remarkable economic effects of the investments in education influence the chances of acquiring a job and earnings, demonstrating how the theory justifies such an investment. At the hand, the allocation of resources in human capital brings performance and benefits to companies investing in their employees. Also, the investment in human capital is strategic for any country that seeks to create a knowledge economy. Considering the above arguments, the aim of this paper is to highlight the characteristics of investment in human capital, the types of investment, the factors of education investment and the entities interested in investing and their benefits.*

Key words: human capital, education, health, development, investment

Introduction

Human capital consists of those skills which are characteristic of individuals and remain the same in their entire social environment. Human capital can be sold on market labor in exchange for economic resources of any kind. Basically, human capital arrives at 9am and leaves at 5pm. On the other hand, the investment in human capital represents the investing in education or some form of on-the job training to improve workforce quality which provides returns to the individual as well as to the economy as a whole. Individuals benefit from higher earnings,

and the economy as a whole benefits from higher productivity. Thus, the importance of investment in human capital was proven by nations who are concerned about growth and development (e.g. Japan). At European Union level are obvious concerns noted for human capital, especially after the 80's when the European Union Member States have proposed to obtain a high level of employment, productivity and social cohesion. Actually, the EUROPA 2020 strategy has the following objectives: smart growth based on developing a knowledge-based economy, sustainable growth; inclusive growth which is based on an economy with high labor employment, ensuring social and territorial cohesion.

Literature review

The concept of human capital is attributed to Theodore Schultz, theoretical developments around this concept dates from the 60s and are related connected to the author contributions above mentioned to which it is added the contribution of Gary Becker and Jacob Mincer. Theodore Schultz has seen education and health expenditures as investments into increase labor productivity and thus economic growth. Gary Becker theory shows that "The individual income increases substantially depending on the level of education" (Becker, 1997). Nowadays, the theory of Economy considers Human capital being a major factor in generating future growth and prosperity. Naisbitt affirms that in transition from industrialized economy based on high-tech economy, skilled labor is required for high technology. Therefore, the issue of investment in human capital today is a concern for all countries competing for progress and prosperity, but more so, for the countries in transition to market economy. Given the general trend of increasing demand for more educated labor in all industries and highly qualified staff, the investment in human capital is strategic for any country that seeks to create a knowledge economy. Thus, growth can be seen in contemporary societies, besides the existence of other traditional factors, as being directly conditioned by the public education. At the macroeconomic level, in recent decades, no country has achieved a sustained period of development without having invested substantial amounts in the labor force and the quantitative evaluation of its contribution to economic growth and development, the most important role was assigned to the investment in human capital (Becker).

Investment in human capital

The human capital and the investment in human capital - particularly the investment in education - determine the ability of individuals to earn as well as his perspectives of employment. Since most of the knowledge and skills are acquired in school, through the educational process, education has been recognized as the decisive part in the accumulation and development of the human capital and therefore in the economic development of a country. Another component of human capital is the status of health. The health of the population is an essential resource for individual development, produces a strong impact both on the quality of labor resources and human welfare and on the efficiency of economic and social activities. In summary, we can say that human capital owned by a person is organized as follows:

- Knowledge

• Skills
• Health status

The theory of Economy in general and especially human capital theory states that human capital consists of: educational capital (skills acquired by individuals in school, on the training and off site) and biological capital (individuals' physical skills synthesized most often by health).

The educational capital is acquired through formal education, training and off site. In Romania, formal education is structured into:

• Preschool Education,
• Compulsory general education,
• Upper secondary education,
• Schools of arts and crafts,
• Post-secondary education,
• Higher education (Bachelor Degree Studies -3 years; Master Studies - 2 years; Doctoral studies – 3 years).

The types of training consist of:

• Specific training - can be used only at the present job. Specific training has the greatest impact by raising the productivity of the employee within the firm providing the training.

• General training - can be used in other organizations also. General training, which can be used by all companies, is still beneficial, but it tends to have less impact on company performance, although it may have important benefits for the individual and for society at large.

The person is not a simple final consumer, but a true manufacturer, which by education and training invests in human capital. The human capital theory demonstrates that the income of the individuals increase substantially depending on the degree of their education. E.g. "studies show that a young 18 years old person who ends the faculty will win until age of 65 around 3 600 000$ (price levels and revenues 1993, USA). A member of the same generation who graduates only the high school will win around 2 400 000 $. Who fails to finish even a high school will win in average only 1 700 000 $" (G. Becker).

Health capital stock comes from hereditary initial stock and acquired Health capital stock.

Likewise, the gross investment in health capital involves the acquisition and maintenance costs. Stock depreciates over time and the depreciation rate is increasing rapidly towards the end of life when human health is degraded more than in youth. The health care of workers develops human capital through better physical and mental human capacities and influences the productivity by reducing time lost because of illnesses. In terms of the health system in Romania, it is characterized by 3.6% of GDP which is allocated to health, below the European average of 8.6%. The life expectancy of women n Romania is 75 years and Romanian male life expectancy is among the shortest in Europe, 68.2 years. The reason why life expectancy is lower for men is related to areas of their professional activity. The data above shows that the health situation is quite difficult and the situation could worsen, especially for beneficiaries because it is in discussion a system of co-payment for medical services (from 6-12Euro/ person for a medical consultation).

The characteristic of investment in human capital can be summarizing as follow:

- The effect will appear with a large gap in time, duration of payback is high;
- Investments in human resources, on the long term, are most effective;
- Human capital is an intangible asset

as it is not owned by the firm that employs it.

- It enhances the ability of agents to adapt to change and to respond to new opportunities.

The Economists Paul Samuelson and William Nordhaus (Samuelson and Nordhaus, 2001) highlight the differences between the salaries of professional categories. Therefore, these differences are due to:

- The work seen as compensation differentiators. Labor is different in terms of its attractiveness, therefore it should be paid more to attract those people to work. Jobs requiring great physical effort, fatigue and low social prestige, with periods of inactivity, or seasonal work involving risks tend to be less attractive.

- Differences between people: quality of work. One of the main determinants of the salaries gap is between the qualitative differences between people, differences that can result from psychic or physical capacities, education acquired in the family and at school, training and experience.

Also, the Nobel Laureates in Economics - Schultz and Becker explain that the existence of higher salaries to graduates of higher education, bringing the example of doctors, lawyers, engineers, as they invest money in training and their professional development, and the money they receive as income should be considered as the return of investment made in the accumulation of human capital - education revenue is derived from making them a high-ranking workers. Categories with a high degree of training begin their careers with higher salaries; revenue is growing faster than the income of the categories with a lower degree of preparedness. But it should be noted that, in general, at the beginning of participation in the workforce the income is increasing with advancing age until they reach a common peak within 45-54 years and decline in the last age group. Since work occupation is amended along with age, most able to work down the hierarchy at a time. The earnings for different work occupations could indicate reaching a peak earlier for unskilled workers, mainly because unskilled older are less able than younger people. Higher education capital implies a higher value of the workforce due to increased productivity, implying a higher payment if it is sold (salary reflects, in general, the marginal productivity of labor, which increases with education level, as illustrated by the human capital). Human capital theory implies that salary differences reflect different productivity of employees. Experienced employees have higher productivity and receive a higher salary. The salary of a specialist includes a reward for hard work and reward for the work invested in education spending.

Briefly, we can mention that the beginning and ending of investment in human capital can be summarizing in:

- The investment in human capital begins when parents decide to make a baby and it ends with the withdrawal from the labor market (approximately 65-70 years).

- The return of investment (ROI) is made after the person becomes active in the labor market and start earning a salary.

- The salary of a specialist includes reward for his work and a reward for the investment in education.

- Eg.For a person who graduated at 22 years, earnings are lower in early career and bigger around the age of 45 years.

Over the life of the owner of human capital, the investments in human capital can be made by the:

Figure 1. Who makes the investment in human capital?

Individual investment. The cost of higher education is the income that person would have won if he would entered in the labor market immediately after compulsory education, plus any other costs, such as fees, equipment, without grants and other allowances to students. The profit is the difference between the income which that person would have been won if he/she had left school and income that it will result as a result of graduating the higher education.

Family investment. The children's abilities and their skills would determine the effectiveness of these investments. On the budget level, there are some constraints derived from the total revenue available and also from the total number of children, which results in a decrease in resources and therefore the resources available for each child.

Families with fewer children invest more in human capital development of their children.

Enterprise decision of investment. The company is interested in increasing the quality of work, acting for it in the following areas:

a) Increase the general level of education and training of human resources;

b) Ensuring a high level of health;

c) Promote an effective system to motivate employees.

The Human capital investments involve an initial cost tuition and training course fees, forgone earnings while at school and reduced wages and productivity during the training period) which the individual or firm hopes to gain a return in the future. In other words, only employees possessing value and uniqueness are qualified as human capital. The qualities of employees with core skills are the fountain source for a company to raise competence and profits. The studies provide evidence that training generates substantial gains for employers. Innovation and IT not only cause firms to invest more in trainings but are also highly dependent on education, skills and training in generating profit from these investments.

Firm's Investment in Human capital has positive effect on:

- Productivity. The impact on productivity of training undertaken with a previous worker's initial productivity by 9.5 percent. Previous on-the-job training has more long-lasting benefits and increases current productivity by 16 percent.

- Profitability. The productivity increase is over twice the size of the wage increase caused by training. On-the-job

firm-provides training sometimes generates considerable third-party externalities when trainees do not stay with the employer who trained them.

- Long term competitiveness. More highly-educated and more highly skilled workers have been found not only to be able to adapt more rapidly and efficiently to new tasks and technologies, but also to be direct source of innovation.

State investment. The Scientist G. Becker explains the extraordinary economic success of Japan and Taiwan and other Asian countries through massive investment in human capital. Having lack of natural resources, Asian countries have developed rapidly, building on a well-trained workforce, educated and hard working class. Also, education and training are helpful to keep the pace with technological change and productivity in advanced manufacturing and services sectors. The recent studies show that industries which progresses more rapidly in particular attract better educated workers and offer education in the workplace.

It is important to note that the investment in education is influenced by several complex factors such as:

a) The time of the investment;

b) The costs involved;

c) The general state of economy;

d) Differences between the profits expected to achieve.

The time of the investment. There is an idea that for a late investment in education there will be a lower net present value and a low yield because there will remain less years for that person to benefit from this investment and to recover lost income while it was in high school. It is very important that the investment to be made at the early age. One of the reasons supporting this factor is considered to be the large share of students in university-age population, between 18 and 22 years.

The costs. If other factors are constant, at least in principle, then, as costs are lower, the more the number of people who will find profitable educational investment will be higher. Research conducted in Western European countries have shown that increased education fees by $ 100 annually, resulting in fewer student candidates with 0, 5-0, 8%.

General state of the economy. It was noted that in periods of recession the income is reduced which the high school graduates in the labor market are expecting to obtain or, worse, it narrows the scope possibilities of obtaining a job. For example, in Romania, in 2010, the number of college applicants has decreased because of economic crisis. Basically, from 2007 until today, the number of students which finance their education has decreased constantly by 10% every year. The most relevant example is about the specialization of Public Administration has registered a sharp decrease in 2010. The candidates' number to the Public Administration specialization declined by 50% in 2010 compared to 2008. The explanation for the shortage of candidates may be: public sector layoffs, blocking positions in the public sector, salary reduction (25-40%) in Public Administration sector.

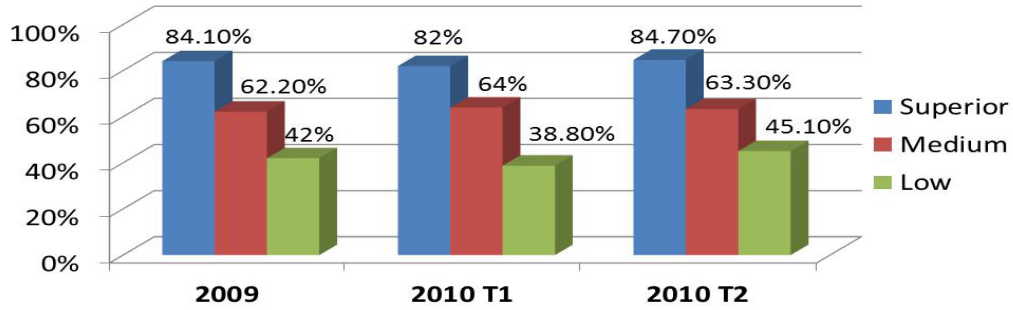
The differences in the size of income. The more will be the difference between the incomes obtained by graduates of secondary and university level, the more will be also the number of those who will invest in human capital.

Table 1. The minimum gross salary/according to the education (Romania)

The minimum gross salary/according to the education (Romania)						
No. of worked hours	*Higher education*	*Higher education -short term*	*Post – Secondary Studies*	*Secondary Studies*	*Primary Studies qualified*	*Primary Studies nonqualified*
8h	*Aprox. 293 Euro*	*Aprox. 222 Euro*	*Aprox. 222 Euro*	Aprox. 197 Euro	*Aprox. 188 Euro*	*Aprox. 171 Euro*

Source: Data collected by Author

Figure 2. Employment rate by the level of education



Source:National Employment Agency

In present, Romanian labor market analysis shows that those most affected by unemployment are individuals with modest education while university-educated people suffer less from this phenomenon.

One of the most important human capital theorists has demonstrated a direct link between investment in human capital - poverty and migration (Becker, 1997). Poverty can cause degradation of the human capital stock; obstructing its costs of maintenance and its development (the lack of economic resources is associated with the impossibility of purchasing health and education services). The gap between the wages of more educated workers and less educated employees is increasing, resulting in increasing levels of high inequality, with negative effects in terms of chronic poverty.

The link between human capital and migration consists in portability of human capital, as:

- The portability of human capital explained by Becker, is a migratory behavior of those who feel threatened its own stock of human capital. Individuals, who make decisions to migrate, are generally richer in human capital, and their migratory movement is from the poorer to the developed areas.
- Massive departure of young and educated people (with a superior work force) may lead to the dissolution of poor communities, while migrants can gain access to superior social and natural environmental conditions.

The current economic crisis affects the

investment in human capital also. The effects consist in a substantial reduction in financial resources for investment in human capital formation and a partial loss of capital human because of massive layoffs, high unemployment and lack of jobs for young graduates. Also, the status quo in the health system induces effects apparent and obvious risks for human capital in that the system has some characteristics: taxpayers are encouraged not to pay insurance under full unused amounts for which they were intended to be collected; unequal and difficult access to health services of the patients, doctors are the subject to financial constraints, sometimes incompatible with the proper conduct of the medical act.

Conclusion

The literature and analyzed data show that there are reasonably strong evidences to show that the infusion of human capital at the individual level depends on the degree to which it contributes to the creation of a competitive advantage. Investment in human capital does not aim only individual level but also at organizational and state level (in policies). From an economic point of view, transaction-costs indicate that firm gains a competitive advantage when they own firm-specific resources that cannot be copied by rivals. Thus, as the uniqueness of human capital increases, firm have incentives to invest resources into its management and the aim to reduce risks and capitalize on productive potentials. In the same time, individuals need to enhance their competency skills in order to be competitive in their organizations. Studies also clearly substantiate the fact that financial performance is positively impacted through the consideration of human capitals. This approach will be a starting point for other studies in the field of human capital and economic development, especially for a further investigation approaching the situation of human capital in Romania

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Impact of global adoption of IFRS on Nigerian Stock Market effectiveness

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Abstract: *International Financial Reporting Standard (IFRS) is a statement of intent to globalize financial standards so as to enable investors move capital and as such enshrine global competitiveness. Nigeria's case to attract investment through the capital market can be advanced effectively if financial reporting is standardized and adopted. As an impact study, we employed adaptive expectation variant of the autoregressive model and multiple regression technique to study the prospect of Compliance with IFRS and how the Nigerian quoted companies faired in compliance with Nigerian Accounting Standards and its correlation with reporting incentives, idiosyncratic volatilities and stock price informativeness; which more or less indicates their preparedness for global adoption of IFRS in 2012.It is recommended that stiff penalties are required to prepare Nigerian financial environment for the global adoption of IFRS.A clear road map of adoption of IFRS will further drive the much needed foreign investment in-flow and help to brand Nigeria out of the corruption quagmire.*

Keywords: Stock price informativeness, idiosyncratic volatilities, reporting incentives and financial reporting standards

1. Introduction

The Capital Market occupies the central position for capital mobilisation in the Nigerian economy and will fundamentally require investor's confidence and trust so as to promote the understanding of purpose of investment. Ordinarily investors rely on financial reports and experts opinion on investment prospects. If publicly available information is reflected in financial position of a company, the stock market is described as semi-strong in pricing efficiency while the inclusion of private information makes the market pricing strongly efficient (Chandra, 2005; Banerjee, 2008). There is a feedback loop that facilitates better investment decisions by the firms' managers because of stock Price informativeness (Allen, 1993; Holm-Strom and Tirole, 1993). Stock pricing depends on fundamentals of the firm, the industry and the market, which is driven by the degree of amelioration of opacity in financial reporting and the improvement in information flow (Ferreira and Laux, 2007). This means comparability will be enhanced with greater information efficiency that is driven by transparency and disclosure in financial reports.

The new theory on the stock price informativeness noted by Beuselinck ,et. al (2008) describes how the adoption of new financial reporting standards (FRS) decrease stock return synchronicity and subsequently rising following analysts' educating activities. In Nigeria, the experience of trading on the floor of Nigerian Stock Exchange supports that stock price informativeness attracts sophisticated investors confidence in becoming more informed about their firm. But, the degree of FRS in compliance with NASB and its co-movement with idiosyncratic volatilities are yet to be studied. This paper adds to the literature on the effect of stock price informativeness on investors' confidence, conceptually reviews the degree of adoption and implementation of NASB standards as an indicator for the preparedness for the adoption of IFRS and the extent of improving the investment climate in Nigeria. This could also be a branding strategy to alter the perceptions of corruption in Nigeria.

Problem of the study

The Capital market thrives on trust and confidence of investors and the growth is thus driven by information flow on the performance of quoted companies which are basic fundamentals that derive their understanding primarily from financial reporting. IFRS was developed to influence albeit globally, a universal approach to financial reporting in such a way that local and international investors' interests can be best protected. The weak or non-adoption of IFRS could adversely not only affect the Nigerian Capital Market proficiency in capital formation services but to a greater extent could have a contagion overflow to world economy in terms of being unable to support globalization goals; that is, the ability to enable efficient allocation of capital across international borders. This is why we examine how the preparedness for the adoption of IFRS by the Nigerian capital market is critical to current financial reporting characteristics.

Research Questions

1. How far has Nigeria quoted companies complied with GAAP and NASB in their financial reporting practices?

2. Do the Nigerian capital market regulatory authorities have the tenacity to adopt IFRS?

3. How does the adoption of IFRS influence stock price informativeness?

The intention of public policy in relation to adoption of universal financial reporting standards is reflected by the directive of Central Bank of Nigeria (CBN) to all banks to mandatorily adopt IFRS by 2010 in their financial reporting while the Securities and Exchange Commission (SEC) demands that all listed companies comply by 2012.

Hypotheses

The following hypotheses are of relevance in this work.

1. The Nigerian quoted firms cannot effectively adopt financial reporting standards with high levels of systemic corruption.

2. Financial reporting incentives from quoted companies influence the extent to which stakeholders are willing to adopt reporting standards

3. Nigerian capital market development is highly dependent on stock price informativeness.

2. Theoretical Framework and Review of Literature

The preparation of accounts is principle-based, but never the less require some systematic judgement that requires the understanding of mathematical and statistical theories. The goal of financial reporting is to enable stakeholders take informed decisions about the company, particularly in determining the risk of insolvency. Thus value judgement depends on risk theory.

According to Daykin, Pentikainen and Pesonen (1993) risk theory explains the probability of ruin wherein claims on the company might exceed assets in such a way that the going-concern basis will be impaired. The valuation of assets and liabilities of business organizations is expected to align with risk theory in other to reflect the unique properties required of financial reports, which is the principal aim of IFRS. Indeed, IAS 39 specifically focuses on how financial instruments can be fairly measured, whereas IAS 16: property, plant and equipment are to conform to agreed changes in reporting patterns for manufacturing industries. The intention is to smoothen volatilities that can be introduced through differences in accounting policies, which might create an unintended positive performance.

The balance sheet which predicts the size of a shareholders' fund at the end of each reporting year is thus a statement of solvency margin or risk reserve theoretically from risk perspectives. Daykin et al (1987) describe it as asset margin to reduce ambiguity. The risk reserve is an uncertain balance that IFRS focuses upon in terms of its qualitative preparation. Indeed, it is the source of stock price informativeness and idiosyncratic volatilities. This paper aligns with the risk reserve connotation and is mathematically represented by:

$$U(t) = A(t) - L(t)$$

U (t): the risk reserve

A (t): the assets

L (t): the liabilities

The lower the value of U (t) the greater might be the level of compliance with reporting standards.

Standards are objective methods of measurements commonly referred to as benchmarks or references. IFRS sprang from the need to harmonize the work of International Accounting Standards Committee (IASC) and International Accounting Standards

Board (IASB) into a common framework for global adoption. Cox (2007) underpins the importance of adopting global standard in financial reporting for its capability of "rapidly accelerating global integration of the world's capital markets".

The main thrust of IFRS is to ensure ease of comparability of financial statements despite being prepared by different Accountants and across varying jurisdictions. Before the advent for the clamour for IFRS, financial statement preparation was governed by Generally Accepted Accounting Principle (GAAP), which most countries built into their accounting standards such as the Statements of Accounting Standards (SAS) adopted by Nigerian Accounting Standards Board (NASB). In spite of the GAAP, financial statements are still considered to be lacking in four qualitative characteristics such as: understandability, reliability, relevance and comparability. Other qualities key to reliability and relevance to users are: materiality, faithful representation, substance over form, neutrality, prudence and completeness.

Faithful representation, materiality, substance over form, Section 12 of SAS 1 expects that financial statements prepared in line with historical cost convention should recognize the lower of cost and market value. Likewise, section 22 of IAS 25 demands revaluation of long term assets valuation in a consistent manner. The risk of fraud defined at www.poauditpanel.org as "intentional misstatement of financial statement" is the main concern that financial reporting standards encapsulated in IFRS addresses. The difficulties of adopting IFRS stems from various complex interacting factors that needs to be analyzed. This paper focuses on Nigerian perspectives of how to prepare the stock market to adopt IFRS in view of lagged characteristics of systemic corruption, level of corporate governance and financial reporting incentives.

Stock Price Informativeness, Idiosyncratic Volatilities and IFRS

The Nigeria Capital Market became internationalized in 1993 by aligning its regulations with global stock market standards. It also created opportunities for the market to join the global race for cross border investments in which Nigeria's indigenous companies were able to use the platform of the capital market to launch themselves for global competition; but nevertheless had been confronted with extent of stock price informativeness and idiosyncratic volatilities derivable from the pattern of IFRS.

Tobin (1984) clarifies that the economic purpose of the stock market is to generate prices that serve as public signals for allocating capital to productive uses hereby contributing to economic growth. By extension, it is noted that the impounding of firm-specific information should influence the investor's interests in taking positions and directing capital towards firms with better opportunities. Stock price volatilities are driven by comovement in fundamental factors (Haggard, Martin and Pereira, 2008), but idiosyncratic volatilities is the result of extent of corporate or investment decisions derivable from stock price informativeness. The value of information derivable from stock prices is captured in three hypotheses: 1) speculative, 2) intrinsic value and 3) rational expectation.

This is based on Keynes's General Theory (1936) cited by Copeland and Weston (1988) and it comes a long way up to now to

explain that prices are formed not only on the expectation of future payouts of the assets, but also on the resale value to third parties. Ferreira and Laux(2007) say "is a summary of information flow, especially for private information about firms." Financial experts and investors form expectation mainly from financial reports which is presumed to conform to standards. In the event of changes in accounting principles or variances in conceptual application of valuation in particular, discrepancies occur that throws the stock market into pandemonium. At an occasion the Governor of Central Bank of Nigeria referred Nigerian stock market as a Casino. This type of frustration could have been abated in an environment of proper adoption of financial standards.

The Nigerian Capital Market and Financial Reporting Standards (FRS)

The Nigerian Capital Market that came into existence from 1961 had its upswings and downturns, but then was thinly traded before 1987 (Olowe, 2008; 2009). From 1988-1997 when the call-over auction trading system was operative, it can be inferred that volume of trading was still low due to level of information efficiency amongst investors and financial experts. From 15th April, 1997, the NSE commenced Automated Trading System (ATS), an electronic trading platform that derives information from financial reports posted on-line. The implications on stock price informativeness and idiosyncratic volatilities are the rapidity with which information is impounded into prices. For a stock market with few listed stocks, the discovery of non-compliance with FRS could be magnified to extended downside or upside volatilities as the case may be.

The capital market regulators seem to be indirectly induced to be silent on weaknesses in reporting, or lacking in regulatory capacity to deal with opacity of financial reporting. In the last 30 years, no financial reports had been officially indicted for poor standards despite innuendos in news paper reports of financial manipulations by Nigerian banks in the last one year. The most disturbing aspect is that whistle-blowing is not yet part of the corporate governance structure. Implementing FRS is dependent on qualitative characteristics of human resources behind the financial data which IFRS is building into financial reporting. An environment with high levels of corruption, poor corporate governance regimes and low per capita economy requires higher implementation rules preparatory to adoption of IFRS.

Nigerian Quoted Firms and Financial Reporting Incentives (FRI)

According to www.mortgagerisk , FRI is a derived mechanism to seek value from an otherwise fiducially related party. Financial reporting in Nigeria conveniently hides under the legal proviso that the preparations of financial statements are the strict responsibilities of the Directors. The external auditors are appointed by these Directors in many cases and not by shareholders. It then becomes questionable that fiduciary responsibilities may have been compromised in the process of obtaining business. Recently, the Central Bank of Nigeria (CBN) pulled out new guidelines for quoted firms not to engage an auditor for more than ten years.

If this is part of the preparation for the adoption of IFRS, will such rules mitigate

levels of social corruption and corporate governance indices? The adoption of IFRS in Europe in 2005 is hinged on International Accounting Standards (IAS) 32 and 39 which requires adoption of measurement standards of financial instruments, mainly financial derivatives. These two sections are relevant to Nigeria capital market, even though derivatives market is non-existent now. The Nigerian capital market is more or less one of the most volatile in the world (Chukwuogor, 2009), and investors' confidence sagged recently following persistent news of financial reporting in banks not keeping to risk capital adequacy requirements. The outcomes are persistent downside volatilities being experienced since mid 2008. The graph below depicts the extent of NSE all-share index volatilities 1998-2010.

Figure 1: Bar chart for NSE all -share index 1998-2010.

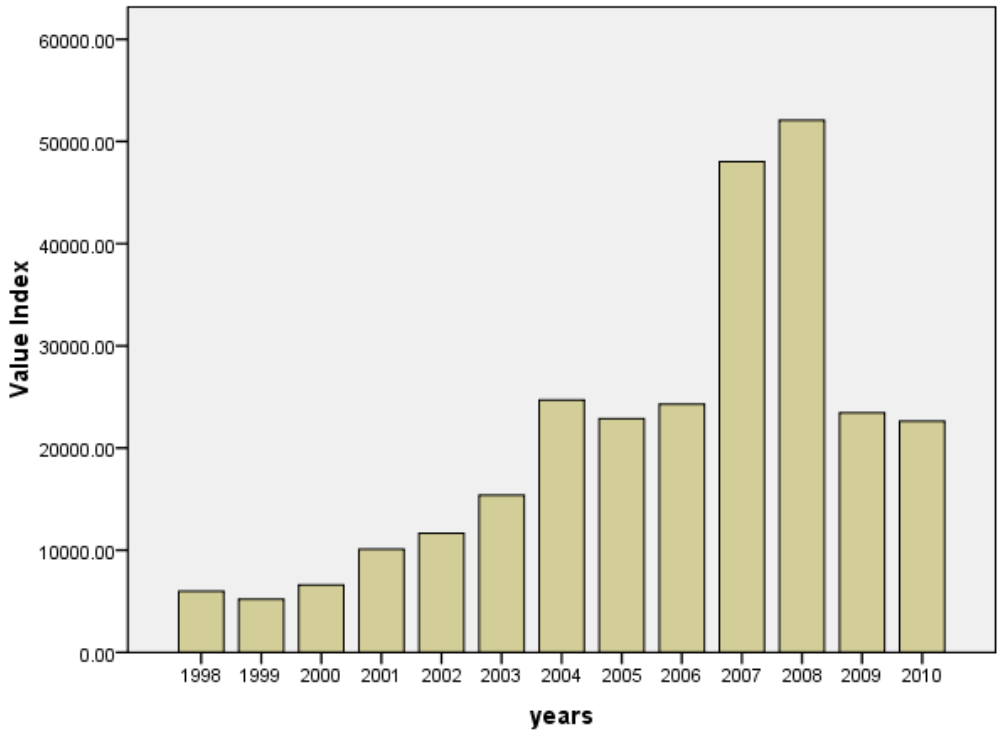

fig:share price index

Source: Authors' computation

Figure 2: Bar Chart for Percentage Movement in Index 1998- 2010

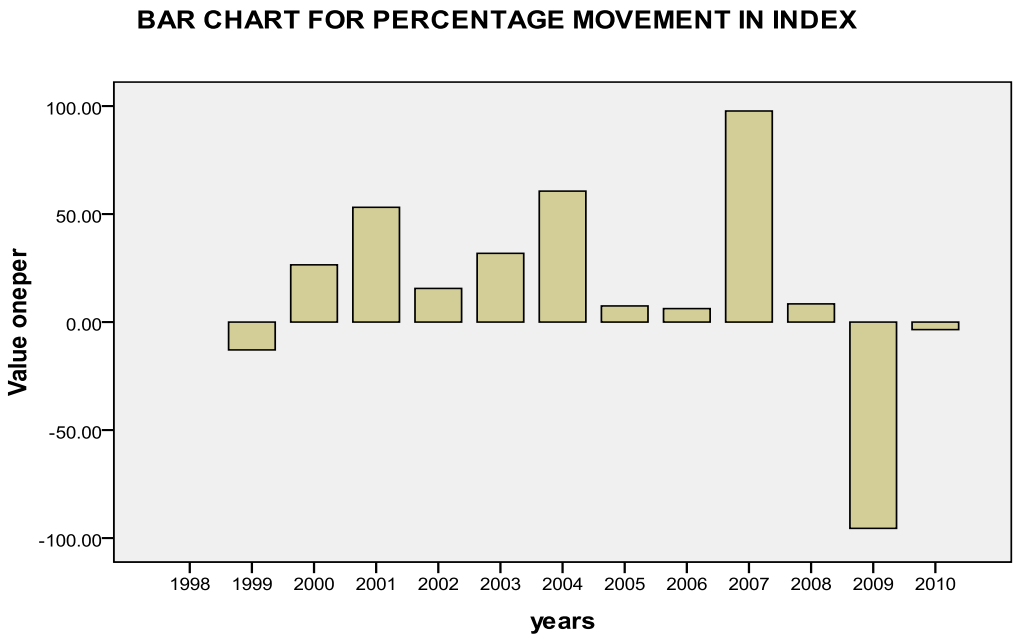

FIG:PERCENTAGE MOVEMENT IN INDEX

Source: Authors' computation

3. Method of analysys

The principles that underlie adoption of IFRS in Nigeria necessitate the use of an "adaptive expectation model", a special case of the autoregressive models, using the single -equations of the ordinary least square methods for the empirical analysis. This is based on the adaptive expectations hypothesis formulated by Cagan (1956), and extensively discussed by Pindyck & Rubinfeld (1998),Asteriou &Hall(2007). It postulates that any change in the level of compliance with accounting standards in future is related to changes in the "expected" level of related explanatory variables. Three hypothesis were designed for testing, using both primary and secondary data. They are enumerated in the model specification. Thirty questions were structured to capture relevant variables addressed in the statements of the research questions and the research objectives. 250 questionnaires were randomly distributed to relevant financial experts who are capital market operators, 134 were returned, representing 54%. For the secondary data, the following proxies were selected to indicate respective variables; the NSE index volatility for stock price informativeness, governance index from World Development Reports and corruption index from World Development Reports.

Model Specification

Following the above approach, we intuitively treat the past and current status of compliance with Nigerian SAS under the first two equations and future compliance under the third. The structure of the model critical to the study is:

1.SV = f (NC+ ut)

2. NC =f (FRI+GI+CI+ ut)

3. FC=f (RQ + Rg + ut)

The full explanatory variables are: Non-Compliance(NC); Financial Reporting Incentive(FRI); Governance Index(GI); Corruption Index(CI); Regulatory Quality(RQ); Regulation (Rg); while the full explained variables are Stock Volatility (SV); Future compliance (FC); Non- Compliance (NC).

4. Result of study

The adjusted expectation equations for the three (3) models were lagged for one and two periods in consonance with general autoregressive models. The first equation attempts to describe the extent to which Non-compliances to basic NAS encourage manipulation, and consequently market volatility. The coefficient of the equation lagged for two periods confirms our ''a-priori'' expectation by approximately 90%. Expectedly, the current non-compliance variable produced a negative coefficient implying that sometime current adverse information does not receive immediate reaction in line with weak- form hypothesis. The constant term has a lower coefficient for a two-period lag but high(73%) for a one-period lag.

The standard errors are generally low at both lagged model, however only the explanatory variable lagged two periods are rather significant, given the rule-of-thumb test. The standard error tests also confirm the non-significance of the coefficients. This is attributed to multicolinerity problems among the explanatory variables. The explanatory variables at 5% significant level for t-test(2-tail) is closely significant with respect to NC(-2).The multiple correlation is rather poor at 8%,while the Durbin-Watson statistics of 1.5 is barely below the significant standard evidencing presence of serial correlation of the explanatory variable. The f-test at 2 d.f. and 17 d.f. are not significant, implying the acceptance of the null hypothesis that the joint influence of the explanatory variables are not significant, suggesting other variables not captured.

Model (2) explains empirically the fair result of the current non-compliance rate as a result of financial incentives, governance index and corruption index. The coefficients of both the current and period one lagged explanatory variables are in line with a-priori expectation. Using the rule of thumb test and standard error test, the constant, the FRI and the GI are significant. The t-statistics tests are equally significance, implying acceptance of the alternative hypothesis that the explanatory variables aside from corruption ratings influences non-compliance with NAS. The R-square of 60% evidences good fit of the explanatory variables. The Durbin Watson test is however not significant with 1.7 against the rule of thumb standard of 2.The joint influence test of the explanatory variable at 3 d.f., 18 d.f. gives 8.7 as against the standard table value of 3.16,implying that the significance of the joint influence of the explanatory variables.

Model (3) explains the likely impact of regulatory quality and regulation on future

compliance with IFRS. The result of the test reveals that the constant and regulatory variables are in line with a-priori expectations. Given the rule of thumb test, the standard error test and t-test (2-tail) only the constant term is significant. However, the one-period lagged test shows that the RQ coefficient is significant. The goodness of fit test is rather poor for both regressions. The Durbin Watson test is rather significant (1.9) going by the rule of the thumb, implying rather weak serial correlation among the explanatory variables. The F-statistics is not significant, meaning that the joint influence of the explanatory variables is not enough to influence future compliance with IFRS.

5. Conclusion

IFRS is necessitated by the need to harmonize the diverse application of GAAP across different jurisdictions. In so doing, financial statements may become globally comparable and help the course of further stock price informativeness. The capital market, the engine that drives financial capability and trust in an economy depends on stock price informativeness, which is a proxy for idiosyncratic volatilities is analyzed in this paper as a development from adoption of FRS in financial reporting. Information has value, if it tells us something that we do not already know accurately (Copeland and Weston, 1988). Financial information can only be fairly accurate when every user perceives the financial position without opacity. Information gleaned by experts from financial reports is encoded with rational expectation when prepared with 'software'of standards. This software is coded subjective human values accounting, classified by the qualitative characteristics of recognition and measurement of the elements from which financial statements are constructed. This is the objective of IFRS which aims at improving the fundamentals of IAS and SAS. The findings of this paper support the view that implementation and indeed adoption of IFRS is an uphill task in Nigeria because of pervasive corruption and poor governance which co-integrate with FRI to explain the regression to lag non-compliance with FRS.

The effect of non-compliance in past periods was an open door for accentuation of idiosyncratic volatilities and synchronicity to NSE all-share index volatilities 2007-2010. The future implications of rational expectations on compliance with IFRS from 2012 as intentioned by regulatory authorities are dependent on degree of adoption of the qualitative variables in designing regulatory standards.

6. Recommendations

The stock market is undoubtedly the fulcrum of economic development and FRS is germane to its sustenance. This paper evaluated the preparedness of the Nigerian financial system to adopt IFRS against the backdrop of environmental antecedents, current conditions and future compliance possibilities from 2012. It is intuitive from the above conclusions that wholesale attack must be made on the level of corruption and weak structure of corporate governance. Other issues that could be considered secondary are:

1) Companies and Allied Matters Act 2004 could be revisited to tie the responsibilities of preparer of accounts between Directors and auditors

2) Appointment of auditors should be

done by shareholders through electronic voting

3) Auditors be assigned ratings as compliance index for adoption of IFRS in financial reporting

4) Stiff penalty such as life sentence is suggested for obvious manipulation of IFRS by regulators and other stakeholders

5) There is need for massive knowledge enhancement of shareholders' association by Securities and Exchange Commission

6) There is need to redefine professionalism in Nigeria in line with Public Interest theory as it is practised in other jurisdictions

7) Regulatory quality is highly dependent on the Chief Executive Officer (CEO) of regulating bodies and Nigeria presents a peculiar case of leadership crisis which must be taken care of in such appointments.

8) The proposed demutualisation of the Nigerian Stock Exchange should be cautiously implemented with more public consultation and consensus being necessary, as the introduction of profit motive introduces new potential conflict of interest in its self-regulatory role in the Capital Market.

9) The proposed NSE window for the SMEs to transform to industrial giants, hence compete globally, would require softened listing rules; total overhaul of the corporate governance structure and systems of the firms.

Generally, the adoption of IFRS by the Nigerian Financial system will recommend Nigeria as an investment destination and further help reduce the negativities ascribed to her corruption level and nation brand.

Appendix

Appendix 1.
MODEL 1 MV = F(NC, NC(-2), U)

Dependent Variable: MV				
Method: Least Squares				
Date: 10/06/10 Time: 18:25				
Sample(adjusted): 1987 2006				
Included observations: 20 after adjusting endpoints				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.143312	0.576373	0.248645	0.8066
NC	-0.431049	0.678453	-0.635341	0.5337
NC(-2)	0.897414	0.812532	1.104465	0.2848
R-squared	0.080151	Mean dependent var		0.424400
Adjusted R-squared	-0.028066	S.D. dependent var		0.381572
S.E. of regression	0.386889	Akaike info criterion		1.076126
Sum squared resid	2.544619	Schwarz criterion		1.225485
Log likelihood	-7.761256	F-statistic		0.740650
Durbin-Watson stat	1.495584	Prob(F-statistic)		0.491575

Dependent Variable: MV				
Method: Least Squares				
Date: 10/06/10 Time: 18:27				
Sample(adjusted): 1986 2006				
Included observations: 21 after adjusting endpoints				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.734830	0.485076	1.514875	0.1472
NC	-0.313864	0.703295	-0.446276	0.6607
NC(-1)	-0.256154	0.710408	-0.360573	0.7226
R-squared	0.024686	Mean dependent var		0.413857
Adjusted R-squared	-0.083682	S.D. dependent var		0.375035
S.E. of regression	0.390412	Akaike info criterion		1.088334
Sum squared resid	2.743585	Schwarz criterion		1.237552
Log likelihood	-8.427511	F-statistic		0.227801
Durbin-Watson stat	1.402924	Prob(F-statistic)		0.798543

Appendix 2

Model 2

*NC = 0.216226315 + 0.7552176802*FRI - 0.6882050936*GI - 0.01707975526*CI*

Dependent Variable: NC				
Method: Least Squares				
Date: 10/06/10 Time: 18:32				
Sample: 1985 2006				
Included observations: 22				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.216226	0.139261	1.552669	0.1379
FRI	0.755218	0.194080	3.891280	0.0011
GI	-0.688205	0.271549	-2.534368	0.0208
CI	-0.017080	0.093498	-0.182674	0.8571
R-squared	0.591593	Mean dependent var		0.561818
Adjusted R-squared	0.523525	S.D. dependent var		0.126289
S.E. of regression	0.087174	Akaike info criterion		-1.878861
Sum squared resid	0.136787	Schwarz criterion		-1.680490
Log likelihood	24.66747	F-statistic		8.691217
Durbin-Watson stat	1.671789	Prob(F-statistic)		0.000886

Dependent Variable: NC				
Method: Least Squares				
Sample(adjusted): 1986 2006				
Included observations: 21 after adjusting endpoints				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.448083	0.333283	1.344452	0.2002
FRI	0.544272	0.299697	1.816078	0.0908
FRI(-1)	-0.053407	0.245584	-0.217468	0.8310
GI	-0.572360	0.338641	-1.690168	0.1131
GI(-1)	-0.003803	0.404586	-0.009400	0.9926
CI	0.052829	0.132691	0.398139	0.6965
CI(-1)	-0.142047	0.146670	-0.968484	0.3492
R-squared	0.629024	Mean dependent var		0.560952
Adjusted R-squared	0.470034	S.D. dependent var		0.129341
S.E. of regression	0.094158	Akaike info criterion		-1.626473
Sum squared resid	0.124122	Schwarz criterion		-1.278299
Log likelihood	24.07797	F-statistic		3.956381
Durbin-Watson stat	1.701820	Prob(F-statistic)		0.015938

Appendix 3

Model 3

*FC = 0.6569377219 - 0.3677470783*RQ + 0.4749367698*RG*

Dependent Variable: FC				
Method: Least Squares				
Sample: 1985 2006				
Included observations: 22				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.656938	0.189469	3.467254	0.0026
RQ	-0.367747	0.303348	-1.212294	0.2403
RG	0.474937	0.388011	1.224030	0.2359
R-squared	0.101402	Mean dependent var		0.699091
Adjusted R-squared	0.006813	S.D. dependent var		0.084398
S.E. of regression	0.084110	Akaike info criterion		-1.987269
Sum squared resid	0.134414	Schwarz criterion		-1.838491
Log likelihood	24.85996	F-statistic		1.072023
Durbin-Watson stat	1.933254	Prob(F-statistic)		0.362137

Dependent Variable: FC				
Method: Least Squares				
Sample(adjusted): 1986 2006				
Included observations: 21 after adjusting endpoints				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.853377	0.296344	2.879679	0.0109
RQ	-0.617896	0.342493	-1.804115	0.0901
RQ(-1)	-0.346758	0.321892	-1.077249	0.2973
RG	0.663643	0.431388	1.538391	0.1435
RG(-1)	0.012869	0.398459	0.032298	0.9746
R-squared	0.230127	Mean dependent var		0.697619
Adjusted R-squared	0.037659	S.D. dependent var		0.086192
S.E. of regression	0.084553	Akaike info criterion		-1.898610
Sum squared resid	0.114388	Schwarz criterion		-1.649914
Log likelihood	24.93540	F-statistic		1.195662
Durbin-Watson stat	1.613888	Prob(F-statistic)		0.350612

Appendix 4 : Table of data

YEAR	*CI*	*FC*	*FRI*	*GI*	*MV*	*NC*	*RG*	*RQ*
1985	*0.900000*	*0.730000*	*0.570000*	*0.010000*	*0.164000*	*0.580000*	*0.410000*	*0.570000*
1986	*1.000000*	*0.520000*	*0.420000*	*0.010000*	*0.203000*	*0.630000*	*0.410000*	*0.520000*
1987	*1.000000*	*0.740000*	*0.680000*	*0.011000*	*0.156000*	*0.730000*	*0.420000*	*0.430000*
1988	*1.000000*	*0.830000*	*0.630000*	*0.013000*	*0.090000*	*0.670000*	*0.520000*	*0.470000*
1989	*1.000000*	*0.830000*	*0.640000*	*0.013000*	*0.237000*	*0.630000*	*0.520000*	*0.570000*
1990	*1.000000*	*0.650000*	*0.580000*	*0.014000*	*0.325000*	*0.540000*	*0.520000*	*0.520000*
1991	*1.000000*	*0.650000*	*0.630000*	*0.015000*	*0.421000*	*0.680000*	*0.410000*	*0.420000*
1992	*1.000000*	*0.680000*	*0.630000*	*0.016000*	*0.438000*	*0.630000*	*0.520000*	*0.570000*
1993	*1.100000*	*0.730000*	*0.460000*	*0.015000*	*0.443000*	*0.630000*	*0.460000*	*0.410000*
1994	*1.300000*	*0.730000*	*0.680000*	*0.017000*	*0.397000*	*0.730000*	*0.520000*	*0.520000*
1995	*1.200000*	*0.650000*	*0.450000*	*0.018000*	*1.612000*	*0.450000*	*0.410000*	*0.440000*
1996	*1.500000*	*0.790000*	*0.730000*	*0.330000*	*0.699000*	*0.580000*	*0.520000*	*0.520000*
1997	*1.700000*	*0.540000*	*0.680000*	*0.300000*	*0.022000*	*0.540000*	*0.520000*	*0.630000*
1998	*1.900000*	*0.650000*	*0.640000*	*0.170000*	*-0.098000*	*0.540000*	*0.520000*	*0.470000*
1999	*1.600000*	*0.590000*	*0.450000*	*0.170000*	*0.117000*	*0.300000*	*0.460000*	*0.470000*
2000	*1.200000*	*0.730000*	*0.480000*	*0.170000*	*0.495000*	*0.380000*	*0.410000*	*0.470000*
2001	*1.000000*	*0.650000*	*0.640000*	*0.170000*	*0.415000*	*0.530000*	*0.520000*	*0.570000*
2002	*1.600000*	*0.790000*	*0.680000*	*0.170000*	*0.162000*	*0.540000*	*0.520000*	*0.570000*
2003	*1.400000*	*0.800000*	*0.490000*	*0.170000*	*0.801000*	*0.630000*	*0.430000*	*0.430000*
2004	*1.600000*	*0.690000*	*0.630000*	*0.170000*	*0.462000*	*0.680000*	*0.410000*	*0.520000*
2005	*1.400000*	*0.730000*	*0.440000*	*0.250000*	*0.327000*	*0.260000*	*0.520000*	*0.380000*
2006	*1.900000*	*0.680000*	*0.730000*	*0.250000*	*0.967000*	*0.480000*	*0.520000*	*0.530000*

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The Requirements of Businesses from Professional Schools in Relation to Applicative Knowledge

~ *Ph. D.* **Ymer Havolli** *(Faculty of Economy, Riinvest University of Prishtina)*

Abstract: *This study identifies the opinion of the businesses about the professional preparation of the students when they enter the labour market based on the point of view of businesses. This is done by surveying small and medium businesses in Kosovo. It is anticipated that majority of employees in small and medium companies are qualified only with a high school diploma while the number of those with higher degree such as Masters or PhD is negligible.*

Regardless of that, majority of businesses do have the opinion that the new employees are well prepared for their new tasks in the labour market, while small proportion of businesses believes that the new entrants lack practical knowledge, however this is gained over time. In addition to this, about 1/3 of the businesses believes that new employees lack both, practical and elementary knowledge for labour market. For this reason, many of the businesses have been engaged in training of their employees in different professional fields. The data about the past trainings and future planned trainings are telling that businesses are shifting into more well planned business making. This is because the businesses are paying enough attention to marketing, business plan making and production which is an indication that the economy is slowly going towards more productive sectors which would generate domestic production which is very low.

There is a general opinion among the business people that the educational institutions are not well

prepared for teaching the potential labour market entrants. In addition to this, there have been only few contacts between business and schools in order to address the needs of businesses and to increase the performance of new employees.

Businesses in general agree that more attention should be paid by educational institutions in offering practical and stimulated methods of teaching about how the new entrants should deal in labour market. Stimulations are among the most preferred form of preparation followed by case studies and group seminars while lecturing is seen as the least important way of teaching the potential entrants for the labour market.

Keywords: educational institutions, businesses, Kosovo

1. General Characteristics of the Economy of Kosovo

Kosovo is among the poorest countries in Europe with a GDP per capita of around 1800 Euros. Among the main characteristics is the high level of unemployment as well as low domestic production. These developments have had an implication on the growth level of the country. The economy is largely based on imports while the exports are very low. However, the main challenge is the unemployment in the country.

Having an unemployment level of around 43 percent, the competition for a job is very strong. The pressure on the labour market mainly comes from young generation since every year it is estimated that more than 20 thousand young Kosovars enter the labour market, while the number of new jobs generated barely reaches 8 thousand.

In the post-war period, government was the main generator of the new jobs, dominated by the new jobs opened for civil servants. However, in recent years (last 3-4 years) the main generator of the jobs is the private sector dominated by small and medium companies. More than 90 percent of the companies in the country are small and medium companies. The share of the private sector in generating new jobs has increased from 30 percent as it was in post-war period to more than 70 percent in the recent years. These jobs are mainly generated by companies working in trade and services while a production is still not performing well.

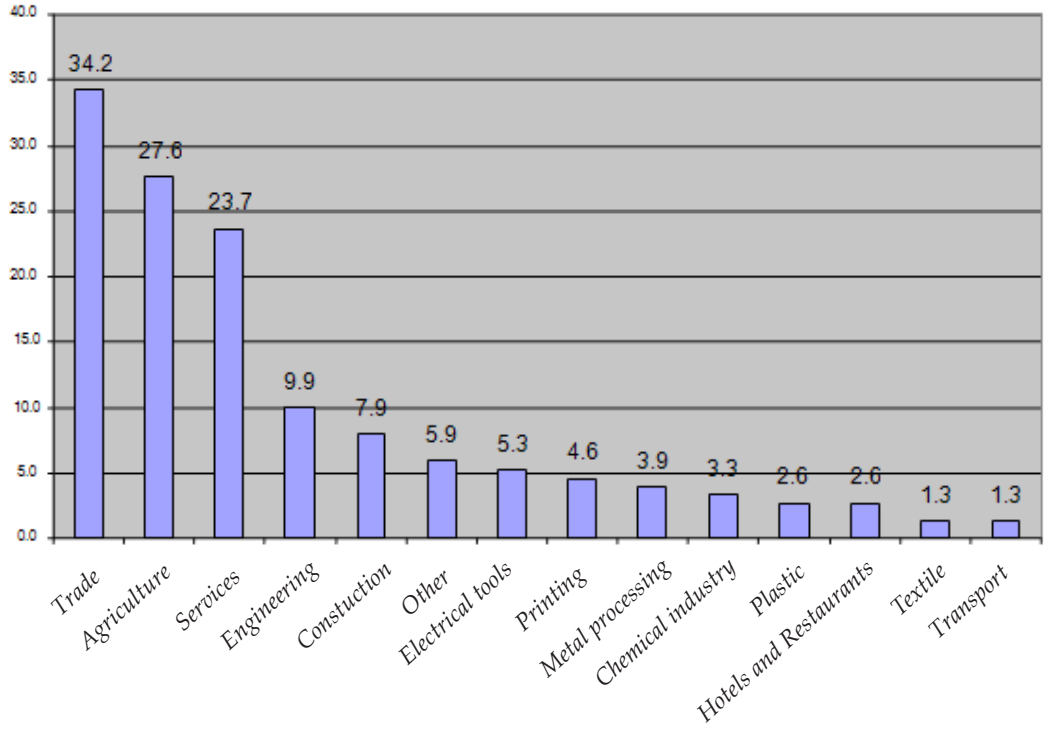
Having in mind these developments in labour market, the idea of this study is to identify the needs of small and medium businesses in order to increase the capability of new labour market entrants to match their jobs better.

2, General Characteristics of Companies Surveyed

This survey covered the main characteristics of 200 companies of different industries. As shown in the chart below (Chart 1) a variety of sectors where these companies operate have been covered by this survey.

Majority of companies in this survey are companies whose main business is trade (34.2 percent of total companies). Trade is also among the largest components of the GDP in Kosovo, only imports representing more than 50% of GDP (CBK 2008). This is because Kosovo's economy is largely dependent on imports as its production sector does not perform very well. As the second most represented sector within companies are those who deal mainly with agriculture related business. Kosovo's economy has for very long time been agriculture oriented economy, however, in recent years it has shifted to trade more than agriculture. Their share to

Chart 1. Sectors in which companies from this survey operate



total companies of this survey is 27.6 percent.

Based on this survey, we observed that a large number of companies are dealing with services (23.7 percent). Service sector is continuously increasing especially in recent years. In addition to those who deal with general services, there are additional companies who offer specific services such as engineering services (9.9 percent of total companies) and others who offer construction services (7.9 percent of total companies). This large share of engineering and construction companies reflects the needs of Kosovo's infrastructure developments. In addition, after the war of 1999 Kosovo experienced a large scale of re-construction process as it has been largely damaged by the war. Moreover, 4.6 percent of surveyed companies offer printing and publishing services.

As part of re-construction process, companies working with electrical tools also had a relatively large share to total companies. They represent 5.3 percent of total companies surveyed in this sample.

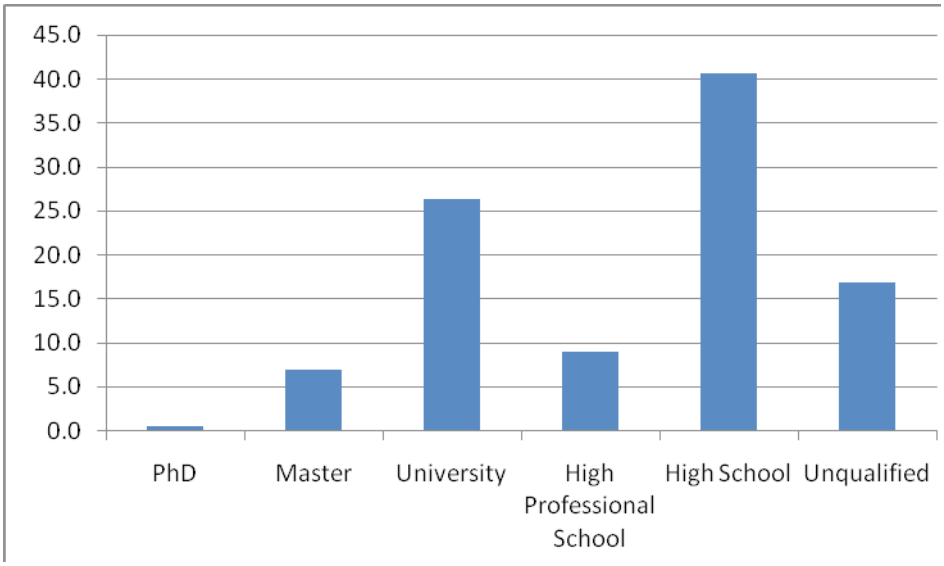
Among others, metal processing industry has been developing after the war in Kosovo. Kosovo was well known previously for its metal production from the mines in Trepça, however, the current metal processing and production is not related to the mines, but contrary it is mainly scrap metal which is being re-used for production. The industry for chemical products represents 3.3 percent of total companies of our sample and this industry is followed by plastic production, hotels and restaurants and finally companies dealing with textile.

Companies in Kosovo are mostly of small and medium size. This is shown in our data set as well knowing that the average

number of employees working in these companies is 4.6 employees per company. There are companies in this sample which employ more than 100 employees; the lowest number of employees is one employee in a company.

Regarding the qualification of the employees of these companies, as shown in Chart 2 below, almost half of them are employees with high school. As the second largest group within the employees of companies are those who completed university. This reflects the needs of combination of university qualified with others which are not highly qualified (such as high school and unqualified which represent 16.9 percent).

Chart 2. Qualification of employees in companies



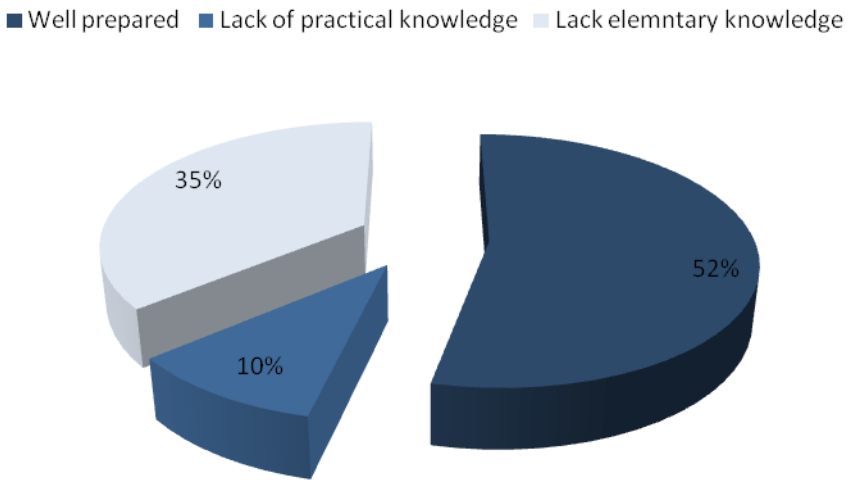
As the number of high professional schools is not largely spread within companies, this is reflected by the employees with such qualification in employment, where they have a share of 8.9 percent. Highly qualified employees are not very highly required by businesses. This is shown by the share of employees who have a master degree and those who have a PhD degree. They represent the lowest share to total employees, that is, 6.8 percent with master degree and 0.4% PhD. As for the gender of the employees, it is observed that Males have much larger share in employment compared to their counterparts, females. Males are represented by 61.9 percent of total employees while females take a share of 38.1 percent of total employees. Kosovo's labor market has this specific that males are those who enter labor market at a larger rate. This figure of males' higher participation in employment in our survey represents the structure of labor market force, which is mainly composed of males.

3. New Employees in 2008

Among others, in this survey was investigated whether the company has hired new

employees during 2008, and it resulted that 64 percent of companies hired new employees, while the remaining 36 percent did not. The total number of new employees hired within these companies reached 142 new employees, of which majority (71 percent) were qualified only with high school. Similarly with the qualification of previous employees, the second largest category of new employees hired based on education level is that with university degree. Employees hired with university degree composed 22.5 percent. Unqualified employees composed 5 percent of total employees while the remaining (less than 2 percent) were employees with Master and PhD. This reflects that in general, companies in the market of Kosovo still do business which is not related highly to skills obtained in schools, it is rather related to skills which may be gained while working (on the job-training).

Chart 3. The opinion of businesses about their new employees



This is also supported by the response of the company regarding the satisfaction of the company with the new employees hired. Only about 10 percent of the companies responded that they think that new employees lack the elementary qualifications for the job that they start to do. This also can be caused due to mismatch on the job for the new employees. On the other hand, around 38 percent of the companies do think that new employees lack practical knowledge for their new tasks on the job. This is a temporary phenomenon since it is expected that over time the new employees will get used to their new jobs. Right after going out from academic institutions (i.e. schools) it rarely happens that employees are familiar with their new environments. On the other hand, 52 percent of the companies are satisfied with the qualifications of the new employees hired. This should not be seen as a very positive fact since this may easily reflect the low-skill jobs in the labor market of Kosovo. However, at this stage, it is observed that more than half of the new employees do good in their new jobs in the beginning.

4. Cooperation of Businesses with Educational Institutions

As the main goal of this survey has been in identifying the needs of businesses by educational institutions, questions to identify these needs have also been designed. For instance, businesses were asked whether they have ever been contacted by educational institutions in order to address their needs.

As the importance of addressing the needs of businesses by the educational institution may be considered as high, based on the responses of the companies it may be suggested that relatively few companies have been contacted by these institutions. In this question, only 18 percent of the companies have reported that they had contacts with educational institutions about their needs, while the remaining 82 percent have never been in contact with educational institutions. However, the interest of cooperation should be expressed by the companies as well. The reason why companies may be reluctant in contacting the educational institutions may be that majority of companies employs low-skilled staff, as shown in the previous chapters. We have seen that companies usually employ employees who only finished high school (40.7 percent of current employees have only a high school diploma, while 71 percent of new employees have been recruited in 2008 with only high school diploma).

In addition to low-skilled jobs on the companies, additional reason for the lack of communication by companies and business may be the satisfaction of employers with the current professional preparation of high school workers (see chart 3 where 52 percent of companies declare that they are satisfied with the preparation of new employees).

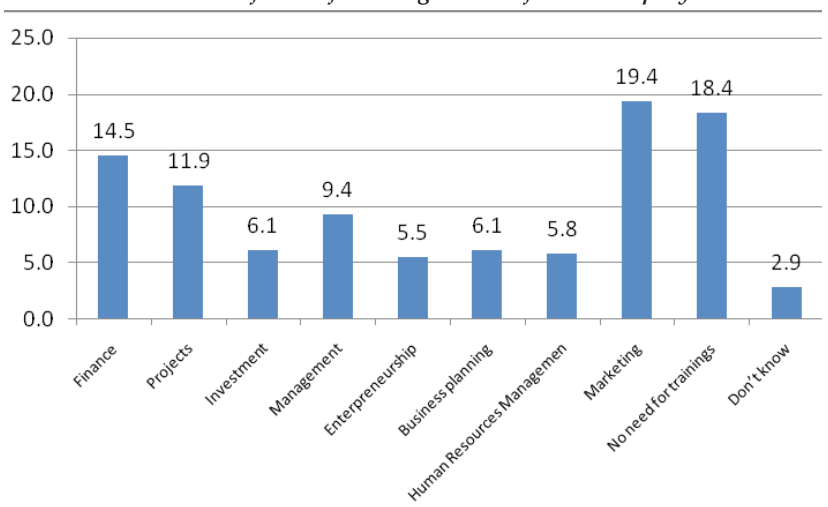
Of those companies who have been contacted by educational institutions, 56 percent of them responded that they have been contacted by high schools, 46 percent of them have been contacted by the university while only 3 percent have declared that they have been contacted by the local directorate for education.

In line with the previous comment that companies are satisfied with the current preparation of the employees is the response which views from the company side the need of communication. About 60 percent of companies believe that there is no need to have a communication line between educational institutions with businesses, while the remaining 40 percent believes that this communication is necessary.

Those companies who believe that their new employees are not prepared enough for their jobs were additionally asked whether they see the need for additional trainings and courses for their employees. About 71 percent of these companies say that there is a need for additional trainings and courses in order to get their employees prepared for their new jobs, while the remaining 29 percent says that there is no need for such trainings and courses, reflecting the approach in some companies that the new employees will learn-by-doing.

As reflected in the chart above (Chart 4), most of the employees have been trained in marketing, while there are also a large number of employers who never sent their employees in trainings since they believe that there is not a need for such trainings. The second largest category is the financial related trainings and courses. Managing projects and the overall management are the fields where additional trainings were provided to employees and this has been identified as the

Chart 4. The fields of trainings needed for new employees



fourth and fifth most important field of training. Investment and business planning have not been seen as very relevant to offer training to their employees by companies. It is a general culture in Kosovo that decisions are made only by the owners of the companies and hence this brings the explanation why employees see no reason to provide additional trainings to their employees.

When companies were asked about the professional preparation of the staff of educational institutions, majority of them believes that educational institutions staff is not very well prepared, that is 60 percent believe that they are not well prepared, while 40 percent say that the educational institution staff are prepared enough to provide education to the potential labour market participants. Of those who believe that educational institutions staff is not well prepared, majority of them believes that the main reason behind their non-professional approach is the lack of practical knowledge (31 percent) while there is a large number of companies that believe that teachers do not have incentive to have a professional engagement.

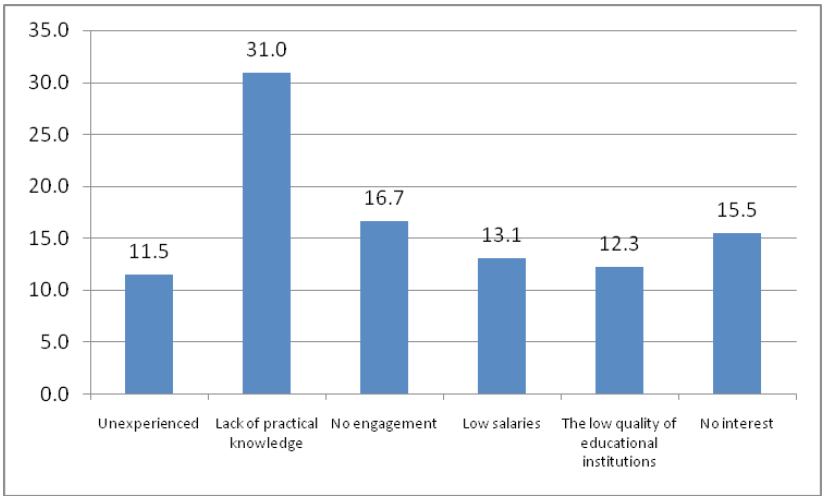
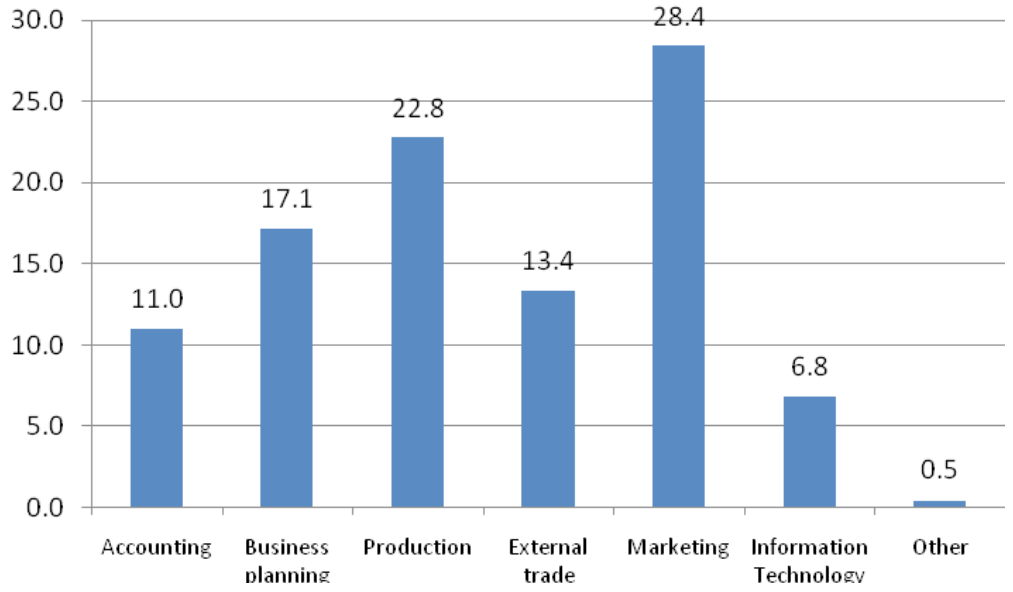


Chart 5. Perceptions of business about the educational staff

Chart 6. The identified needs by the businesses about future trainings



In order to asses the needs of businesses through this survey, another quesiton about the training of employees was addressed. That is the opinion about the business about the future training needs of businesses. When asked in which field the business needs to train in the future their employees, the opinion was that priority should be given for the fields as shown in chart 6.

Similarly as in the previous question when businesses were asked where they trained mainly their employees, in the second question about the needs for additional training, they think that marketing should be the priority of their business. However, as the second most important field for additional training by business perspective has been identified the training for production process followed by business planing.

The figure of production and business planing are ecnouraging since this reflects the shifting of the companies to, first, more production and second, to more well planned business. In the after war period businesses did not really had a reliable business plan if any. However, this reflects that the approach to doing business is slowly changing into more well planed business which in future will surely lead to better performance of the companies. Another fact that supports our above mentioned argument is the requirements of the business to have trainings for their employees for the external trade. This shows that Kosovar businesses are shifting more into international trade which leads to better performance of the companies due to the exchange of experiences with international companies. Accountign also has been another important field in which companies need additional trainings, while information technology, namely the use of computer, is not a wide spread problem. This may be due to two main reasons; the first is that the nature of the business may not requires the

use of computer (due to low skilled jobs requirements), while the second reason is that Kosovo is well known in the region for a very wide and well use of computer by young generations.

5. Teaching methods

In order to address more specifically and to get a broader opinion on the needs of businesses, we asked them also to give their opinion on teaching methods in both, professional high schools as well as faculties.

Regarding the first one, that is professional high schools we asked the businesses to give their opinion on the weight of each of the following methods of teaching: Lecturing, group seminars, stimulation of events, case studies, or any other method if they had to recommend.

Based on the observed results, we have identified that businesses mainly would require using case stimulations for students by high schools that is 31 percent of businesses require case stimulations. Same percentage of businesses prefer having case studies by students which then would lead to better assessment by students for their new labour markets. Group seminars are the third most important way of teaching method as viewed by businesses, that is, 22 percent of businesses believe that group seminars would lead to better performance in labour market by the new employees. As the least important method of teaching was identified the lecturing (this is the main method used to date in schools). Schools in Kosovo use this method in preparing the students for the labour market. However, this is seen as the least effective way for preparation by students. This opinion of businesses may be due to the current performance of employees going from schools into the labour market.

With regard to the faculties and the methods to be used in faculties, businesses opinion on this is that faculties also should give the largest weight to the case stimulations (33 percent), while the second most important way of preparing the faculty students for the labour market is case studies (by 24.5 percent). Furthermore, lecturing takes 22.5 percent of weight based on the opinion of businesses about the methods to be used in faculties, while the least weighted form of teaching in faculties is group seminars.

6. . Conclusions and Implications of the Findings

This project has covered an important side of businesses especially that of new employees who join the market for first time. Among others, it identified the needs for more practical and more business oriented approach by educational institutions. However, it is noticed that there is a lack of cooperation by both, businesses and educational institutions. This is one of the main implications of this study since it is evident that many companies do offer additional training to their employees. The implication here would be that schools could do this instead of other training institutions since the training is mostly required to fields which schools can cover such as marketing, business planning as well as accounting. Another issue that worth mentioning here is that majority of businesses believe that there is no need for business-school cooperation. This approach by businesses should be changed by using the identified fields and show that schools can play an important role for businesses.

Another factor identified by businesses is that they believe that staff of schools is not doing best to teach the potential labour market entrants. This viewpoint of businesses should be taken into account seriously and increase the performance academic staff. However, at this stage, majority of businesses are satisfied with their new employees. As stated earlier, this is due to low-skills required business. However, it can be suggested that the sphere of interest by businesses has changed into more professional field, knowing that businesses are requiring trainings related to marketing and business planning. Despite the low interest for cooperation by businesses, the educational institutions should be those taking the first step towards identifying the needs of businesses and offering education programs which would be beneficial for both, businesses as well as for the new potential entrants in the market.

Macroeconomic Dynamics and Financial Crisis in Nigeria

~ *Ph. D.* **Olowe Olusegun** *(Covenant University, Ota. Nigeria)*

Abstract: *This work as an empirical economics assessment examined the role of domestic macroeconomic policies with emphasis on the management of the impact of macroeconomic variables on the global financial crisis in Nigeria.. It applies VAR framework on annual time series data from 1969 to 2009. The paper opines that the Nigerian economy is far from converging towards a sustainable equilibrium in the short run. The paper suggests that attitudinal change, monetary and fiscal policies could be used to address the Nigerian version of the global financial crisis. However, the right mix of these policies to avoid conflicts in the light of dampening effects of the global financial melt-down as well as the possible effects of the global financial crisis and macroeconomic fluctuations on economic development in Nigeria is of relevance..The direction and magnitude of relevant policy to stimulate increased government intervention, it was observed that there is the need for comparative dynamics of economies in order to return to the path of sustainable growth and development.*

Keywords: macroeconomic, financial crisis, econometrics, development, dynamics

1. Introduction

The global financial crisis followed a period of economic boom: 2003-2007. During that period, the world economy was growing at an average of 5% per annum. However, the current crisis was precipitated by a combination of factors including emergence of subprime rates in the USA housing sector, deepening crisis in the financial markets, rising crude oil prices and surges in commodity prices which triggered-off series of bankruptcies, forced mergers, loss of employment, firm closures and concerns in the corridors of economic policy analysts in the USA and major capitalist economies. In the course of the financial crisis, the world economic growth rate has dropped to about 1% between the fourth quarter of 2007 and third quarter of 2008 (World Bank, 2009), as reminiscence of the Great depression of the 1930s.

The impact of the sub-prime crisis spread well beyond United States, causing a widespread squeeze in liquidity and credit. And price hikes in primary commodities, fueled partly by speculation that has shifted from financial instruments to commodity markets, added to the challenge for policy makers' intent on avoiding a recession while at the same time keeping inflation under control. The Global Development Finance 2009, revealed the negative effects of the global financial crisis that have caused liquidity and other assets flow into developing countries like Nigeria to fall by 41 per cent in 2008. From a peak of $1.2 trillion in 2007, the development finance coming into developing countries dropped sharply to $707 billion in 2008.From the projection, it is revealed that capital flows would fall further to $363 billion in 2009, due to the fact that not a few African banks depend on the international markets for some financing. The new global economic and financial crisis has become a major concern for political leaders, economists, and managers of financial institutions around the globe. Addressing the global financial crisis would, however, require knowing the root causes of crisis. There are some disagreements as to 'what constitute a crisis', but as related to the issues in discourse Eichengreen and Portes (1987) have defined crisis 'as a sharp change in asset prices that leads to distress among financial markets participants.' But as Eichengreen (2004) has observed, it is not very 'clear where to draw the line between sharp and moderate price changes or how to distinguish severe financial distress from financial pressure

Threat of a reduced capital inflow as well as liquidity available to banks for onward transfers as loan for investment and other purposes would probably result to an era of slower growth, which would require tighter and more effective oversight of the financial system. The economic and social impact of the global financial crisis is enormous. It has damaged global markets and economies around the world: the industrialized western economies, the newly industrializing economies of East Asia and China, Latin American, the Middle-East and African economies. It has affected business operations and investments by way of reducing domestic and international demand for goods and services and pushing up unemployment as many industries and organizations are shedding off workers. The global economic downturn has also affected national income and budgets, exchange rates and interest rates, and slowed down economic growth in societies around the globe.

The global financial crisis has further

exposed the fragility of today's global financial sector. Instead of reducing risk, complex financial instruments have served to spread the impact of risky investments across countries and markets. The recent crisis has shown once again that market discipline is ineffective in preventing recurrent episodes in which financial firms attempt to extract double-digit returns out of economies that grow at much slower rates particularly in a country like Nigeria. Since financial crises can have major repercussions on the real economy, policymakers have no choice but to bail out parts of the financial sector when systemic threats are brought to the fore. However, such bailouts with moral hazard tendency, also undermine the call for tight regulation.

The current international framework for monetary and exchange-rate policies offers opportunities for speculative activities that are highly profitable for a limited period of time, but ultimately destabilize the entire system. The rapid unwinding of ''carry trade'' activities, aimed at extracting gains from nominal interest rate differentials, presents another threat for the global financial system. The financial turbulence, the speculative forces contributing to commodity price hikes and instability, and the apparent failure of foreign –exchange markets to bring about changes in exchange rates that reflect current account trends suggest that there is an urgent need for reviewing the institutional framework of the global economy.

A combination of factors threaten to keep growth weak, including lower commodity prices, a tougher environment in which to attract funds, a withdrawal of portfolio investment, a shortage of dollars in some markets, and , now, heightened concerns about exchange rate depreciation that have led to a pullback in cross-border lending. Unemployment as a significant aspect of changes to business has not become a core research agenda in the country.. The volatility and characteristics of macroeconomic variables is essential feature of instability in macroeconomic policy decisions and governance.

The objective of this paper is to examine the relationship between global financial crisis and the macroeconomic variables in Nigeria. Using the VAR method of analysis.. This is achieved by analyzing the effects of various macroeconomic policy dynamics using Nigerian data by applying the Vector Auto regression (VAR) approach..This approach is considered appropriate due to its ability to capture shocks in an economy.

2. Macroeconomic Policies and the Nigerian Economy

Measuring the performance of the Nigerian economy is an up hill task because of ineffective institutions and paucity of data. The wide spread impact of the new global economic crisis has clearly demonstrated how interconnected the world has really become, as economic forces in a faraway country would affect nations thousands of miles away. There are, however, variations in living standards around the globe, as economic growth rates and productivity vary from nation to nation. Some countries are poor, some are fairly well off, and others are rich, just as some individuals are poor, some are fairly well off, and others are considered rich. But everything is relative, and that is certainly the case with poverty. Measuring the performance of the Nigerian economy is an up hill task because of ineffective institutions and paucity of data. The wide spread

impact of the new global economic crisis has clearly demonstrated how interconnected the world has really become, as economic forces in a faraway country would affect nations thousands of miles away. There are, however, variations in living standards around the globe, as economic growth rates and productivity vary from nation to nation. Some countries are poor, some are fairly well off, and others are rich, just as some individuals are poor, some are fairly well off, and others are considered rich. But everything is relative, and that is certainly the case with poverty. The Nigerian economy is a mono-cultural oil economy. It is necessary to review the macroeconomic policy issues that pervaded the Nigerian economy as a whole and also in phases.era. For most part of the period under study, macroeconomic stability basically meant a mix of external and internal balance to ensure full employment, sustainable economic growth and low inflation rate. In the case of Nigeria, crude-oil revenue exposed her to highly pro-cyclical financial swings characteristic of volatile crude-oil prices.

Full employment as one of the key macroeconomic variables hinged on economic growth and development signify a high degree of pro-cyclical macroeconomic policies which have not encouraged growth, in many developing economies including Nigeria; they have in fact increased growth volatility. In the dynamism, macroeconomic policies, such as imprudent fiscal spending can lead to inefficient resource allocation, in some cases contributing directly to overheating in the economy and sowing the seeds of macroeconomic instability.

The most common economic measuring tool is the Gross National Product (GNP) or the total income earned by a nation's permanent residents [the nationalist] at a given period. The average income of a citizen of any country is the GNP per capita, calculated by dividing the GNP with the population. GNP, however, differs from Gross Domestic Product (GDP) or the market value of all final goods and services produced within a country in a given period of time (Mankiw 2001), by including income that a nation's citizens earn abroad and excluding income that foreigners earn in the country .The most common economic measuring tool is the Gross National Product (GNP) or the total income earned by a nation's permanent residents [the nationalist] at a given period.

On the other hand, it could result in over-tightening of monetary policy and indiscriminate fiscal adjustments which can lead to substantial losses in many valuable social projects, weakening accumulation of infrastructure and human capital as well as aggravating the downturn and reducing the potential for long term growth in the economy. Given the indices currently used by international organizations, Nigeria's current GNP per capita of about $260 is below that of less affluent countries such as Bangladesh with a per capita income of about $370. Nigeria's low per capita income compares with those of smaller African countries with less endowment in natural resources, such as Tanzania with a per capita income of $260 and Mozambique of about $220. African countries that enjoy impressive standard of living are South Africa with a per capita income of about $3,170 and Botswana with a per capita income of $3,240.

Nigeria's poor per capita income becomes more frightening when compared with those of some western nations. For instance, in 2007, the GDP of the United States

was about $13.8 trillion with per capita GDP of about $46,000, and the per capita GDP of Britain was put at about $23,590. This is not to mention the impressive economic performances of the four Asian Tigers of Singapore, South Korea, Taiwan and Hong Kong that are said to have "had a stretch of sustained economic growth ranging from 6-10 per cent annually" (The Great Courses, October 2008) in the years before the impact of the global financial crisis. Nigeria's GDP in 2007 was $166 billion in 2007.

Fiscal policy can always provide a useful countercyclical device. Indeed, it is frequently argued that fiscal policy is a more powerful countercyclical instrument than monetary policy in an open economy. One of the problems with managing the Nigerian economy is that the nation's fiscal policies do not synchronize with its monetary policies. Economic principles are not working in Nigeria's environment -the forces of demand and supply hardly determines prices in the society. For instance, while reduction in global demand for oil is forcing down oil prices globally, oil prices are not going down in Nigeria. The federal government, which controls the prices of petroleum products, has refused to reduce oil prices with the flimsy excuse that domestic prices are not deregulated. Weak institutions and poor infrastructure have combined with years of unreasoned monetary and fiscal policies to damage the economy and eroded productivity.

Fiscal policy has often been preferred in Nigeria in view of the underdevelopment of the financial sector up to the 1990s. As a fall out on the impact of the global economic crisis, economic agents' confidence have been so battered that government needs to tackle the problems from various angles, such as the use fiscal stimulus to jumpstart the economy; envisage a restructuring of the financial system in order to strengthen banks, and employment of monetary policy tools to arrest exchange rate volatility and liquidity concern within the confine of the money market.

3. Method of analysis

The use of VAR has become a standard method of analysis in empirical economics since Sims (1980). This is resulting from the failure of simultaneous equations models to provide good forecasting power and their insufficient representation of the dynamic interactions in a system of variables. Thus, it helps to observe impulse-response mechanisms; study variance decomposition of variables in the system; for forecasting; causality and policy formulation analysis.

These outcomes of VAR procedure are germane to the identification of policy measures to address the current economic downturn which has a global outlook.

The Model

This work draws inspiration from the work of Baltagi (2003). In formulating the model for this study. The model used in the work is to be modified for this work. In that work, three families of VARs were specified. First, a 3-variable VAR with employment rate, CPI inflation and interest rate. Second, a 3- variable VAR model with unemployment, interest rate and growth rate of industrial production, Third, a VAR with five variables. Consequently, given a set of k time series variables:, the basic VAR relevant for this work will be the latter and will be stated implicitly of the form as below:

RGDP = f (RMS, RGE, EXR, PLR, CPI)

The variables of the model are:

- rgdp : real gross domestic product;
- rms : real broad money supply;
- rge : real government expenditure;;
- exr : exchange rate;
- cpi : consumer price index; and
- plr : prime lending rate

The Data

This paper applies the VAR framework on annual time series data in Nigeria from 1969 to 2009 to estimate the responses of monetary and fiscal measures to unanticipated impulses shocks over different horizon. The data are sourced from the Central Bank of Nigeria. The software package to support the VAR analyses was EVIEWS 7.0

4. The Results

The main findings include the following:

(1) The consumer price index and the prime lending rate were significant at % percent and percent respectively.

(2) A positive money supply is equally negatively impacted on the GDP also.

(3) Apart from the PLR and CPI that were significant, all other variables were not significant at all.

(4) There is no significant relationship between government expenditure and real GDP.

(5) All these give a vivid picture of the poor level of preparedness of Nigeria to shocks arising from the global financial crisis.

(6) Invariably, the forecast position reveals the non- challant attitude to the reaction required so as to get out of the woods quickly. The response rate is very poor.

(7) The impulse-response function has been in convergence since independence. However, in the present dispensation, the sharp divergence has revealed the pronounced dynamism of the macroeconomic factors on the economy. In this instance, the relevance of these macroeconomic variables requires a steady and consistent approach to put the economy in proper perspective. This is expected to pull the country out of the woods as a result of the effect of the global financial crisis. All the variables are in divergence.

5. Conclusion

The Nigerian economy is far from converging towards a sustainable equilibrium in the short run. However, analysis carried far into the horizon indicates that the variables converge uniformly to the steady state equilibrium if a proper zeal to triumph is involved. This call for a positive and paradigm shift towards recovery. It shows that both monetary and fiscal policies could be used to address the impact of global crisis from this perspective. It is of the essence that authorities must use the right mix of these policies to avoid conflicts so as to move the economy forward with the aim of achieving a stable and full employment status which forms the nucleus of macro economic objectives in this instance.

As the global financial/economic downturn persists, African countries including Nigeria are concerned about what happens in regards to development cooperation, aid delivery and provision of social amenities as they face higher borrowing costs and lower export demand as well as weak currencies, falling remittances, reduced capital inflows and macroeconomic imbalances. To this end, advanced countries are expected assist

the less developed nations in this regard.. In essence, African economies are being challenged to use the global downturn to transform their economies by diversifying sources of growth, improving governance and evolving right policies to attract investments to Africa and as such strive to achieve and even surpass the stated macroeconomic objectives of government..

As global competition and the use of technology are on the increase Nigeria should begin now to take very seriously investment in education and skill training as no nation can compete effectively in the emerging global market place with poorly educated and skilled graduates. The leading factors of production in the new world economy are said to be technology, knowledge, creativity and innovation. How much land or mineral resources a nation has no longer determines the wealth and progress of nations, but the quality of their human capital. Good education could help people thrive in difficult economic times, but that alone cannot change Nigeria. The policy makers should redesign and implement effective monetary and fiscal policies to provide good incentives to individuals and organizations to invest in the economy, and encourage proper competition to increase the quantity and quality of goods and services.

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It is of paramount importance to consider the potential role of home countries and the international community in facilitating flawless trade mechanism particularly from the angle of low-income nations that lack domestic capabilities, skills, knowledge and abilities. Risk-mitigation measures by home countries and international organizations can help in this regard also. Special attention may have to be given to measures aimed at mitigating three broad types of risks such as - political risk (including sub-sovereign and contractual and regulatory risks); credit risk and exchange-rate risks. Since Nigeria is among the nations that depend on foreign aid, remittance from abroad and trade with countries at the epicenter of the financial crisis the political leaders of Nigeria should not fold their hands and expect miracle to happen. They should reduce waste and improve social environment with rapid industry and service sector job creation to reduce the rising youth unemployment and underemployment in the society.

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and expect miracle to happen. They should reduce waste and improve social environment with rapid industry and service sector job creation to reduce the rising youth unemployment and underemployment in the society. Nigeria cannot achieve greatness without addressing its fundamental problems. With all the twists and turns in the new global economy

Nigeria needs leaders committed to tackling the sociopolitical and economic problems facing the nation. There should be massive investment in the non-oil and agricultural sector of the economy, commitment to sustainable monetary and fiscal policies, and sufficient highly skilled personnel to supervise the needed reforms and manage the affairs of the nation. For sound policy formulation, the Nigerian economy should adopt developmental programmes so as to promptly correct the identified divergence in the impulse-response function.

Appendix

Appendix 1: Table of data on variables in model

RGDP	CPI	EXR	MS	PLR	RXD
3225.500	0.220000	0.714300	660.4000	7.000000	433.4200
4219.000	0.230000	0.714300	978.2000	7.000000	716.1000
4715.500	0.230000	0.657900	1041.800	7.000000	823.6000
4892.800	0.250000	0.657900	1214.900	7.000000	1012.300
5310.000	0.260000	0.657900	1522.500	7.000000	963.5000
15919.70	0.300000	0.616200	2352.300	7.000000	1517.100
27172.00	0.400000	0.626700	4241.200	6.000000	2734.900
29146.50	0.480000	0.630800	5905.100	6.000000	3815.400
31520.30	0.590000	0.651400	7898.800	6.000000	3819.200
29212.40	0.670000	0.647500	7985.400	7.000000	2800.000
29948.00	0.740000	0.560500	10224.60	7.500000	3187.200
31546.80	0.820000	0.544500	15100.00	7.500000	4805.200
205222.1	0.990000	0.636900	16161.70	7.750000	4846.700
199685.3	1.060000	0.670200	18093.60	10.25000	5506.000
185598.1	1.310000	0.748600	20879.10	10.00000	4750.800
183563.0	1.840000	0.808300	23370.00	12.50000	5827.500
201036.3	1.930000	0.999600	26277.60	9.250000	7576.400
205971.4	2.030000	3.316600	27389.80	10.50000	7696.900
20806.50	2.240000	4.191600	33667.40	17.50000	15646.20
219875.6	3.500000	5.353000	45446.90	16.50000	19409.50
236729.6	5.260000	7.650000	47055.00	26.80000	25994.20
267550.0	5.650000	9.001000	68662.50	25.50000	36219.60
265379.1	6.370000	9.754000	87499.80	20.01000	38243.50

271365.5	9.230000	19.66100	129085.5	29.80000	53034.10
274833.3	14.50000	22.63100	198479.2	18.32000	136727.1
275450.6	22.77000	21.88600	266944.9	21.00000	89974.90
281407.4	39.35000	84.57500	318763.5	20.18000	127629.8
293745.4	50.88000	79.60000	370333.5	19.74000	124491.3
302022.5	56.31000	74.62500	429731.3	13.54000	158563.5
310890.1	60.74000	84.36700	525637.8	18.29000	178097.8
312183.5	64.76000	92.52800	699733.7	21.32000	449662.4
329178.7	69.25000	109.5500	1036080.	17.98000	461660.0
356994.3	82.32000	112.4860	1315869.	18.29000	579300.0
433203.5	92.93000	126.4000	1599495.	24.85000	696800.0
477533.0	105.9600	135.4060	1985192.	20.71000	984300.0
527576.0	121.8700	132.6700	2263588.	19.18000	1032700.
561931.4	143.6200	130.4000	2814846.	17.95000	1223700.
595821.6	155.4500	128.2700	4027902.	17.26000	1290202.
634251.1	163.8200	117.9600	5809827.	16.93000	1589270.
672302.6	182.8000	119.7900	9458490.	14.88000	2117400.
716949.7	205.4000	146.4600	10767378	18.98000	2131960.

source: CBN

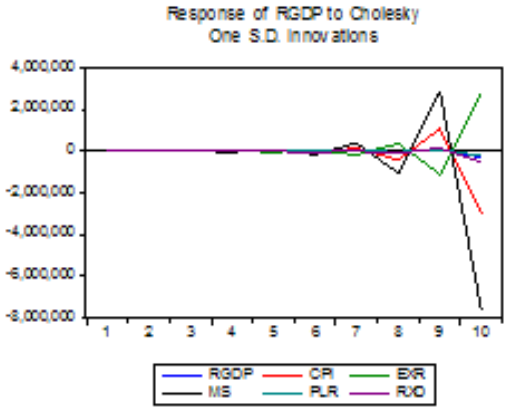
Appendix 2: Multiple Regression Result

Dependent Variable: RGDP				
Method: Least Squares				
Date: 06/13/11 Time: 22:54				
Sample: 1969 2009				
Included observations: 41				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
CPI	3910.505	1650.338	2.369517	0.0235
EXR	-1126.505	892.7126	-1.261890	0.2153
MS	-0.011401	0.017426	-0.654256	0.5172
PLR	10199.88	1763.057	5.785339	0.0000
RXD	0.015864	0.132899	0.119366	0.9057
C	-7818.610	23775.71	-0.328849	0.7442
R-squared	0.921880	Mean dependent var		244777.7
Adjusted R-squared	0.910720	S.D. dependent var		204552.5
S.E. of regression	61119.66	Akaike info criterion		25.01351
Sum squared resid	1.31E+11	Schwarz criterion		25.26428
Log likelihood	-506.7770	Hannan-Quinn criter.		25.10483
F-statistic	82.60609	Durbin-Watson stat		1.492595
Prob(F-statistic)	0.000000			

Appendix 3 : VAR result

Vector Autoregression Estimates						
Date: 06/13/11 Time: 22:58						
Sample (adjusted): 1971 2009						
Included observations: 39 after adjustments						
Standard errors in ( ) & t-statistics in [ ]						
	RGDP	CPI	EXR	MS	PLR	RXD
RGDP(-1)	0.434211	-3.70E-06	1.28E-05	-0.681837	2.30E-05	0.035486
	(0.19571)	(1.1E-05)	(4.3E-05)	(0.96658)	(1.4E-05)	(0.15644)
	[2.21861]	[-0.34343]	[0.29652]	[-0.70541]	[1.59580]	[0.22683]
RGDP(-2)	0.104864	6.92E-06	5.73E-06	-0.057245	-9.14E-06	-0.121495
	(0.19303)	(1.1E-05)	(4.3E-05)	(0.95335)	(1.4E-05)	(0.15430)
	[0.54324]	[0.65114]	[0.13457]	[-0.06005]	[-0.64171]	[-0.78739]
CPI(-1)	920.5612	0.961287	1.154419	-28111.75	-0.025409	-16210.45
	(3840.28)	(0.21146)	(0.84732)	(18966.2)	(0.28339)	(3069.72)
	[0.23971]	[4.54600]	[1.36244]	[-1.48220]	[-0.08966]	[-5.28076]
CPI(-2)	-584.1230	-0.322313	-1.176489	73784.43	0.010340	19513.60
	(3297.43)	(0.18157)	(0.72754)	(16285.2)	(0.24333)	(2635.79)
	[-0.17715]	[-1.77518]	[-1.61707]	[4.53077]	[0.04249]	[7.40331]
EXR(-1)	-291.6259	0.159653	0.616229	-3968.851	0.003155	2668.793
	(1170.75)	(0.06447)	(0.25831)	(5782.05)	(0.08639)	(935.839)
	[-0.24909]	[2.47658]	[2.38558]	[-0.68641]	[0.03651]	[2.85177]
EXR(-2)	461.7045	0.037533	0.423576	-19388.53	0.008166	-2255.433
	(1221.07)	(0.06724)	(0.26942)	(6030.58)	(0.09011)	(976.063)
	[0.37811]	[0.55823]	[1.57220]	[-3.21504]	[0.09062]	[-2.31074]
MS(-1)	-0.019211	-5.67E-06	3.26E-05	-0.733657	3.60E-06	-0.379739
	(0.09110)	(5.0E-06)	(2.0E-05)	(0.44992)	(6.7E-06)	(0.07282)
	[-0.21088]	[-1.12963]	[1.62059]	[-1.63064]	[0.53556]	[-5.21473]
MS(-2)	0.040907	1.82E-05	-5.34E-05	3.343324	-4.95E-06	0.843074
	(0.19982)	(1.1E-05)	(4.4E-05)	(0.98684)	(1.5E-05)	(0.15972)

	[0.20472]	[1.65106]	[-1.21194]	[3.38790]	[-0.33574]	[5.27835]
PLR(-1)	4505.451	-0.027073	0.667252	986.5739	0.431779	5497.642
	(2633.63)	(0.14502)	(0.58108)	(13006.8)	(0.19435)	(2105.19)
	[1.71074]	[-0.18669]	[1.14829]	[0.07585]	[2.22171]	[2.61147]
PLR(-2)	1133.169	0.204012	-0.520957	19903.43	0.299789	-2130.806
	(2830.64)	(0.15586)	(0.62455)	(13979.8)	(0.20888)	(2262.67)
	[0.40032]	[1.30891]	[-0.83413]	[1.42372]	[1.43519]	[-0.94172]
RXD(-1)	0.018764	-1.11E-05	9.04E-06	-1.539088	-4.31E-06	0.107111
	(0.19212)	(1.1E-05)	(4.2E-05)	(0.94882)	(1.4E-05)	(0.15357)
	[0.09767]	[-1.05384]	[0.21324]	[-1.62210]	[-0.30377]	[0.69747]
RXD(-2)	0.055626	1.73E-05	-1.52E-05	-1.300045	1.93E-08	0.237544
	(0.19510)	(1.1E-05)	(4.3E-05)	(0.96355)	(1.4E-05)	(0.15595)
	[0.28512]	[1.61348]	[-0.35302]	[-1.34923]	[0.00134]	[1.52318]
C	-1209.020	-1.285431	-1.832731	-121401.9	2.221922	-24643.72
	(23055.1)	(1.26949)	(5.08686)	(113863.)	(1.70132)	(18429.1)
	[-0.05244]	[-1.01256]	[-0.36029]	[-1.06621]	[1.30600]	[-1.33722]
R-squared	0.952025	0.998357	0.968249	0.992048	0.759693	0.996438
Adj. R-squared	0.929883	0.997599	0.953594	0.988378	0.648782	0.994794
Sum sq. resids	7.44E+10	225.6748	3623.492	1.82E+12	405.3235	4.76E+10
S.E. equation	53504.91	2.946150	11.80530	264247.6	3.948337	42769.11
F-statistic	42.99618	1316.881	66.07204	270.3119	6.849587	606.1371
Log likelihood	-472.0457	-89.57150	-143.7054	-534.3331	-100.9905	-463.3113
Akaike AIC	24.87414	5.260077	8.036175	28.06836	5.845668	24.42622
Schwarz SC	25.42866	5.814598	8.590696	28.62288	6.400188	24.98074
Mean dependent	257139.5	43.04821	45.86272	1140753.	14.96821	349299.2
S.D. dependent	202061.3	60.12900	54.80134	2451185.	6.662329	592774.1
Determinant resid covariance (dof adj.)		7.85E+32				
Determinant resid covariance		6.89E+31				
Log likelihood		-1761.579				
Akaike information criterion		94.33739				
Schwarz criterion		97.66451				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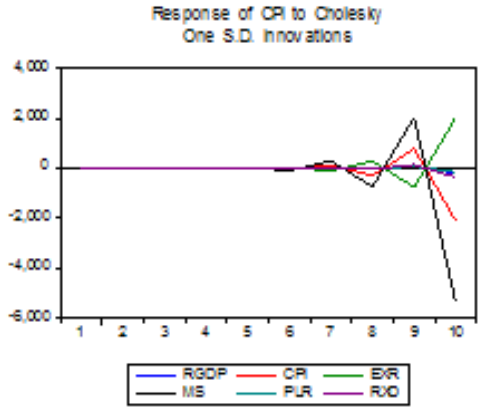
RGDP CPI EXR
MS PLR RXD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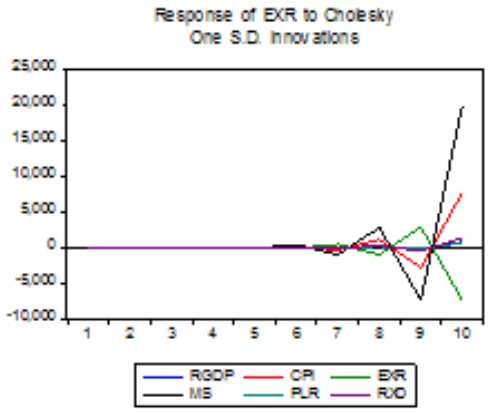
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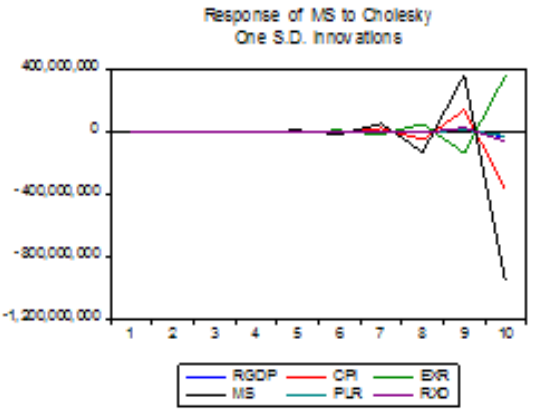
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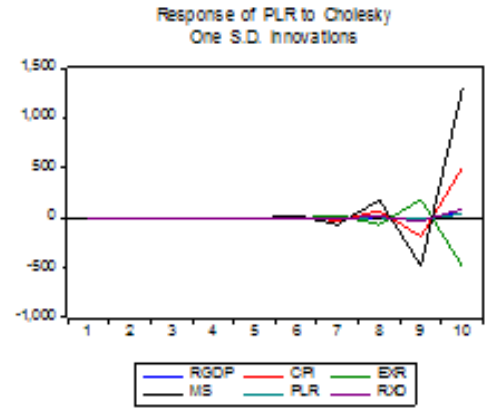
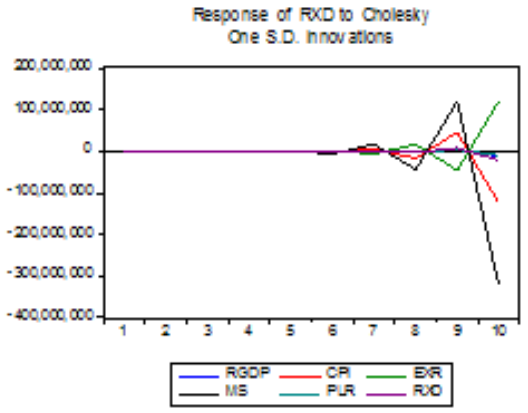
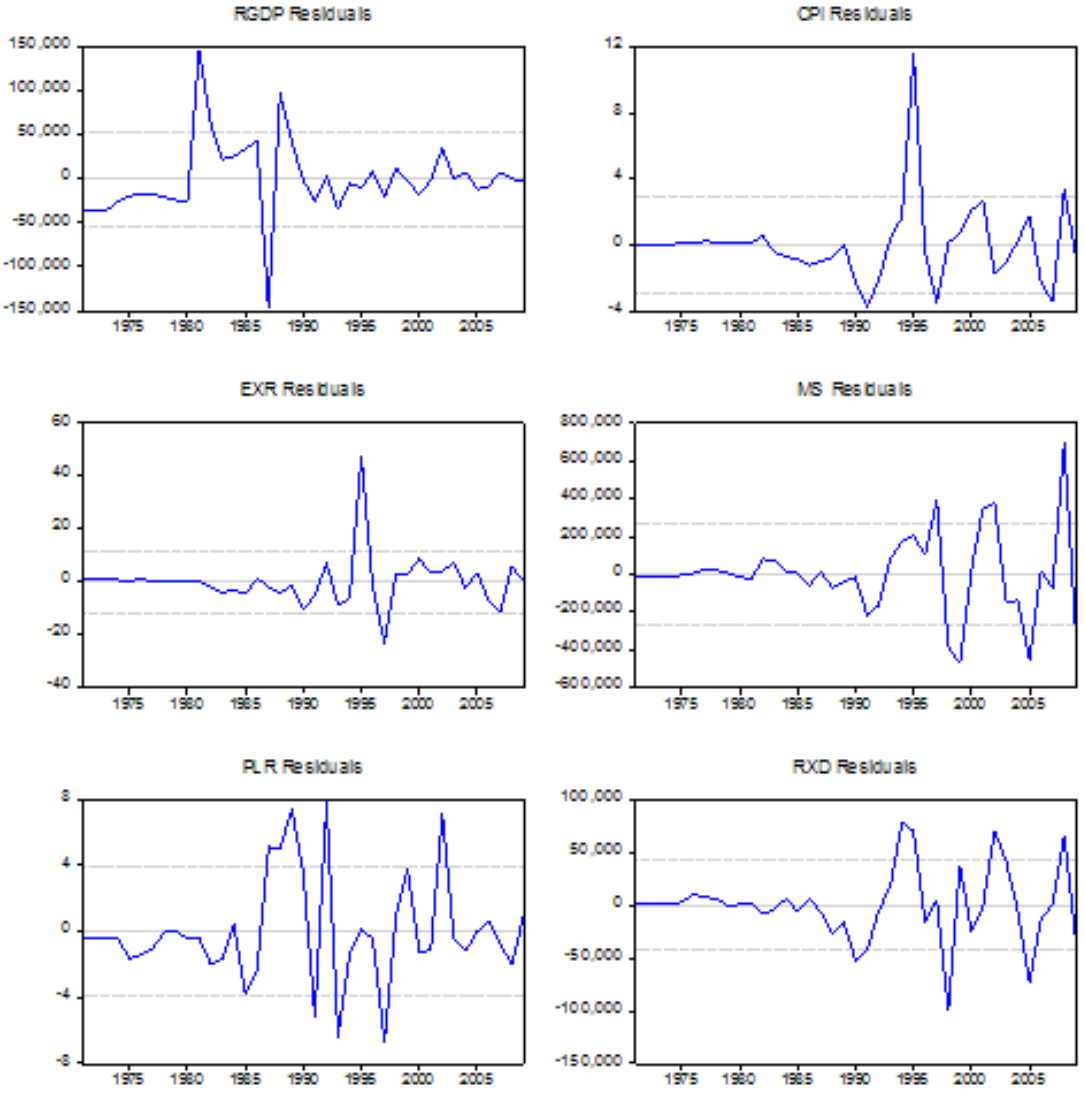
RGDP CPI EXR
MS PLR RXD


Response of PLR to Cholesky
One S.D. Innovations
1,500
1,000
500
0
-500
-1,000
1 2 3 4 5 6 7 8 9 10
RGDP CPI EXR
MS PLR RXD


Response of RXD to Cholesky
One S.D. Innovations
200,000,000
100,000,000
0
-100,000,000
-200,000,000
-300,000,000
-400,000,000
1 2 3 4 5 6 7 8 9 10
RGDP CPI EXR
MS PLR RXD

Response of RGDP:						
Period	RGDP	CPI	EXR	MS	PLR	RXD
1	53504.91	0.000000	0.000000	0.000000	0.000000	0.000000
2	24866.29	-1562.967	7795.482	-5377.384	15732.27	605.5360
3	23094.78	8604.662	8189.848	10222.83	17147.20	2034.683
4	17099.87	-3037.917	20628.05	-14481.21	22202.78	87.82428
5	18395.09	24235.37	-10914.42	63173.13	24383.26	2465.693
6	7524.710	-54629.11	58040.74	-133657.5	17638.73	-13627.38
7	24037.52	151536.6	-152772.2	406122.3	31754.86	18931.37
8	-32534.05	-411135.4	385039.4	-1035652.	-13383.53	-80362.05
9	107646.6	1095689.	-1101410.	2878045.	102406.0	177531.2
10	-282607.3	-2993273.	2862885.	-7642112.	-212958.2	-529829.8
Response of CPI:						
Period	RGDP	CPI	EXR	MS	PLR	RXD
1	-0.080267	2.945056	0.000000	0.000000	0.000000	0.000000
2	-0.295221	3.900443	1.466877	-1.633147	-0.104587	-0.359769
3	0.203492	7.876419	-0.037958	6.714778	0.674428	0.504536
4	0.123544	0.118203	7.599438	-10.85429	1.345096	-0.990237
5	2.366305	19.17983	-13.15821	42.50527	3.400479	1.816380
6	-3.056904	-36.56908	37.45455	-96.57483	-0.537304	-8.674746
7	10.15488	108.5429	-108.8495	283.2032	10.46093	15.35752
8	-28.30349	-288.5210	272.9775	-735.4731	-20.28025	-54.01483
9	71.73627	775.3873	-772.7688	2022.684	61.87462	128.6758
10	-202.4542	-2106.836	2028.272	-5402.978	-160.1202	-369.2777
Response of EXR:						
Period	RGDP	CPI	EXR	MS	PLR	RXD
1	-0.209940	9.859519	6.489290	0.000000	0.000000	0.000000
2	0.626845	11.46516	2.453125	7.970366	2.335634	0.291704
3	0.613472	2.399627	11.72145	-17.64890	0.931977	-2.397629
4	3.083660	30.50951	-14.49905	52.52708	3.717541	2.419237
5	-3.131839	-43.11069	58.51398	-138.6502	-1.042632	-10.53997
6	16.50567	157.0894	-135.6435	377.5886	15.19626	24.13602
7	-33.84605	-382.5688	391.7335	-1015.749	-25.19637	-68.89994
8	104.9034	1072.853	-1027.809	2742.578	87.86904	182.1519
9	-266.7827	-2854.264	2805.218	-7399.871	-214.2670	-495.0799
10	738.3662	7741.616	-7532.248	19960.32	603.6917	1332.427

Response of MS:						
Period	RGDP	CPI	EXR	MS	PLR	RXD
1	-2078.263	59294.94	-84106.02	243377.8	0.000000	0.000000
2	-29927.24	-189291.6	38103.51	-214825.6	2039.366	-49668.72
3	677.9475	252855.4	-545700.3	1094961.	21505.38	-2428.686
4	-163887.5	-1124392.	643250.1	-2305940.	-107057.2	-260481.9
5	140360.1	2410300.	-2991709.	7062735.	156002.5	329679.1
6	-819015.5	-7387505.	6304770.	-17844192	-605202.5	-1376550.
7	1608536.	18612126	-19477048	49935802	1405310.	3080449.
8	-5165870.	-52238691	49027168	-1.32E+08	-4065457.	-9186319.
9	12760525	1.38E+08	-1.37E+08	3.60E+08	10580375	23520892
10	-36156339	-3.77E+08	3.63E+08	-9.66E+08	-29145084	-65310559
Response of PLR:						
Period	RGDP	CPI	EXR	MS	PLR	RXD
1	0.360874	-0.121896	1.792690	-0.253260	3.488036	0.000000
2	1.387286	0.050672	0.492783	0.666104	1.502138	-0.138980
3	0.677818	-0.792411	1.252424	-1.430260	1.991234	-0.229080
4	1.091825	1.139583	-0.791553	3.253117	1.586387	-0.024832
5	0.419169	-3.587010	4.007297	-9.369276	1.180479	-0.744996
6	1.728038	9.501264	-8.563771	24.24536	2.120578	1.546203
7	-1.585745	-25.52649	25.81219	-66.31658	-0.616524	-4.393541
8	7.424595	69.03723	-66.35154	177.9002	6.692829	11.95755
9	-16.75385	-186.1180	182.7551	-481.2325	-13.07095	-32.01686
10	48.50852	502.4807	-488.8961	1296.467	39.97248	86.75416
Response of RXD:						
Period	RGDP	CPI	EXR	MS	PLR	RXD
1	-1029.163	15429.65	-250.1108	23403.41	910.8248	32271.53
2	5302.484	-42961.73	59085.68	-91305.60	19273.53	3456.625
3	16541.38	124019.2	-111809.8	334298.7	10819.23	32765.22
4	-32724.30	-327519.9	301574.6	-796857.7	-10020.77	-59841.97
5	74403.44	869122.9	-894936.7	2298995.	62639.41	136110.2
6	-243981.6	-2361329.	2225435.	-6012890.	-183933.9	-430752.5
7	574368.9	6329450.	-6300747.	16488820	481298.0	1060424.
8	-1662032.	-17175917	16559782	-44092151	-1326525.	-3000705.
9	4329608.	46114385	-45324308	1.20E+08	3558827.	7902697.
10	-11895860	-1.25E+08	1.21E+08	-3.22E+08	-9628812.	-21600325



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Pension system in Romania. Long term imbalances and inconsistent policies[1]

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Abstract: *Public policies on retirement, both in Romania and in other EU countries, have been and still are conditioned by numerous short-term budgetary constraints and by long term major sustainability problems. Alongside objective, demographic developments known in all European countries, support systems for the elderly are facing numerous constraints, both due to government policies marked by fiscal indiscipline and lack of consistency of decisions and, hence, the credibility phenomena caused by the phenomenon "the captive politician of a redistributive policy model".*

Modeling support institutions for pensioners by political actors was most of the times the expression of elections marked by Weberian instrumental rationality and not by wertrationalität, using the axiom - guide for the behaviour of decision makers to "meet social interests in order to come to power" and not by the concern for a more long term efficient trans-redistributive approach. This paper aims to pursue the most important imbalances that characterize the public pension system in Romania, expression of decisions determined by aggregating in group individual preferences and not by both rational and ethical analysis, without redistribution centres.

Keywords: age dependency ratio, PAYGO systems, imbalances

JEL Classification: *H55 - Social Security and Public Pensions*

[1]Paper realized within the project "Economic scientific research, support of the welfare and human development in the European context", financed by the European Union and the Government of Romania within the European Social Fund Operational Programme Human Resources Development 2007-2013, grant agreement no. POSDRU/89/1.5/S/62988

1. Sources of imbalances between the european homophonous and the distinct national mark

In the last two decades, EU public policies regarding retirement have been reviewed systematically and sometimes radically. Virtually none of the countries within the common European space has not excluded from its public policy objectives the public pension system reform. In the meantime, starting in the 1980's and acting globally, the World Bank has assisted 68 countries to reform public pension systems, with over 200 loan and credit programs (World Bank, 2006). It is generally accepted that most of the completed reforms were not due only by the desire for doctrinal relocation of the role given to public policies under the influence of what is known to be the Washington Consensus (Williamson, 1990), but rather the common changes of developed countries and some of the emerging ones, regarding the nature of demographic growth, effects of new social behaviours, well documented by sociologists in the last three decades.

PAYGO pension systems, with defined benefits, allow a balanced fiscal approach of the link between contributory generations and the beneficiary ones only if there is some form of age dependency ratio(the percentage of people over 65 years in the population aged between 15 and 64 years). Lower the number lower the share of population over 65 in the total population aged 15 to 64 years is. In 2010 it reached the rate of 1 to 3.8 and for 2050 it is forecasted a rate of 1 to 2 in the EU countries. Therefore the critical mass of occupied people who financially support pensioners has decreased and it will continue to decrease dramatically.

In Table no. 1 this trend can be seen as it appears in 2010 and the forecast for 2050.

Table no. 1

Countries	2010	2050
EU (27 countries)	25.92	50.16
World	11.7	25.4
Romania	21.37	53.81
China	11.32	38.8
Japan	35.1	73.8
Poland	19	40
Spain	25	70
France	26	49
Germany	31	53
US	19	40

Source: Eurostat and World Bank, 2011

The major negative trend of dependence will severely increase after 2030, when the baby boom generation will reach retirement age.

There are three major reasons for this dramatic change: increased longevity, earlier retirement ages and slower population growth, or shortage in the future population.

The evolution of the fertility rate (continuous decrease) and life expectancy (constant growth) have made the current developments in dependency rate well anticipated and with sizeable effects, hence the wide acceptability of more determined steps towards reform.

Increasing longevity is one of the important factors that have imposed the PAYGO reform. Both in Europe and the U.S., as well as in China, demographic changes over the past 50 years and the ones projected for the next 50 years highlight the transformation of the age structure from the pyramid shape - which highlights the growth of young population - to a rectangular shape which emphasizes the contraction of youth population and the expansion of the old one's. This trend is less evident in the U.S. than in other economic areas due to higher fertility rates and a greater number of emigrants.

The first two following graphs show trends in age structure of the EU in the years 1990-2010-2050. The trend shown by these graphs is that of maintaining the drastically reduced fertility rate (below the generation replacement rate) and a major increase in population over 65 years, thus of the retirement age (EU 15 countries have the highest longevity rates of the world).

Fig. no. 1

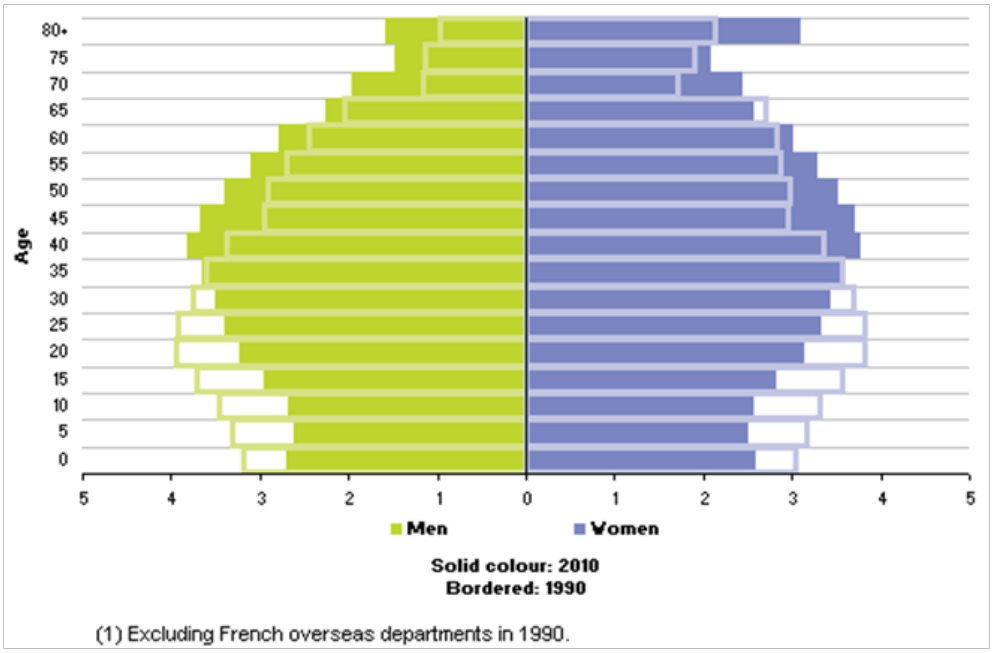
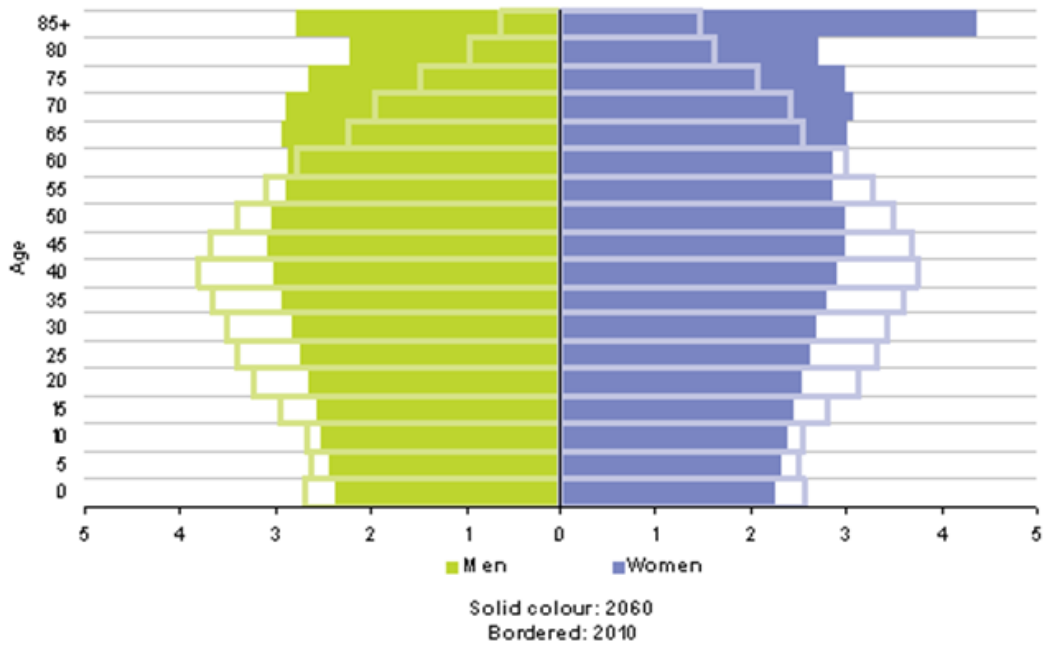


Fig. no. 2



(1) 2010, provisional; 2060 data are projections (EUROPOP2010 convergence scenario).
Source: Eurostat (online data codes: demo_pjangroup and proj_10c2150p)

For 2050, in Romania, demographers' expected a number of people over 65 years amounts to approximately 7.4 million (43% of the population) from a total of about 17 million people, compared to the 5.7 million pensioners in early 2011 which represented 27% of the country's population. This trend is accompanied by current low fertility rates and identical projections for coming years the 21st century. Romania has one of the lowest fertility rates in the EU (1.39 children per couple), surpassed only by Germany, Hungary and Latvia, well below the generation replacement rate (2.1 children). This makes the median age in Romania to be 38.7 years, (38.5 in the EU), compared to the world median of 20 years[1] . Forecasts for 2050 raise this median age to 48 years, meaning the aging thesis is getting more shape.

The above developments regarding the ageing of population have important implications over workforce evolution. Negative population growth as well as developments in the labour market, allow us to make observations on the evolution of employment and the number of retirees.

Table no. 2 reveal in Romania a decrease of the employment rate over the last decade. Between 2000 and 2011 the decrease was about 8% compared with a slightly increase in the EU 27 for the same period.

[1] CIA World Factbook

Table no. 2 Employment rate 15-64

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
EU (27 countries)	62.2	62.6	62.4	62.6	63	63.5	64.5	65.4	65.9	64.6	64.1	64.3
Euro area (16 countries)	61.4	62.1	62.3	62.6	63.1	63.7	64.7	65.6	66	64.7	64.2	64.2
Romania	63	62.4	57.6	57.6	57.7	57.6	58.8	58.8	59	58.6	58.8	58.5
United States	74.1	73.1	71.9	71.2	71.2	71.5	72	71.8	70.9	67.6	66.7	NA
Japan	68.9	68.8	68.2	68.4	68.7	69.3	70	70.7	70.7	70	70.1	NA

Source: epp.eurostat.ec.europa.eut, 2012

Table no.3. Employment rate at 55-64 – 2010

EU 27 countries)	46.3
Euro area (17 countries)	45.8
Romania	41.1

Source: Eurostat, Key figures on Europe, 2011

The employment rate within the 55-64 group is also low at the EU 27 level, of about 46%, as it can be seen in the table no. 3. With the new pension reforms, the level of employment at 55-64 is expected to raise at around 60% from this age group.

Future pensions funding also depends on the support ratio (people in the age group +65, in the labour force). In 2005 EU 25 had 35 people in the age group 65+ per 100 people in the labour force. By the year 2050 – at constant labor / labour force participation rates and with immigration this support ratio would reach the level of 72 people in the age group 65+ per 100 people in the labour force.

Low employment rate within this segment but also in the hole 15-64 (only 58%)[2] segment leads to systemic disequilibriums: lost of GDP, assuming the actual trend in work productivity (48.9%) than EU average in 2010) and also the small labor force participation and a financial disequilibrium because of the small amount of contributors to the social insurance budget which raise the problem of who will sustain the futures defined benefits of the pension system.

The next two tables show the evolution of GDP on market prices and the evolution of the new entrants as pensioners in different periods of time (which represent different governments).

[2] Eurostat, Key figures on Europe, 2011

Table no. 4. Evolution of the number of pensioners

Perioada	1990-1992 Left government			1993-1996 Left government				1997-2000 Right government			
Pensioner no. Evolution	+ 623.000			+960.000				+576.000			
Number of pensioners (thousands)	3577	4034	4200	4392	4917	5187	5352	5524	5702	5894	6110
GDP (billionUSD)	40.8	28.9	19.6	26.3	30	35.4	35.3	35.2	38.1	35.6	37

Sursa: BNR, 2011, INS for number of pensioners

Table no. 5. Evolution of the number of pensioners

Perioada	2001-2004 Left government				2005-2008 Right government				2009-2011 Right government	
Personier no.evolution	-106.000				-357.000				-134.000	
Number of pensioners (thousands)	6311	6342	6274	6205	6042	5785	5726	5685	5689	5555
GDP (billion USD)	40.1	45.8	56.9	73.1	98.6	121.9	166	200	161.1	161.6

Source: BNR, 2011 for GDP, CNPP for number of pensioners

The relationship between the evolution of GDP and the number of pensioners reflects a strong inverse correlation between the two indicators in the period 1990-1992 because of the started policies of economic restructuration (GDP decline correspond to an increase of the pensioners), only in the first months of 1990 the number of pensioners increasing by around 400,000 people as an results of Law 50/1990. The decline of the GDP is also determined by the diminishing labor force through unemployment which increased with about 600.000 persons from 337440 to 929019). In the second examined period, even if the economy restarted the number of pensioners still increase with about 960000, which is explain because the gain in productivity are realized by reducing labor costs and maintaining retirement as a substitute policy to unemployment (the unemployment decrease at the and of this period with about 500.000).

In the third period 1997-2000 period, for a GDP growth of about 5%, the number of pensioners increased by 576,000 as it is with the number of unemployed with about 120.000 .

On the hole, the ninth decade is the one in which retirement can be seen as a deliberate loss of labor productivity (thus of GDP), through discretionary public policies, based on the incidence passed forward principle (or, for the sustainability of PAYGO systems with defined benefits it is important to track income trends: if they grow due to increased productivity, then there will be higher incomes available for redistribution; if revenues fall then the amounts likely to be redistributed also diminish.

The ninth decade is also characterized by the **decline in GDP** due to defensive

restructuring (companies' productivity increase was achieved by cutting down the number of employees). .

An interesting phenomenon, documented for the1993-2005 period by Brown and Earle (2007), relevant to the unsustainability of the pension budget was the one concerning the productivity evolution of **new firms** entering the economy. They found that the average new firm entry in productivity growth is very low; even if **net entrants** had brought a higher productivity rate (up to 50% of productivity growth) they could not cover the whole economy productivity losses. Moreover as the two authors suggest, new firms entering the market have had in the first year a productivity of up to 30% lower than the incumbents but surpassing them after two years with about 20% the productivity of incumbents. After four years the increase productivity of these companies remains the same as the incumbents', and after seven years, new entrants to incumbents productivity remains high but not by much (10%), within a survival rate of 60%, which reflects a system effect (follows the average). On the other hand, ***the cross effect*** (gains in productivity from the expansion of employment shares in high productivity growth firms and the reduction of employment shares in low productivity growth firms)[3] is negative, which means that an increase in productivity is not associated with the increase share of the firm in employment. This shows a „defensive restructuration" and not a "redistributive" one (shift in employment between sectors).The construction sector productivity is one good example of the fore mentioned: in 2006 the productivity in this sector was 300% higher than in 1989, but the reduction in labor force in this segment was the biggest in the Romanian economy 65%[4] . As a result, in Romania even the labor productivity increased constantly it remains high below the EU average, 50.2% in 2008 and the salary augmentation (and correlative the pension contribution) on those sector with higher productivity cannot compensate the losses of contributors from the other sector of economy.

The **number of employees** is also relevant for the current imbalances of public pension system and for the futures ones without changing policies: between 1989 and 2010 the shrink was of 50% from 8.2 millions to 4.1 millions. Adding at this the evolution of the real salary (for the afore mentioned period increase only of 24% with a major reduction between 1990-1997 (in 1997 the same salary as it is in the 1969) we can add a new tile at the explanatory pattern of public pension system imbalances.

Corroborating these figures with the ones previously mentioned, we can make the following comments: (1) the 90's have been defined by approximately 3.6 million job losses due to structural adjustments, whilst "transforming" intro retirees about 2.4 million people, which has brought to the stage of the public pensions sustainability problem. (2) The reducing employment trend is positively correlated with the economic growth

[3] http://siteresources.worldbank.org/ECAEXT/Resources/Innovation_Inclusion_Integration2, p.40

[4] **Herman, Emilia, Georgescu, Maria-Ana,** *Correlations between the average wage and labour productivity in romania in thecontext of the socio economic sustainable development,* p.2, ICELM-3, Tîrgu Mureș, Romania, 2008

period (in 2002 the level from 1989 had been reached) and strongly correlated with the economic crisis: at a GDP decline of 7% there has been recorded a decrease in the employed population of approximately 8%. This diminishing employment trend has further continued in 2010; at a GDP growth of 1.5%, employment fell by about 6%, suggesting the lack of confidence in the "reboost" economy and, hence, the lack of major investment projects in terms of employment. Moreover, in 2010, foreign direct investment has been declining with about 25.6% compared to 2009, and in 2009 it was about 48.4% lower than in 2008, according to data provided by the National Bank of Romania. At the same time, the decrease in the employed population sector has been also the result of government policies regarding the adjustment of the public sector through layoffs and retirements.

Another significant indicator for understanding the future pressures on public pension budget **is the number of pensioners.** In 1990 this was 2.6 millions persons, but in the early twentieth century the number of them was 6.1 millions from which a number of 4,2 individuals were social security public budget pensioners and the rest retired farmers (with pensions not related to contributiveness); in 2010 their number was of 5.6 millions, of which 737.000 pensioners from agriculture or having different periods of time worked in agriculture, while in 2011 the number of all pensioners was of 5,5 millions from which only 200.000[5] .

The evolution of the number of pensioners in this period reflects an extremely complex and dynamic reality marked by inconsistent policies. If in the ninth decade lax and fragmented retirement policies were a deflector of some expected social effects of structural adjustment policies of economics (i.e. increasing poverty), in 2000 "developments in pension policies cannot be detached from the ones belonging to the previous period" (Gheţău, 2011). In the ninth decade, the number of pensioners on all categories of social security pensions increased, which marked the evolution of the number of pensioners in 2000. The only declining category of retirements is in the agricultural sector (farmers) with a drop of over 50% compared to 2000, due to mortality.

Stage of pensioners' contributiveness. Ministry of Labour (2011), statistics show a trend of a decrease of retirements on complete contribution in the total number of pensioners. The report also revealed the increase of retirement on age limit and incomplete contributiveness. 1.83 million (approximately 33% of total) have an incomplete contributiveness stage and only 2.60 million (approximately 42% of total) are old age pensioners who have a complete contributiveness stage. These developments have led to a real average retirement age of 52 years and a proportion of 25% pensioners in total population.

With a life expectancy at retirement age of about 23 years - average men and women, on average, a pensioner will receive pension rights for approximately 21 to 27 years - based on gender. Such a constant development will determine the possibility to predict in 2030 a growth to 6.3 million individuals (except special pensions)[6] , meaning 31% of the total population.

All the desequilibrums (natural or

[5] www.ins.ro

[6] **Ghetau, Vasile**, *Cati pensionari va avea Romania in 2030?*, HotNews.ro, mai 2011

artificial) explained above will give us the configuration of the main financial imbalances faced by the social security system.

2. Constant financial imbalances

Demographic evolution and the structural changes in the structure of the Romanian economy together with inconsistent policies in the field of social protection system lead to permanent fiscal imbalances from the mid of the 90. Aging population, reducing tax revenues due to low growth rates, small salaries as a consequence of small productivity are only few of the economic and social evolution which rise the imbalances of public social protection budget and increase both the needs of transfers from the state budget and increasing needs of government borrowing to cope with the increasing deficits.

As it's seen in the table no. 6, public expenditure for social protection represent a large and a constant part of the GDP in EU and the future projections (OECD, 2005) based on hypothesis of unchanged policy parameters show higher levels of public expenditures in the future, a contagion effect, we can say.

Table no 6. Expenditure on social protection (with health expenditures)

Expenditure on social protection										
% of GDP										
Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
EU (27 countries)						27,12 225	26,71 441	25,74 323	26,35809	Aprox.26
Euro area (16 countries)	26,675 59	26,80 647	27,37 277	27,77 143	27,673 46	27,71 077	27,34 273	26,79 991	27,46864	Aprox.27
Romania	13,035	12,77 552	13,56 135	13,05 948	12,822	13,43 839	12,81 993	13,55 158	14,25329	11.1%

Source: Eurostat, 2011

Tabel no. 7. Old age expenditure 2000- 2050 forecast

Country	Old age 2010	Old age 2050
EU (27 countries)	13.06	Increase by 3-5% from GDP
Romania	8.4	14.8
France	12.1	14.5
Germany	11.8	13.8
Italy	14.2	14.4
Nederlands	5.2	8.3
Sweden	9.2	10.8

Source: Ageing and Pension System Reform Implications for financial markets and economic policies, November 2005, OECD.

Compared to the EU average, Romania expenditures on old age are particularly low and slightly widening. These does not mean that from a financial point of view the things are better due to the high level of interest rate of the loans (6.7% for the Romanian bond on 10 years).

In the EU countries, expenditure on pensions accounts for aprox.13.6% of GDP, Romania 2010 expenditures on pensions representing 8.4% of GDP, up to 4 percentage points compared to 2001. Among the emerging markets in the EU, Romania also ranks a middle position regarding expenses, but forecasts for 2050 rank us at the forefront of these emerging countries in regards to the share of expenditure on GDP.

The share of social expenditures in the public budget represented 24.9% of budget expenses in 2010, this share being higher by 8.5 percentage compared to 2001 (Preda, 2011).

For 2011, the deficit of the pension budget was 2.7% of GDP, given that in 2009 and 2010 the deficit was 1.5 and 1.3 of GDP, according with Ministry of Labour budget execution.

In numbers, the budget deficit in Romania in 2010 was about 2.5 billion dollars and in 2011 was around 3.5 billion (2.7% GDP), far from expected 6% deficit in budget in 2050;

S@P Report (2010), suggest that if we will have similar evolution in the next years the financial imbalances will grow higher due to: increasing cost of loans to cover the differences between contributions and the level of pensions (interest rate is expected to rise at 8.2% in 2030), the increase in the number of pensioners because of the baby boom generation[7].

According to S@P study, in Romania in the period between 2010 and 2050 the GDP growth will be only 1.9% which indicates the impossibility of funding the pension budgets from the GDP growth, as long as they will increase in the afore mentioned range by 6.4% of GDP

Another major element of the current deficit of public pensions budget is the annual average growth of pensions in the period between 2004 and 2009 (24% each year). The annual average growth of wages was only 15% in the same period and the average real growth of GDP was of 5.4%.

In the analyzed period, the average pension was increased 6 fold, while the wage increased almost 5 times.

To these developments we can can add inconsistent policies in the field of retirement regarding: the change of the retirement age, changes in the calculation of the pension (from percentage of the base wage on the last five or ten years to the points system), special interest groups policies on retirement etc[8]. and also a lax policy on disability pension.

To these we add a low collection rate, from approximately 15 million people of working age, only 4.4 pay pension insurance. In the meantime the number of contributors to the second pillar in March 2012 was 5.6 million (the numbers must be equal).

[7] S&P Global Aging 2010; *An irreversible truth*, 2010

[8] Preda, Marian, coordinator, "Sistemul de asigurari de pensii in Romania in perioada de tranziție: probleme majore si solutii", European Institute of Romania, Bucharest, 2004

Conclusions

National public pension system in Romania is in the middle of important structural reform because of a projected deterioration in public finance in the next forty years. Budgetary consolidation of the pension system it a must not only for the romanian public authorities but for all the EU national authorities. These is for several reasons: (1) ageing population which is not a problem neither of left parties nor of the right ones but a mathematic one. (2) a moral problem, because of the sake of intergenerational solidarity it's beyond of any ethical principles to increase the taxation burden for the future employed generations, (3) because of the need of keeping in the future social peace in a world of dramtic social change.

Germany, 1992, Italy, 1992, 1995, France, 1995, 2003, Belgium, 1997, Netherlands, 2004, Sweden, 1998 etc. have pension system reformed by: changing calculation parameters (pension increase is based on indexing with the inflation rate or with the net salary, introduction of the points system in pension calculation) , introduction of multi-system approach, gender equality concerning the retirement age, diminishing level of the defined benefits, increasing contribution rates etc..

Even with these reforms more remains to be done to put the public pension systems in balance for the next generation and in the same time to preserve the level of the welfare of the old age population as an objective beyond the ideologies.

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Database improvements of national student enrollment registry. Link external systems tu NSER DB

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Abstract: *The main purpose of the paper is to illustrate how we can link external informatics systems to National Student Enrollment Registry, a national database, a distributed information system, of all students from higher education system. The general idea is to improve NSER database to have a strong unique informatic system where all the data should be collected from all universities. Employers and all academic institutions can check someone's background easy through a national portal just by log in. As a result of the paper, the author found that this system has it's flows but can be improved.*

Keywords: Informatic system for management of students, MSSQL db improvements, ID student number.

1. Introduction

The purpose of National Student Enrollment Registry is to have a national database, linked through a distributed information system, of all students from higher education system.

In a way, we can say that a functional system like this could provide the full path of a student – an individual record of all academic studies.

For such a result, all academic institutions (universities) have been linked through a UE project that provided an informatics system linked to a local database connected also to a national one.

The results of such a system are useful to employers, students and others academic institutions.

Why employers? Because a PR can easy check if a candidate for a job has been told the truth in his/her cv just by log in in a national portal and search by name or ID.

Why useful for students? The answer is simple. One student can also log in in the national portal and check his academic path. This way he/she is sure that the studies are recognized and the diplomas are real and provided by Minister of Education.

Why for academic institutions? If a student want's to enroll for superior studies like master or PhD, his background can be checked and no one could came from fake universities / faculties, like in the past.

2. Literature review

National Student Enrollment Registry (NSER) may become the only way students could avoid in future receive of diplomas without legal protection (România Liberă, 20 July 2009).

In the context where 4 universities have been discovered to enroll students on fake faculties or fake form of faculties and moreover to print diplomas for them, a change was needed. This change was to be made by a national database of unique numbers for every student (license studies, master studies or doctoral studies) – Lex et Scientia , no. 2 , 2009, pag. 514.

This way NSER will lead to a coherent picture of human capital involved in higher education system and detailed information will be available for implementation of education policies and strategies (Market Watch, 18 September 2010 and 3 June 2011).

3. Paper Content

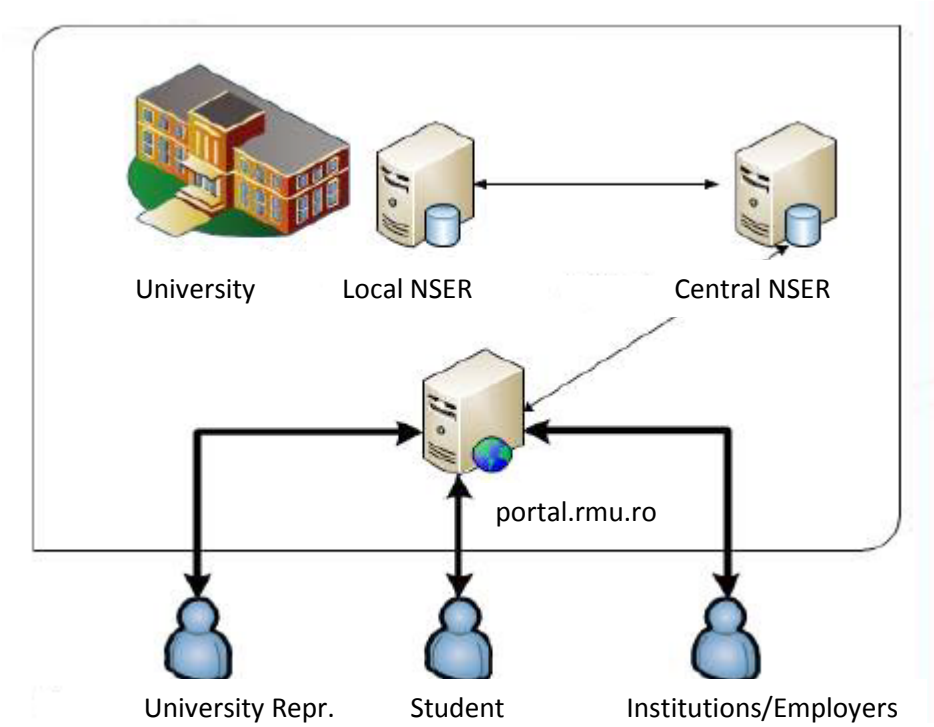
National Student Enrollment Registry (NSER) is reglemented by the law 1 from 2011 and, this year, by the minister order 3313 from 2012. This way the legal environment is very well defined in order to have a strong informatic system.

When the system will be fully functional, a PR can easy check if a candidate for a job has been told the truth in his/her cv just by log in in a national portal and search by name or ID. One student can log in in the national portal and check his academic path. This way he/she is sure that the studies are recognized and the diplomas are real and provided by Minister of Education. And more if a student want's to enroll for superior studies like master or PhD, his background can be checked and no one could came from fake universities / faculties, like in the past.

First of all I will present the NSER system, from a former job where I was the IT manager with responsibilities also of NSER.

On a first look the system is quite simple. We have a local component (client and database) and a centralized one (database and advanced client) at the UEFISCDI core – Fig.1.

Fig. 1 NSER system.



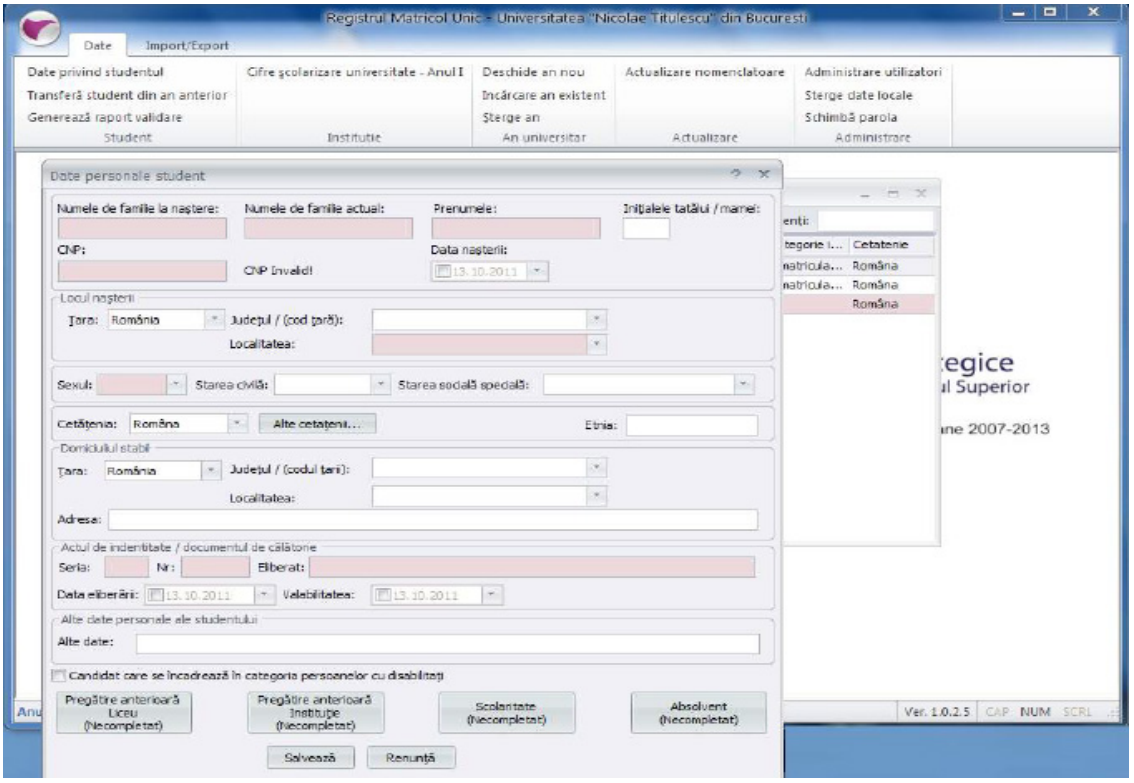
From Fig. 1 we can deduce that the information flux is quite simple.

University employees add students data to the local university database through the local client (Fig. 3). When all the data are added, the IT manager with the Rector, electronically sign the package and send it to national database. When all the data collected from all the universities are in the national / central database, students – by theirs own accounts- employers – again by theirs own accounts- and university representatives can access an Internet portal (http://portal.rmu.ro) to check the data (Fig. 2).

In this way when a student or graduated student apply to a job, the employer easy can check the future employee by accessing the NSER portal (Fig. 2).

Fig 2. NSER Portal

Fig. 3 NSER Client



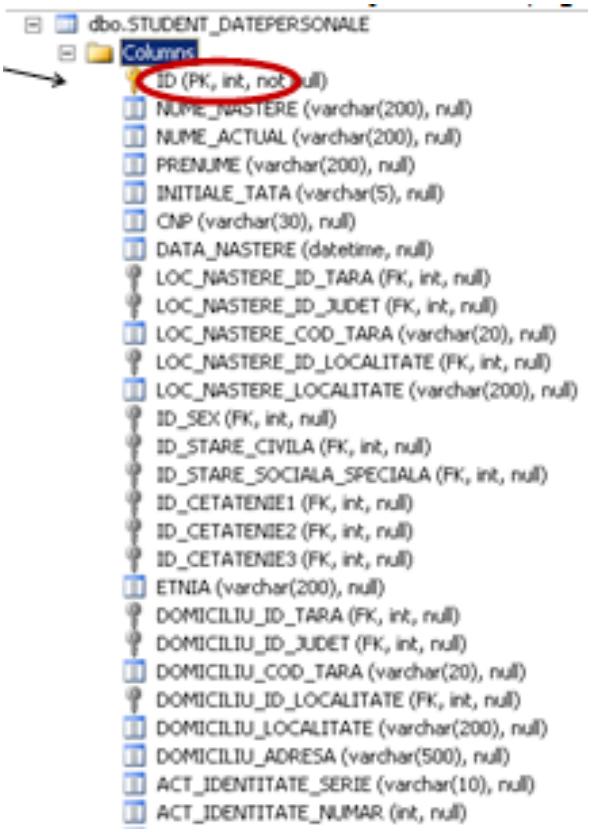
. 4 Local Informatic system for management of students

The main problems that results from managing such a system was that all or almost all universities had already a informatic system developed locally(Fig 4).

That means the administrative personal had to add the same data in two different systems because the NSER database is somehow closed from external clients.

In order to link such systems an ***id for external identification*** should be defined in tables. Now, there is only an ***internal one*** which cannot be accessed from other systems/db(Fig 5).

Fig. 5 NSER internal ID from Student_Datepersonale Table



Another thing was that all the select fields were not updated with all the information needed. To update or add a field to a select field, the procedure takes almost 5 weeks. In this situation adding data is quite difficult. There is an import component but is way far from be sync one.

When the data is added for a year and you have to start another year the first thing to do is to download new tables for select fields which are added as new tables. Let say that you work for 2011-2012 and you have a table, for example, country2011-2012. If you continue for 2012-2013, you will have another table country2012-2013. This way is wrong(Fig 6). Suppose you work for 10 years. You'll have 10 tables for country. And this just for one field.

Fig. 6 NSER Tables name – year

After the external ID is added is possible to link a MYSQL/PHP system with MSSQL NSR database.

Tables that should be populated in NSER DB =>

STUDENT_DATEPERSONALE
STUDENT_DATESCOLARITATE
STUDENT_DATEADMINISTRATIVE
STUDENT_PREGATIRELICEU
STUDENT_PREGATIRESTUDENT
STUDENT_ABSOLVENT

In order to populate tables with data we have concatenate id fields and then to add data:

```
// unique id based on the two fields concatenation
$o->ID_STUDENT = $o->rmu_tableID.'000'.$o->rmu_student_id;
// STUDENT_DATEPERSONALE
//$STUDENT_DATEPERSONALE['ID'] = $o->ID_STUDENT;
$STUDENT_DATEPERSONALE['NUME_NASTERE'] = $o->rmu_numelanastere;
$STUDENT_DATEPERSONALE['NUME_ACTUAL'] = $o->rmu_numeactual;
$STUDENT_DATEPERSONALE['PRENUME'] = $o->rmu_prenume;
$STUDENT_DATEPERSONALE['INITIALE_TATA'] = $o->rmu_initiala;
$STUDENT_DATEPERSONALE['CNP'] = $o->rmu_cnp;
$STUDENT_DATEPERSONALE['DATA_NASTERE'] = date_stupid_format($o->rmu_datanastere);
$STUDENT_DATEPERSONALE['LOC_NASTERE_ID_TARA'] = $o->rmu_locnastere_tara;
$STUDENT_DATEPERSONALE['LOC_NASTERE_ID_JUDET'] = $o->rmu_locnastere_judet;
$STUDENT_DATEPERSONALE['LOC_NASTERE_COD_TARA'] = $o->rmu_locnastere_tara;#
$STUDENT_DATEPERSONALE['LOC_NASTERE_ID_LOCALITATE'] = $o->rmu_locnastere_localitate;
$STUDENT_DATEPERSONALE['LOC_NASTERE_LOCALITATE'] = $o->rmu_locnastere_localitate;
```

```
$STUDENT_DATEPERSONALE['ID_SEX'] = $o->rmu_sex;
$STUDENT_DATEPERSONALE['ID_STARE_CIVILA'] = $o->rmu_starecivila;
$STUDENT_DATEPERSONALE['ID_STARE_SOCIALA_SPECIALA'] = $o->rmu_staresociala;
$STUDENT_DATEPERSONALE['ID_CETATENIE1'] = $o->rmu_cetatenie;
$STUDENT_DATEPERSONALE['ID_CETATENIE2'] = $o->rmu_cetatenie2;
$STUDENT_DATEPERSONALE['ID_CETATENIE3'] = $o->rmu_cetatenie2;#
$STUDENT_DATEPERSONALE['ETNIA'] = $arr['etnii'][$o->rmu_etnie];
$STUDENT_DATEPERSONALE['DOMICILIU_ID_TARA'] = $o->rmu_domiciliu_tara;
$STUDENT_DATEPERSONALE['DOMICILIU_ID_JUDET'] = $o->rmu_domiciliu_judet;
$STUDENT_DATEPERSONALE['DOMICILIU_COD_TARA'] = $o->rmu_domiciliu_tara;
$STUDENT_DATEPERSONALE['DOMICILIU_ID_LOCALITATE'] = $o->rmu_domiciliu_localitate;
$STUDENT_DATEPERSONALE['DOMICILIU_LOCALITATE'] = $o->rmu_domiciliu_localitate;#
$STUDENT_DATEPERSONALE['DOMICILIU_ADRESA'] = $o->rmu_domiciliu_adresa;
$STUDENT_DATEPERSONALE['ACT_IDENTITATE_SERIE'] = $o->rmu_ci_serie;
$STUDENT_DATEPERSONALE['ACT_IDENTITATE_NUMAR'] = $o->rmu_ci_numar;
$STUDENT_DATEPERSONALE['ELIBERAT_DE'] = $o->rmu_ci_eliberat;
$STUDENT_DATEPERSONALE['ELIBERAT_DATA'] = date_stupid_format($o->rmu_ci_dataeliberare);
$STUDENT_DATEPERSONALE['VALABILITATE_DE_LA'] = date _format($o->rmu_ci_dataeliberare);
$STUDENT_DATEPERSONALE['VALABILITATE_PANA_LA'] = date_format($o->rmu_ci_datavalabilitate);
$STUDENT_DATEPERSONALE['ALTE_DATE'] = $o->rmu_altedatepersonale;
$STUDENT_DATEPERSONALE['CANDIDAT_PERS_DISABILITATI'] = $o->rmu_dizabilitati;
$STUDENT_DATEPERSONALE['VALID'] = 1; # for the moment $o->ID_STUDENT;
// check if we need INSERT or UPDATE
$q_ck_STUDENT_DATEPERSONALE = "SELECT * FROM STUDENT_DATEPERSONALE WHERE ID = ".$o->ID_STUDENT."";
$r_ck_STUDENT_DATEPERSONALE = $db->GetRow($q_ck_STUDENT_DATEPERSONALE);
if(count($r_ck_STUDENT_DATEPERSONALE) > 0)
{   $db->AutoExecute('STUDENT_DATEPERSONALE', $STUDENT_DATEPERSONALE, 'UPDATE', 'ID ='.$o->ID_STUDENT.'');
    $export_update = 'UPDATE RMU SET lastexport_STUDENT_DATEPERSONALE = "'.date("Y-m-d H:i:s").'" WHERE rmu_tableID = '.$o->rmu_tableID.' AND rmu_student_id = '.$o->rmu_student_id.' LIMIT 1;';
    $db->Execute($export_update);}
else
{   $db->AutoExecute('STUDENT_DATEPERSONALE', $STUDENT_DATEPERSONALE, 'INSERT');
    $o->RMU_ID_STUDENT = $db->Insert_ID();
    $export_update = 'UPDATE RMU SET lastexport_STUDENT_DATEPERSONALE = "'.date("Y-m-d H:i:s").'" WHERE rmu_tableID = '.$o->rmu_tableID.' AND rmu_student_id = '.$o->rmu_student_id.' LIMIT 1;';
    $db->Execute($export_update);}
// STUDENT_PREGATIRELICEU
$STUDENT_PREGATIRELICEU['ID'] = $o->RMU_ID_STUDENT;
$STUDENT_PREGATIRELICEU['ID_STUDENT'] = $o->RMU_ID_STUDENT;
$STUDENT_PREGATIRELICEU['STUDII_LICEU_ID_LICEU'] = $o->rmu_studpre_denumire;
$STUDENT_PREGATIRELICEU['STUDII_LICEU_ID_TARA'] = $o->rmu_studpre_tara;
$STUDENT_PREGATIRELICEU['STUDII_LICEU_ID_JUDET'] = $o->rmu_studpre_judet;
```

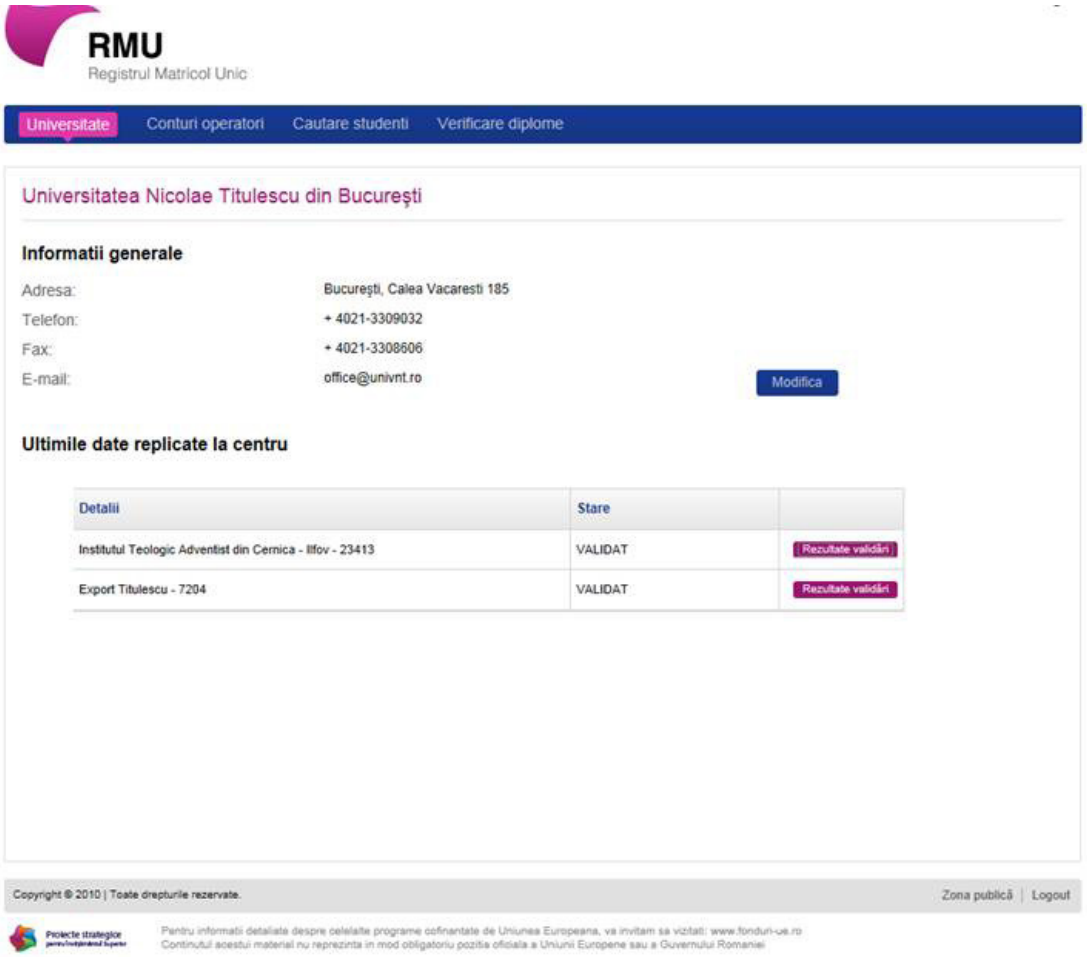
```
$STUDENT_PREGATIRELICEU['STUDII_LICEU_ID_LOCALITATE'] = $o->rmu_studpre_localitate;
$STUDENT_PREGATIRELICEU['STUDII_LICEU_ID_DOMENIUPROFIL'] = $o->rmu_studpre_profil;
$STUDENT_PREGATIRELICEU['STUDII_LICEU_DURATA'] = $o->rmu_studpre_durata;
$STUDENT_PREGATIRELICEU['STUDII_LICEU_AN_ABSOLVIRE'] = $o->rmu_studpre_anabsolvire;
$STUDENT_PREGATIRELICEU['STUDII_LICEU_ID_FORMA_INV'] = $o->rmu_studpre_finv;
$STUDENT_PREGATIRELICEU['DATE_DIPLOMA_ID_TIP'] = $o->rmu_studprediploma_tipul;
$STUDENT_PREGATIRELICEU['DATE_DIPLOMA_SERIA'] = $o->rmu_studprediploma_serie;
$STUDENT_PREGATIRELICEU['DATE_DIPLOMA_NUMAR'] = $o->rmu_studprediploma_numar;
$STUDENT_PREGATIRELICEU['DATE_DIPLOMA_ID_EMITENT'] = $o->rmu_studprediploma_emitent;
$STUDENT_PREGATIRELICEU['DATE_DIPLOMA_ANUL'] = $o->rmu_studprediploma_anemitere;
$STUDENT_PREGATIRELICEU['ALTE_OBSERVATII'] = $o->rmu_studpre_obs1.' '.$o->rmu_studpre_obs2;
// check if we need INSERT or UPDATE
$q_ck_STUDENT_PREGATIRELICEU = "SELECT * FROM STUDENT_PREGATIRELICEU WHERE ID_STUDENT
= ".$o->ID_STUDENT."";
$r_ck_STUDENT_PREGATIRELICEU = $db->GetRow($q_ck_STUDENT_PREGATIRELICEU);
if(count($r_ck_STUDENT_PREGATIRELICEU) > 0)
{   $db->AutoExecute('STUDENT_PREGATIRELICEU', $STUDENT_PREGATIRELICEU, 'UPDATE', 'ID_STU-
DENT ='.$o->ID_STUDENT.'');
    $export_update = 'UPDATE RMU SET lastexport_STUDENT_PREGATIRELICEU = "'.date("Y-m-d H:i:s").'"
WHERE rmu_tableID = '.$o->rmu_tableID.' AND rmu_student_id = '.$o->rmu_student_id.' LIMIT 1;';
    $db->Execute($export_update);}
else
{   $db->AutoExecute('STUDENT_PREGATIRELICEU', $STUDENT_PREGATIRELICEU, 'INSERT');
    $export_update = 'UPDATE RMU SET lastexport_STUDENT_PREGATIRELICEU = "'.date("Y-m-d H:i:s").'"
WHERE rmu_tableID = '.$o->rmu_tableID.' AND rmu_student_id = '.$o->rmu_student_id.' LIMIT 1;';
    $db->Execute($export_update); }
----------and so on with others tables----------
```

This way NSER DB would be populated with data in real time and employees should work only in one system.

When you export the data to central database, you sign the data package digitally but after the send action you don't have nothing, no prove, that the export was done successfully (Fig. 7). On the first export I have sent correctly the data but in the central core were recorded to a different institution (Fig .8).

Fig. 7 Success on exporting data

Fig. 8 Exported data to a different institution



5. Conclusions and implications

This system is now on a right way of development but is far away from a mature system.

Right now, local informatic system is linked with NSER database and the client just need to validate student personal information. An ID student and the data are manipulated and synchronized in both databases.

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The weaknesses of China's contractors in overseas construction project management: 2 case studies

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Abstract: *The practices of international construction contracting have been prevalent increasingly over the past half a century. Although the contractors of highly developed world have dominated this field, there tends to be more players from newly emerging countries like China. The history of China's contractors performing in the overseas construction markets is divided into 3 major phases, namely the planning economy era, reform and openness period and the latest new millennium. However, the know-how and techniques of modern project management have been widely deployed in China for merely 2 decades. While competing with those veterans in overseas markets, China's contractors still lack adequate advantages as well as experiences, leading to the underperformance or even failures. A 2-dimension framework of overseas project management, comprising the external risk and internal function aspects, is proposed. Based on the analysis of 2 recent cases in Saudi Arabia and Poland respectively, it's found that the low cost strategy, management in risk, commerce, cost, human resources etc. are their fatal weaknesses.*

Keywords: weakness; China; international construction; project management.

1. Introduction

There is no doubt that the construction sector plays a crucial role in the economy. The proportion of construction industry accounts for roughly 10%, in the context of global economic volume (Gunhan, 2009). With the globalization sweeping the whole world, construction has also been involved in inevitably. Seymour (1987) defined that international construction is where a company, resident in one country, performs work in another country; an international contractor is the one that works outside the country in which that company is registered. But Ofory (2003) argued the point that an international construction project was defined as the one undertaken by an enterprise outside its home-country is out of date, and that the definition must now include projects in a home-country involving foreign firms as competitors.

As early as 1960s, the contractors of highly industrialized nations in North America, West Europe and Japan started expanding their business into overseas markets, since the domestic demand had been saturated increasingly, meanwhile the demand in developing countries had kept rising rapidly. From that time on, the international construction activities began growing gradually. Particularly in the end 1970s and early 1980s, the construction boom in the Mid-east nations, which gained the huge build-up of fund thanks to the surging oil and gas prices, largely stimulated the development of international construction (Drewer, 2001). The worldwide decrease of international construction activities starting from 1997 Asia financial crisis, started to gain momentum in 2002, and continues to grow parallel to world economic expansion. In 2003, growing liquidity around the world boosted the international construction revenues as well (Gunhan, 2009). Bon and Crosthwaite (2000) estimate that the global construction market is over $3000 billion annually. The volume of the world construction market is approximately US$ 4.6 trillion as of 2006 and is expected to grow at 4.6% annually until 2011 (Han et al., 2010). Following the footsteps of the earlier participants, those contractors from the emerging economies such as Korea, Turkey, China and so on, joined in the competition as well. Within the initial phase, the later ones combated by essentially selling the low cost labour resources of their own domestic economies (Drewer, 2001); after a few years of exercises, they tend to be competitive enough in many projects with complex technologies.

China, Germany, Vietnam, Malaysia, India and Russia would have the fastest growing construction markets in the medium-term (Bon and Crosthwaite, 2001). In the next 25 years, Western Europe and North America would become substantial importers of construction services, and Asia a substantial exporter (Ofory, 2003). However, construction firms from Western Europe and North America would continue to have competitive advantage in highly specialized construction services (Ofory, 2003). The objective is to identify the weaknesses in overseas project management of the contractors that come from one of those newly rising countries-China. Following the introduction is the historical review of China's internationalization in construction sector. The framework of international project management is presented. As the major method of this paper is one of the qualitative techniques-case study, 2 overseas projects contracted by China's contractors are

examined, with the discussion based on the 2 case studies. Finally comes the conclusion.

2. Review of China's internationalization

As a newly industrialized nation, China is still at the burgeoning stage of internationalization, despite it entered into the overseas construction markets as early as half a century ago. Historically, China's international construction practice is divided into 3 phases.

2.1 Planning Economy Era (1960s-1970s)

Indeed, China's contractors have begun undertaking overseas construction projects since 1960s when the international construction activities emerged. However, at that time China's economy was being predominated by the highly centralized planning mode that had been borrowed from former Soviet Union and featured arbitrary by authority. Thus, the overseas projects were as well managed by means of arbitrary administration. Besides those projects were all in the essence of foreign aids, most of which had been enjoyed by African countries that in exchange supported China in diplomacy. Almost each ministry administrating the infrastructure construction set up the department of foreign aid that specifically executed the overseas projects. One of the largest scale aids was the Tanzania-Zambia railway project, in which China provided nearly all fund and undertook all technological work including survey, site investigation, design, purchasing and construction, therefore it's akin to the EPC project to an extent.

2.2 Reform and Openness Period (1980s-1990s)

Since the early 1980s, the leadership launched the unprecedented political and economic reforms, coupled with the openness of market, consequently unleashing the skyrocketing economic growth over the next 3 decades. Within this era, the predominant planning economy was gradually transited to the market-oriented mode, meanwhile not only the huge foreign direct investment but also the advanced technologies and management know-how have been flowing into China. It's in 1986 when the modern project management techniques were first brought into China by a Japanese contractor which in forms of joint venture participated in a hydroelectric project. Largely encouraged by this case, an increasing number of contractors across the country began deploying the modern project management, resulting in a revolutionary in China's construction industry. Concomitantly, China's strategy in overseas construction markets also shifted in line with the reform. The number of free aids fell dramatically, instead the contractors performed the projects according to the business disciplines more than the past years, as their competitors from developed countries did. Meantime thanks to the diplomatic policies that stopped exporting communism, the relationships between China and many nations, especially the Asian neighbours, have been greatly normalized, leading the overseas markets share to change largely. The revenue gained from Asian markets already exceeded that from Africa that used to be China's sole market. In 1985, merely 2 Chinese corporations were shortlisted by Engineering News Record (ENR) in the top 225 international contractors, the figure grew to 33 by 2000

(Low et al., 2004). Nonetheless, within that period most projects that China's contractors completed were characterized as those with low value, low technologies and low profit margin.

2.3 New Millennium (2000s)

China's policymakers at the outset of the new millennium introduced 4 major strategies in the long term plan, comprising 'Education, Urbanization, Internationalization and West Development', which are the 4 pillars expected to retain the prosperity in 21st century. For the purpose to internationalization the leadership of China has been largely encouraging the enterprises in various sectors to enter into the global competition while focusing on domestic market. In addition to the natural resources that provide ingredients for the industrialization, the overseas infrastructure contracting market is also what China's companies are aspiring to engage in, as not only can it gain the market share but also facilitate the import of capital, industrial products, technologies and labour. This strategy is being perceived meaningful at a moment when part of the home market is gradually saturated, for instance the hydroelectric construction.

A number of institutions backing the international business were accordingly created, such as Department of Foreign Economic Cooperation, Economic and Commercial Counselor's Office, China International Contractors Association and China Export & Import Bank (Chen and Orr, 2009).

Largely spurred by this policy, the progress that China's contractors have made over the past decade is obvious. The operational scopes of China' contractors are much more plural, expanding to more than 180 countries (Ling, 2010). The number of enterprises ranking among 2011 Top 225 international contractors surged form 33 in 2000 to 51 dramatically. As of 2010 end, the annual revenue and value of signed contracts in overseas markets have totaled $92.2 and $134.4 billion, respectively, which were far more than $8.38 and $11.72 billion in 2000 and even the accumulative $82.72 and $114.78 billion by 2002.

Having practiced at the low-end markets for dozens of years, China's contractors are also committing to move towards the upstream of the industry, where they have successfully won a few projects valued at billions of dollars and with technological complexities, and the innovated delivery forms such as EPC, BOT/BOOT and PPP etc. have been used as well.

Figure. 1 Annual Revenues of Overseas Projects in 1980s and 1990s

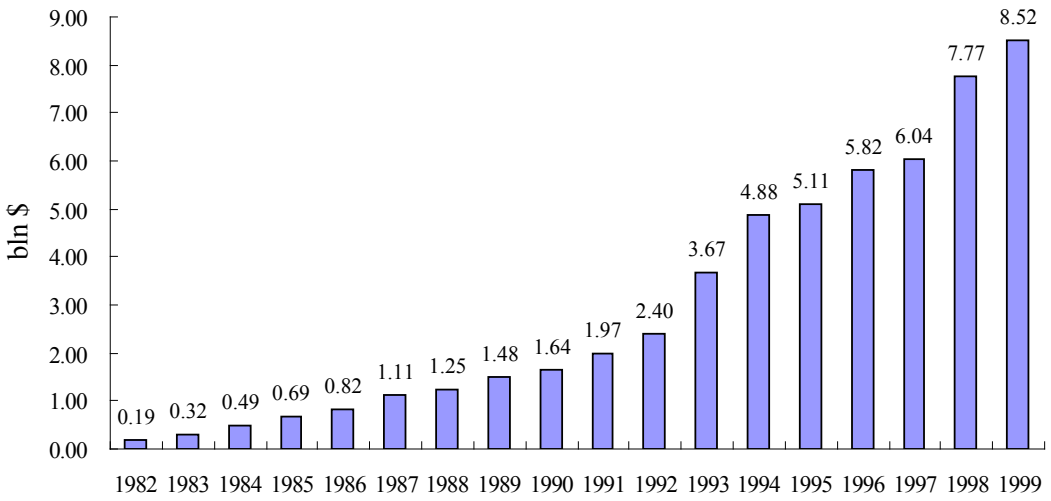
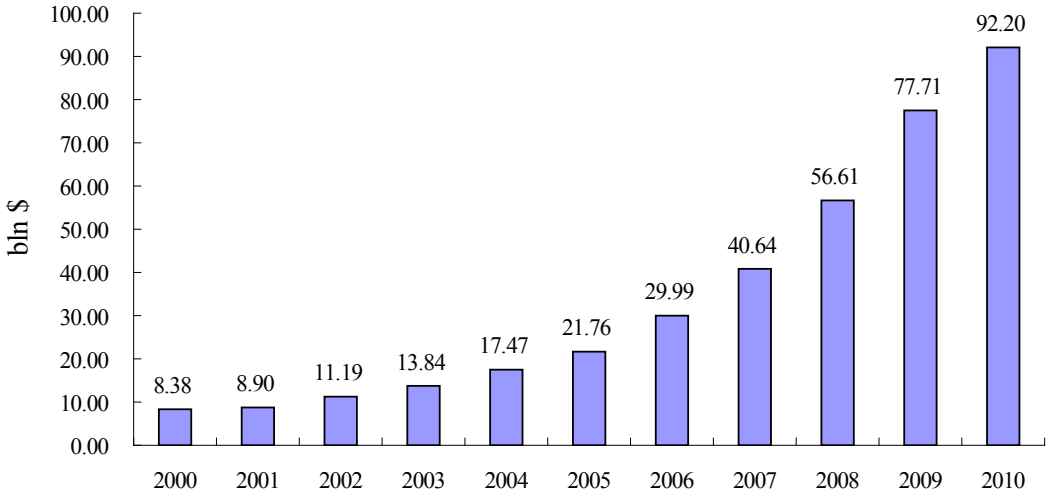


Figure. 2 Annual Revenues of Overseas Projects in 2000s



3. Management of international construction project

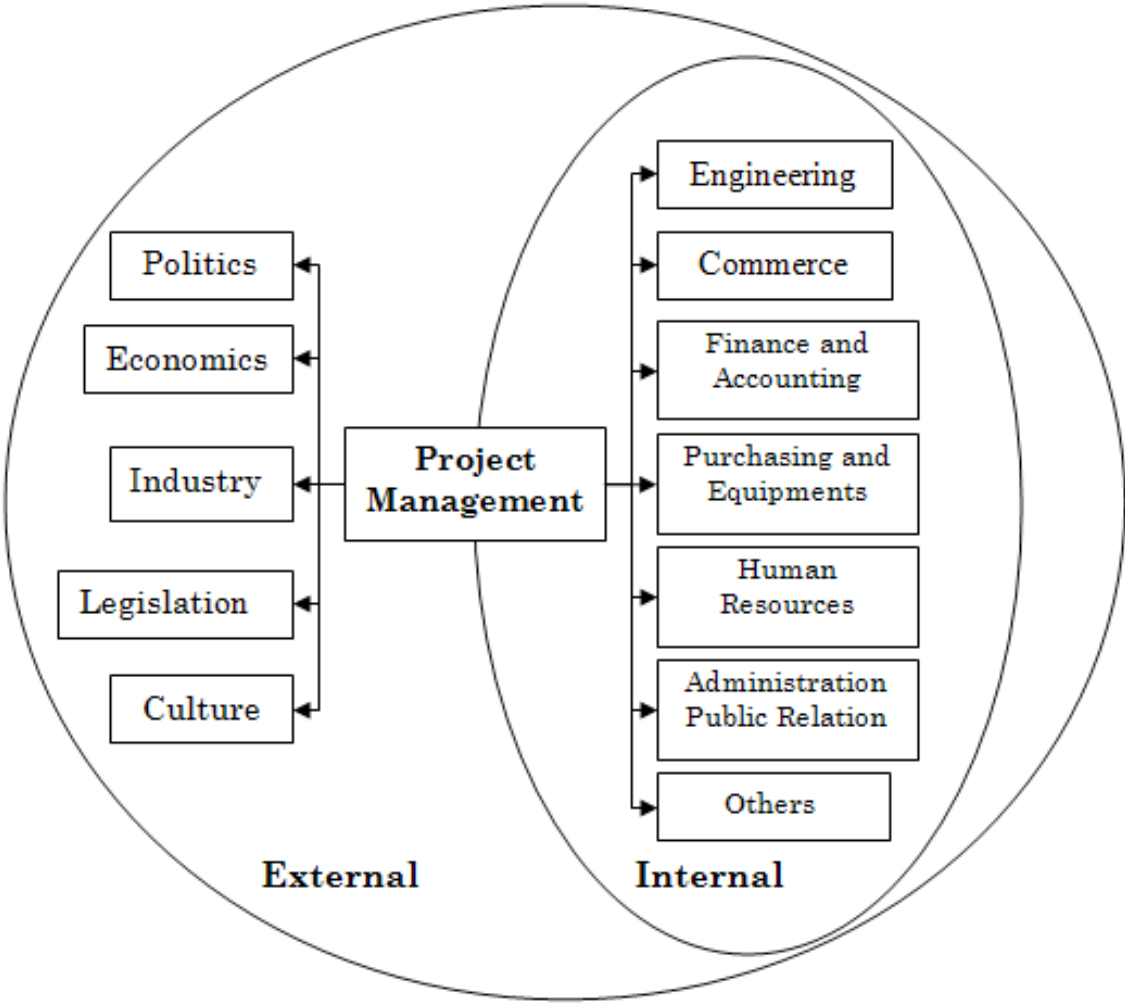
By distinguishing between project and project management, Munns and Bjeirmi (1996) proposed their definitions, respectively: a project comprised a series of activities and tasks aiming to achieve the specific objective, within the scheduled time span that has definite start as well as end dates; project management is the process of controlling the achievement of the project objective. The modern know-how and techniques of project

management have originated from the aerospace and defense sectors of USA since 1950s and 1960s (Chen et al., 2008) when the international construction contracting started to emerge coincidentally. Given the success in aerospace and defense projects that demonstrated the superiority, the methods of project management were soon borrowed by the construction industry. As is compared with the manufacturing, construction is likened to an outdoor factory producing a one-off product (Levy, 2010). Thus, construction process is project-based and features uniqueness, as those one-off products, ranging from the resident houses, to the industrial and commercial buildings, to the heavy civil engineering works, are all competed in the form of project. In general, the project management team (PMT) is the execution organization of a construction project. The work of project management in terms of function is broken down into a few aspects, mainly including engineering and technologies, commerce, finance and accounting, procurement and equipments, human resources, administration and public relation, along with others such as information, security, logistics etc. Accordingly, the functional departments are set up within the PMT. When it comes to the overseas projects, despite the structure of PMT remains almost the same with the domestic one, the management process is definitely internationalized and complicated. Unlike the projects in home market, the overseas condition gives rise to the difficulties in the project management, because a large number of issues rarely encountered at home are meant to arise in the overseas market. The major challenge is the risk which so many researchers have spotlighted. In contrast to the domestic projects, those in overseas markets where the operational environments are distinctive face much risks stemming from a variety of sources. Han and Diekmann (2001), Wang et al. (2004) and Neerajjha and Devaya (2008) have studied the international project management purely from the perspective of risk. Based on their researches, those sources of risks are classified into 5 primary groups, namely politics, economics, industry and market, legislation and culture, each also including a few constructs.

- Politics: ruling regime, government instability, expropriation, turmoil or war, bilateral relationship etc.;
- Economics: recession, exchange rate, inflation or deflation etc.;
- Industry: authority regulatory, specification, local competition, restriction on foreign companies, tax etc;
- Legislation: completeness of legal system, justice enforcement, corruption etc.;
- Culture: language, region, custom etc.

A 2-dimension framework of overseas project management, consisting of the external risks and internal functions, is proposed and demonstrated as follows:

Figure 3. Framework of Overseas Project Management



4. Case studies

By means of empirical study on 2 cases, it from the perspective of the framework above explores the weaknesses of China's contractors in the overseas project management.

4.1 Mecca Light Railway Project in Saudi Arabia

When China's President in February 2009 was visiting Saudi Arabia, the 2 sides signed the contract of Mecca light railway project awarded to a China's giant contactor. This railway connecting Mecca Mosque and Hill of Arafat with a length of 18.25 km is expected to attenuate the traffic congestion caused by the annual pilgrim where millions of Muslims flow into.

Other than the facilitation by the governments of 2 countries, it's the lowest tender price that made the employer opt China's contractor. The most competitive indigenous contractor's price was as high as $2.7 billion, by contrast China's contractor tendered for

Table 1. Profile of Mecca Light Railway Project

Condition of Contract	EPC+OM
Accepted Contract Price	$1.77 billion (non-adjustable lump sum price)
Time for Completion	22 months (10 Feb 2009-13 Nov 2010)

only $1.77 billion that was nearly $1 billion lower than the former. Borrowing the experience of a municipal light railway already completed in China, the contractor estimated the tender price using the norms of China, as they ideally assumed that the site condition would be similar to that in China. Shortly after the signature of contract, many contingencies unexpected arose. First of all, the project was performed not fully subject to the contract, which deployed the condition of EPC+OM also dubbed 'turn key' contract. On this condition, the prime contractor should undertake the work of survey, investigation, design, procurement and construction, as well as the operation and maintenance after the completion for a stated length of time. However, the task of engineering was actually assigned by the employer to an U.S. contractor adopting the American specification. Regarding the procurement, a number of key equipments such as the locomotives, signal and manipulation systems etc., the most profitable parts, were also taken over by the European suppliers due to the employer's nomination. Indeed, the engineering and part of the purchasing were both in the employer's control, rather than the so-called prime contractor that instead performed like the construction subcontractor. Consequently, the speed of design and purchasing lagged behind the anticipation of China's contractor. It's estimated that under normal circumstance the time for completion should be at least 2 years. The construction didn't commence until July 2009, leaving mere 16 months for the contractor. On the other hand, the engineering and procurement out of prime contractor's control gave rise to the cost. If these jobs had been subcontracted by China's companies as the prime contractor expected initially, the cost would have been much lower.

The contract stated that 35% of the entire transport capacity should be reached by the completion time on 13 Nov 2010. But the employer after the commencement proposed a significant variation that the 35% was more than doubled to 75%, largely increasing the quantity of works. On the side of China's contractor, what it failed to foresee was the ferocious natural and cultural environments. Unlike the commonplace municipal railway, the majority of this railway was built in the desert area, where the high temperature, vicious shortage of water and sand storm led to the difficulty in outdoor work and decline in productivity. A few Chinese labour refused to work overtime as they did in domestic projects as before, and argued to increase the wages. Even strike and other violent incidents occasionally took place at construction site. Performing in a Muslim country, China's contractor not good at the affairs of religion and language, failed to cope with the local residents who always impeded the land acquisition, which badly slowed down the execution speed.

Caused by these negative factors, the contractor incurred enormous overrun of

both cost and time. As of 31 Dec 2009, only 5 months after the commencement, the cost sharply mounted to $1.81 billion that had already exceeded the contract price, meanwhile the process also lagged far behind the schedule. Despite the contractor was put at a passive position, the decision makers still determined to continue this project instead of claim or termination, as they were aware of the project's extraordinary importance that the signature of contract was host by President and King, the delay or failure would lead to not only destructively political impacts but also bad impression by the Muslims worldwide. In order to address the problems, the contractor in April 2010 temporarily arranged more than 4,000 workers from China to aid this project, while infusing hundreds of million dollars itself for filling the hole hollowed by the cost overrun. Eventually, the project was completed within the time in accordance with contract, with all the requirements satisfied by the employer. However, what the contractor achieved in both time and quality was at the huge expense of overrun cost that totaled to $2.36 billion, which along with other spending resulted in the net loss of $609 million.

4.2 A2 Motorway Project in Poland

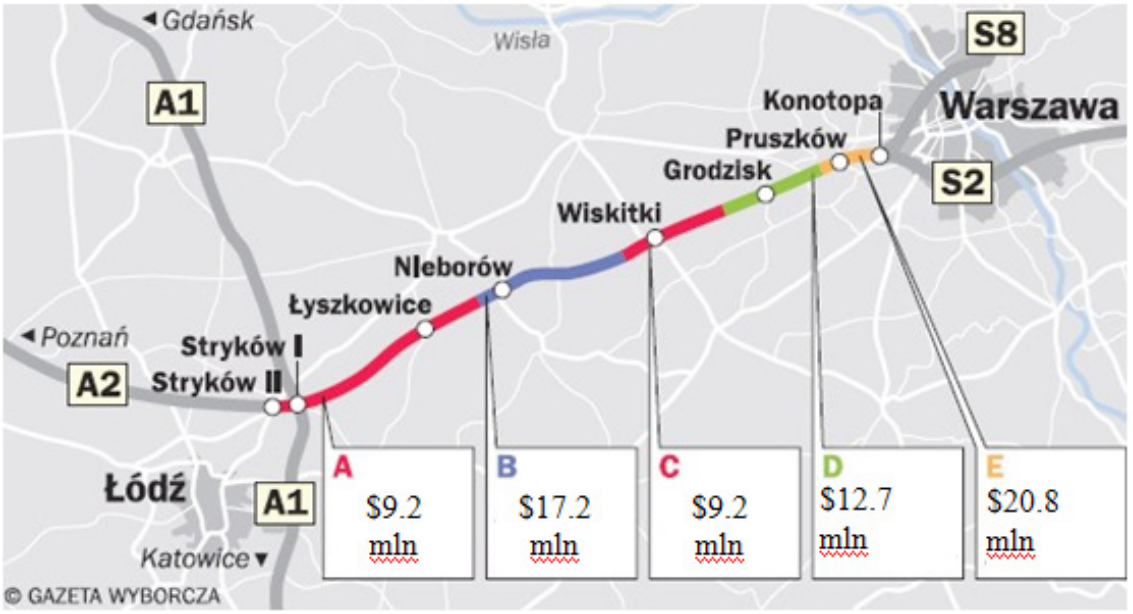
This case is summarized mainly on the basis of the report by Ni (2011). In order to improve the outdated transport infrastructure, Poland launched the project of A2 motorway that was also one of the preparations to host the imminent 2012 Europe Cup. The motorway includes 5 packages (A-E), with package A and C awarded to the Sino-Poland joint venture which involved 3 China's contractors (hereafter referred to as C1, C2 and C3) and a Polish company, and was led by C1 at the outset.

Table 2. Profile of A2 Motorway Project

Condition of Contract	EPC
Accepted Contract Price	$477 million (non-adjustable lump sum price)
Time for Completion	32 months (28 Sep 2009-31 May 2012)

Compared with the European companies, the Chinese-led contractor's lowest price played a decisive role in the tender, as the price of $477 million was less than half of the employer's budget estimated at $972 million. The disparity between the estimated costs of package A & C and another 3 won by European contractors is manifest as shown in the following Figure:

Figure 4. Project's Packages and Contractors' Estimated Costs



This surprisingly low price could be explained by the 3 points:

The contractor ambitiously aspired to win the project, through which they hope to enter into the markets of European Union;

The advantage of low cost in personnel, material and equipments was perceived to make sense in spite of the lowest price;

Even if the cost rises in the later phase, the contractor expected to have the payment increased by adopting the variation, an approach that China's contractor frequently used in domestic and African markets.

The employer and contractor on 28 Sep 2009 signed the EPC contract formally. Although the contract was drafted on the basis of the condition published by International Federation of Consultancy Engineers (FIDIC), many critical clauses that are beneficial to contractors had been arbitrarily cancelled or changed by employer, shifting the risks to contractor. These clauses included:

Advance payment: the employer would make no advance payment;

Variation and Adjustment: the employer would never compensate the contractor if any variation and adjustment for changes in legislation and cost takes place;

Quantity of works: if the actual quantities of works exceed that initially set up in the bill of quantities, the contractor is entitled to no additional payment;

Dispute: any dispute arising between the 2 sides shall be referred to Polish court rather than arbitration institution.

Besides, the ruling language of contract was Polish in which China's contract was improficient.

It's until June 2010 when the design and drawings hadn't been finished. Immediately after the commencement, the quantity of works dramatically increased, mainly including the steel and injection piles for bridges and ground improvement, since neither the employer provided detailed PFU nor

did the contractor investigate the site condition along the planned motorway, especially the geology. Additionally, the laws of environmental protection in Europe are strict, to which the contractor didn't pay attention either. As the local environmental administration intervened, the contractor added a number of structures designed to protect the wild animals living alongside the motorway, the cost of which was estimated to be 19% of the total but hadn't been taken into account in the budget at the beginning. The contractor wasn't entitled to any additional payment for these increase quantity of works according to the contract.

The purchasing management exacerbated the execution as well. The tender for this project was in middle 2009 when Poland's construction market was in depression infected by the global economic recession, with the prices index hitting the bottom. That's another reason why China's contractor dared tendering with so low a price. What's fatal was that the contractor didn't cling to the opportunity to sign the long-term supplying contracts with local manufacturers. Unfortunately, only a year later when the construction started, the prices for raw materials as well as rental machinery stimulated by the recovering economy began to surge, inevitably increasing the cost.

Aiming to cut the spending, the struggling PMT was forced reducing a few staff they viewed as unnecessary, such as the law consultant, translator and even technical personnel. Whereas it worsened the management furthermore instead of improvement. Given the poor performance of PMT over the past year, the parent company in the end of 2010 restructured the PMT significantly by replacing the project manager and transferring the leading power to C2 from C1, both of which were the wholly-owned subsidiaries of the parent, a construction conglomerate in China. What's worse, another partner C3 quit the joint venture shortly after the restructure, which was attributed to the dissatisfaction in the collaboration. Despite these bailout actions were adopted, the performance of project has been hardly reversed as expected. In the 2nd quarter of 2011, the contractor encountered serious financial crisis. Without advance payment, the contractor funded $100 million that afterwards was run out soon due to the increased quantities of works and continuously growing prices of materials. The payment by employer was monthly, but the prime contractor paid the subcontractors weekly in accordance with contracts. In May 2011, the angry Chinese workers and Polish subcontractors whose payments had been deferred for a while launched strike that escalated to the violent upheaval, followed by the suspension of project. As of that time, nearly two thirds of the stated time had passed, meanwhile merely 20% of the quantity had been completed yet. As the contractor estimated, the total cost would mount to $786 million, but the remainder of payment would be $ 392 million, with the potential loss of $394 million. Hence, the contractor proposed to increase the contract price, which the employer determinedly rejected because it's subject to neither the contract nor the 'Public Procurement Act'. As a consequence the contractor terminated this project, badly angering the employer and authority which then claimed $271 million and decided to prohibit the contractor in Poland over the next 3 years. Finally, China's first infrastructure project in European Union market culminated in the painful failure.

5. Finding and discussion

One of the case study's shortcomings is that the research is concentrated in a narrow scope, the findings of which cannot be generalized, but a number of similar weaknesses of China's contractors in overseas project management have been identified, despite the studied projects were in Saudi Arabia and Poland, respectively, which are largely distinctive in terms of political regime, economy, culture, natural environment etc. These weaknesses are perceived general to the extent that the contractors of both projects are 'central enterprises' owned and operated by China's cabinet, representing the highest grade in construction sector.

5.2 Low cost strategy

Except for the advantage in low cost, China's contractors hardly possess any other edges such as the track record, technologies, expertise, management skills and so on when they compete with the veterans. This phenomenon has also been proven by Low (2004) and Ling (2010), the former of whom argued that cheap labour was indeed the sole advantage that China's contractors enjoyed. Historically, this strategy has been fostered within the long-time practices in domestic and traditional African markets, where the personnel and procurement with lower prices than other regions were easily accessible. The construction industry features low profitable margin but high risk, particularly for the contractors engaging in international markets face much higher risks. In contrast to other strengths, low cost is far more vulnerable as it can hardly be realized because a set of uncertainties. When China's contractors expand their business territory into other markets including the highly matured one in Europe, and perform the projects in more complex delivery forms such as EPC, BOT/BOOT and PPP, their weak capacity in the project management cannot guarantee the execution of low cost.

5.2 Risk management

Another reason for the low cost strategy is the near-zero risk management in overseas projects. Generally, an experienced contractor's estimation of tender price includes those which the potential risks are likely to erode lest the low profit margin turns to be the loss. But as is described in the case studies, China's contractor rarely took into account the risks, generating the extraordinarily low tender prices. The life cycle of a project is normally comprised of 2 phases, namely i) start-up and ii) operation (including termination). Compared with the internal functional management taking place within the operational stage, the risk is managed throughout the whole life cycle, starting from the bid or even as early as the entry time. Accordingly, the risk management also consists of 2 aspects, the prediction and mitigation. While tendering for the project in start-up phase the contractor should investigate a range of conditions covering the politics, macroeconomics, market, legislation, society and culture etc. as proposed in the framework, then evaluate and predict the likely risks as fully as possible. Following the prediction, the managers in execution phase also need to monitor and trace those potential uncertainties. Once the risks are bound to emerge, the alarm and action must be deployed immediately to mitigate the impacts of risks. It is seen in the 2 studied cases that the specific

risk management didn't exist at all throughout the entire life cycles of the projects. The necessary investigation prior to bid was neglected by contractors. Indeed, it's what they failed to discover and foresee that created nearly all the contingencies leading to the overrun of cost and time. Besides, when those risks arose the contractors lacked effective approaches to address them.

5.3 Commercial management

Regarding the internal functional management, the work of commerce, especially the contract is the biggest weakness. In the matured and completely legal markets, it's the contract that safeguards player's interests by steering the activities as well as preventing the opportunism. An international project generally involves a number of participants, provided the high risks each party ranging from the employer, to the prime contractor and to the subcontractors and suppliers prefer to shifting the potential risks to other sides frequently by means of contracts. Thus it's definitely worth for the participants negotiating the contracts to ensue that the fair and conducive clauses are stipulated. On the side of China's contractors that rarely emphasized the issues, the processes of drafting contracts are usually simplified. Besides, the deficient competitive strength except for the leadership in low cost bestows little bargaining power when they negotiate the contracts. Given that, their counterparts-the employers or projects-intend to draft harsh contracts transferring the risks to China's contractors. Nor is the work such as the consultancy in business and laws paid enough attention to. Therefore, when the interests are violated, they miss another powerful weapons such as the claim, litigation etc. to protect themselves.

5.4 Cost management

The cost, in conjunction with the time and quality, are the 3 fundamental objectives of project management. The cost overrun that China's contractors incurred stemmed from 3 major sources: procurement, labour, and increased quantity and variation. It is estimated in the infrastructure project that the cost of purchasing the raw materials and equipments normally accounts for 30%-70% of the total. Since the cost estimation of China's contractors were base upon the assumption that the procurement would be done in the home market, the cost rose sharply where the purchasing from home couldn't be realized due to a host of factors such as the far distance, employer's nomination, and the prices surge. So does the labour management. As the construction is a labour-intensive industry despite the machineries have been widely used, the cost for labour is also considerable. Though the wage level in domestic market is relatively low, the employment of Chinese labour who require increasing the wages often leads the cost to mount. The added quantity of works and variation undoubtedly make the cost exceed the previous budget as well.

5.5 Human resources management

The process of project management does consume a wide range of resources. Fundamentally, what's perceived as the most crucial is the manpower, as it's the manager team comprising the general manger, functional heads and their staff who execute the whole work. Manifestly, assessed by the performances within the 2 projects studied, the manager teams were incompetent for international projects. Although they could outperform other manager in home market, the

exercises and experiences needed in overseas project management are what they still lack so far. Many issues that the veterans view as common, however, are unprecedentedly difficult for them. International projects need versatile managers being both businessmen and technicians (Gunhan and Arditi, 2005). Another factor that the companies' government-run nature inevitably has the managers infected by the bureaucracy and performing not like businessmen but like officers who sometimes can't distinguish between business management and government administration. This weakness is definitely harmful to the international project management. Regarding the labour, the strike or even violent protest triggered by the low wage and delayed payment also contributed to the underperformance. Actually, the mismanagements on workers have been seen not only in the 2 cases but also in many other projects of China's contractors worldwide.

6. Conclusions

The wave of globalization, coupled with the increasingly saturated infrastructure market at home, have conspired China's construction companies implementing the internationalization strategy which proves to be a necessary option with few alternative. Despite they have committed in the overseas markets for nearly half a century, particularly the pace of internationalization has been accelerated from the outset of new millennium, they are still in the infancy phase when the capability of project management hardly keeps pace with the ambition. The cases study reveals a number of commonplace weaknesses of China's contractors in overseas markets. When they are expanding the business into broader territory, the traditional strategy of low cost has been inherited and continued as ever which proved unsustainable from the long run. With regard to the project management, they simply duplicated the internal functional management without taking into account another dimension-the external risks. It's the drawbacks in the management of commerce, purchasing, labour and deficiency of competent managers that weaken the performance or even lead to failures in overseas projects. Overall, it's bound to take a long time for China's contractors to overcome those weaknesses and improve the capability of project management, thus the leadership in low cost is meant to be maintained. But China's strength the robust financial power, e.g. the world's hugest build-up of U.S. dollars-tends to play a significant role, as the majority of China's international contractors are overwhelmingly government-owned, and can easily access the finance with the institutional supports.

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Human capital investment and economic growth in Nigeria: The role of education and health

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Abstract: *This study looked at Human Capital Investment and Economic Growth in Nigeria – the Role of Education. Even though there are different perspectives to economic growth, there is a general consensus that growth will lead to a good change manifested in increased capacity of people to have control over material assets, intellectual resources and ideology, and obtain physical necessities of life like food, clothing, shelter, employment, e.t.c. This is why some people have argued that the purpose of growth is to improve peoples' lives by expanding their choices, freedom and dignity. The belief in human capital as a necessity for growth started in Nigeria during the implementation of the 1955-60 Development Plan and today, with the importance of knowledge in the economy, human capital has increasingly attracted both academic and public interest. This study made use of the Unit Root and Augmented Dickey Fuller (ADF) tests and found out that a positive relationship exists between government expenditure on education and economic growth while a negative relationship exists between government expenditure on health and economic growth. Therefore, based on these findings, the study recommended that the Government should increase not just the amount of expenditure made on the education and health sectors, but also the percentage of its total expenditure accorded to these sectors. The ten percent benchmark proffered by the present national plan should be adopted.*

Keywords: Human Capital Investment, Economic Growth, Education.

1. Introduction

The notion of investment in human capital is of recent origin. Jhingan (2005) points out that in the process of economic growth, it is customary to attach more importance to the accumulation of physical capital than human capital. The new endogenous growth theories are thus significant in the introduction of the active role of human capital in the growth of economies. Human capital is the term economists often use for education, health, and other human capacities that can raise productivity when increased (Todaro and Smith 2003). Health and education are two closely related human capital components that work together to make the individual more productive.

Taking one component as more important than the other is unrealistic as a more educated individual, who is ill, is as inefficient as an illiterate, but healthy individual. Both components are thus related together because of their close relationship. Appleton and Teal (1998), describe health and education as components of human capital that are contributors to human welfare. They describe these components as different from other types of goods produced in societies. While high incomes may be conducive to health it cannot be directly purchased like material goods and services. Health and education are often subsidized by the state and in some countries, education is compulsory for certain minimum length of time. Nigeria, which was one of the richest 50 countries in the early 1970s has retrogressed to become one of the 25 poorest counties at threshold of the twenty-first century. The belief in human capital as a necessity for growth started in Nigeria during the implementation of the 1955-60 development plan and today, with the importance of knowledge in the economy, human capital has increasingly attracted both academic and public interest.

Thus, the objective of this study is to examine the role of education and health in human capital investment and how this can translate into economic development in a country like Nigeria. The hypothesis formulated in this study stated in its Null form is:

H0: Human Capital Development has no significant positive impact on Economic Growth in Nigeria.

2. Literature review

Health and education as components of human capital

Economists do not always recognize the health component of human capital. Schultz (1961) saw human capital as those resources that are inherent in each human being, which can be traded between the users and the owners to improve their respective living conditions. He outlined these inherent resources in human beings to include knowledge (knowing what to do), skills (knowing how to do what is to be done), and attitude (behavioural demonstration of a favourable inclination while doing that which is to be done). No mention is made here of health. Barro (1991) carried out a study on the effects of human capital on growth. His study was based on data sets pertaining to very diverse array of countries. He used a narrow flow of human capital such as school enrolment rates at the primary and secondary level. Human capital can thus be regarded in two ways: the narrow sense which deals with just education, or the broader sense which adds health to the education component. It has become conventional to discuss human capital in its

narrower sense because expenditure on education and training is capable of measurement as compared to healthcare (Jhingan, 2005).

Healthcare shall however be included in this study. Aigbokhan et al (2007) consider education to be a basic and obvious process by which skills, knowledge and attitude are acquired for the performance of socio-economic responsibilities, social integration, improving personal competence, and seeking better opportunities. In the words of Leeuwen (2007), 'Human capital is implicitly referred to as formal and informal education, yet it can also contain factors such as the costs of raising children, health costs, and ability. 'The health and education, components are recognized, although education comes ahead of health, showing the priority placed on it. In line with this, Igun (2006) defines human capital as 'the total stock of knowledge, skills, competencies, innovative abilities possessed by the population'. These obviously have education as their bedrock.

Economists have identified overtime, other components and indicators of human capital. With the two broadly accepted components, come additional factors. For example, Nakamura (1981) for pre-modern Japan defines human capital as labour and managerial skills, entrepreneurial and innovative abilities, plus physical attributes such as physical strength and skills. Newland and San Segundo (1996) also use several measures as indicators of human capital such as physical strength and skills. As such, they see human capital on the one hand as ability and education of an individual, and on the other, the costs of physically raising a child or its health.

From the organizational points of view, Dees and Picken (2000) have this to say: 'human capital is generally known to consist of the individual's capabilities, knowledge, skills and experience as they are relevant to the task at hand, as well as the capacity to add to this reservoir of knowledge, skills, and experience through individual learning. Quantitatively oriented economic historians such as Zanden (2004), measure the price of human capital as the relative wage of skilled labour compared to the unskilled. This measure includes factors such as on-the-job training and experience. These factors serve to compliment, rather than substitute the health and education components. This is due to the basic role they play in the lives of individuals. Through healthcare and education, individuals can be fashioned to lead useful and happy lives and contribute to societal and economic goals. Appleton and Teal (1998) confirm that human capital is a broad concept which identifies human characteristics which can be acquired and also increase income. It is commonly taken to include peoples' knowledge and skills acquired partly through education, but can also include their strength and vitality, which are dependent on their health and nutrition. This makes health and education two umbrellas under which all other recognized factors can fit. Human capital theory thus focuses on health and education as inputs in economic production.

Human capital development: Investing in health and education

The economic rationale for investing in human capital derives from the belief that human capital plays a key role in economic growth. According to Todaro and Smith (2003), human capital must be given direct attention in its own right, even in economies that are growing rapidly. This points

to the fact that importance of this key concept centres not on just developing countries who wish to break free of their vicious cycle, but also developed countries that aspire to achieve sustainable growth and development.

Schultz (1961), one of the early contributors to the study of the importance of human capital, identifies five ways by which human capital can be developed. They are as follows:

i) Health facilities and services, broadly conceived to include all expenditures that affect the life expectancy, stamina, strength, vigour and vitality of people.

ii) On-the-job- training, including old type apprenticeships organized by firms.

iii) Formally organized education at the elementary, secondary, and higher levels.

iv) Study programs for adults that are not organized by firms, including extension programs notably in agriculture.

v) Migration of individuals and families to adjust to changing job opportunities.

These activities all seek to make the individual more productive. Investment in health and education (the two components of human capital) thus leads to the development of human capital. Speaking of which, Jhingan (2005) opines that in its wider sense, investment in human capital means expenditure on health, education and social service in general; and in its narrower sense, it implies expenditure on education and training. The development of human capital transcends mere acquisition of intellectual ability through the education system, or the living of a healthier life through adequate healthcare. It seeks to improve the productivity of the individual and make him more useful to society. Aigbokhan et al (2007) describe it as being concerned with the transformation of the total man to enhance his productivity. This indicates a necessity for the said investment to lead to increased productivity.

3. Human capital development in Nigeria

The importance of investing in education and health is well appreciated and understood in economies that wish to attain sustainable growth. Nigeria is rated by international standards as 'less developed' and thus has economic growth as a major goal. Indeed, the importance of a prime sector such as education has been stressed in Nigeria since the early sixties following the submission of the Ashby report in September 1960. In recent times, during a keynote address by the former governor of the Central Bank - Dr J.O Sanusi (2002), he stressed the importance of human capital development for Nigeria, saying that the Nigerian economy has to be efficient and competitive in the new world order in which national frontiers no longer constitute barriers to human, material, and capital flows. He noted that one of the greatest barriers facing Nigeria in this millennium is the issue of capacity building to enhance productivity in the economy.

The government in Nigeria as explained by Ogujiuba and Adeniyi (2005), primarily controls education. They summarize the breakdown of this control from the federal to the state and the local government level.

In Nigeria, the federal government is primarily responsible for the tertiary institutions although some states and private individuals also fund and run this level of education. Secondary education is mainly a state responsibility although there are some federal secondary schools. Primary education

is a local government responsibility but there also exists a National Primary Education Commission (NPEC) that draws up the curricular for corporate bodies, individuals, religious organizations, international agencies, non-governmental agencies and community based organizations with the three tiers of government. Importance of higher education in national development in Nigeria is reflected in the goals for tertiary education as enunciated in the National Policy on education (NPE, 1988), which are to:

1. Contribute to national development through high-level manpower training.

2. Develop and inculcate proper values for the survival of the individual and the society.

3. Develop individual's intellectual capacity to understand and appreciate their local and external environments.

4. Acquire both physical and intellectual skills, which will enable individuals to be self-reliant and useful members of the society.

5. Promote and encourage scholarship and community service.

6. Forge and cement national unity.

7. Promote national and international understanding and interaction.

These set goals are expected to be achieved by tertiary institutions through teaching, research and development, sustainable staff development programs, generation and dissemination of knowledge and a variety of modes of programs.

Aigbokhan et al (2007) note that a cursory look at the magnitude and trend of increases in allocation might be misleading in passing judgment on the budgetary performance until they are placed side by side with their percentage allocations. The characteristic pattern of the government's allocation to education and health in Nigeria as a percentage of the total budget revealed inconsistency. That is, health and education expenditure were not considered as policy targets in the overall budgeting, or else, they would have maintained an increasing proportion of the yearly budget of the nation.

The National Economic Empowerment and Development Strategy (NEEDS), which is presently Nigeria's development plan and poverty Reduction Strategy Paper, stipulates a goal of increasing government's budgetary allocation to health and education from 8% to 10% between 2004 and 2007. While listing selected targets, education and health are rightfully noted as worthy of closer attention.

Under its specific sectoral strategies, the government and the private sector are identified as key players in tackling issues that are critical for effective economic growth. One of such listed issues is inadequate human capital development. Going ahead to discuss these specific sectoral strategies, the first sector discussed is education.

Under NEEDS, education is considered the key bridge to the future. In this regard, the strategy aims at the empowerment of the citizenry to acquire skills and knowledge that would prepare them for the world of work. In order to achieve this, NEEDS is to address the following crucial issues:

i) Faithful implementation of the free, compulsory Universal Basic Education (UBE) law to among others:

- Improve education infrastructure.
- Expand institutional capacity to produce quality manpower.
- Expand total school enrolment.

ii) Review of school curricular from primary to tertiary to incorporate vocational

and entrepreneurial skills.

iii) Re-tooling and repositioning of technical schools to be able to address the technical manpower needs of the economy.

iv) Establishment of more vocational centers to encourage Nigerians to embrace vocational education.

v) Review of school curricular at all levels to incorporate the study of information and communication technology (ICT).

vi) In view of Nigeria's position in, and vision of ECOWAS sub-region, review school curricula to make study of French compulsory from primary through secondary schools.

vii) Expand existing special education programs including the virtual library project, the distance learning program and the Nomadic education program.

viii) Sustain existing vocational/on-the-job training programs of the Federal government and encourage the states to do the same.

ix) The National Youths Service Corps will be reviewed with a view to using a good part of the service year to develop entrepreneurial and basic business skills in corps members.

The orientation period will be extended to include a one-month period for formal training on entrepreneurship.

Following the training, corps members will be posted mainly to industrial (including small scale enterprises) and agricultural concerns so that the exposure will expose them to consider the possibility of post-service self-employment.

The health sector is next for which specific sectoral strategies are listed. Major strategies of NEEDS to improve the service delivery of this key sector are as follows:

i) Redefinition of the roles and responsibilities of the federal Ministry of Health (FMOH) and other Federal public health structures and institutions in the provision and financing of quality services to Nigerians.

ii) Reorganization and restructuring within the context of the redefined roles and responsibilities.

iii) Review of existing health policies and strategies as well as health legislations culminating in the publication of a new National Health policy and the enactment of health system and the health functions of each of the three levels of government.

iv) Strengthening the capacity of FMOH in policy formulation and implementation.

v) Improving the existing and/or setting up of new mechanisms to generate and use evidence and information for health policy/program/plan development and implementation.

vi) Increase in antenatal, postnatal, and family planning services and outlets to reduce maternal and infant mortality from the present 704/100,000 and 77/1000 respectively.

vii) Intensification for the campaign of the eradication of harmful traditional practices such as female genital mutilation and child marriage.

In a January 2008 publication of the Guardian Newspaper, an article by Sanyaolu describes human capital as the bedrock upon which productivity in Nigeria rests. The contributions of prominent individuals to the topic were documented and presented as advice to the President of the country as key points worthy of note. The National President, Senior Staff Association of Nigerian Universities, Mr. Promise Adewusi, the former Director, Institute of Education, Lagos State University, Prof. Ademola Onifade, and

the Registrar and Chief Executive, Certified Institute of Cost Management of Nigeria, Mr. Victor Omoregie were among the contributors. Their contributions can be streamlined to consist of the following issues: Better funding of educational Institutions, tackling unemployment, provision of infrastructural facilities, and research and development.

A later publication of February 2008 included an article describing a contribution to human capital development by a joint project of Chevron Nigeria Limited, Coca-Cola Nigeria, and Discovery Channel Global Education Partnership. The project involves eight new learning centers and teacher training programs to enable teachers from eight primary schools in Lekki and Ikoyi areas to use educational media technology and programming to complement classroom learning for more than five thousand (5000) students. This would also reach an additional fifteen thousand (15,000) community members. The implementation of this project is founded on the belief that human capital and economic performance will be positively affected.

4. Model specification

In an attempt to determine the effect of human capital development on economic growth in Nigeria, it is necessary to develop a model to justify the correlation that exists between the variables. In this regard, a multiple regression model is thus developed to determine the effect of human capital development on economic growth.

The model for this study is theoretically stated as: Gross Domestic Product (GDP) depends on Government's Expenditure on Health (GEH), Government's Expenditure on Education (GEE), Primary School Enrolment Rate (PER), Secondary School Enrolment Rate (SER), and Tertiary Institutions Enrolment Rate (TER).

Thus: GDP = f (GEH, GEE, PER, SER, TER) ---------- (1)

GDP is chosen as a proxy for Economic Growth because it reveals the overall contribution of each sector of the economy.

Government's Expenditure on Health and Education and Enrolment Rates into the three levels of education are chosen as proxy for human capital development because the concept entails investment in health and education.

The explanation of the multiple regression model for this study is as follows:

$GDP = \beta 0 + \beta 1GEH + \beta 2GEE + \beta 3PER + \beta 4SER + \beta 5TER + \mu$ ---------- (2)

Where:

B0 = Intercept of the equation

β1GEH = Estimate parameter with the corresponding regressor of Government's Expenditure on Health.

β2GEE = Estimate parameter with the corresponding regressor of Government's Expenditure on Education.

β3PER = Estimate parameter with the corresponding regressor of Primary School Enrolment Rate.

β4PER = Estimate parameter with the corresponding regressor of Secondary School Enrolment Rate.

β5PER = Estimate parameter with the corresponding regressor of Tertiary Institutions Enrolment Rate.

μ = Stochastic error term

The economic apriori criteria refer to the sign and size of the parameters and the economic relationship between the variables. The apriori expression of this multiple regression model is that $\beta 1 > 0$; $\beta 2 > 0$; $\beta 3 > 0$;

$\beta 4 > 0$; $\beta 5 > 0$.

A positive sign is expected from the coefficient of the relationship between GDP and GEH, GDP and GEE, GDP and PER, GDP and SER, and GDP and TER.

Estimantion Method

Recall that the study formulated this hypothesis:

H0: Human Capital Development has no significant positive impact on Economic Growth in Nigeria.

To test this hypothesis, it is necessary to ensure that some tests are carried out to make adequate allowance for the dynamic relationship, non-stationarity, and spurious regression problems.

Table 1: Unit Root Analysis

Variable	ADF Test Statistical Value	MacKinnon Critical Value at 1%	MacKinnon Critical Value at 5%
GDP	4.31173	-3.7497	-2.9969
GEE	6.23814	-3.7667	-3.0038
GEH	0.75219	-3.7497	-2.9969
PER	0.72669	-3.7497	-2.9969
SER	-0.67016	-3.7497	-2.9969
TER	-1.78513	-3.8572	-3.04

Source: Researcher's Computation

Table 2: ADF Test Statistic Results

Variable	ADF Test Statistical Value	MacKinnon Critical Value at 1%	MacKinnon Critical Value at 5%	MacKinnon Critical Value at 10%	Order of Integration
GDP	-6.085464	-4.5346	-3.6746	-3.2762	I(2)
GEE	-3.35995	-4.5	-3.6591	-3.2677	I(2)
GEH	-6.11233	-4.4415	-3.633	-3.2535	I(1)
PER	-4.58112	-4.4691	-3.6454	-3.2602	I(2)
SER	-3.74268	-4.4691	-3.6454	-3.2602	I(2)
TER	-3.44056	-4.8025	-3.7921	-3.3393	I(1)

Source: Researcher's Computation

From the results obtained in Table 1 above, it is observed that all the variables are non-stationary as their t-values are greater than the critical values at 1% and 5%.

The results in Table 2 above shows that Gross Domestic Product (GDP), Government expenditure on Education (GEE), Primary School Enrolment Rate (PER), and Secondary School Enrolment Rate (SER), are stationary at second-order difference. Also, Government expenditure on Health (GEH), and Tertiary Institutions Enrolment Rate (TER), are stationary at first-order difference.

Table 3: Error Correction Model Estimates

Variable	Coefficient	Std. Error	t-Statistic	Prob
GEE(2)	26.52724	6.856537	3.868898	0.0038
GEH(1)	-0.98187	8.815632	-0.111375	0.9138
PER(2)	-140934	88708.6	-1.588733	0.1466
SER(2)	357033.1	389459.1	0.916741	0.3832
TER(1)	4292078	761860.4	5.633681	0.0003
ECM(-1)	-0.75589	0.388065	-1.957818	0.0819
R-squared	0.992261	Mean Dependent var		1894281
Adjusted R-Sqd	0.987961	S.D Dependent var		2469049
S.E. of Regression	270910.6	Akaike info criterion		28.146414
Sum sqd Resid	6.61E+11	Schwarz criterion		28.42936
Log likelihood	-205.096	Durbin-Watson stat		2.154743

Interpretation of results

The cointegration test results show that the residuals, and thus the variables, are cointegrated. This necessitates the development of the error correction model for short-term adjustment.

ECM(-1) is -0.75589. The percentage value of ECM is thus 75.6%, showing that the variables have to be adjusted approximately 76% to restore equilibrium in the short-run. The t-statistic value of -1.957818 is also significant. The R-Squared is 0.992 showing that the explanatory variables explain 99.2% of changes in the dependent variable. It remained strong even after adjusting for the degrees of freedom to 98.7% (Adjusted R-Squared). This means that in Nigeria, the variables chosen are strong in explaining economic growth.

The Durbin-Watson statistic, which is 2.15, falls within the acceptable range in applied research of no autocorrelation (between 1.8 and 2.5). The model is thus free from autocorrelation. The coefficient of Government Expenditure on Education (GEE) is 26.52724. This is a good performance in terms of a priori expectation as it is a positive value. This implies that a positive relationship exists between government expenditure on education and economic growth. The coefficient is also found to be statistically significant as evidenced by an examination of the t-statistic value (3.868898) and the corresponding probability value (0.0038). In the long-run therefore, a one unit increase in government expenditure on education will generate about 2652 percent increase in GDP which will by extension, lead to economic growth.

The coefficient of Government Expenditure on Health (GEH) -0.98187 is inconsistent with a priori expectation implying a negative relationship between government expenditure on health and economic growth. However when tested for statistical significance, the t-statistic value of -0.111375 indicates statistical insignificance. The coefficient of Primary school Enrolment Rate (PER), which is -140934, is also inconsistent with a

priori expectation. A negative relationship between primary school enrolment rate and economic growth is implied from the result. The t-statistic value of -1.588733 also indicates statistical insignificance.

The coefficient of Secondary school Enrolment Rate (SER) performs well in terms of a priori expectation. It has a value of 357033.1, which is positive. This point to a positive relationship between enrolment in secondary schools and economic growth. The coefficient of Tertiary institutions Enrolment Rate (TER) is positive with a value of 4292078. This is in accordance with a priori expectation. The t-statistic value of 5.633681 implies statistical significance. This indicates the existence of a positive relationship between enrolment in tertiary institutions and economic growth such that a one percent increase in tertiary enrolment leads to a significant and more than proportionate increase in GDP and ultimately, economic growth.

This result can be described as good and reliable as the model was properly treated to avoid spurious results. The variables that are consistent with a priori expectation are also found to be statistically significant. The R-squared is strong even when adjusted for degrees of freedom. Also, there is no indication of any violation of econometric assumptions as there is no autocorrelation. The result is thus reliable for policy formulation and forecasting purposes.

5. Policy recommendations

Based on the conclusion that human capital development enhances economic growth, and the finding that Nigeria is yet to fully benefit from it in terms of enhanced economic growth, the study makes the following recommendations to improve the growth-enhancing tendencies of human capital development in Nigeria.

1. The planned strategies by the government in the education and health sectors as enunciated in the NEEDS document should be fully carried out with reports provided of progress made at each stage.

2. The Government should increase not just the amount of expenditure made on the education and health sectors, but also the percentage of its total expenditure accorded to these sectors. The ten percent benchmark proffered by the present national plan should be adopted.

3. The private sector should improve its participation in the provision of private schools and hospitals. While these are already available, efforts should be made to make these services more affordable to the general public.

4. Teachers/lecturers and doctors should be paid higher rates than what they presently earn. This should be done so as to curb the imminent brain drain problem of the country.

5. Better infrastructural facilities should be provided for existing schools and hospitals, while new educational and medical institutions should be established to provide quality education and healthcare for the populace.

6. The free basic education (UBE) and health care programs established by the federal and state governments should be improved on, and sustained.

7. An enabling environment of macroeconomic stability should be provided by the government to encourage investment in human capital by the private sector and the government itself.

8. A Government free from corruption, discontinuity, and political stability is needed. If the government is transparent and morally sound, then these policies can be implemented and sustained for better performance of the Nigerian economy through the development of human capital.

6. Conclusions

Based on the theoretical presentations, findings and mathematical manipulations of this study, the following conclusions can be drawn:

First, there exists a clear-cut and obvious relationship between human capital development and economic growth.

Second, the contribution of human capital development to economic growth in Nigeria has been less than satisfactory and there is much room for improvement.

Third, the education and health sectors are in a deplorable state and as such, demand urgent attention.

Fourth, the government has the major responsibility of provision of quality education and satisfactory health care, with the private sector playing a complementary role.

Fifth, the importance of human capital development in economic growth is noted in the past and present national plans of the country, however, adequate action to back this realization is lacking.

Sixth, only through well-planned policies, can Nigeria begin to fully benefit from human capital development, such that it enhances economic performance and growth.

Nigeria is endowed with abundant resources, one of which is human resources. The proper development of this resource will lead to improved economic performance while mismanagement of the resource will hamper whatever growth process has begun. The issues discussed in this study are of optimum importance to the economic growth of the country depending on how well economic managers and policy makers approach them. It is indeed desirable that in the coming years the human capital of the country will be transformed from being merely potential, to kinetic so that sustainable, people-oriented growth can be realized.

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Environmental accounting: A tool for promoting environmental management in the Niger Delta

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Abstract: *Oil exploration and exploitation has over the last four decades impacted disastrously on the socio-physical environment of the Niger Delta oil-bearing communities in Nigeria. This invariably is responsible for the social unrest in the host communities. In response to various pressures by environmental lobby groups, companies have began to realize the need for the integration of environmental reporting practice in their annual report. To this end, this paper studied exploratively the extent to which the introduction of environmental accounting practice will help in bringing about an improved environmental sustainability and an effective environmental management system in the Niger delta region of Nigeria. The paper concludes that the integration and the disclosure of environmental liabilities will to a large extent reduce the social unrest in these areas. This in return will help organizations to maximize the efficient use of their resources, minimize environmental liabilities and demonstrate a good corporate image. The paper therefore recommends that accountants and environmental experts should pool their skills to form a multidisciplinary team to address environmental issues.*

Keywords: environmental accounting, sustainability, government, Niger Delta

1. Introduction

Industrial activities and operations of multinational corporations worldwide have caused significant environmental liabilities with its associated huge financial impacts. Industries are therefore becoming progressively more aware of the social and environmental liabilities arising from their operations and products (Environmental Protection Agency, 2000). These liabilities include impacts on the natural environment; conveyed through the three principal media: air, water and soil. Financial effects are lately more often portrayed in corporate images and disclosures (Goodstein, 2002). Nevertheless, some of these multinational corporations mostly those domiciled in developing countries still find it difficult to relate social environmental liabilities to financial effects (Carter, Perruso, and Lee, 2001)). This is primarily due to inherent uncertainties in measuring these liabilities, and in ways of expressing them as part of corporate financial evaluations (Hayden, 1989). Uncertainties in measuring environmental liabilities can be addressed by using environmental evaluation, environmental impact assessment techniques and accounting techniques, such as qualitative matrix evaluation and streamlined life cycle analysis methods (Labuschagne, 2002); and quantitative methods including quantitative life cycle analysis, life cycle costing and total cost assessment (Veefkind, 1998). Environmental accounting can be used to demonstrate the potential for environmentally beneficial investments to yield significant financial payoffs, through the avoidance of environmental liabilities (Hayden, 1989). While environmental accounting now forms part of industrial decision making in first world countries, there is a dearth of similar commitment to the environment in the developing countries, especially Nigeria as companies are still far behind in understanding and applying environmental accounting. Therefore the objective of this paper is to study exploratively the extent to which the introduction of environmental accounting practice will help in bringing about an improved environmental sustainability and an effective environmental management system in the Niger delta region of Nigeria.

In other to have a good insight of this paper, the paper is divided in three parts. The first part covers the introduction; the second which is the literature review covers areas such as what is environmental accounting; the principle of environmental accounting, its benefits, why companies should use it and also the environmental consequences of petroleum operations in the Niger- Delta region. The final section covers the conclusion and recommendations.

2. Literature review

Environmental management can be defined as the process of allocating natural resources so as to make optimum use of the environment in satisfying basic human needs, if possible, for an indefinite period and with minimal adverse effects to the environment (Barrow, 1997). However, the earth's ecosystems cannot sustain current levels of economic activity and material consumption; therefore effective sustainability initiatives are required as basis of corporate environmental management frameworks to relieve pressure on ecological and social integrity (Wackernagel and Rees, 1996). Environmental accounting is an innovative sustainability initiative. Coupled with the

various standardized procedures and practices for effective environmental management, for example, ISO 14000 and Integrated Environmental Management Systems (IEMS), defines the environmental management frameworks that exist at present that can assist companies in managing, measuring and improving the environmental aspects of their operations and within which industries must operate today (Grace, Perez, Maywah, 1999).

What is Environmental Accounting

According to International Federation of Accountants (1998, p2), "Environmental accounting is seen as the management of environmental and economic performance through the development and implementation of appropriate environment-related accounting systems and practices". While this may include reporting and auditing in some companies, environmental accounting typically involves life cycle costing, full-cost accounting, benefits assessment, and strategic planning for environmental management. A complementary definition given by Steele and Powell (2002) viewed environmental accounting as the identification, allocation and analysis of material streams and their related money flows by using environmental accounting systems to provide insight in environmental impacts and associated financial effects. Green (environmental) accounting involves the measuring of the environmental performance of an organization, including government bodies and manufacturers, in economic term. It is a type of cost benefit analysis which relates to the monetary and physical assessment of environmental cost associated with the development and operational activities and the economic benefits of good environmental management and other actions (such as implementation of pollution prevention technology). Green accounting can be used to determine less tangible and external cost for projects and activities such as bio-diversity, human health and aesthetic values. It is also aimed at broader issues such as implementing sustainable business practice to conserve natural resources for future generations. It generally serve as a management tool which can be used for a variety of purposes such as improving environmental performance, controlling costs, investing in cleaner technologies, developing "greener" processes and products and informing decisions related to product mix, product retention and product pricing.

Basically, the objective of environmental accounting is to measure the effects of the actions of the organization upon the environment and to report upon those effects (Crowther, 2002). In other words the objective is to incorporate the effect of the activities of the firms upon externalities and to view the firms as a network which extends beyond just the internal environment to include the whole environment. In this view of the organization, the accounting for the firm does not stop at the organizational boundary but extends to include not just the business environment in which it operates but also the whole social environment. Environmental accounting therefore adds a new dimension to the role of accounting for an organization because of its emphasis upon accounting for external effects of the organization's activities. In doing so this provides recognition that the organization is an integral part of the society, rather than a self contained entity which has only an indirect relationship with society

at large. This self-containment has been the traditional view taken by an organization as far as their relationship with society at large is concerned, with interaction being only by means of resource acquisition and sales of finished products or services. Recognition of this closely intertwined relationship of mutual interdependency between the organization and society at large, when reflected in the accounting of the organization, can help bring about a closer and possibly more harmonious relationship between the organization and the host community.

The Principles of Environmental Accounting

In order to understand the rationale for environmental accounting, and the basis on which it is suggested that such accounting system operates, it is necessary therefore to consider the principles upon which environmental accounting operates. There are three basic principles to environmental accounting as identified by Schaltegger, Muller, Hindrichsen, (1996)

a) Sustainability;
b) Accountability;
c) Transparency.

Sustainability

Sustainability is concerned with the effect which action taken in the present has upon the options available in the future. If resources are utilized in the present then they are no longer available for use in the future, and this is of particular concern if the resources are finite in quantity. Thus raw materials of an extractive nature, such as coal, iron and oil, are finite in quantity and once used are not available for future use. At some point in the future therefore, alternatives will be needed to fulfill the functions currently provided by these resources. This may be at some point in the relatively distant future but of more immediate concern is the fact that as resources become depleted then the cost of acquiring the remaining resources tends to increase, and hence the operational costs of organizations tend to increase.

Sustainability therefore implies that society must use no more of a resource than can be regenerated. This can be defined in terms of the carrying capacity of the ecosystem and described with input – output models of resource consumption (Hawken 1993).

Accountability

Accountability is concerned with an organization recognizing that its actions affect the external environment, and therefore assuming responsibility for the effects of its actions. This concept therefore implies a quantification of the effects of actions taken, both internal to the organization and externally. More specifically the concept implies a reporting of those quantifications to all parties affected by those actions. This implies a reporting to external stakeholders of the effects of actions taken by the organization and how they are affecting those stakeholders. This concept therefore implies recognition that the organization is part of a wider societal network and has responsibilities to that entire network rather than just to the owners of the organization. Alongside this acceptance of responsibility therefore must be a recognition that those external stakeholders have the power to affect the way in which those actions of the organization are taken and a role in deciding whether or not such actions can be justified, and if so at what cost to the organization and to other stakeholders.

Transparency

Transparency, as a principle, means that the external impact of the actions of the organization can be ascertained from that organization's reporting and pertinent facts are not disguised within that reporting. Thus all the effects of the actions of the organization, including external impacts, should be apparent to all from using the information provided by the organization's reporting mechanisms. Transparency therefore can be seen to follow from the other two principles and equally can be seen to be a part of the process of recognition of responsibility on the part

of the organization for the external effects of its actions and equally part of the process of transferring power to external stakeholders.

Benefits of Environmental Accounting

Environmental accounting provides an explicit recognition that stakeholders other than the legal owners of the organization have power and influence over that organization. Environmental accounting therefore provides a mechanism for transferring some of the power from the organization to these stakeholders and this voluntary surrender of such power by the organization can actually provide benefits to the organization. Benefits from increased disclosure and the adoption of environmental accounting can provide further benefits to the organization in its operational performance, beyond this enhanced relationship with society at large. These benefits, as argued by Bartelmus (1992, p.156), to include:

i. An improved corporate image for the organizations which will translate into increased confidence of stakeholders, investors, insures and financial institutions.

ii. Improved relationships with local communities, regulators and non-governmental organizations. Local communities will be more tolerant and even supportive of organizations that openly communicate with their stakeholders. Transparency and documentation of social and environmental accountability are important to gain confidence of local communities

iii.Greater control of environmental performance. Environmental reporting allows organizations to present information on their environmental performance and also ensures that the host communities are aware of the measures being taken by organizations to bring about environmental sustainability.

iv.The integration of an environmental accounting system by organization will enhance the maximization of environmental resources, reduce waste and minimize environmental liabilities.

Why Should Companies use Environmental Accounting?

Companies and managers usually believe that environmental costs are not significant to the operation of their businesses. However, often it does not occur to them that some production costs have an environmental component. For instance, the purchase price of raw materials: the unused portion that is emitted in a waste is not usually considered an environmentally related cost. These costs tend to be much higher than initial estimates and should be controlled and minimized by the introduction of effective cleaner production initiatives whenever possible. By identifying and controlling environmental costs, Environmental Management

Accounting systems can help environmental managers justify these cleaner production projects, and identify new ways of saving money and improving environmental performance at the same time. The systematic use of EMA principles will assist managers in identifying environmental costs often hidden in a general accounting system. When hidden, it is impossible to know what share of the costs is related to any particular product or process or is actually environmental. Without the ability to isolate and separate this portion of the overall cost from that of production, product pricing will not reflect the true costs of its production. Polluting products will appear more profitable than they actually are because some of their production costs are hidden, and they may be sold under priced (Patrick and Francois, 2006). Cleaner products that bear some of the environmental costs of more polluting products (through the overhead), may have their profitability underestimated and be over priced. Since product prices influence demand, the perceived lower price of polluting products maintains their demand and encourages companies to continue their production, perhaps even over that of a less polluting product. Finally, implementing environmental accounting will multiply the benefits gained from other environmental management tools. Besides the cleaner production assessment, EMA is very useful for example in evaluating the significance of environmental aspects and impacts and prioritizing potential action plans during the implementation and operation of an Environmental Management System (EMS). EMA also relies significantly on physical environmental information. It therefore requires a close cooperation between environmental managers and management accountants which will result in an increased awareness of each other's concerns and needs. As a tool, EMA can be used for sound product, process or investment project decision-making. Thus, an EMA information system will enable businesses to better evaluate the economic impacts of the environmental performance of their businesses.

The Environmental Consequences of Petroleum Operations in the Niger-Delta Region

Although petroleum resources sustain the Nigerian economy, industrial activities in the sector have been known to be associated with substantial environmental degradation and social crises, posing a potential threat to sustainable development in the Niger Delta, where the bulk of the country's petroleum resources are found. Most of the negative environmental consequences of oil industry activities are localized and more intense in the areas of primary activities; some of the effects have trans-boundary implications (Orubu, Odusola & Ehwarieme, 2004). For example, gas flaring which is a common feature of the Nigerian petroleum industry has been known to be a factor in the problem of global warming (World Bank, 1995). In the same vein, mangrove swamp and rain forest destruction as a result of oil industry activities can have long-term consequences for both ecological and climatic balances.

Despite the different environmental policies and strategies that has been made in Nigeria since the Rio conference in 1992 to address the core environmental issues; environmental degradation has remained the greatest problems in the Niger-Delta region. The table below shows the level of oil operations and their impacts on the environment:

Table 1: Oil operations and their impacts on the environment

S/N	Activity/Event	Actual and Potential Impact on the Environment
1	Exploration – including geological surveys and, geophysical investigations	Destruction of forest land, vegetation and farm land/human settlement. Noise pollution and vibration from seismic shooting. Effects on animals and nearby settlers (on shore) and on fisheries (near/offshore). Disturbances of flora and fauna habitats. Dislocation of economic activity. Tension on the social environment due to compensation disagreements
2	Drilling	Accumulation of toxic materials from drilling materials, oil pollution of the sea, beaches or land. Destruction of fisheries production. Destruction of breeding ground for some marine fisheries. Alteration of the taste of fish. Killing of bottom dwellers. Pollution of underground water (waste pots). Adverse health effect on humans, social tension arising from compensation disagreements from accidental spills from locations.
3	Product/process (1)Plat forms and tank farms (2)Gas flaring	Water pollution from long term cumulative effects of produced water (with high salinity). Air pollution from gas and processing evaporation and flaring. Production of heat kills vegetation around the heat area. Suppresses the growth and flowering of some plants. Reduces agricultural productivity and wild life concentration in area.
4	Refining petroleum	Air pollution and waste water impacting negatively on human health and ecosystem.
5	Oil spillage	Destruction of farmland, fishery and aquatic resources and mangrove ecosystem. Water pollution. Creates social tension due to compensation disagreements.
6	Tanker loading location	Water pollution from ballast and tank washing. Deck drainage, spillage during loading Operation.
7	Storage depot	Land pollution from effluent water and solid waste of chemical cans and drums. Destruction of farmland for the establishment of storage depots, water pollution from effluent water. Air pollution from gaseous fumes during loading.
8	Transportation	Disruption of the sea-bed by dredging for pipeline installation. Sedimentation along pipeline routes. Water pollution from consequences of leaks from fracturing or breaking of pipe caused by metal fatigue, trawlers and dredges or sea floor failures, and sabotage. Air pollution by transport tankers. Destruction of environmentally sensitive area e.g. lowland, where estuaries, wet lands and sand dune fields exist. Erosion and flooding of the area drastically affected.
9	Marketing	Pollution of immediate environments from retail outlets. High hazard potential where located near residential buildings.

Adapted from Orubu et al, (2002)

A careful analysis of Table 1 as observed by Orubu et al, (2002) shows that every aspect of oil operations, though in varying degrees, has significant negative implications for the environment. The second, and closely related to the first, is that in most cases all of the facets of what constitute the environment are affected in one single operational line and Thirdly, the effects of these various aspects of oil operations on the environment are not mutually exclusive, but rather reinforcing. Fourthly is the fact that environmental consequences impose economic effects on the people. And finally, social tension tends to result from compensation disagreements arising from environmental damage claims by host communities.

In light of the problems identified above, accountants are of the opinion that the basic premise of environmental disclosure practice is that conventional accounting practices and existing operational and financial management within organizations obscure environmental information. By clarifying inputs, outputs, and impacts, the integration of environmental accounting can help companies and organizations develop an innovative solution that is targeted to achieving environmental sustainability in this region (Owolabi, 2000). This view is supported by a similar survey conducted by Uwuigbe & Olatunji (n.d) on the perceptions of accountants, managers and environmental lobby groups towards environmental reporting in the Niger- Delta Region. The result of this study is depicted in the figure below:

Fig 1: perceptions on the adoption of environmental disclosure by companies

Adapted from Uwuigbe & Olatunji, (n.d)

From the above, the result across the three selected local governments in Rivers State shows that an average of 70% of accountants of companies located in these areas were of the opinion that environmental reports should be integrated into the conventional accounting system. This is because, once organizations are made accountable for environmental costs; they would be compelled to minimize the potentially harmful effects of their activities. They further opined that the reporting of environmental liabilities will require organizations to forecast the potential environmental impacts of their activities and

accordingly estimate contingent liabilities and create provisions for environmental risk. In the same survey, an average of 52% of the managers was of the opinion that environmental accounting might be useful for the reporting of environmental costs.

Finally, an average of 87% of the lobby groups in these regions was affirmative that the disclosure of environmental issues should be of upmost importance in the annual reports of companies.

6. Conclusion and recommendations

In conclusion, environmental accounting is a tool for organizations to both improve their environmental performance and enhance their business efficiency. This will require organizations to take active roles in examining their practices and then determining how their impacts should be managed, which will in the long-run bring about an improved environmental sustainability and an effective environmental management system in the Niger delta region of Nigeria. In addition, the integration and the disclosure of environmental cost will to a large extent reduce the social unrest in these areas. This in return will help organizations to maximize the efficient use of their resources, minimize environmental liabilities and demonstrate a good corporate image.

The paper therefore recommends that as a result of the environmental problems in this region, there is a need for companies involved in oil exploration and production activities to imbibe a new method of recording, analyzing and reporting environmentally induced financial impact and ecological impact. These will in the long run promote more accurate costing and pricing of products and can also aid companies in the design of more environmentally preferable processes, products, and services for the future.

On the government's part, the paper recommends that once environmental costs are properly traced back to products or services, government can use the information to direct the market through the introduction of taxation instead of relying only on environmental legislation.

Finally, accountants and environmental experts could pool their skills to form a multi-disciplinary team to address environmental issues of significant to the organization and recommend appropriate remedial actions.

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