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~ Information Management ~

Information and e-books

E-books come with a myriad of advantages in terms of identifying, processing and using information. Such can become multimedia, with numerous interactivity possibilities.

The genuine communication channels between the author and the reader can be designed while reading. Thus, feedback can become the engine for developing further informational media, thus in many cases turning the reader into author. Actually, this could be mentioned as designing genuine group volume which can be built starting from the book of one author. The author becomes the creator and catalyst of an informational universe that is extended by the reader's adding information and experiences. In a not so distant era, e-books could include advertisements, which would increase revenues for the publisher and author and would reduce the price for the end reader. Thus, a challenge could lead to the identification of a solution for issues generated by classic books.

It is obvious nonetheless that hard copy of books will remain a major alternative for reaching valuable information.

Prof. Ph.D. Paul Marinescu

Analysis of monetary and fiscal policy mix

~ *Ph. D.* **Ionuţ Constantin** *(Faculty of Bussines and Administration)*

Abstract: *Economies are constantly hit by various shocks - that affect aggregate demand and aggregate supply and have the potential to generate recession or expansion, repective a high level of unemployment and high inflation rate. Governments use fiscal and monetary policies to try to stabilize the economy.*

Key words: Macroeconomic policy, fiscal policy, monetary policy, Economic growth

1. Introduction

Reaching the objectives of fiscal policy implies o strong coordonation (both temporal and in terms of consistency) between fiscal policy and monetary policy.

The realization of such coordination aims, in fact, the adoption of those measures that allow that the effects generated by a policy in a given field will not be annihilated by the effects arising from application of other policies. Coordination problem holds by to the ability to manage complex processes, with unclear mechanisms.

2. Macroeconomic policy: objectives and instruments

In the condition of inflationst pressure and those related with the increase in the number unemployed, of growing macroeconomic imbalances, bring into question in recent years, the appropriateness of adopting a mix of economic policies conducive to macroeconomic stabilization. Not infrequently, macroeconomic stabilization was associated with monetary stabilization. Monetary stabilization, etymologically speaking (within the meaning of the word base) requires, in fact,

specific monetary system changing economy and, above all, change currency that economy. The other side of the stabilization concept is most commonly used today, having regard to economic stability by restoring the economy of general equilibrium analysis.

The process of macroeconomic stabilization is strongly influenced by the measure of economic policy adopted, of the coherence and implicitly by the degree in which the authorities involved in implementing these measures are able to work together to achieve goals.

Macroeconomic policy is embodied in all the instruments and measures adopted by the authorities of a country to influence key economic variables and attaining the desired level for the respective economy. In other words, *economic policy is a deliberate state intervention in the economic field in order to accomplish certain objectives of a structural or term*[1].

The question is the choice of economic policy objective that have to be pursued through the economic policy mix which will be adopted. Even if *objective is the same, the means to achieve – are not the same. The economy is a mechanism so complex that leadership is likened to an art rather than an exact science. Offered solutions to a problem or another problem are usually multiple, sometimes seemingly contradictory.*

Reaching these objectives is based, ultimately, on the tools used by the authority empowered to achieve macroeconomic policy. These instruments are represented by the components of economic policy; components that are translates into as many independent policy, but also correlated with one another: monetary policy, exchange rate policy (considered by some economists as part of monetary policy, and by others as separate policy in macroeconomic policy), fiscal policy, trade policy and not the least revenue policy.

2.1. The objectives of macroeconomic policy

Achieving macroeconomic stability is reflected by the way in how are reached the objectives set thrugh the macroeconomic policy and, last but not least, the nature of the objective had in view. The objectives envisaged by macroeconomic policy aimed the economic activity; economic activity can be represented by several variables such as GDP, employment, inflation, etc.. Achieving a certain level of these macroeconomic variables is the fundamental objective of macroeconomic policy in the state in general and monetary policy in particular.

The objective with the greatest social impact is the employment of labor, going on maximizing it. Regarding this objective, it is almost clear desire to register a high level of employment, on the one hand to ensure a decent living, and secondly to ensure a high level of product offerings.

Price stability is emerging as one of the most important objectives of economic policy. In pursuing these objective conditions must be borne in mind that the notion of price stability does not mean that all prices are stable or fixed. At the pragmatic level, the focus is on maintaining price stability in the environment, aiming, ultimately, their relative stability and not the absolute. Economists consider that there is relative stability of prices while the annual growth rate of prices, determined from a representative price index is at most 2%.

If price stability is now one of the main strands of authority, we must keep in mind that one of the problems arising from inflation

[1]Basno, Cezar și Dardac, Nicolae, Monedă, credit, bănci, Editura Didactică și Pedagogică, București, 1999, pag. 379

is economic stagnation. There are thus cases in which the state's economic policy is envisaged to ensure sustainable economic growth.

In terms of ensuring a certain level of growth it is, for some countries, one of the most important coordinates of macroeconomic stabilization policy.

Setting the pace of economic growth is based on quantitative records of previous years, adding to this factor is, of course, circumstantial factors which, in most cases, significantly affect economic growth. If the early twentieth century the idea is going to ensure economic growth of at least 3% - 4%, these expectations can be far more pessimistic.

To speak of a sustainable economic growth, must register an actual increase in the production of a country (quantity) rather than, simply, an increase in the national currency. To this must be added that the mix of products and services must be made to stimulate real demand and thus stimulate consumption.

All these goals of macroeconomic stabilization are considering only domestic economic issues.

Depreciation is another factor that involves the adoption of a firm policy of macroeconomic stabilization. Financing budget deficits on monetary issue can gradually emphasize inflationary pressures in the economy, these having infleunce on the value of the money, value that leads, in turn, lower purchasing power and hence living standards.

As a result, lately between the objectives of economic policy is to ensure control and the state budget deficit.

The conflict between the objectives of macroeconomic policy.

The choice of economic policy objectives is very often contradictory, because achieving one objective can lead to failure of other targets, so that puts a great emphasis on establishing a single objective of macroeconomic policy to allow, indeed to achieve stabilization macroeconomic.

2.2. Macroeconomic policy instruments

Undeniably it is considered that macroeconomic policy is represented by two major components, the realization that, as is the action of which depends, in fact, achievement of macroeconomic policy: monetary policy and fiscal policy.

To these are added, however, and policies such as income, foreign exchange policy (if one considers that the policy somewhat independent of monetary policy - and we think it is good to keep in mind this aspect, because of special importance and implications arising from the economy of the national currency exchange rate changes) and the country's trade policy review.

Problems faced by the global economy over the years have led many theorists to give ideas on restoring the possibility of general economic equilibrium. All this regard, in fact, develop a program of economic policy that prevents, if possible, of destabilizing factors, which are all geared towards achieving that goal.

Regardless of optics on courses of action taken in what concern the macroeconomic policy, has outlined very well the idea that the most important macroeconomic policy instruments are represented by monetary policy and fiscal policy.

The mix of monetary and fiscal policies in Romania.

In any economy, achieving objectives of macroeconomic policy implies a strong coordination (both temporally and in terms of consistency) between the components of stabilization policy. Achieving such coordination aims, in fact, the adoption of those

measures that allow that effects they are generate in a given field will not be annihilated by the effects arising from application of other policies.

Taking into account the claims of Marshall and Swanson [1974] as well as by Dornbusch, Fischer and Startz [1998] on the macroeconomic policy mix (mix consists primarily of monetary and fiscal policy), it makes it clear that monetary policy has a very large flexibility to adapt to new economic conditions and thus allow their influence. At the other pole is that fiscal policy does not allow so great liberality in its action, is quite difficult to change, mainly the tax system at short intervals.

If we consider the conditions for manifestation of a high inflation, economic analysts have concluded that a mix of policies - monetary and fiscal - is more effective than independent implementation of each policy.

Regarding the establishment of macroeconomic policy mix, was unanimously accepted the cooperation between monetary and fiscal policy. With the state still holds a significant share in the productive sector, it is necessary to take into account salary policy, in order to eliminate the distortions related to the sharing of resources. Large role in this process of stabilization was attributed to monetary policy, which is, unfortunately, the most well defined at the time of starting the transition process (from an institutional perspective - National Bank of Romania has been in his rights central bank rather quickly - and in terms of its credibility granted).

Conclusions

Modern economies are open economies. Modern industrial economies of all countries, economically advanced, as is the number of developing countries, are open to the outside, which reflects a significant activity in foreign trade and international capital movements.

Increasing globalization of world economies and the effects of this phenomenon on countries and individuals are often the source of virulent political debates.

In an open economy, an excess demand (as there are years in the Romanian economy) can lead to fuel inflation and external deficits. But most of the excess demand has resulted in external deficits in recent years due to disinflation and the apreciation of the currency.

In the meeting point of a budget with much higher resources with a monetary policy that targets an annual inflation of 3-4% per year we have achieved an optimal compromise in macro policy - and will be difficult. And if we had dry years and energy prices keep rising, the job will be more complicated.

Budgetary policy should be calibrated so as to allocate funds necessary for basic expenses (including financing of EU funds) without favoring one big skid.

Medium and long term we have won the battle for productivity / competitiveness. This means greater investment in production, research and technological development, education. There is a need for a strategic alliance between the public and private sectors.

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The amazing world of the internet – challenges of the internet age

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Abstract: *This presentation is aimed at briefly underlining the most important developments in informatics, following the introduction of the new informational techniques and technologies.*

Our presentation began by enumerating the programming languages used over time, by presenting the computers industry and computers generations. We have focused on numerous technical aspects, such as hardware structure; however the basis was represented by the way how information and computer networks are organized. At said point, an analysis was made of the Intranet and Internet, with a particular focus on the evolution of the Internet and its advantages and disadvantages. The Internet has represented and continues to represent a great challenge for its users, whereas as beneficial its advantages might be, the more dangerous it can become its use by some users in less controlled environments.

Introduction

Most scientists, i.e. linguists, philosophers, logicians, informatics and cybernetics specialists, admit that the main function of the language is communication and thus the transmission of information, while other knowledge is also transmitted along with such. Natural language has been the starting point for the literary, historic, poetic, philosophic, logic, scientific languages, up to the formalized and conventional languages and computer programming languages.

Scientists currently accept that information is a primary concept that can be transmitted by a minimum of energy; nonetheless the quantity of information does not depend on the value of such minimum value. Nowadays information theory is considered to be a self standing area, although its history is still short.

In 1838 the French scientist A.M. Ampère introduced the term of cybernetics,

while in 1868 the principle of a feedback device was introduced by Maxwell, who then in 1871 made a connection between the notion of information and the energetic notion of entropy.

1. Programming Languages

From a semiotic standpoint, most specialists assert that some programming languages are more similar to the logic languages, while others are rather similar to the natural ones.

From a chronological view, the code machine was the first programming language ever to be used. Starting from the semantic description of algorithm, a program comprises a finite array of instructions written in the form of binary characters sequences. It implies significant effort from programmers, and it is currently used only for programming microprocessors for simple automate machines. Nowadays, most of the phases necessary in order to programming in machine code have been transferred to the computer, by creating a series of types of programming languages. Said languages are recognized by the computer, which has a series of programs installed to such end that are named compilers and transform such into machine code. During the last forty years, an impressive number of programming languages have been created, among which we mention:

• ALGOL - an algorithmic language, in which a series of instructions are input for forming correct constructions, definitions of the senses to be allocated to such constructions and definitions regarding potential uses. This is a widely used language in universities;

• FORTRAN – an universal language, one of the most used languages in the 70s. Facilities for creating cycles exist in this language.

• COBOL – a language used for data manipulation, accountancy operations;

• BASIC – a language used by the wide mass of users who are not programming specialists. It is first of all used by engineers for simple programs, when they use certain engineering formulae;

• APL – the first language used by scientific researchers;

• PROLOG – a language used for expert programs in various areas – medicine (for diagnosis and treatment recommendations), geology, technologic processes etc;

• C++ - an object focused languages, that allows for data from the reality to be stored, for programming tools and modelling of situations in the real world;

• JAVA – a modern objects focused language used for Web pages, well protected against viruses.

2. Computers Industry, Computers Generations

The most important scientific and technologic development was faced by the computers industry, both in the hardware (intrinsic computer construction) and in the software area (programs and operation systems installed on computers). Thus, from 1946, when the first electronic computer ENIAC appeared and until the present moment development boosted and analysts were able to distinguish between categories by time and development level.

I. The First Computers Generation

This generation includes the period between the creation of the first electronic

computer and up to 1955. Computers of that generation were equipped with electronic tubes, electromagnetic relays, while internal and external memories used magnetic tubes. That is why the calculation speed was of approximately 10,000 operations a second, the working capacity was low, with low (approximately 2 ko) internal and external memories.

II. The Second Computers Generation

The second generation benefited of semi conducting commuting circuits (transistors, diode, Zener diode etc.), of ferrite based internal memories and electromagnetic external memories.

This generation covers the period between 1956 and 1963. The working speed reached 100,000 – 200,000 operations a second, and the internal memory capacity reached 32 ko.

The first operation systems occurred (own programs of the computing system that control the data input and output activity, the alternative running of programs, programs for standard services such as sorting and categorizing, standard computing programs for mathematic functions such as square root, exponents) and high level programming languages by which the bases of programming engineering were created:

• FORTRAN (FORmula TRANslator) focused on technical-scientific computation, in 1956;

• COBOL (Common Business Oriented Language), focused on economic computation which manipulate high data volumes, in 1960;

• ALGOL (ALGOrithmic Language), introduced in 1958, focused on technical-scientific computation, and later one generating PASCAL programming language.

III. The Third Computers Generation

The computers of this generation appeared between 1964 and 1975 and were built with integrated circuits, with an integrated circuit capsule comprising a series of active circuits (transistors, diodes) and passive circuits (resistors and condensers), they had internal memories made out of semi conductors, thus much more rapid than the magnetic based external memories. Microcomputers with microprocessors of 8 bites addressing appeared, which allowed for direct access for the user to computation technique and the wide use of information.

This computers generation benefited of developed programming languages. New programming languages appeared:

• PL1 (Programming Language no.1), created by IBM;

• LISP (LISt Processing language), created in 1960 and focused on lists based processing. It was the first non-procedural language on which artificial intelligence and expert systems are based.

• PASCAL, created in 1971, a structural language (each processing is deemed as a block, and blocks can be closed, encapsulated in one another). This language created in Switzerland faced wide development once the microcomputers occurred.

• C was created in 1971 by Bell-Telephone company, in order to allow for the Unix operation system to be achieved. It is a high performance language, with the concepts of high level structural languages allowing it further access to hardware.

• BASIC (Beginners All-purpose Symbolic Instruction Code), was created in 1975 and is an interactive language that can be used on microcomputers and even calculators. It was created in the USA and allows

people to use it who are not informatics specialists.

During this computers' generation operating systems grew significantly. In 1965, IBM introduced two operating systems DOS (Disk Operating System) – focused on personal computers and OS (Operating System) – focused on strong, multi-program time partition computers.

IV.The Fourth Computers Generation

Computers became a production mean during this period, which began in 1973 and ended in 1990, representing the boost of PCs (Personal Computer).

In Romania this period began in 1990.

The computers of this generation used medium scale integrated circuits – MSI, large scale integrated circuits – LSI and very large scale integrated circuits – VLSI.

The internal memory was also built with integrated circuits, while external memories were made by also using magnetic disks, however with much larger memory capacities.

The computers of this generation had a computing speed of 10 MIPS, the capacity of the internal memory of 16 Mo, and their low mass allowed for such to be installed on desks, while prices allowed for PCs to also be used by private individuals.

Computer networks were widely used and thus interactive working with other intelligent terminals.

Operating systems evolved greatly, and companies which specialized in producing them were Microsoft and Digital Research. The first microcomputers generation used the CP/M operating system made by Digital Research, while the second generation was dominated by MS-DOS and then Windows systems developed by Microsoft.

Mass application packages appeared for text processing, data base management, image and sound processing, computer assisted design etc.

Non-procedural languages began to develop: LISP created in USA and PROLOG created in France.

By using such programs, computers manage to reason.

V. The Fifth Computers Generation

The computers of the fifth generation, produced by Japanese were defined as complex knowledge processing systems. They are planned to be used in areas such as:

- Intelligent computer assisted research/design systems;
- Intelligent computer assisted training systems;
- Intelligent office automation systems;
- Intelligent robots.

Obviously, computers in the fifth generation to which scientists are currently working will gradually replace the ones in the previous generations.

3. Computer Hardware Structure

The hardware component of a computer is formed of the physical equipment in which the automatic information processing is made and of the equipments allowing for the user to communicate with the computer. It is formed of the following sub-assemblies:

a. Internal memory, where programs and the data used on a particular moment are stored;

b. External memory, the computer hard-disk where all programs and data that might be necessary to the computer for processing purposes are stored. Hard-disk is formed of a set of disks on which data and

programs can be installed. It is mounted inside the computer and has a storing capacity that nowadays can exceed 9 Go. Computers generally have only one hard-disk, which is used for the permanent storing of programs, including the operating system, and data.

Equipments allowing for the user to communicate with the computer are formed of:

- Input peripherals.
- Output peripherals.
- Input/output peripherals.

4. Information Organization

4.1. Data and Information

To become information, data regarding the object of activity must be processed in accordance with the information requirements, i.e. data collection and processing and then distributing them to policy makers.

So:

• Data are about primary events collected for information or for solving problems or situations;

• Information are messages obtained through data processing, calculations, sorting, classifying.

Data subject to computer processing are introduced in the form of numbers and alphanumeric (letters, digits and other special characters).

Today IT is defined as the science that processes data electronically.

In computer development, one can distinguish four stages:

Stage I 1940 - 1960, when informatics is a novelty and enters the U.S. major military staffs, universities and research institutes.

Stage II 1960 - 1970 when informatics was introduced within enterprises and particularly trade and oil companies.

Stage III 1970 - 1990, informatics was based mainly on the creation and use of medium capacity computers. Informatics entered in all areas of daily life, especially in military and economic activity, scientific research and education.

Stage IV 1990 - 2000 and further is when computers gained momentum reaching into all areas of economic and social activity, including people's homes.At the same time intelligent computers occurred and they are developing their own organizational and environment recognition programs including voice and writing recognition of the users they are in contact with.

4.2. File types

The file is a collection of information, homogeneous in terms of the nature of information and their processing requirements, a collection can be stored on an information support.

The file identifier consists of two elements: the name and extension.

For the MS-DOS operating system, the file has a maximum 8-digit alphanumeric characters and a string of 3 characters extension, file type is used to determine its affiliation in a class file. Separation period is used to separate the base file name from the extension.

Windows 95 supports long file names, which can have up to 255 characters and thus allow a better definition of the content file, and the first characters are used by default making it uniquely defined in the tree.

4.3. MS-DOS Directories

Directory is a catalogue, a table, a directory of the disk. Information about files that are recorded on the disc so that any file can be found on disk are stored in it.

The root directory is created whenever you format a disk or a floppy disk. In the Root Directory the following are stored: the name of each file with its extension, the space occupied on the disk in bytes, date and time it was created or modified.

Tree is a directory tree structure created by the boot disk starting from the root directory.

Building directory tree is subject to the following rules:

• A directory has only one home directory, called the parent directory (parent directory) located immediately on the superior level. A directory that has a parent directory is also called subdirectory. This allows a directory tree and several subdirectories.

• A directory can have multiple directories child directories. These directories are in direct subordination and they are found on the next inferior level.

4.4. Folders

Folders are used in Windows 95 and 98 respectively to define a container that can store files, applications and even other folders. If the directory is a mechanism through which physical files are organised on the disk, the folder represents a logical organization mechanism at the level of the interface of different entities, including files the operating system is working with.

5. Operating Systems

Operating system is software (programs and data) that provides an interface between the hardware and other software and is composed of a collection of programs that manage computer resources and controls its whole activity.

The operating system provides mainly the following functions:

• Management of the physical resources of the computer and its peripheral devices;

• Management of input/output;

• Management data (files) onto the external memory;

• Internal memory load control, activity functioning and seizing for user programs;

• Notification of special events that occur during execution and handling these events (error messages and solving recommendations);

• Providing the user interface, its access to control the program, examining the system state.

• Components of the operating system:

• kernel;

• shell.

Processor sharing is made through a core operating system component called the process scheduler. The process scheduler solves the requests of the active programs loaded into internal memory through a system of priorities, sharing time, etc.

The operating system interface provides communication between the user and computer. Via keyboard or mouse, user send commands or responses to requests via the computer and monitor, computer send users messages or questions.

Interfaces can be made using:

• Command languages;

• Menu systems;

• Graphics using symbols (icons).

6. Computer networks

6.1. Structure of computer networks

Two or more computers can share data between them in two ways:

• Off line - data sharing is accomplished through floppy disks;

• On line - data sharing is accomplished through an electric cable or communication lines.

A network is formed when a group of computers are connected to each other by various means, so that they may communicate with each other.

A. Intranet: If the network is composed of PCs that are in the same place it is called local area network (LAN). These are computers which are usually in the same department, department of work or place of business. A local area network of a company is called intranet, to distinguish the Internet. Intranet access is generally limited to employees of a firm. The available Intranet information belongs to the company, and thus from the legal and organizational point of view enters under secrecy incidence.

If computers are spread over a much wide area, the network is called wide area network (WAN). These networks may consist of computers located in different cities or countries.

B. The Internet: is a worldwide conglomeration of computer networks. The Internet is not owned or managed by a company and it represents a network of computer networks that can communicate with each other.

Most networks consist of one server and the clients connected to the network.

A computer network offers a wide range of advantages, among which we mention:

• Communication through email;

• Centralized data can be accessed by the computers from the network;

• Resources can be shared between computers (i.e. modems, printers, etc.);

• The possibility to make safety backups on the server.

• The term Internet, or - internet, has several closely related meanings depending on the context:

• The proper noun Internet (in upper case) refers to the World Wide Web, the single global network of computers interconnected through communication protocols (rules) Transmission Control Protocol and Internet Protocol, shortly called TCP / IP. The precursor of the Internet is dating from 1965, when the Defence Advanced Research Projects Agency (DARPA) (Advanced Research Projects Agency Defence - Ministry of Defence, Department of Defence or the U.S. DoD) created the first network of interconnected computers called ARPAnet. Today's super-network is the result of the extension of the ARPANET.

• The common noun internet (written with lowercase) represents in most cases the same network, but seen as a medium of mass communication, with information and services offered to users via this medium.

Technically, the term can also refer to a network that interconnects two or more independent networks that are far away from each other. Examples of large networks, for which the use of this name is justified, are SIPRNet and FidoNet.

The word "Internet" is derived from the artificial and partial annexation of two English words: interconnected and network.

The starting point for the development of the Internet has been the rivalry between two great powers of the twentieth century: the United States and the Soviet Union. In 1957, the USSR (Union of Soviet Socialist Republics) launches into space the Earth's

first artificial satellite called Sputnik. This triggered a particular concern in the United States of America, and President Eisenhower established a special agency subordinated to Pentagon: Advanced Research Projects Agency (www.darpa.mil). This agency of the Ministry of Defence (Department of Defence, abbreviated DOD) is led by scientists, has reduced bureaucracy, and its mission is the following: "To maintain technological superiority of the U.S. military and prevent technological surprise from harming our national security by funding the newest and most revolutionary scientific discoveries and by investing practically unlimited funds for connecting the scientific research and its technological military substantiation." In 1959 John McCarthy, professor at Stanford University, whose name will be associated with artificial intelligence, found the solution to connect multiple terminals to a single central computer: time-sharing. This is a method of working in which several applications (software) require competitive access to a resource (physical or logical), whereby to each application is allocated a time to use the requested resource. When the first computers appeared within large universities, there was also the problem of their interconnection. Researcher Lawrence Roberts supports an interconnection solution by packet switching in the model called "client-server". Thus in order to transmit information, it is shredded into small parts called packets. As in classic mail, each packet contains information regarding the recipient, so it can be properly directed on the network. Full information is reassembled at the destination. Although this method encounters resistance from experts, in 1969 "ARPANET" network starts operating between four nodes: University of California, Los Angeles (UCLA), University of California, Santa Barbara (UCSB), The University of Utah and The Stanford Research Institute's Augmentation Research Center. All these have been codified into a protocol that regulates data transmission. In its final form, it was TCP / IP (Transmission Control Protocol / Internet Protocol), developed by Vint Cerf and Robert Kahn in 1970 and is now the Internet. TCP / IP makes possible for different models of computers, i.e. the ones that are compatible with IBM and Mac's, using different operating systems such as UNIX, Windows, MacOS, etc. to "get along" one with another. In this way, the Internet was to become truly independent of the used hardware platform. As the U.S. program of Ministry of Defence, the ARPANET has grown amazingly fast, more and more computers connecting to this network. In 1979 ARPA decided to separate the network into two, one for commercial and academic world, and one for military. The two networks could still communicate, basically building an inter-network (internet) originally called DARPA Internet and subsequently established as the Internet. Many academic and military researchers have concentrated efforts to develop network communication programs. Thus in 1980 a series of communication programs (based on well defined protocols), which are used today, were already completed. In 1983, TCP / IP Protocol become the only official Internet protocol and thus, more computers worldwide were connected to the ARPANET. The increased number of computers connected to the Internet has become exponential, so in 1990 Internet included 3,000 networks and 300,000 computers. In 1992 the 100000 computer was already connected. Then the size of the Internet has

doubled about every year.

The rapid development of Internet was due to the fact that the access to the reference material of the mandatory protocols was and still is free. 1969 S. Crocker initiated a series of "research notes" called RFC (Request for Comments), numbered chronologically and and being in time free to access on-line (on the internet). The great change began in 1989 when Tim Berners Lee at the European Center for Nuclear Physics in Geneva (CERN) founded the first prototype development of the World Wide Web (WWW or Web). Another major change occurred when, in 1993, the National Center for Supercomputing Applications (NCSA) in the USA has provided the browser named "Mosaic", which was based on a graphical interface (Windows). The enormous growth of the web began almost at once: in June 1993 were recorded 130 web servers, and in 1994 were already more than 11,500 servers.

6.2. Using the electronic mail

Email is a modern form of communication that combines the speed of a phone call with the recording and sending a letter. Sending the letter only takes a few seconds, and the recipient can respond to it when he wishes to and also it is not necessary to contact the direct recipient for sending the letter.

Another advantage of the email is the low subscription price.

The downside is that email does not ensure the inviolability of correspondence.

An email address has two parts, first part is the user's name or any name chosen by the user followed by the @ sign and the second part is represented by the email account name, often followed by the symbol of the country in which the server is. Usually the account name is the same as the server name the host computer is subscribed to.

7. Social issues related to Internet and its dangers

The prevalence of the Internet in the world is huge: in June 30, 2009 about 1.67 billion inhabitants of the Earth had access to the Internet.

Simple and cheap Internet access has also a negative consequence, i.e. no one can guarantee the correctness of users. Thus there is already a wide range of malware, created by evil persons, that are beginning with (invisible) spying to a user's activity and ends with theft of bank account of people who do not know how to defend themselves.

Some world states prohibit, censor or restrict their population's access to the Internet in various fields: politics, religion, pornography, etc., for example North Korea, China etc.

There are lots of web hosting service providers on the internet that can host websites and online projects. The largest international companies in 2008 were: GoDaddy, 1 & 1 Internet AG, ThePlanet and net@access. In Romania there are also many companies offering web hosting. There is also an active community, Gazduire.info, composed mainly of representatives of these companies, community that aimed at promoting these services locally.

Informatics specialists are warning those who use wireless Internet about the dangers thay are exposing to by using free WLAN networks and Internet cafes. The number of mobile computers is continuously increasing. Especially netbook markets have much to gain from this development: the very attractive prices and the possibility of accessing the Internet anytime the user wants to represent good reasons to attract

a younger market segment like the tourists who want to have the opportunity to use a mobile device connected to the www especially during holidays. Security experts (see www.marketwatch.ro) draw attention on the risks those who use free connections expose to, especially free WLAN networks from airports, holiday establishments or Internet cafes. Often, upon returning from vacation it turns out that these low-cost connections used during vacations are traps of the cyber criminals who increasingly target these "holiday" connections.

The netbooks with insufficient protection are not the only source of danger. WLAN and free internet cafes use can also transform your holiday into a failure. Criminals often create fake free wireless networks. Then, all the traffic data is received by hackers. Checking your bank accounts or booking a hotel for accommodation with credit card can constitute major problems for their victims when they return from travel.

Especially young people are extremely interested in netbooks. Despite the very low purchase price, these devices offer everything you need to surf the Internet. A problem that many of them have is the antivirus protection, because they do not provide quality security solutions, leading users to be almost unprotected from attacks.

Holiday tips from security experts:

1. Do not use online banking services or make purchases online from an Internet cafe, a public terminal or using a free WLAN.

2. After using the services of internet cafes or public terminals, delete the browsed files, browser history and stored cookies.

3. Do not forget to hit "log off" when you logged on a website as registered user. Otherwise, the next user will be able to access your account.

4. To send holiday cards it would be better to make a particular email account before the trip, for example on yahoo.com.

5. Many Internet applications such as browsers or email clients are generically called "Portable Apps" and can be launched without a laborious installation directly from a USB stick. A contact point for this type of "portable" applications is www.portableapps.com.

6. As an alternative to WLAN: use a UMTS card, which, even if it is expensive, involves less risk for users.

Children's safety and concerns while using the Internet depends on each parent separately. If parents will require children not to do certain things on the internet, it is possible that those prohibited actions to become more attractive. It is therefore important that the education process to be bilateral developed together with children. It is best that parents have an open conversation with children; to make them reach the correct conclusions regarding the internet surfing. The available safety rules for children who use a safe internet must provide an online experience in a positive manner. It should be noted that the Internet is a living organism. With each innovation, we expose ourselves and our children to a new risk.

Conclusion

Nowadays technology has recorded astonishing development rates.

The development of technology refers to knowledge management, new business models and organizational structures, dynamic and cooperative business processes on the network, optimised labour and cooperative work environments, virtual and digital production, modeling, simulation and presentation instruments.

Objectives to be achieved in this area is to create a mobile communications platform for data transmission and access to business information services, developing integrated software tools for financial and economic activities, development of high performance computational techniques for real-time systems, multi-agent systems for quality management processes in a virtual organization, structure, design and development of industrial and other areas / complex activities within economy in modern, advanced, virtual and extended design, creating embedded systems for business development and work environments in cooperation, development of methods and techniques in monitoring processes and technological facilities, development of methods and techniques of dynamic clustering and selection to develop a virtual enterprise, systems to assist the decision within the transfer of information, achieving an integrated information network of protection and control for the technological processes, managing information safely in special institutions, creating an informational integrated system of modelling and simulation of electricity consumption within the residential area, developing an integrated resource management in multimodal transport of goods, handling uncertain information and developing an electronic auction service for small and medium enterprises, achieving integration of the resources of agro tourism services, developing a food quality detection system using innovative techniques, models and algorithms for design guidance and creation technology for the industrial products within machine building industry.

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Computer science and the recent innovations of the modern society

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Abstract: *The paper "Computer science and the recent innovations of the modern society" presents the importance of computer science, with the most important historical moments in its evolution, the main theoretical elements of the computation science, computer elements and architecture and the latest innovations in the computer science, such as Artificial Intelligence.*

Introduction

Computer science, or computing science, is the study of the theoretical foundations of information and computation and their implementation and application in computer systems. One well known subject classification system for computer science is the ACM Computing Classification System devised by the Association for Computing Machinery.

Computer science or computing science (sometimes abbreviated CS) is the study of the theoretical foundations of information and computation, and of practical techniques for their implementation and application in computer systems. It is frequently described as the systematic study of algorithmic processes that create, describe, and transform information. According to Peter J. Denning, the fundamental question underlying computer science is, "What can be (efficiently) automated?"

Computer science has many subfields; For example, programming language theory studies approaches to describing

computations, while computer programming applies specific programming languages to solve specific computational problems, and human-computer interaction focuses on the challenges in making computers and computations useful, usable, and universally accessible to people.

The focus of computer science is more on understanding the properties of the programs used to implement software such as games and web-browsers, and using that understanding to create new programs or improve existing ones.

Computer science deals with the theoretical foundations of information and computation, and of practical techniques for their implementation and application.

1. The history of computer science – a brief analysis

The early foundations of what would become computer science predate the invention of the modern digital computer.

➤Machines for calculating fixed numerical tasks, such as the abacus, have existed since antiquity. Wilhelm Schickard built the first mechanical calculator in 1623. Charles Babbage designed a difference engine in Victorian times helped by Ada Lovelace. Around 1900, punch-card machines were introduced. However, all of these machines were constrained to perform a single task, or at best some subset of all possible tasks.

➤During the 1940s, as newer and more powerful computing machines were developed, the term computer came to refer to the machines rather than their human predecessors. As it became clear that computers could be used for more than just mathematical calculations, the field of computer science broadened to study computation in general.

➤Computer science began to be established as a distinct academic discipline in the 1950s and early 1960s. The first computer science degree program in the United States was formed at Purdue University in 1962. Since practical computers became available, many applications of computing have become distinct areas of study in their own right.

➤Although many initially believed it was impossible that computers themselves could actually be a scientific field of study, in the late fifties it gradually became accepted among the greater academic population.

➤It is the now well-known IBM brand that formed part of the computer science revolution during this time. IBM (short for International Business Machines) released the IBM 704 and later the IBM 709 computers, which were widely used during the exploration period of such devices. During the late 1950s, the computer science discipline was very much in its developmental stages, and such issues were commonplace.

➤Time has seen significant improvements in the usability and effectiveness of computer science technology. Modern society has seen a significant shift from computers being used solely by experts or professionals to a more widespread user base.

➤Despite its short history as a formal academic discipline, computer science has made a number of fundamental contributions to science and society. These include:

➤The start of the "digital revolution" which includes the current Information Age and the Internet.

➤A formal definition of computation and computability, and proof that there are computationally unsolvable and intractable problems.

➤The concept of a programming language, a tool for the precise expression of methodological information at various levels of abstraction.

➤In cryptography, breaking the Enigma machine was an important factor contributing to the Allied victory in World War II.

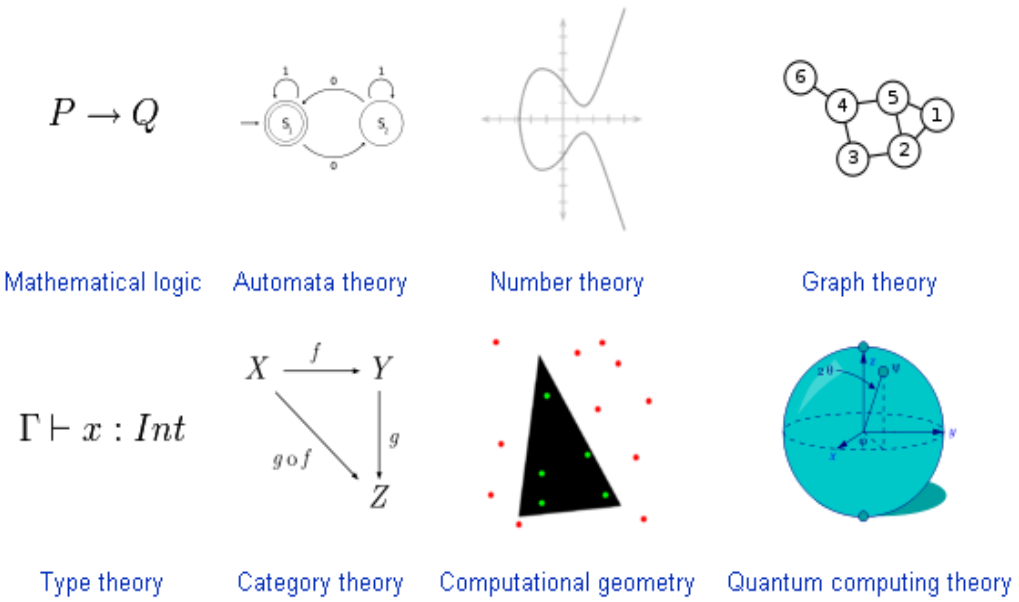
➤Scientific computing enabled advanced study of the mind, and mapping of the human genome became possible with the Human Genome Project.

➤Algorithmic trading has increased the efficiency and liquidity of financial markets by using artificial intelligence, machine learning, and other statistical and numerical techniques on a large scale

2. Theoretical computer science

The broader field of theoretical computer science encompasses both the classical theory of computation and a wide range of other topics that focus on the more abstract, logical, and mathematical aspects of computing.

Figure 1: *"Theoretical computer science and its major elements"*



Source: www.wikipedia.org

3. Theory of computation

The study of the theory of computation is focused on answering fundamental questions about what can be computed and what amount of resources are required to perform those computations.

In an effort to answer the first question, computability theory examines which computational problems are solvable on various theoretical models of computation.

The second question is addressed by computational complexity theory, which studies the time and space costs associated with different approaches to solving a computational problem.

The famous "P=NP?" problem, one of the Millennium Prize Problems, is an open

problem in the theory of computation.

Computability theory, also called recursion theory, is a branch of mathematical logic that originated in the 1930s with the study of computable functions and Turing degrees. The field has grown to include the study of generalized computability and definability. In these areas, recursion theory overlaps with proof theory and effective descriptive set theory.

• Computational complexity theory is a branch of the theory of computation in computer science that focuses on classifying computational problems according to their inherent difficulty. In this context, a computational problem is understood to be a task that is in principle amenable to being solved by a computer. Informally, a computational problem consists of problem instances and solutions to these problem instances. In particular, computational complexity theory determines the practical limits on what computers can and cannot do.

• Closely related fields in theoretical computer science are analysis of algorithms and computability theory. A key distinction between computational complexity theory and analysis of algorithms is that the latter is devoted to analyzing the amount of resources needed by a particular algorithm to solve a problem, whereas the former asks a more general question about all possible algorithms that could be used to solve the same problem. More precisely, it tries to classify problems that can or cannot be solved with appropriately restricted resources. In turn, imposing restrictions on the available resources is what distinguishes computational complexity from computability theory: the latter theory asks what kind of problems can be solved in principle algorithmically.

• Cryptography (or cryptology; from Greek κρυπτός, kryptos, "hidden, secret"; and γράφω, gráphō, "I write", or -λογία, -logia, respectively) is the practice and study of hiding information. Modern cryptography intersects the disciplines of mathematics, computer science, and engineering. Applications of cryptography include ATM cards, computer passwords, and electronic commerce. Until modern times cryptography referred almost exclusively to encryption, which is the process of converting ordinary information (plaintext) into unintelligible gibberish (ciphertext). Decryption is the reverse, in other words, moves from the unintelligible ciphertext back to plaintext. A cipher (or cypher) is a pair of algorithms that create the encryption and the reversing decryption. The detailed operation of a cipher is controlled both by the algorithm and in each instance by a key. This is a secret parameter (ideally known only to the communicants) for a specific message exchange context. Keys are important, as ciphers without variable keys can be trivially broken with only the knowledge of the cipher used and are therefore less than useful for most purposes. Historically, ciphers were often used directly for encryption or decryption without additional procedures such as authentication or integrity checks.

4. Algorithms and data structures

a) Analysis of algorithms

To analyze an algorithm is to determine the amount of resources (such as time and storage) necessary to execute it. Most algorithms are designed to work with inputs of arbitrary length. Usually the efficiency or running time of an algorithm is stated as a function relating the input length to the

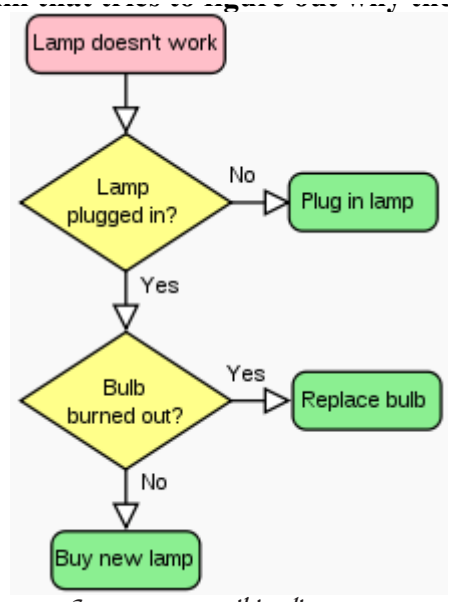
number of steps (time complexity) or storage locations (space complexity).

Algorithm analysis is an important part of a broader computational complexity theory, which provides theoretical estimates for the resources needed by any algorithm which solves a given computational problem. These estimates provide an insight into reasonable directions of search for efficient algorithms.

b) Algorithms

Bellow is an algorithm that tries to figure out why the lamp doesn't turn on and tries to fix it using the steps.

Figure 1: *"Theoretical computer science and its major elements"*



Source: www.wikipedia.org

c) Data structure

In computer science, a data structure is a particular way of storing and organizing data in a computer so that it can be used efficiently. Different kinds of data structures are suited to different kinds of applications, and some are highly specialized to specific tasks. Data structures are used in almost every program or software system. Specific data structures are essential ingredients of many efficient algorithms, and make possible the management of huge amounts of data, such as large databases and internet indexing services. Some formal design methods and programming languages emphasize data structures, rather than algorithms, as the key organizing factor in software design.

Data structures are generally based on the ability of a computer to fetch and store data at any place in its memory, specified by an address — a bit string that can be itself stored in memory and manipulated by the program.

5. Computer elements and architecture

5.1.Computerelements–major elements

a) Digital electronics are systems that represent signals as discrete levels, rather than as a continuous range. In most cases the

number of states is two, and these states are represented by two voltage levels: one near to zero volts and one at a higher level depending on the supply voltage in use. These two levels are often represented as "Low" and "High".

b) Micro architecture: In computer engineering, micro architecture (sometimes abbreviated to μarch or uarch) is the way a given instruction set architecture (ISA) is implemented on a processor. A given ISA may be implemented with different micro architectures. Implementations might vary due to different goals of a given design or due to shifts in technology. Computer architecture is the combination of micro architecture and instruction set design.

c) Multiprocessing is the use of two or more central processing units (CPUs) within a single computer system. The term also refers to the ability of a system to support more than one processor and/or the ability to allocate tasks between them. There are many variations on this basic theme, and the definition of multiprocessing can vary with context, mostly as a function of how CPUs are defined (multiple cores on one die, multiple chips in one package, multiple packages in one system unit, etc.). Multiprocessing sometimes refers to the execution of multiple concurrent software processes in a system as opposed to a single process at any one instant. However, the terms multitasking or multiprogramming are more appropriate to describe this concept, which is implemented mostly in software, whereas multiprocessing is more appropriate to describe the use of multiple hardware CPUs. A system can be both multiprocessing and multiprogramming, only one of the two, or neither of the two.

5.2. Computational science (or scientific computing)

Computational science (or scientific computing) is the field of study concerned with constructing mathematical models and numerical solution techniques and using computers to analyze and solve scientific problems. In practical use, it is typically the application of computer simulation and other forms of computation to problems in various scientific disciplines.

6. Artificial Intelligence

As our world becomes smaller, scientific communities are becoming increasingly international. National scientific societies are evolving to serve their international constituencies, and in doing so, have come to reconsider their roles, their purposes, their images, their identities, their "branding," and, consequently, their names.

This branch of computer science aims to create synthetic systems which solve computational problems, reason and/or communicate like animals and humans do. This theoretical and applied subfield requires a very rigorous and integrated expertise in multiple subject areas such as applied mathematics, logic, semiotics, electrical engineering, philosophy of mind neurophysiology, and social intelligence which can be used to advance the field of intelligence research or be applied to other subject areas which require computational understanding and modeling such as in finance or the physical sciences. It all started with the grandfather of computer science and artificial intelligence, Alan Turing, who proposed the Turing Test for the purpose of answering the ultimate question... "Can computers think?".

By far the greatest danger of Artificial Intelligence is that people conclude too early that they understand it. Of course this problem is not limited to the field of AI. Jacques Monod wrote that a curious aspect of the theory of evolution is that everybody thinks he understands it. The field of Artificial Intelligence (AI) has a reputation for making huge promises and then failing to deliver on them. Most observers conclude that AI is hard; as indeed it is. It is very easy for people to think they know far more about Artificial Intelligence than they actually do. It is very difficult to write about global risks of Artificial Intelligence.

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Debt management and economic growth in Nigeria: performance, challenges and responsibilities

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Abstract: *There is no one entity solely responsible for the debt crisis Nigeria found itself in by the early 1980s: not the Nigerian government, the banks, not the creditor governments. The increase in the Nigeria debt crises has been caused by a lot of factors that have forced their way into the country's administration over the years. The major cause of Nigeria's debt crises is the change in the economic fortune in the oil sector.*

One major obstacle for Nigeria's economic development over the last two decades has been its crippling debt overhang. In April 2006, Nigeria ordered a final debt repayment to rich lending nations, completing Africa's biggest debt relief deal.

How do we assess the debt crisis in which Nigeria found itself? What are the lessons to be learned? Certainly, these are some of the most important questions to be studied as the country embarks with a clean slate with private and bilateral lenders after the long sought-after debt restructuring deal that came in April 2006. This paper analyzes the lessons to be learned from Nigeria's debt history, looking especially at the phenomenon of oil-led spending and borrowing that occurred during 1986-2006. Its objective is to determine whether Nigeria received a higher credit-rating than its domestic and macroeconomic fundamentals would have otherwise justified due to its oil revenues, and whether the debt-repayment crisis arose because oil windfalls from the early 1980s were not used to retire its debt.

Keywords: External Debt, Internal Debt, Debt Rescheduling, Debt Repudiation, Debt-servicing capacity, Debt Forgiveness.

Introduction and Background

The origin of the gloomy Nigerian debt situation can be traced back to the late 1970s when there was the need to finance the widening deficit gap created by profligate spending. This marked the beginning of the end of the oil boom era which was characterized by falling foreign exchange earnings and rising fiscal deficits and external borrowing. Nigeria's foreign debt quadrupled from $9 billion in 1980 to $ 36 billion in 1990. These debt obligations accumulated and crystallized into what is today known as the Paris Club debts, promissory notes and par bonds. The Paris Club debt component, which was a mere $5.39 billion in 1983, graduated to $21.6 billion in 1999. (Simbowale, etal.2004)

One major obstacle for Nigeria's economic development over the last two decades has been its crippling debt overhang. In April 2006, Nigeria ordered a final debt repayment to rich lending nations, completing Africa's biggest debt relief deal. This and other debt restructuring agreements in the last few years have reduced Nigeria's external debt to only 6% of its GDP. But the interest in Nigeria's debt has not dissipated since the Paris Club deal. On the contrary, now that the whole process has been completed, analysts (both international and local) are enabled to assess fully its possibilities. Some analysts have said that the successful completion of this deal would help redeem Nigeria's reputation in international financial circles, and prevent a repeat debt crisis. Others believe that, because of Nigeria's oil dependence, the country could face the same pattern of debt accumulation and mismanagement that heralded calls for debt relief in the first place.

The current scenario of low debt levels and high oil prices (and revenues) mean that Nigeria's financial position is quite similar to what it was in the 1970s. Hence, determining the policy steps that should have been taken in the past could shape opinion about how to manage the country's new borrowing to avoid a debt crisis similar to the one from which it has just emerged.

This paper seeks to analyze how Nigeria's policies mishandled its debt accumulation. Dividing Nigeria's debt history into two major periods (1979-1985 and 1986-2006), the paper would make use of the latter for analyses. To what the degree was Nigeria's External and Internal debts have on total debts of the nations between 1986-2006.

Literature Review

Most studies of external debt in Africa appear to have focused on regions, especially the Sub-Sahara, which tended to give little attention to the peculiarity of individual countries. Furthermore, other studies dwell on country groupings based on certain characteristics (e.g. oil-exporting countries) or inter-country comparison.

Barro (1979) proided the foundation for a neoclassical theory of debt management with testable implications for the management of public debt, under the assumption that governments behave in the manner that theory suggests would be optimal. And in fact, for industrial economies, the evidence is at least roughly consistent with the predictions of the theory.

Edo (2002) analyzes the African debt problem, with particular reference to Nigeria and Morocco, and finds that fiscal expenditure, balance of payments and global interest rate are the crucial factors in explaining the accumulation of external debt in the two countries. One of his policy suggestions is a

sustained export promotion programme that would generate increases in foreign earnings needed to service the debt. He also suggests that both countries should restructure and develop their capital markets to reduce exposure to the vagaries of the global interest rate.

Traditionally the practice of debt management has focused on either minimizing the interest cost of borrowing, supporting short term interest rates set by monetary policy makers or assisting capital markets through providing appropriate amounts of risk free assets and liquidity at key maturities (Missale, 1999).

Nigeria's External Debt Problem

A. Origin & Sources

For many years there has been little agreement over the exact scale and composition of Nigeria's external debt stock. The origin of Nigeria's external debt dates back to 1958, when a sum of US$28 million was contracted for railway construction. Between 1958 and 1977, the resort to foreign debt was minimal, as debts contracted during the period were the concessional debts from bilateral and multilateral sources with longer repayment periods and lower interest rates. From 1978, following the collapse of oil prices, which exerted considerable pressure on government finances, Nigeria was unable to shift gears in the face of changing economic fortunes and adopted a policy of deficit financing. It became necessary to borrow for balance of payments support and project financing. The first major borrowing of US$1 billion, referred to as the "jumbo loan" was contracted from the international capital market (ICM) in 1978, increasing the total external debt stock to US$2.2 billion. Thereafter, the borrowing epidemic continued with the entry of state governments into external loan contractual obligations. While the share of loans from bilateral and multilateral sources declined substantially, borrowing from private sources at stiffer rates increased considerably. Thus, the debt stock grew rapidly from $3.4 billion in 1980 to $17.3 billion in 1985 and $32.9 billion in 1990, Ogbe (1992).

Nigeria's external debt stock has been heavily skewed by the Paris Club of creditors, to which the country owes 80% of its external debt. This is mainly publicly guaranteed private sector debt (guaranteed by the export credit agency of country in which these commercial creditors operate) that crystallized into official bilateral debt.

Background

1973-1985 was the period of Nigeria's Third and Fourth National Development Plans, which were launched against a background of abundant financial resources following sharp increases in both the price of crude oil (1973-74) and Nigeria's level of production. In nine months from late 1973 to mid-1974, the government's "oil revenues almost quintupled because of much higher prices, greater production, and an increase in its share of the oil revenues through greater public ownership and higher taxes and royalties" Gelb (1988). The unusually favorable financial circumstances that the country found itself in during the early 1970s generated optimism both locally and internationally. The response of the government to the unexpected windfall was to expand the economy through public spending. As the government embarked on elaborate post-civil war

reconstruction plans, it looked externally for additional funding. Nigeria's creditworthiness abroad was automatically enhanced by the era of high (yet volatile) prices of crude oil in which it found itself.

Background: The Establishment of Debt Management Office

The Debt Management office commenced operations on October 4 2000. Prior to the establishment of the office, debt management in Nigeria was characterized by several major shortcomings, particularly the diffusion of debt management responsibilities across numerous agencies, leading to inefficiencies and coordination problems. During that era, debt management functions were split among as many as seven different government departments and agencies.

In the Ministry of Finance alone, four departments were involved in external debt management:

- Department of External Finance – responsible for all Paris Club debts and for the management of all debt statistics.
- Multilateral Institutions Department – responsible for relationships with all multilateral institutions (except for the African Development Bank) and for the management and servicing of multilateral debt.
- African and Bilateral Economic Relations Department – had oversight for ADB, ECOWAS and all non-Paris Club Bilateral debts.
- Treasury Department, Office of the Accountant General of the Federation – pre-eminent in the debt service process and responsible for issuing mandates to the Central Bank for payment of external creditors.

Nigeria's External Debt Problem

B. Origin & Sources

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In the mid 1970s, the interest earned on foreign loans was substantially higher than on domestic loans. Undoubtedly, the collective behaviour of the world banking community after the first and second oil shocks reflected insufficient attention to the efficiency of the projects they were financing and to the soundness of the economic policies of the debtor countries whose balance-of-payments deficits they were helping to meet. This was in part due to the limited time available during the rush of events for the bankers, governments, and international institutions to think through the ramifications of such large-scale, unprecedented, and urgent borrowing and lending and to relate these to changing trends in terms of trade, interest rates, and financial flows and investment, Samuels (1986); but it was also partly due to the Cold War interests taking precedence over the viability of the projects for which these loans were acquired and the feasibility of repayment.

Methods or ways of Repayment of Public Debts

The methods of repayment of public debts are as follows:

➤***Debt Rescheduling:*** This involves the rearrangement of terms of debt like the adjustment of interest rate grade period, principal repayment and maturity, importantly, the strategy does not cause any reduction in the stock debts rather it facilitates management of debt by providing relief. For instance, Nigeria negotiated services of rescheduling arrangements with the Paris Club of Creditors between 1986 and 1991 to which more than half of the external debt is owed. However, the use of this method has been argued against because it will only lead to the postponement of the evil day of the debtor nation like Nigeria.

➤***Debt Equity Conversion:*** The Nigerian government is currently applying debt equity swap, i.e. converting foreign debts into equity in local companies. Under this system, there are some advantages that could be obtained in one hand and loss encountered on the other hand. It makes the economic environment attractive for foreign investments. It also reduces the outstanding stock of the external debts, a situation that will reduce debt service burden. Disadvantages of this method include the fact that the fear of foreign domination in terms of ownership of assets may be counter productive in relation to our economic growth and development. Also debt conversion leads to large increase in money supply that may complicate the problems of inflation.

➤***Ban on External Borrowing***: This is just a temporary measure to stop the

government from further borrowing, i.e. putting a ban on borrowing for a particular period of time.

➤***Debt Repudiation:*** This involves disowning the debt completely. Many Economists had advocated this. According to Fidel Castro, there is no sense in a developing country like Nigeria paying back debts owing, especially foreign debts, because through colonization African countries had more than paid for debts. However, there is possibility of sanction from the International Monetary Fund (IMF) and the World Bank if Nigeria should repudiate.

➤***Debt Forgiveness:*** This arise when the creditor nation decides to forget or write off the debt. Paris Club has taken this option in favour of some debtors in the past. Recently, the club agreed to write off $30 billion being owed by Nigeria. This is based on the agreement that the country will pay the remaining $12.4 billion between now and the 1st quarters of 2006. (EIU, 2005)

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Table 1: *Nigerian Debt Profile (# Million)*

Year	External Debt	Internal Debt	Total Debt
1986	41,452.4	28,440.0	69,892.4
1987	100,789.1	36,790.6	137,579.7
1988	133,956.3	47,031.1	180,987.4
1989	240,393.7	47,051.1	287,444.8
1990	298,614.4	84,124.6	382,739
1991	328,054.3	116,900.2	444,254.5
1992	544,264.1	161,900.2	706,164.3
1993	633,144.4	261,093.6	894,238.0
1994	648, 813.0	259,360.9	908,173.9
1995	716, 865.6	248,774.6	965,640.2
1996	617, 320.0	343,674.1	960,994.1
1997	595, 931.9	359,029.1	954,961.0
1998	633, 017.0	537,409.9	1,170,426.9
1999	2,577,383.4	794,806.3	3,372,189.7
2000	3,097,383.8	898,253.9	3,995,637.7
2001	3,176,291.0	1,016,974.0	4,193,265
2002	3,780,208.9	1,166,000.7	4,946,209.6
2003	4,478,329.3	1,329,680.0	5,808,009.3
2004	4,890,269.6	1,370,325.1	6,260,594.7
2005	2,695,072.2	1,525,906.6	4,220,978.8
2006	451,461.7	1,753,259.0	2,204,720.7

Source: Central Bank of Nigeria's Statistical Bulletin (2007)

Problems of Debt Management in Nigeria

There are lots of problems that militate against effective debt management in Nigeria and some of them are stated below;

• Scarcity of Statistical Data: Scarcity of statistical data on both internal and external debt is a major problem in Nigeria's debt management because Nigeria has been calculating its internal and external debt grossly, under its estimation of the actual debt. That is, Nigeria has been basing the calculation of its debt on assumption.

• Institution Arrangements: Institutional arrangements for external debt management is a hindrance to its effective management in Nigeria, that is, the Central Bank of Nigeria (CBN) is taking care of the private sector short term trade debt while the Federal Ministry of Finance creates the erroneous impression that external debt management is one integrated activity.

• Ineffective Law and Regulation: Another dimension to the institutional problem is the neglect or ineffectiveness of law and regulation. If the provision of the Public Bodies Act of 1965 were put into effective use, it could have forged a cohesive link in the statistical data on external borrowing of Federal, State governments and the parastatals, a situation where information on foreign borrowing is picked by bits is detrimental to her national economy.

• Low Yield on Debts Instruments: The low rate of interest that were administered on debts instruments for a long time prior to the introduction of Structural Adjustment Programme (SAP) in 1986 made the instruments very unattractive giving low yield vis-à-vis other instrument outlets. (Anaro, 2005)

Methodology

The study uses data of the Country's External and Internal Debt for the period from 1986-2006. These data were gathered from secondary, specifically Central Bank of Nigeria's Statistical Bulletin. The method of analysis was based on correlation coefficient between Total debts and internal and External Debts of the Country. Bar chart and control chart were also used to show the trend of the internal and external debts. Regression analysis was used to show the relationship between the total, internal and external debts.

Model Specification

$TB = A_0 + B_1IB + B_2EB + \mu$

Where TB = Total Debts
IB = Internal Debts
EB = External Debts
μ = Error Term

Table 2: *Model Summary-Dependent Variable*

	Constant	IB	EB	R2	F-Stat	Adj R^2
	64.994	-0.778	0.944			
	(1.273)	(-8223.4)	(29.7791)	0.980	109.500	0.950
Std Error	51.056	0.59				
Probability	0.219	0.000	0.000			

Findings and Discussion

***Table* 2** below shows the data used in running the regression equation specified for this study. The summary of the regression results for the equation is presented below, and the data used covers the period of 1986-2006, a period of twenty-one years.

From the result above it could be observed that the coefficient of the equation R squared is 0.980 which is considered to be high. This indicates that about 98% of the variation in Nigeria's total debts is explained by variation in her internal and external debts. The F-statistics of 109.500 with probability of 0.000 also indicates that the regression equation can be relied upon in making valid inference about debt management strategies in Nigeria.

The OLS regression estimation in the table above shows that internal debt has negative relationship with dependent variable (TB), this shows that internal debt has no significant influence on total debts in the model.

However, external debt has a positive relationship with the dependent variable (TB) indicate an increase in the Nigeria's total debt stock is significantly dependent on the external debt or borrowing. The coefficient of correlation (Adj. R2) of 0.950 also indicate a very strong correlation between total debt stock and external debt. The estimated regression equation shows that the larger the accumulated (total) debt stock of Nigeria's leading to lower debt payment and lower growth. The T-Statistic value for the external debt is greater than that of internal debt and its significance at 0.000.

Therefore, we accept our postulation that external debt has a higher degree of effect on total debt than internal debt in Nigeria during 1986-2006. The economic implication is that the volume of Nigeria's total debt accumulated over time is built upon external debt with internal debt contributing lower proportion.

Conclusion

The central focus of this study was to establish the effect of Internal and External Debts on the country's debt profile. The study was able to highlight some lessons learnt from Nigeria's debt history, looking especially at the phenomenon of oil-led spending and borrowing that occurred during 1986-2006. The paper determined whether Nigeria received a higher credit-rating than its domestic and macroeconomic fundamentals would have otherwise justified due to its oil revenues, and whether the debt-repayment crisis arose because oil windfalls from the early 1980s were not used to retire its debt.

The study revealed that external debt has a positive relationship with the dependent variable (TB) indicate an increase in the Nigeria's total debt stock is significantly dependent on the external debt or borrowing.

Therefore, we accept our postulation that external debt has a higher degree of effect on total debt than internal debt in Nigeria during 1986-2006. The economic implication is that the volume of Nigeria's total debt accumulated over time is built upon external debt with internal debt contributing lower proportion.

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Variations in government contract in Malaysia

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ABSTRACT: *The complexity of construction works means that it is hardly possible to complete a project without changes to the plans or the construction process itself. There can only be a minority of contracts of any size in which the subject matter when completed is identical in every respect with what was contemplated at the outset. As such, variations are inevitable in even the best-planned contracts. This study is attempted to examine the ways a variation was formed in law and project, in finding out whether the Standard Form of Contract used in Malaysia particularly the government Public Works Department (PWD) form has been utilized to the best level in variation cases. Additionally, this study examined the benefits of variations to parties in contract and also provides suggestions and assumptions in an effort to contribute solutions to issues and problem detected. The research methodology used in this study was an extensive review of relevant literature, case study, empirical questionnaires and structured interviews and general observations based on experience and surroundings. The academic study approach incorporated stages such as initial understanding, data and information gathering, analysis of data, findings and conclusion and general suggestions in the study. The major findings of this study, among others, revealed that the existences of variations are common in projects. The main cause of variations was due to client request because of inadequate project objectives for the designer to develop comprehensive design. Besides, the analysis pointed out that the government form of contract the Public Works Department (PWD) 203/203A can help in overcoming projects with variation because of the clear defined procedure. This study also found that proper planning and coordination at tender stage can minimize the risk of 'unwanted' variations. In conclusion, this study recommended that future research should be done in design and build based contract as such new information sharing can lead to an expansion to the body of knowledge of the construction industry in Malaysia.*

Keywords: Variation, government contract, variation order, Penang, Malaysia.

1. Introduction

Use of the word 'variations' in building contracts usually refers to a change in the works instructed by the architect, contract administrator or the employer as the case maybe. Most standard forms of contract include a clause under which the employer or his representative is able to issue an instruction to the contractor to vary the works which are described in the contract. A change in shape of the scheme, the introduction of different materials, revised timing and sequence are all usually provided for by the variations clause. It will also usually include a mechanism for evaluating the financial effect of the variation and there is normally provision for adjusting the completion date. In the absence of such a clause the employer could be in a difficulty should a variation to the works be required and the contractor could not be compelled to vary the works and he could insist upon completing precisely the work and supplying precisely the material for which he has contracted. No power to order variations would be implied in such situation.

The complexity of construction works means that it is hardly possible to complete a project without changes to the plans or the construction process itself. Construction plans exists in form of designs, drawings, quantities and specifications earmarked for a specific construction site. Changes to the plans are effected by means of a variation order initiated by a consultant on behalf of the client or as raised by the contractor. Legal precedents, illustrate that variations date back to time in memorial. While their occurrence is no longer an inconceivable issue, it is their effect and subsequent management that continues to challenge stakeholders of projects to this day. This happens against a background that over years, experience has been gained to handle variations in form of contract clauses and procedures, which define what constitutes a variation and how to manage them. They continue to cause undue uneasiness to the stakeholders because of their effect on the successful delivery of projects in terms of cost, time, quality and utility. Disputes and misunderstandings are still encountered when variations arise, often causing disruptions to the smooth running of projects. This study is attempted to examine the ways a variation was formed in law and project, in finding out whether the Standard Form of Contract used in Malaysia particularly the government PWD form has been utilized to the best level in variation cases. Additionally, this study examined the benefits of variations to parties in contract and also provides suggestions and assumptions in an effort to contribute solutions to issues and problem detected.

2. Variation in Government Contract

There is no single definition of what constitutes a variation. In general, the ever famous 'guru' of construction industry Prof. Vincent Powell-Smith ascribes the followings meaning to the term ***variation:***

Any change to the works as detailed or described in the contract documents….

On a broad-brush approach, following the above mentioned definition, there is, prima facie, a variation every time there is a departure from the work stipulated in the

contract. Whether such a variation is in law strictly a variation with its attendant legal consequences has to be established in relation to the particular contract involved. Usually, each standard forms of building contract will contain a definition of a variation in terms of specific actions and activities. As for the PWD 203/203A (Rev. 2007) Condition of Contract, Clause 24.2 defines and stipulates that:

24.2 The term 'Variation' means a change in the Contract Document which necessitates the alteration or modification of the design, quality or quantity of the Works as described by or referred to therein and affects the Contract Sum, including:

a) the addition, omission or substitution of any work;

b) the alteration of the kind or standard of any of the materials, goods to be used in the Works; or

c) the removal from the Site of any work executed or materials or goods brought thereon by the Contractor for the purposes of the Works other than work, materials or goods which are not in accordance with this Contract.

Fong (2004) defines Clause 24.2 by explaining that the meaning of variation for the purpose of the Contract as the alteration or modification of the design, quality and quantity of Works shown upon the Contract Drawings, Bills of Quantities and/or the Specification. It also includes the addition, omission or substitution of any work, alteration of the kind or standard or any of the materials or goods to be used for the Works and the removal off the Site of any work, material or goods executed or brought to the site expect if the work, material or goods are not in accordance with the Contract.

3. Variations and variation orders

Any deviation from an agreed well-defined scope and schedule can be called as variations. Stated in a different way, this is a change in any modification to the contractual guidance provided to the contractor by the owner or owner's representative. This includes changes to plans, specifications or any other contract documents. A variation order is the formal document that is used to modify the original contractual agreement and becomes part of project's documents (Fisk, 1997; O'Brien, 1998). Furthermore, a variation order is written order issued to the contractor after execution of the contract by the owner, which authorize a change in the work or an adjustment in the contract sum or even the contract time (Clough and Sears, 1994). For a variation to be tenable at law, it must be valid in the first place. Unless such a change meets the validity test, the contractual consequences ensuing thereof cannot arise and accordingly cannot be enforced. Therefore, the contractor cannot be compelled to comply with any variation order issued and he on his part may not be able to recover his contractual entitlements as to additional costs and/or time, for instance. It is hence apparent that the central issue of validity forms the essence of a contractually tenable and therefore enforceable variation; a matter that continues to generate disputes in many a contract in the engineering and construction industry. According to Harbans Singh (2002), when one classifies a variation as 'valid', the fundamental reference is in terms of posing the question: whether the change has been carried out in compliance with a valid variation order or not? The term variation order in turn has no magical meaning but its precise ambit

must be appreciated to ensure that the elements of validity are not compromised. Prof Vincent Powell-Smith in relation to engineering contracts which holds a 'variation order' to be:

An instruction of the engineer to effect a change to the works as defined in the contract documents, it is commonplace for a variation simply to be issued as an engineer's instruction; it being evident from the content that it is a variation. Alternatively, variations are issued separately on variation orders.

The principal elements of a valid variation order outlined by Harbans Singh (2002) are, a variation must be in the form of an 'instruction' in the formal/contractual sense. Secondly, the person issuing the instruction must be the contract administrator or the person empowered under the contract to issue such instruction. Third principle is the instruction must effect a change to the works and forth is the works being changed or varied must be spelt out or defined in the contract documents. Fong (2000) in 'Law and Practice of Construction Contract Claims' identifies two main factors determining the validity of a variation order. First, the legal nature of the proposed change, i.e. contract conditions governing variations and the common law rules governing the scope of change. Second the formalities governing the change, e.g. issue of the variation order by the designated person and the applicable procedural requirements. Fong (2000) explains further that under contract conditions governing variations, it is settled law that a contractually valid variation order can only be issued if there is a term in the contract permitting the same and strictly in accordance with this term. Should there be no such term or that the provisions of an existing term be not complied with, any variation order thereupon issued may, for all intents and purposes, be invalid and therefore unenforceable. To cater for the eventuality of permitting such variations to be effected, most if not, all the standard forms of conditions of contract have incorporated express stipulations in the conditions of contract. In the rare situation of the absence of such an express stipulation in the contractor it being rendered invalid/unenforceable, the parties have only a number of alternatives available to them; one of these being to enter into a supplementary agreement to enable the varied work as envisaged to be carried out. To preclude such a situation from arising and to obviate its attendant complications, it is necessary for the parties to ensure that not only the relevant express provisions are included in their contract from the very outset but these are religiously adhered to in the implementation stage. Under the second factor of determining validity of a variation order, Fong (2000) explains, for a variation order to be upheld as contractually valid, one of the main requirements is that it must be issued by the person empowered under the contract to effect the same. Such a body or person might be:

a) The employer himself; or
b) The contract administrator; or
c) Any other body or person designated in the contract or authorized expressly under the contract.

The body or person so designated can be either named in the contract or empowered through a formal letter of delegation of power issued after award of the contract during the currency of the contract. The above requirement is neatly summed up in the following words by Robinson and Lavers:

The employer, under all standard forms, is required to exercise his right to change the contractor's obligations, through the agency of the architect (or engineer or supervision officer). The contractor is generally under no obligation to accept instructions direct from the employer except under some governmental forms where such a right of direct communication is retained for reasons of national security. The use of the architect as agent in this context is necessary of course to ensure coordination of the design, to ensure standardized administrative procedures and because, in most cases, the initiator of the changes is the architect himself as his detailed design work progresses.

As can be distilled from the above extract, in most contracts, this power is delegated to the contract administrator, i.e. the Architect in the PAM Forms, Engineer in the IEM Forms, Employer's Representatives in the Putrajaya Forms, etc. It is pertinent to note that once the contract designates a specific person as the official who is empowered to vary the works or a specific person is delegated this duty, a variation order issued by any other person will not be contractually valid. Furthermore according to Robinson & Lavers (1988), in exercising this power, the contract administrator must ensure that the said power meets the following criteria:

- It covers the nature of the variation or change ordered;
- Covers the extent of the variation or change envisaged; and
- It meets any express time limit prescribed for exercising such powers, e.g. whether the contract permits variation orders to be issued after practical completion of work, etc.

The following characteristics and/or features of the power of the contract administrator to vary works should also be considered according to Harbans Singh (2002). The characteristic are, the employer may (either in the contract or the letter of delegation of powers) subject the exercise of the said power to certain procedural and/or financial limitations, e.g. in Public Works Contracts, the prior consent of the employer may be a prerequisite to the contract administrator's issuing any variation orders. Where the contract administrator is empowered under the contract to vary the works, his use of such power as the employer's agent is for the purpose of the contract purely discretionary: *Neodox Ltd v The Borough of Swinton & Pendlebury.* Second characteristics will be a person who is designated as the party empowered to issue variation orders is not obliged to exercise the said power 'fairly' as the said power is normally only for the benefit of the employer and the person exercising such power is acting as the latter's agent: *Davy Offshore v Emerald Field Contracting*. As an overview, the contract administrator must be mindful not to exceed his real or ostensible authority or act beyond the powers vested in him under the contract or in his professional services agreement. Should such an eventuality occasion, he may be culpable of acting *ultra vires* with such possible consequences of rendering any variation order issued invalid and/or exposing himself to claims of breach of contract or negligence by the employer. According to Fish (1997), there are two basic types of variations: directed and constructive changes, which are discussed in detail below:

I. Directed Changes

Directed changes are easy to identify. A directed change occurs when the client directs

the contractor to perform works that are different from the specified in the contract or an addition to the original scope of work. A directed change can also be deductive in nature, that is, it may reduce the scope of work called for in the contract. Disagreements tend to center on questions of financial compensation and the effect of the change on the construction schedule for directed changes.

II. Constructive Changes

A constructive change is an informal act authorizing or directing a modification to the contract caused by an act or failure to act. In contrast to the mutually recognized need for change, certain acts or failure to act by the client that increases the contractor's cost and/or time of performance may also be considered grounds for a variation order. This is termed as a constructive change and must be claimed in writing by the contractor within the time specified in the contract documents in order to be considered.

4.Evaluating the need of variation orders

The usage of a variation order is to effect a change in the contract. As mentioned previously, such changes should always be in writing to avoid unnecessary disputes among the owners and the contractors. The following are some of the purpose served by variation orders (Fisk, 1997):

1. To change contract plans or to specify the method and amount of payment and changes in contract time there from.

2. To change contract specifications, including changes in payment and contract time that may result from such changes.

3. To effect agreements concerning the order of the work, including any payment or changes in contract that may result.

4. For administrative purpose, to establish the method of extra work payment and funds for work already stipulates in the contract.

5. For administrative purposes, to authorize an increase in extra work funds necessary to complete previously authorized change.

6. To cover adjustments to contract unit prices for overruns and under runs, when required by the specifications.

7. To effect cost reduction incentive proposal (value engineering proposals).

8. To effect payment after settlement of claims.

A variation order is used in most instances when a written agreement by both parties to the contract is either necessary or desirable. Such use further serves the purpose of notifying a contractor of its right to file a protest if it fails to execute a variation order (Fisk, 1997). The absence of a variations clause undoubtedly makes it difficult to vary the terms of the contract but it is at least possible that the courts would imply a term allowing minor variations to be made. In any event, it would of course be most unusual for a contractor to attempt to refuse to carry out small changes and even less likely that the contractor would go to court over an attempt to impose them. By inserting a clause which allows for changes to be made to the works as they are being built, the employer, through the contract administrator, can alter the works as and when necessary. The purpose of the variation clauses is to allow such changes to be made, and also to permit any consequential changes to be made to the contract sum. Furthermore according to Murdoch & Hughes (1996), it is always

possible for a contract to include a clause that fixes express limits on the amount of variations. In any event, it must be borne in mind that the existence of a variation clause does not entitle the employer to make large scale and significant changes to the nature of the works, as these are defined in the recitals to the contract. In particular, variations which go to the root of the contract are not permissible. If the recitals state that 8 dwelling houses are to be built, then a variation altering this to 12 would possibly be constructed as going to the root of the contract. However, if the recitals state that the contract is for 1008 houses, then a variation changing this to 1012 would not go to the root of the contract, because it would be a minor change in quantity. If the quantity of work is not indicated in the recital, then the question does not arise in the same way. What is probably more important is that if the contract is for the erection of a swimming pool, a variation which attempts to change it to a house would clearly be beyond the scope of the contract. There are two classic cases to explain the above statement. The first case is in Blue Circle Industries Plc v Holland Dredging Company (UK) Ltd the parties entered into a contract under which the defendants were to dredge a channel which served the plaintiffs dicks in Lough Larne, Eire. The dredged material was to be deposited in areas of Lough Larne to be notified by the local authority. When the plaintiffs instructed the defendants instead to use the dredged material so as to construct an artificial island, it was held that this could not be regarded as a variation. It was beyond the scope of the original contract altogether, and thus had to form a separate contract. In McAlpine Humberoak Ltd v Mc Dermott International Inc, on the other hand, the plaintiffs entered into a sub-contract for the construction of part of the weather deck of a North Sea drilling platform. The documents on which the plaintiffs tendered include 22 engineers' drawings. However, when work began, a stream of design changes transformed the contract into one based on 161 drawings. The trial judge ruled that these changes were so significant as to amount to a new contract, but the Court of Appeal held that they could all be accommodated within the contractual variation clause.

5.0 Potential Effects of Variation Orders

Research on the effects of variation orders were done by many researchers (Clough and Sears, 1994; Thomas and Napolitan, 1995; Fisk, 1997; Ibbs, 1997; Veenendaal, 1998; Reichard and Norwood, 2001; Arain and Low, 2005; Moselhi et al., 2005). Changes that occur during construction will affect any project (Reichard and Norwood, 2001). Lewis (1991) indicated that change orders have its ripple effects as a contractor does not work in a vacuum; rather must properly allocate his limited resources within projects and between actual and potential projects. Thus, whenever a change occurs, a contractor must make adjustments to work under the contract and reallocate time, material and labour resources. Arain and Low (2005) identified 16 potential effects of variation orders on institutional building from the research they did in Singapore. The effects that were determined are discussed further below.

5.1 Progress is Affected but Without any Delay

Project progress and quality may be affected by variations (Arain and Low, 2005). During construction, time is of the essence.

However, according to Arain and Low (2005), only major variations during the project may affect the project completion time because the contractor would usually try to accommodate the variations by utilizing the free floats in the construction schedules. Therefore, variations will affect the project progress but without any delay in the project completion date.

5.2 Increases in Project Cost

During the construction phase, the most common effect of variations is the increase in project cost (CII, 1990). The increase in the project cost is caused by any major additions or modifications to the design (Clough and Sears, 1994). Therefore, contingency sum will usually be allocated in every construction project to cater for any possible variations in the project, while keeping the overall project cost intact.

5.3 Hiring New Professionals

CII (1995), variations often occur in complex technologies projects, this may be caused by something was overlooked by the architect/engineer during the design stage. Complex technologies projects need specialists to get the job done (Fisk, 1997). Depending on the nature, occasionally, new professional need to be hired or the entire project team is replaced to execute the variations (Arain and Low, 2005). Hiring the new professionals takes time and thus affecting the project progress.

5.4 Increases in Overhead Expense

Variations need to go through a few stages of processing procedures as mentioned earlier and require to be evaluated before they can even be implemented (O'Brien, 1998). Because of this, the overhead expense for all the parties involved will increase as there is a lot of work and paperwork need to be done. However, normally these overhead charges are provided for from the contingency fund allocated for the construction projects (Arain and Low, 2005).

5.5 Delays in Payment

Delay in payment occurred frequently due to variations in construction project (CII, 1990). CII (1995), variations may hinder the project progress as mentioned before thus leading to delays in the construction works done which will eventually affecting payments to the contractors. If the main contractor does not have enough funds to pay the subcontractors then this may cause severe problem to both the main contractor and the subcontractor as well. This can happen because some main contractor depends on the payment from client to pay the subcontractors.

5.6 Quality Degradation

Frequent variations may affect the quality of work adversely (Fisk, 1997). This maybe because of frequent variations may cause the contractors to compensate their losses by cutting corners.

5.7 Productivity Degradation

Variation orders often associated with interruption, delays and modification of work do have a negative impact on labor productivity. Hester et al., (1991) feel that the productivity of workers was expected to be seriously affected in cases where they were required to work overtime for prolonged periods to compensate for schedule delays. Thomas and Napolitan (1995) concluded

from their research that variations normally led to disruptions and these disruptions' were reasonable for labor productivity degradation and on average, there is a 30 percent loss of efficiency when changes are being performed. Thomas and Napolitan (1995) also feel that the most significant types of disruptions were due to the shortage of materials and lack of information as well as the work out of sequence and these disruptions result in daily loss of efficiency in the range of 25 to 50 percent. Reichard and Norwood (2001) found out from their research that if variations reach 10 to 15 percent of the originally planned labor hours, productivity of the remaining unchanged work will decreased due to the extra labor hours spent on executing the variations. According to Moselhi et al., (2005) the few factors that were found to influence the impact of variation orders on labor productivity are as follows:

6.0 Research Methodology

Systematic research method is important to get good research result. Research system that is reliable has to be used so that the objectives that were lineout above will bare result.

6.1 Data Collection

Data collection was carried out through primary and secondary sources. As for primary data, the data shall be acquired through case study, questioners, observation, structured interviews (both contractor and clients). The scope of case study and questioner's distribution shall be confined to Penang. The secondary data shall be acquired from library, resource center, Government Departments, lectures, Internet and other sources. As an illustration, secondary data shall be obtained from references books, newspaper, journals and other printed materials. This is important since appropriate and relevant data and information related to the study is necessary prior to a detailed analysis. For the purpose of this study, the researcher developed a structured interview-based questionnaire. The purpose of such method was primarily to gather data relating to the research objectives in this study. Among the relevant questions asked include the cause of variations in a project, the forms of contract involved and procedures or steps undertaken when there is a variation.

6.2 Questionnaire Design

The questionnaire in this study consisted of two segments; basically Segment A and Segment B. Segment A consisted of information related to the demographic data of the respondents. Among the variables in this section include, age, gender, years of experience and profession of the respondent. In Segment B, questions posed were related to the research paper, and included items on awareness in construction contract variation, the frequency of such variations, the cause of variations in a project and the procedures taken when there is a variation in a project. The questionnaire items, particularly related to the area of study, were formulated based on an extensive literature review and frequent discussions with the supervisor of the study. After some review and amendments, a final copy of the questionnaire was produced.

6.3 Questionnaire Distribution

A total of 50 questionnaire forms were distributed to selected respondents in the construction industry mainly operating in the northern state of Malaysia, Penang. The

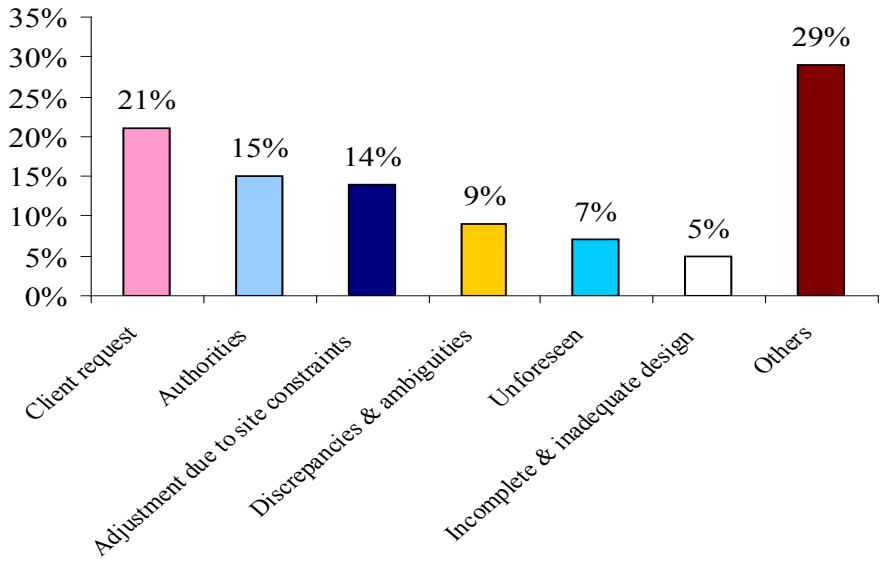
method used by the researcher in the distribution was on a personal contract-basis. In this method, the researcher himself went to meet the respondents and provided them with a copy of the questionnaire. The technique used in data collection was a drop and pick-up technique. In this technique, respondents were given the questionnaire and told that the completed questionnaire shall be picked up the next day. The questionnaires in this study were distributed on 28th December 2009 to 28th January 2010. 15 of the respondents returned the completed questionnaire on the same day. There were a few cases when the researcher was informed that the completed questionnaire shall be returned the next day. However, this did not happen. Although the initial plan, as stated earlier, was to collect the questionnaires from the respondents the next day; however it was different in practice. Some 10 respondents took more than one day to send in their responses and another 5 respondents took 14 days to reply. Although the respondents were reminded via a telephone call and through personal contact, the researcher did not receive the completed questionnaire. Thus, most probably, either the respondent would had misplaced the questionnaire, or changed his (her) mind about participating in the study.

7. Results Analysis

In analyzing the detailed information based on questionnaire in this study, it further reinforces the existences of variation as a common occurrence in a typical project. When the respondents in this study were asked if variation were common in projects thru their working experience, 97% of the responders answered yes. This study confirms that the reasons of variation offered by respondents were in lined and seems to fit the literature review. From the many reasons or causes of variation the single most frequent cause of variation was client request (21%). Results from the questionnaire study seem to support the case study findings in the sense that the second highest contributor of variation for Balai Bomba Kepala Batas, Penang was due to client request. Example of variation due to client request is change of plan or scope of project, inadequate project objectives and many more. Under the case study of this research the reason of variation is due to inadequate project objectives that result in the designer unable to develop a comprehensive design which leads to numerous variations during the project construction phase. With reference to the procedures be taken when there is a variation in a project, it was observed among the procedures followed were checking with the relevant contract and drawings to establish and valid variation and then gather information to produce an estimate and brief clients on the financial impact of the variation, issue SO instruction to contractor for changes, verify estimated cost and whether cost is treated as variation (addition/omission) and finally owners approval for variation to be carried out. Basically, the procedures taken when there is a variation are relatively same in process. These procedures are affirmed in the researcher literature review by Harbans Singh (2002) explaining that most of the standard forms of construction contract provide some basis procedures or rule for variation works. The rules are often similar in principle. Either its private sector of government sector standard form

of contract the producers on how to identify a variation, measurement of variation, valuation and also payment of varied work are outlined in detail in these forms.

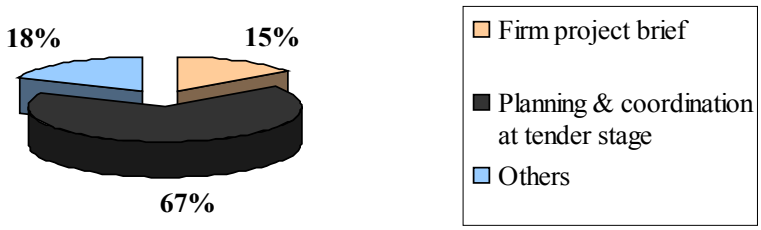
***Figure 1:** What are causes of variations in a project?*



With reference to the second objective of this study, majority (87%) of respondents agreed that PWD standard form of contract can help them in overcoming a project that has variations. Some of the reasons outlined by respondents on how the standard form of contract helps in variation were, the variation clause clearly defines what variation is. Some respondents agreed that the PWD form provides a framework and spells out the necessary steps/ procedures needed for both parties (client and contractor) in terms of responsibilities, scope, obligations of the parties concerned. On the other hand, some respondents (13%) did not agree that PWD form of contract could help them in overcoming a project with variations. Among reasons given were, conditions are vague, incomplete and difficult to implement effectively. Some even argued that it does not overcome projects with variation but only provides good procedures and fair to both parties. Referring to the case study, the form of contract used for the project was PWD 203A. Based on the researcher findings, the form of contract helped and gave an explicit guide to the contract administrator in deciding, valuating, issuing and even in rejecting some variation claimed by the project contractor. Undoubtedly PWD form of contract and it clauses has the clarity in dealing with variation procedures and this is an integral part of effective management of variation. The procedures in this form are clear to all parties and would help in reducing variations. Furthermore the comprehensive and balanced variation clauses in PWD form would help in improving coordination and reduce conflicts that can result in problems and misinterpretation. Generally, supported with the outcome and result of the study and observation by the researcher it can be concluded that PWD form can and does help in overcoming projects with variations. In discussing the ways towards, minimizing the

risk of 'unwanted' variations, the soundest proposal in this study is to have proper planning and coordination at tender stage. It is in tandem with the Japanese policy that 80% of effort and time should be in the planning stage and the other 20% in implementation stage. As contract documents and drawings are the main source of reference and information, good coordination and involvement of all professional parties and even the client is important in developing creative and practical ideas that minimize discrepancies and resulting in reduced variation.

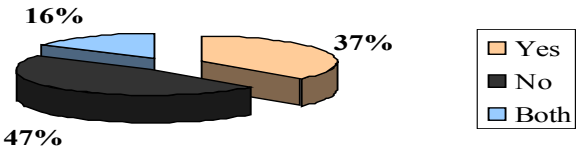
Figure 2: *Minimize the Risk of 'Unwanted' Variations?*



The involvement of the owner in the design phase would assist in clarifying the project objectives and in identifying the noncompliance with their requirements at an early stage. The controls for the errors and omissions in design, design discrepancies and frequent change in design, would be through detailing of design. Thorough detailing of design was perceived as one of the most effective controls for variation. This process would assist in identifying the errors and ambiguities in design and help in elevating variations. Involvement of professionals at initial stage can assist in developing better and practical designs. Another suggestion in minimizing the risk of 'unwanted' variation is to have clear and complete project brief. It helps in controlling variations as it helps in clarifying the project objectives to all parties. In my own view, variations must be kept to a minimum so that it is possible for all works to be completed by the original stipulated completion date. The study recorded a mixture of responses whether organization benefited or not from variation. With 37% respondents agreeing it benefited them, where else 47% disagree variations can benefit and the balance 16% both agree and disagree depending on situation. In my observation, the question of benefit or not depends on what type of scenario does a variation incurred. Most contractors and consultants response was if it is an additional variation than it benefited them in terms of increase in contract sum and higher profits (for contractor) and higher percentage of fees for consultants but not beneficial if a variation resulted in an omission. In the researchers own point of view, variation is an instrument to facilitate change in a contract and it is not for any parties to misuse or make profits or even lose profits from it. Some of the views or comments expressed by respondents among others were, there is no such thing as a variation free contract and any attempt towards this phenomena is an exercise in complete futility. We all know variations are the necessary 'evil' in the construction industry that cannot be avoided but should be

managed or maybe minimized thus there is no such thing as a complete and perfect contract. Analysis of detailed information in the case study revealed that there were variation with additional cost and some variation with omission (reduction in cost). It was observed that variation is a normal and common scenario in any typical construction project as supported by literature review. The primary reason for such a case study is to provide a practical and workable scenario closely related to variation. It can be concluded that the case study is in tandem and supports the literature review and questionnaire analysis done in this study.

Figure 3: Do you think your organization Get some benefits from variations?



8. Conclusions

As a conclusion, considering the fact that variations are common in all types of construction project, it is hoped that this research can be used as a guide by professionals to reduce and control variations in projects. Although variations are frequently unavoidable in the construction industry, 'unwanted' or negative variations are undesirable in projects as these would have an adverse impact on time, cost and quality. The study also suggests that the management of variation must begin from the planning stage and continue through the end of the project. Finally, the overall objectives of this study, as set out in above have been successfully achieved. It is most important to research findings and information generated shared among professionals in the construction industry. Undoubtedly, such information sharing leads to an expansion to the body of knowledge in dealing with both theoretical and practical, the legal aspects and related areas of variation.

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Bank consolidation/capitalization in the Nigerian Commercial Bank (1986-2006): Causes, consequences and implication for the future

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ABSTRACT: *The CBN Governor noted that the vision or prospect of the CBN and the Federal Government of Nigeria is a banking system that is part of the global change, and which is strong and reliable. It is a banking system which must be efficient, depositors can trust and investors can rely upon. Using descriptive approach, this paper provides an in-depth analysis of the causes, consequences and implication of the policy thrust of the recent bank capitalization/consolidation of the Nigerian Commercial banks. The implications of this paper amongst others, is that reforms, remain a major tool for banking soundness, especially in the light of the recent global financial meltdown.*

Keywords: Bank Capitalization and Bank Consolidation.

1. Introduction

The recapitalization policy is just one of about 13 issues announced in July 2004 by the Central Bank of Nigeria (CBN) in order to sanitize the banking industry. The CBN Governor noted that the vision or prospect of the CBN and the Federal Government of Nigeria is a banking system that is part of the global change, and which is strong and reliable especially with the prevailing global financial meltdown. It is a banking system which must be efficient, depositors can trust and investors can rely upon. This is the Consolidation era (2004- till date). It is the era of "13-point Reform Agenda for Repositioning the CBN and the Financial System for the 21st Century", of which recapitalization was the policy trust. The policy required that the minimum capitalization for banks should be N25 billion with full compliance before the end of December 2005 (that is, 18 months rather than 12 months normally given in many countries).Only banks that met with the requirement above were licensed to undertake banking business.

Others that failed to meet up either merged or were liquidated. For the first time, the Nigerian banking industry witnessed merger between the small and big banks.

Table 1 : *The emerging banks in the nigerian banking industry as at december, 2005*

N/S	GROUP	MEMBERS	SHARE-HOLDERS FUNDS N	TOTAL ASSETS N	TOTAL DEPOSITS N
1	First Bank	First Bank Plc and MBC International Bank Plc	58.9 bn	538.1bn	391.2b
2	Diamond Bank	Diamond Bank and Lion Bank	34.9bn	223bn	144bn.
3	Bank PHB Plc	Platinum Bank & Habib Bank	28bn	156bn	109bn
4	Zenith Bank Plc	Zenith Bank Plc	93bn	608.5bn	392.8bn
5	Oceanic Bank	Oceanic Bank, Stanbic & Int'Trust Bank	37.1bn	371.6bn	310.3bn
6	Intercontinental Bank	Intercontinental Bank, Equity Bank, Global Bank and Gate way Bank	53bn	360bn	252.2bn
7	Fidelity Bank	Fidelity Bank, FSB International Bank &Manny Bank	25.6bn	120bn	78bn
8	UBA	UBA & STB	47bn	851.2bn	757.4bn
9	FCMB	FCMB,Coop. Bank, Nigeria-America Merchant Bank	25.2bn	106bn	70.3bn
10	Access Bank	AB, Marina Int' Bank & Capital Bank	28.6bn	174bn	110bn
11	NIB	NIB alone	35.2bn	112.2bn	61bn
12	Sterling Bank	Trust Bank of Africa, Magnum Trust Bank, NBM Bank, NAL Bank & Indo-Nigeria Bank	35bn	111.2bn	75.0bn
13	Unity Bank	Intercity Bank, First Inter State Bank, Tropical Commercial Bank, Centre Point Bank, Bank of the North, Societte Bancaire,New Africa Bank & Pacific Bank,NNB Inter'	30bn	100bn	N/A
14	ETB	Equatorial Trust Bank & Devcom Bank	28.4bn	109.7bn	72.7bn
15	Ecobank	Ecobank alone	35.3bn	132.0bn	84.0bn
16	Union Bank	UBN, Universal Trust Bank, Hallmark Bank	95.6bn	517.5 bn	275.5bn
17	Spring Bank	Citizens Inter' bank, Guardian Express Bank, ACB Inter' bank, Omegabank,, Fountain Trust Bank &Trans Inter' bank.	Over 25b	131 bn	N/A
18	First Inland Bank	FTB, Inland Bank, IMB,& NUB Bank	29.4bn	130bn	80bn
19	Guaranty Trust	GTB alone	36.4bn	305.1bn	212.8bn
20	Standard Chartered	Standard Chartered alone	26bn	34.72	23.5bn
21	Afribank	Afribank Inter (Merchant Bankers)	27.1bn	129 bn	94bn
22	IBTC – Stanbic bank		Over 60bn	100bn	Over 63bn
23	Skye Bank	Prudent Bank, EIB Inter, Bond Bank, Reliance & Coop. Ban k	37.7bn	176bn	70bn
24	Wema	Lead bank, National Bank, Wema Bank	34.8 bn	127.7bn	78bn

However, banks that are able to exceed the capital requirement stand a better chance of luring customers and instilling confidence in the system. The Nigerian banking industry has been affected by inconsistent monetary policies, unstable macroeconomic variables such as exchange rate, interest rate and general inflation some of which have led to increase in prices of capital and consumer goods thus, lowering effective purchasing power of people and reduced aggregate demand. Like other sectors, this sub-sector is also faced with poor infrastructural facilities and poor performance of regulatory authorities. Like other sectors, this sub-sector is also faced with poor infrastructural facilities and poor performance of regulatory authorities. According to Ajekigbe (2009), from the classical and historical perspective, *several factors led to the failure of banks between 1977 and earlier 2000. Some of the reasons advanced are poor asset quality, under capitalization, inexperienced personnel, illiquidity, inconsistent regulatory policies and supervision*. In the Nigerian Banking Industry, bank capital requirement has been reviewed several times between 1952 and 2006. (see table 2).

Capital constitutes an important part of any business. It serves as a measure of the degree of financial commitment of the owners in that business/project and also serves as a veritable loss absorber. Capital becomes imperative when reserves of the business are not sufficient to cushion or cover operational losses. The evolving competition in the banking industry as a result of globalization has made it difficult for Nigerian banks to play their major role of financing economic activities arising from inadequate capital. Inadequate bank capital has led to a crisis of confidence in the banks to the extent that the original functions which is to support the volume, type and character of a bank's business, to provide for the possibilities of losses that may arise there from and to enable the bank to meet a reasonable credit need of the community have been eroded. Losses suffered by banks led to bank failure especially in the areas of lending. The soundness, safety and profitability of a bank affect the quality of its loan portfolio.

The last few years have both been traumatic and revolutionary for the Nigerian banking system. According to Eke (1999): "Since the introduction of structural adjustment programme (SAP) in 1986 and the deregulation of the nation's financial system, banking business has raised a variety of performance questions. Although insured banks had recorded an appreciable increase in the volume of assets and deposits, their overall financial condition had deteriorated tremendously".

In the past, the Nigerian banking industry had been plagued with small size banks with low capital and high cost of operations. This weakness inhibits bank management in the performance of its development roles in the economy, thus hindering the achievement of government objectives such as price stability, macroeconomic stability, provision of employment and increased output. It also affects the ability to compete effectively in the international market. Since the banking sector is the hub around which all other economic activities revolves, the health and prosperity of the bank is a major source of concern to Nigerians especially the regulators. According to the Governor of Central Bank of Nigeria cited in Egene (2009), of the ten (10) banks audited so far as at August 2009, the banks' balance sheets of five

banks (Union bank, Finbank, Oceanic bank, Afrique bank and Intercontinental bank) had shrunken, shareholders' funds impaired and they now have liquidity problems.

Table 2: *Trend in the capital structure of nigerian banking (1952 - 2006)*

YEAR	FOREIGN (Commercial)	INDIGENOUS (Commercial)	MERCHANT
1952	£200,000	£25,000	--
1958	£400,000	£25,000	--
1969	£1,500,000	£600,000	--
1979	N1,500,000	N600,000	N2,000,000
FEB. 1988	--	N5,000,000	N3,000,000
OCT.1988	--	N10,000,000	N6,000,000
OCT.1989	--	N20,000,000	N12,000,000
FEB.1991	--	N50,000,000	N40,000,000
1998	--	N500,000,000	N500,000,000
2001-Universal Banking	--	N1 billion (old banks) N2 (new bank)	N1 billion (old bank) N2 billion (new bank)
1st January, 2006	--	N25,000,000,000	--

Source: CBN Annual Report (Various issues)

Their huge exposure to non-performing loans (margin loans) has affected the banks. These banks had spent length of time at the expanded discount window (EDW) introduced in September, 2008 by the apex bank. These five banks accounted for 90% of transactions at the EDW. The remaining banks accounted for 10%.According to the apex banks, these banks took money from the inter-bank to repay their exposure to the discount window. It is an indication that their balance sheets had shrunk. The management teams had acted in a manner that was detrimental to the interest of their depositors and creditors. According to the apex bank, the temporary capital injection of N420 billion into the banks in the form of Convertible Tier 11 Debt, is expected to be repaid to the CBN once the banks are recapitalized. Considering the fact that ownership of banks has moved from family to private, existing shareholders have not been informed how these funds would be converted when the bailout fund is fully repaid. The measure adopted by CBN to bail out the banks is adjudged as misuse of taxpayers' money and may eventually displace existing shareholders.

Therefore, the objective of this paper is to evaluate the causes, consequences and future implications of the capitalization/consolidation within the Nigerian commercial bank, and review the extant literature. The remainder of this paper is organized as follows: Section 2 discusses the related literature

while Section 3 presents the country experiences, while section 4 dwells on causes, consequences and implications of capitalization/ consolidation for the future. The final section summarizes and concludes.

2. Literature review

Ojo (1992) and Oluyemi (1995), cited in Eke (1999) opined that the financial condition of banks can be assessed using some basic indicators and trend analysis such Capital Adequacy, Asset Quality, Earnings and Liquidity. Apart from quantitative factors, qualitative factors such as quality of management, the degree of compliance by banks with applicable banking laws and regulations (e.g Monetary and Credit policy Guidelines), as well as banking services to the local economy are relevant. The measures of ascertaining a bank's financial condition and Performance by the regulatory authority are encapsulated in the acronym CAMEL, which stands for: Capital Adequacy (Owners fund to total risk-weighted assets); Capital Adequacy, a quantitative factor is one of the important indicators of the strength and performance of a bank. The best management cannot turn around an ailing bank if it does not have adequate capital. Assets Quality (Non-performing assets to total loan and advances portfolio); the incidence of large amounts of non-performing loans (bad debts) can put bank management under severe stress. Management (in terms of quality, competence and depth of experiences); the quality of management can make an important difference between sound and unsound banks. Poor management often manifests itself in the form of excessive operating expenses, inadequate administration of loan portfolio, overly aggressive policies to attract deposits. Earnings/Profitability (adequacy and sustainability of earnings over the long term); continued build-up of non-performing assets, would seriously affect banks in generating adequate income on their loan portfolio. The implementation of CBN Prudential Guidelines in 1991 for licensed banks has reduced the paper profit formerly reported by some banks. Liquidity (in terms of adequacy to meet maturing obligations and demand for new credits; inadequate liquidity damages banks' reputation while excess liquidity will retard their earnings.

Where a bank management fails to pay close watch to any of these indices, it could have adverse effect on bank performance. Where a bank is distress or healthy it would ultimately have recourse to new prospective investor, both local and foreign. Any attempt aimed at successfully recapitalizing any bank must focus on the bank's assets quality, management competence and experience, level of earnings, adequacy of liquidity and image/perception among other factors outside the control of the banks themselves. Healthy banks that intend to attract potential investors should start getting their overall business strategies and focus right. The findings of Modigliani and Miller (1958), Berger, Herring and Szego, (1995) as reported in White and Morrison (2001) posited that in a world with perfect financial markets, capital structure and hence capital regulation are irrelevant. It was also reported in White and Morrison (2001) by Rochet (1992) that capital adequacy help to reduce risk– shifting by bankers whose assets are insured while Diamond and Dybvig (1983), Diamond and Rajan (2000) posited that capital adequacy help in preventing destructive bank runs. Ross (2002) used selected capital ratios to

measure capital adequacy such as: total capital / total deposits, total capital /total assets.

Where risk assets include all bank assets, if a bank has excessive asset quality and earning problems, more capital will likely be necessary. The idea of minimum capital on all banks actually began in the United States in December 1981.Prior to that date subjective approach was used and it relied on peer group comparisons to decide if a bank had enough capital. The judgment method for assessing the adequacy of a bank's capital looks at the following: Management quality, Asset liquidity, Earnings history, Quality of ownership, Occupancy costs, Quality of operating procedures, Deposit volatility and local market conditions. It was reported by Nwude (2005) "that the amount of capital funds a bank needs should be related to the risks it assumes. The greater the risks, the more the capital funds. It can increase its capital as the risk it assumes increases, or invest in assets that are relatively free of risk. He opined that capital adequacy is the relationship between the degree of risk a bank takes and the amount invested by its owners".

Ross (2002), Macdonald and Koch (2003) explained that banks are faced with several risks, such as credit risk, liquidity risk, interest rate risk, operating risk, exchange and crime risk all of which affect shareholders/ funds. Credit risk occurs when the customers fail to pay interest and principal payments on due date which eventually erode bank's capital. Liquidity risk is the danger of not being able to meet credit request of customers due to shortage of cash. Interest rate risk is the probability that fluctuating interest rates will result in significant appreciation or depreciation in banks assets. Operating risk results from fluctuations in economic conditions that could adversely affect the bank's performance. Exchange risk results from adverse movements in currency prices while the bank is trading for itself or for its customers. Crime risk is the danger that a bank will lose funds as a result of robbery. According to the CBN Bullion (2003), a bank's capital adequacy is based on what is known as the capital ratio, which involves the weighting of a bank's capital base against the portfolio of risk assets, carried. This is in line with the Basel Committee of the Bank for International Settlement of 1988 and 1992. Banks are to maintain, as capital funds, not less than 8 percent of their total risk-weighted assets with effect from January 1992. Also 50% of the bank's capital must comprise of primary or Tier 1 capital defined as paid –up capital and undisbursed reserves of statutory and general nature. In the literature, MacDonald and Koch (2003) reported that Financial Institutions Rating System encompasses six general categories of performance labeled **CAMELS:**

- C = Capital Adequacy,
- A = Asset Quality,
- M= Management Quality,
- E =Earnings,
- L= Liquidity,
- S = Sensitivity to Market.

The Federal Deposit Insurance Corporation in America (FDIC) as reported in Macdonald and Koch (2003) numerically rates every bank on each factor, ranging from the highest quality (1) to the lowest quality (5). A composite ranking of 1 or 2 indicates a fundamentally sound bank, while a ranking of 3, 4 or 5 signifies a problem bank with some near term potential for failure.

A bank must adhere strictly to all capital adequacy guidelines issued by the CBN.

According to CBN Bullion (2004), capital adequacy can be measured amongst others by the following:

*Equity/Total Asset Ratio, Equity/*Risk Asset Ratio, Equity/Fixed Asset Ratio, Equity/Total Deposit Ratio, Debt/Equity Ratio,*Equity = Unimpaired or Adjusted Bank Funds,*Risk Assets = Adjusted loans & Advances. Where these ratios of our banks are below the industry average and as recommended by Basel Accord 1 and 2, the need for recapitalization becomes imperative. In finance literature, some of the identified weaknesses that led to bank recapitalization in Nigeria and the world over are size of banks and degree of soundness, stunted growth in the real sector, high lending rate and shunning of real sector, over-dependence on public sector deposits, unprofessional and unethical conducts, illiquidity and insolvency (Soludo, 2004). Like the CBN, the Nigeria Deposit Insurance Corporation (NDIC) also oversees the activities of insured banks registered with it. One of the greatest risk facing banks is the inability to meet depositors request for demand deposit at the appropriate time. This form of risk is usually due to bank failure. As a result, the NDIC was set by Decree No. 21 of 1988 to pay bank depositors on liquidation of any bank provided such bank has paid 1% of 15/16 of its deposit liabilities to NDIC.

Until recently, while commercial banks avoided merger; significant progress was achieved in the merger of various development finance institutions (DFIs), which had overlapping roles. The process, which commenced in the year 2000, was an attempt to give the institutions a better focus and to promote socio-economic development of the country. The Bank of Industry Limited came into being in October 2001, by the merger of the Nigerian Industrial Development Bank (NIDB), Nigerian Bank for Commerce and Industry (NBCI) and the National Economic Reconstruction Fund (NERFUND). Nigeria Agricultural Cooperative and Rural Development Bank (NACRDB) were formed from the merger of Nigeria Agricultural and Cooperative Bank (NACB), Peoples Bank of Nigeria (PBN) and the Family Economic Advancement Programme (FEAP). The Nigerian National Mortgage Bank (NinamBank) originated from the merger of Federal Mortgage Bank of Nigeria (FMBN) and the Federal Mortgage Finance Limited (FMFL).

Lemo (2005) opined that consolidation of banks will stimulate overall investment climate and enhance growth and development. He expatiated that post consolidation would enable banking institutions to support public and private sector partnership in the financing of projects hitherto the exclusive reserve for the public sector, particularly in the areas of infrastructure and social services. Consolidation would help in no small way in meeting the long-term vision of NEEDS and the New Partnership for African Development (NEPAD) and also to meet the target of the Millennium Development Goals intended at creating wealth and reducing poverty.

As stated in Ross (2002) the representative of the United States and representatives from 11 other leading industrialized countries (Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland, the United Kingdom, and Luxembourg) agreed on new capital standards-often referred to as the Basel Agreement. Banks were required to consider the off-balance sheet

commitments in determining their capital position. Nwagwu (2000) opined that adequacy of capital structure has remained a major concern in the administration of indigenous commercial banks in Nigeria. One of the reasons for the collapse of indigenous commercial banks in the 1930's, 1940's 1950's 1990's was due to inadequate capital structure. Hempel and Simonson (1999) carried out a study on the effect of bank size on the acceptable and permissible levels of financial leverage. The result showed that small banks usually have a higher return on assets and a higher percentage of equity to asset The large banks usually have lower than average return on assets and a lower than average percentage of equity to assets, which produces a higher leverage multiplier (assets/equity), and a close to average return on equity because of the greater leverage. Nwude (2005) posited that recapitalization has both positive and negative implications:

The positive implications are strong, sound, competitive and reliable big banks, quality management and best practice in corporate governance, improvement in profitability, improvement in credit availability and enlargement of areas of operations, improved professionalism and ethical practices, diluted ownership structure giving rise to professionalism, improved capacity to finance projects, improved depositors/investors confidence, healthy competition, reduction in regulatory abuses, reduced lending rate, higher economic growth rate, deepened level of the Nigerian capital market, attractive investors returns, attractive concessions and creation of new entrepreneurs. The large banks have greater management depth. The negative implications of recapitalization include amongst others are loss of identity, sanction on erring banks, downsizing the workforce, flight to safety by depositors, higher shareholders expectation, collusion to form monopoly, business failure, dilution of ownership control, merger and acquisitions, excessive pricing of assets and insufficient attention and follow-up efforts to post-merger implementation.

A vibrant banking sector and an equally vibrant real sector would enhance capacity utilization, which will in turn boost employment and growth in the economy. However, this would be possible if there is good corporate governance. Chukwudire (2004) posited, that in the immediate past two decades the financial services industry has experienced fluctuating fortunes leading to high profile cases of corporate failure and consequent near loss of public confidence. The industry's problems are consequences (directly or indirectly) of bad corporate governance. Good corporate governance leads to public confidence, market efficiency, integrity, financial stability and growth and a fair share of global capital flow to the economy. Unegbu (2004) opined that the crisis witnessed in the Nigerian financial system, especially in the nineties could essential be linked to non-compliance with the principles of sound management which therefore underscores the need to continually raise the awareness of the Nigerian private sector, especially the banking sector, in the area of good corporate governance.

According to CBN Banking Supervision and Annual Report (2002) reported by Oyewale (2004); it stated that the twin evil that is distress and eventual liquidation experienced in Nigerian banks in the last one-and –a half decades can be traced to ineffective corporate governance when it declared as follows: "A unique feature of banking business is the overwhelming dominance of depositors' fund in comparison with the

shareholders equity". Therefore to check excessive insider lending, among other abuses, which characterized banking business there is need for institutionalization of good corporate governance practices. The issue of corporate governance requires purposeful leadership/management in the financial services industry. According to Ogubunka (2004), "the leadership we desire is one that breed's positive influence…it is about transformation of value into actions, vision into realities, obstacles into innovations, separateness into solidarity, and risks into reward".

3. Country experiences

Banking business thrives on public confidence and such confidence is bed-rock on everything about a bank being seen to be going in the positive direction. Any negative development usually sends wrong signals to the banking public. That makes banking wide risk management imperative especially in this post-consolidation era in Nigeria. Failure to effectively manage risks in banks can therefore lead to such adverse consequences such as: Capital losses, losses of business opportunities; runs on banks; loss of professional standing; loss of public confidence; loss of reputation; possible financial distress. Risk management requires that management should know the severity of the consequences and that management respond accordingly and promptly.

The issue of bank capitalization which often metamorphose into consolidation of banks around the globe has fuelled an active policy debate on the impact of consolidation on financial stability, Beck, Demirguc-Kunt and Levine (2003), Boyd and Graham (1991 and 1998). They concluded banks capitalization/consolidation exercise was designed to improve the banking system efficiency through the enhancement of the composite units. In the literature, concentration levels have been a major determinant of banking system performance by way of efficiency.

The just concluded banks consolidation exercise, mainly through mergers and acquisitions (M&A) in order to attain a minimum capital base of N25 billion (approx $250 million), is an aspect of the first phase of the reforms. It resulted in the compression of 74 banks, which accounted for about 93 percent of the industry's total deposit liabilities, into 25 new banks (Komolafe and Ujah, 2006). The recent merger of IBTC and Stanbic banks in 2008 has reduced the number of banks in Nigeria to 24. The greater subsidy for large banks may in turn intensify risk-taking incentives beyond and diversification advantages enjoyed by them, thereby increasing the fragility of concentrated banking system. Berger, e tal (1995) find evidence that the increase in the proportion of banking industry assets controlled by the largest banking organizations in the 1990s, due to the liberalization of geographic restrictions on banking in the United States, may have been responsible for part of the credit crunch observed in 1989-1992.

Berger and Udell (1996) and Canonero (1997) find that large banks not only tend to have a smaller proportion of their loans made to small borrowers, but also tend to charge lower prices than other banks to small borrowers, indicating that large banks only issue business loans to higher-quality credits. It has also been argued that the higher the concentration in the local banking market, the higher the prices for financial services

and that may lead to increase in the banks profit. This is because banks in less competitive environments charge higher interest rates to firms. If concentration is positively associated with banks having market power, then concentration will increase both expected rate of return on bank assets and the standard deviation of those returns (Beck, Demirguc-Kunt and Levine, 2004). One can infer that the policy implication is that higher market concentration is associated with lower socio-economic welfare and therefore is undesirable. As a consequence of the above, Holden and El-Bannany (2006) opined that in the United Kingdom the Monopolies and Mergers Commission (1996) became wary of a concentration ration that is 25 percent or more of the banking market in terms of total assets or deposits.

According to Ebhodaghe (1994), reported in Oluitan (2004), "Capital inadequacy has affected the financial health of banks. He explained that an analysis of bank capitalization revealed that as at the end of 1992, almost all banks (120) operating in Nigeria required additional capital totaling N0.6billion to support their volume of trading. This amount was the variance between the amount stipulated by the monetary authorities for prudential minimum capital and the aggregate capital outlay. By 1993, this variance further deteriorated to N9.1 billion". No one wish to see a bank collapse inspite of the leverage provided by Deposit Insurance Corporation to customers when it occurs. To instill confidence in bank customers and other stakeholders', safety, soundness and financial condition of banks are crucial. Sachs, et al (1995) reported in Oluitan (2004) in his study of 20 emerging banks, observed low reserves as one of the crisis plaguing banks. Oluitan concludes that these anomalies have led to erosion of public confidence in the banking sub-sector as a result of the growing number of distressed banks experienced in the past, which affected the liquidity position of banks. In recent years, a wave of bank consolidations has spread across the world. According to Amel et al (2002), "more than 8000 bank consolidations occurred between 1990 and 2001 and the total value of the deals reached about $1,800 billion". It is notable that one of the major driving forces of the recent wave of bank consolidations has been government policy. For example, Since the Asian Financial Crisis in 1997, the financial authorities of Asian countries have been promoting bank consolidations and the Japanese government initiated a policy of promoting consolidations among regional financial institutions on the grounds that this policy would contribute to the stabilization of the banking system Berger et al. (1999); Shih (2003). The idea underlying the use of a consolidation promotion policy during a financial crisis is that bank consolidations would assist in risk asset diversification, Shih (2003).

Mailafia (2004) and Ekaete (2004 have all pointed to the prospects for increase inter-regional businesses post-consolidation. In South East Asia, they found that the level of cross-border transactions rose following the consolidation of the 1990s and the beginning of this century. Weak banks cannot participate in the mega-dollar businesses. Apart from the benefits discussed above, Mailafia (2004) also pointed out that consolidation/ bank capitalization involves geographic diversification as a bank can expand into new areas where it was not well represented. This increases its deposit base and enhances the profitability potentials. The result will be

some synergy in terms of the composition/ types of loans, maturity structure, risks, etc. The prospects of higher returns on the investors is also worthy of mention as we consider the benefits of banks consolidation. Traditionally, it is realized that returns are often directly correlated with the level of investment. Consolidated banks are expected ab initio, to have access to more capital and as they invest large sums, they would also receive higher returns. This is facilitated by the improvement in the pressure put on them by the expanded shareholders. Moreover, the reduction in inter-bank borrowing would cut cost and enhance profit margins. Also, the availability of more funds should reduce the level and magnitude of unethical practices with their attendant adverse impact on profitability.

4. Causes of financial capitalization/ consolidation in Nigeria

According to Ige (2006), the reasons for the CBN decision to recapitalize the Nigerian banking industry are not unconnected with the following, among others:

Bad management was rampant in many of them as they were unable to afford the desirable skills and technology, the uncompetitive and distress banks were better acquired or merged with successful banks, or else liquidate a spectre of gloom for depositors, the owners and the economy, the high interest rates for money borrowed, which were far beyond any internal rate of return in Nigeria, could suggest given the appalling management capacity, a good number of them derived a sizeable proportion of their profit from illegal practices, encouraging bunkering, foreign exchange mal-practices e.t.c and many of the banks at their previous levels could not compete globally with their foreign counterparts in the developed and emerging industrial countries of South East Asia and South America.

The recapitalization of Nigerian banks until recently in 2006 was very infinitesimal. Many of them lacked the resources, ingenuity and besides, they were unable to utilize business opportunities in Nigeria let alone those in other countries. Bribery, over-invoicing, illegal deals in foreign exchange and corruption were the modus operandi of Nigerian banks. Sharp banking practices such as high interest rate, exchange rate, inflation stunted the development of a credible macro- economic framework in Nigeria. Banking is bedrocked on risks, hence, the acceptance and management of risk remains an integral part of the business. Banking institutions should neither engage in any business in a manner that unnecessarily imposes risk upon it, nor absorb risks that can be transferred to other parties. It should rather accept those risks that are uniquely part of the array of bank's services. Zero tolerance of risk is certainly not good banking business just as one hundred per cent tolerance is also not good banking. Risk management requires the involvement of all key stakeholders including the Board, Management and Staff. For effectiveness, the risk management process requires: commitment from the Chief Executive and Executive Management of the organization; assignment of responsibilities within the organization; allocation of appropriate resources for training and development of enhanced risk awareness by all stakeholders.

According to CBN Bullion (2005), the following should be considered along with capital ratios as conditions influencing

capital adequacy: the quality of management influences outsider' perception of capital adequacy because, if management is good the bank will be profitably, and efficiently operated and there will be no need to rely unduly on capital to cushion disaster; a bank carrying good quality and adequate liquid assets will not be in danger of prolonged and damaging illiquidity. Consequently, the need for capital will be minimized; the history of earnings and retention thereof: good earnings and write-back policy will continually enhance the capital adequacy of a bank.

A bank that allows itself to be politized and which put ethnic consideration before business prudence can only contribute to the failure of the bank and increase its need for capital; the potential volatility of deposit structure will affect the liquidity of a bank which will in turn affect the profitability and need for capital; the quality of management will impact on the efficiency of operation and consequently the need for capital; the restrictions placed on the maintenance between capital funds and loans and advances, the higher a bank's capacity to meet the potential credit needs of its environment. With Central Bank of Nigeria (CBN) and Nigeria Deposit Insurance Corporation (NDIC), technical and financial support traditionally given to banks in Nigeria, it is easy to tolerate temporary and relative inadequacy of bank capital in our banking system.

5. Consequences of bank capitalization/ capitalization

The consequences of the recent capitalization in the Nigerian Banking Industry which culminated in consolidation of banks can be discussed under the following subheads:

Efficient payments system consequences of consolidation

Consolidation has led to fewer players (Commercial banks) in the banking industry. It has made possible agreed payments standard amongst banks. The operation of payments system exposes banks and participants to various forms of risks, including credit risk, liquidity risk, operational risk, and systemic risk. It is expected that operations of the payments system would be further modernized and standard for realization of desired efficiency.

Safety and Soundness effects

The assumption is that not many large institutions with substantial capital base will have bank run, rather they will experience some degree of soundness in the money market. On the other hand, if the risk of an institution is high, this could raise the probability that the institution will fail or become illiquid before settling some of its payments obligations, thereby exposing other institutions directly to risks as payees or indirectly contributing to panic runs. The larger the institution, the higher the probability of having higher asset base which has the effect of boosting the image and confidence of the banking public.

Financial Safety consideration

For instance, the trend in the capital base of banks coupled with manifold expansion of the recent capitalization, could translate to lower rates of interest to the industrial sector if well managed. It may also result in

an increase in the return to ordinary shareholders. The Nigerian Deposit Insurance Corporation (NDIC) would have to create a formal safety net which involves additional cost to the corporation though; the premium payable by individual institutions might need to be reviewed. The safety net may give additional protection to institutions considered "too big to fail", which may be created by the capitalization/consolidation.

Supervisory effects of consolidation

There is need for the supervisory body (CBN) to improve the level of transparency, good governance and the degree of supervision of risk management systems. Transparency has been a recurring problem in the financial industry in Nigeria, and unless, it is improved upon, it has the potential of making nonsense of the efforts of the supervisors in the present dispensation (New Capital Accord).

Service availability consequence of consolidation

With few players in the banking industry giving rise to additional market power will lead to unavailability of services through shut down of unviable branch offices, as well as avoiding "not so profitable business loans. It is also possible to increase the supply of services to customers because better and dynamic banks are able to serve their customers more profitable. Although, this does not mean that large, complex financial institutions associated with M&As would reduce services to all small customers, but for those with strong financial statements and valuable collateral, they may receive essentially the same transactions based services as large customers.

Market power consequences of consolidation

It is argued in the literature that lending to small and medium enterprises may be adversely affected because banks with market power will tend to reduce lending volumes and increase loan interest rates. In the short run, it might be difficult for banks to make the require profit in the short-run but in the long run, as the bank wax strong profit will reach rise beyond the optimal. Studies have also shown that return on assets (ROA) or return on equity (ROE) tend to improve where M&A occur, and the Nigeria banking sector will not be an exception.

Efficiency consequences of consolidation

It could also be a means to change organizational focus or managerial behaviour towards improving efficiency through achieving risk-expected return trade off. Studies have shown that large organizations take the benefits of an improved risk-expected return trade off after consolidation. Such big organizations are able to diversify their risks through increased efficiency which in turn help to lower incidence of insolvency.

Employment effects of consolidation

It is argued in the literature that safety of bank deposits rather than high retrenchment costs (job cuts) should be the concerned of policy makers. There is no doubt that the recent capitalization of the Nigerian Banking industry would bring about a change in the nature and quality of employment. Bankers with traditional banking skills cum information technology (IT) knowledge may not be seriously affected. The capitalized

banks (mega banks) will require management and IT skills as well as other specializes knowledge.

Promotion of depositors' confidence in the system

There is no doubt that in the recent past the banking industry in Nigeria was characterized by failure and loss of depositors' fund, which led to lost of confidence. Thus, Soludo noted in his July 2004 address to the Bankers Committee that the capitalization/ consolidation in Nigerian banking industry is expected to promote depositors confidence. Increase in capital base of the banks will make the banks stronger. Financial Commentators in the banking industry have noted that lower capital makes the bank to be weak. For instance, in December 2003, aggregate paid up capital of the banks had increased by 18% from 2002 to N120.3 billion. Similarly, at December 2003, the aggregate shareholders funds stood at N211 billion (CBN, 2004). These figures compare unfavourably with the scenario for banks in South East Asia and even South Africa. Similarly, the share capital requirement was a low N3 million (US$140,000), in 1989, N2 billion in 2003 (US$14.6 million) which are rather low by international standards. The raising of the shareholders funds unimpaired by losses to a minimum of N25 billion (US$180m), is expected to put the banks in a better position to fund the economy.

Better Funding of the Economy

The above point as outlined by the CBN Governor is expected to hold a priori. However, studies elsewhere have found mixed results. For instance, Studart (2003) notes that the World Bank's forecast that consolidation in Latin American countries would increase access to credit did not materialize. Also in a similar vein, Peek and Rosengreen (1997) reported that there was no conclusive evidence that consolidated banks will discriminate against small business. Rather they found that the position shifts from sticking to their pre-consolidation portfolio to liberalization towards SMEs. Specifically, they note that first in roughly half of the commercial and savings bank mergers, the portfolio share of SMEs loans of the acquirer rise rather than fell after the merger. In slightly less than half of the cases, the acquirer had a larger portfolio share of SMEs loans than its target. Finally, it is only when the acquirer is large and less active in SMEs lending, that its loan portfolio share of the consolidated bank is much more likely to decline than to rise after the merger, (Peek and Rosengreen,1997).

Another area where consolidation can be beneficial is cost reduction

While there is evidence on cost reduction potentials of consolidation, there is also opposing evidence. For instance, Linder and Crane (1992) investigated the cost profile of merged and non-merged banks in the USA and concluded that there was no significant difference between the two groups in regard to results that bank mergers raise profits by reducing cost. The evidence from their study of Bank of America and Security Pacific, Chemical and Manufacturers Hanover, etc, showed that reduced operational costs rarely translated into higher profits because of increased loan losses, among other reasons. Later, Kwan and Wilcox (2001) studied a sample of 1,134 bank mergers between 1987 and 1995; employing a change in relative

operating costs for the bank merger. They measured the variables of the ratio of total non-interest expenses to total assets, ratio of labour expenses to total assets and ratio of premise to total assets. The main finding was that "bank mergers reduced operating costs … both labour cost and occupancy expense are found to decline significantly after the merger" (Kwan and Wilcox, 2001). Finally, the issue of cost-reduction in mergers/consolidation is a controversial and an empirical one.

On the flip side of the benefits of capitalization/consolidation are the costs. Since consolidation started, costs have been incurred and the trend is likely to continue. An aspect of the costs is the necessity of the process undertaken in the exercise. The merger entails legal expenses such as those on issuing houses, stock brokers, reporting accountants, etc. These are expenses that are avoidable in the absence of consolidation. Of course, this would include security and exchange commission (SEC) fees as well as consultants' fees. Ibrahim (2004) notes that the CBN had pledged to underwrite all these expense and provide a team of technical experts in this regard.

A cause for worry about in the recent bank capitalization/consolidation in the Nigerian banking industry is the future fear of job losses. Already some bank staff have lost their jobs in the processes leading to the merger as the weak banks downsized in the bid to meet the conditions for absorption by the healthy banks. The consequent job loss would swell the unemployment market (Kwan and Wilcox, 2001). One of the cost saving areas is in job reduction.

Empirical work across the areas where capitalization/consolidation had taken place indicated that it resulted in concentration of banking and the consequent reduction in the number of banks in the post consolidation era.

There is the implication that the rural areas could be marginalized in the service delivery. Indeed, Shields, et al (2004) found that in rural Pennsylvania State, USA, "the results show that consolidation is dramatically reducing the number of banks in rural areas", they submit that "should the trend continue, then there would be no banks headquartered in rural Pennsylvania by 2005". In addition, consolidation has triggered off runs on some banks as customers move to prevent their funds being trapped in the banks, coupled with a lull in the interbank market. This arises from corporate customers making massive withdrawals as that of the Oyo State Government (pre recapitalization in 2005) from Trans International Bank Plc. Consequently, the bank was unable to pay its numerous customers and it was barred from the clearing system. While the appropriate authorities (CBN and NDIC) responded by extension of financial assistance to the banks, this will need to be intensified in order to calm down nerves and curb the anxiety that usually accompanied capitalization/consolidation.In spite of all the efforts of the CBN and NDIC, all unsound banks were unable to meet the requirements for merger or acquisition (M&A). Those that failed impose losses on the depositors, on the one hand, and the shareholders, on the other. In addition, the recent CBN audit report of five banks in August 2009: (Union bank, Finbank, Oceanic bank, Afrique bank and Intercontinental bank) revealed that their shareholders' funds have been impaired and they now have liquidity problems. This may also trigger crisis of confidence in the banking system inspite of the bail-out measures adopted by CBN. We

have found in the literature that in some of the countries that have undergone capitalization/consolidation of their banking sectors, not all banks succeeded. Some inevitably failed. It was therefore not surprising that the CBN allowed some to fail partly in order to sanitize the system and partly as lessons for those who had mismanaged their banks before the advent of the consolidation policy.

Implications for the Future

Bank capitalization / consolidation could help to facilitate cross-border consolidation by promoting trade, and reducing the currency conversion costs of institutions operating within the sub-region when economic integration is realized. Reforms present the best way to revitalize the lost confidence of depositors in the Nigerian banking industry. Bank assets should be valued realistically and avoid the temptation to overvalue assets; and bad loans should be reported accurately. There is also the need to increase banking transparency and entrench good governance. High standard of public disclosure by external auditors, internal auditors, banks inspectors are expected to be a kind of road map towards disseminating standards and good practice of accounting principles, as well as methods and payments systems.

The coordination of supervisory policies within and across borders should be well articulated and properly executed. The banking system is hub around which other sectors revolve. Therefore, if the gains of capitalization/consolidation are enhanced it will lead to the creation of larger banks having better access to markets for managing liabilities. It will also affect the pricing of bank loans in response to changes in the monetary policy stance. There is the chance of mergers resulting in geographic diversification of bank portfolios, enhance the safety and soundness of banking institutions, improve payments system, improve the allocation of credit and performance of the economy. Consolidation may reduce the liquidity or increase the volatility of the reserves, making it more difficult for the Central Bank of Nigeria to keep their policy rate near target. On the other hand, consolidation has its negative social consequences such as reduction in availability of services to small customers.

6.Conclusion

The banking industry has witnessed drastic changes especially in information technology propelled by the new generation banks (banks that came on board from 1988). Capitalization is a means of preparing the industry for survival. It makes an institution bigger, more efficient and better capitalized; among others. Though, driven by government but it is also influence by market forces. The impact of capitalization/consolidation is pathway to achieving financial stability. The benefits or gains of capitalization depend on the quality of the regulatory authorities, supervision and financial market sophistication. Bank capitalization/consolidation is vital and deeply rooted in the agenda of the financial system of both developed and developing countries that strives to compete in any global market. It requires bank management to understand the potential effects of capitalization/consolidation as this would serve as a tool for meaningful decision making. The recapitalization process should at all time give premium in building high quality assets to avoid distress syndrome which has been the bane of the Nigerian banking industry in the past.

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Pension funds investments in hedge funds – a necessary regulation

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Abstract: *When it comes to investment strategies, generally, pension funds have proved to be conservative investors with a long term approach on investments and constant preoccupation for asset diversification as well as tendencies to secure their portfolios through investments in established financial products.*

Nevertheless, within this constant preoccupation for portfolio diversification as well as gain of notable profits, private pension funds have invested to a certain degree also in less cautious products respectively have conducted less stable investments.

The financial turbulences that hit the US towards the end of 2007 and spread globally to become one of the most severe financial crisis witnessed, haven't left pension funds immune to this phenomenon. Although, as previously stated, the special feature of pension funds is based on long term investments, which confers a certain degree of natural protection, there can not be the talk of absolute immunity either.

Keywords: hedge funds, financial turbulences, diversified portfolio, aggressive investment strategies, risk control measures, derivative products, systemic risks, hedge fund industry, transparency, qualitative and quantitative restrictions, supervisory authorities.

Private pension funds have been especially affected by the financial crisis, although public pension plans have been pressured and suffered tremendously due to low global productivity and rise of unemployment as concrete consequences of the crisis, not to mention the well known demographic stress.

According to the prestigious French journal "Le Figaro", the total losses registered by private pension funds across the entire OECD zone in October 2008 amounted 3300 billion dollars, respectively 20% of the total assets, by comparison with December 2007. If other types of assets were to be taken

into consideration, as for example, the ones owned within the individual saving pension accounts in the US and similar schemes in other countries, the registered decrease would come to 5000 billion dollars (Laboul, OECD 2009).

The impact of the financial crisis upon pension funds varies from country to country within the OECD zone, depending on the type of pension schemes (Defined Benefit respectively Defined Contribution) as well as on the type of invested products. Pension funds investing notably in shares have been exposed on the stock market and consequently registered important losses. This is the case of Ireland with 66% of the Irish funds' portfolio being oriented towards investments in stocks. US, Great Britain and Australia follow.

In the past years, ascendant tendencies in view of investments in hedge funds have been noticed among private pension funds. Considering the financial crisis, the dimension and the impact upon pension funds, although to a much smaller extent compared with other financial institutions, many prestigious international financial and economic organizations and institutions such as OECD, IMF and World Bank have drawn the attention upon the risks related to this type of dangerous investments as well as concluded thorough analyses in order to show the necessity of risk control measures and regulatory framework.

Dating from 1949, when the sociologist, author and financial journalist, Alfred W. Jones was accredited with the constitution of the 1st hedge fund, hedge funds represent usually funds used by private investors – wealthy persons and institutions – structured as partnerships and opened only to a limited number of investors, due to a extremely high minimum accepted investment limit, practicing aggressive investment strategies at national and international level with the aim of gaining significant profits.

Hedge funds are exonerated from complying with many rules and regulations governing the activity of investment funds, permitting thus the attainment of aggressive investment objectives.

Hedge funds have drawn the public's attention in 1998, when the Long Term Capital Management fund (LTCM) in the US nearly reached collapse, needing a financing rescue plan of approx. 3,5 billion USD organized and coordinated by the Federal Reserve Bank of New York and paid by private banks. In the year 2006 another large hedge fund collapsed. Amaranth Advisors cost the investors more than 6 billion USD.

Critics sustained the idea that hedge funds carry systemic risks, which became notable once the disaster of LTCM took place. The exposure of hedge funds to derivative products, in order to obtain very high returns, has been revealed as one of the main factors contributing to the creation of systemic risks.

The systemic risk represents the risk of collapse of an entire financial system or of a market in its totality. It refers to the risk imposed by interdependences within a system or market, where the collapse of an individual entity or a group formed of several entities can cause a "cascade" disaster leading to the downfall of the entire system or market. It is actually what happened starting with the year 2007 in the US and spread to global scale up to present – the financial turmoil.

In 2006, the European Central Bank (ECB) warned referring to the potential of hedge funds in view of systemic risks

threatening the financial stability. This warning was sadly disputed by several parties in the financial industry.

In February 2007, the Bush administration and the American regulatory financial institutions rejected the idea of regulating the activity of these funds and recommended instead, that the persons, institutions and banks conduct healthy practices before investing or borrowing money to hedge funds. The American "Securities and Exchange Commission" (SEC) had introduced a list of requirements for hedge funds, which was later rejected by the Federal Court.

The potential of hedge funds in regards to systemic risks has been highlighted by the collapse of the two Bear Stearns funds in June 2007. These funds had invested in mortgage backed-up securities.

Regarding the dimension of the hedge fund industry, estimations vary a lot due to the lack of central statistics, the difficulty of classification of hedge funds as well as due to the rapid growth of this industry.

Indubitable though is the fact that the hedge fund market developed in the past years, the growth of the assets administered by the approx. 10.000 funds being estimated at more than 1 trillion USD.

This growth is based, to a large extent, on investments of institutional investors and in particular, of pension funds. According to recent OECD data, approx. 20% of European and American pension funds and approx. 40% of Japanese pension funds invest in hedge funds. Despite this, the total amount of pension funds' assets dedicated to investments in hedge funds is relatively small. According to IMF evaluations, there are few funds allocating more than 5-10% of their assets to investments in hedge funds.

Nevertheless, the past has shown a tendency of increasing this percentage. Due to the periods of low performance registered by pension funds and to the objective to avoid under funding, pension funds have been tempted to invest in a larger range of products.

International organizations and surveillance institutions have drawn the attention on the necessity that fiduciaries are in perfect knowledge of the complexity of the invested products and that they take appropriate measures for risk control and management.

Often, the risks involved with these investments, the type and exposure to these risks are hard to evaluate, due to low transparency. Besides that, the strategy of hedge funds can modify rapidly, as in the case of Amaranth Advisors, where investors didn't know that the fund owned 10% of the global natural gas market. Fraud has also been related to the lack of transparency and is a serious danger when investments are exonerated from rules, regulations and reporting requirements.

Pension funds investing in hedge funds could also experience problems referring to the difficulties to withdraw from these investments, due to illiquid feature of hedge funds as well as due to high withdrawal taxes.

Some countries have chosen to forbid investments of pension funds in hedge funds, while in some other states authorities considered that measures for risk management and control as well as reporting to supervising authorities are supposed to cover the associated risks.

Although percentages of investments within the total portfolio of pension funds can appear, at first glimpse, rather low, these

can hide quite large amounts of money – for example 2% of the pension funds' assets in Holland invested in hedge funds amount to approx. 15 billion USD.

In order to control implicated risks, quantitative and qualitative restrictions have been imposed in the majority of OECD countries. While some countries apply restrictions related to a certain investment limit – Greece, Spain and Portugal imposing a limit of 5% - other states foresee restrictions regarding the type of allowed financial products – unlisted securities are not allowed in Ireland, Estonia and Austria.

In view of qualitative restrictions, Prudential Rules and compliance with general risk management requirements are imposed in most countries. Additional to these restrictions, many countries have introduced requirements related to directive principles, education measures and risk assessment before investing into hedge funds.

In conclusion, there are regulations which help the supervising authorities to monitor the activities of pension funds. Nevertheless, due to the general tendency of exposure to hedge funds, a more careful concentration on transparency, fulfillment of requirements as well as improvement of the measures for risk control and management are necessary. After all, who can play with the security of generations of people and can fund managers prove their total engagement and experience when investing the money of society?

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Working capital management and its impact on profitability: A study of selected listed manufacturing companies in Sri Lanka

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Abstract: *Main purpose of the study is to identify the impact of working capital management on profitability of selected listed manufacturing companies from financial year 2003-2007. Correlation and regression analysis were performed. Results reveals that cash conversion cycle (CCC) and return on assets (ROA) are negatively correlated the value of -0.127 which is highly significant at 1 percent level of significance, which means that as the cash conversion cycle increases ROA decreases.*

In addition inventory conversion period (ICP) is highly significant at 1 percent level. It indicates that with increasing level of ICP, ROA will be increased -0.065 levels. Further the coefficient of the CCC variable is negative at a value of -0.0503 and p value is 0.006. This implies that an increase in the number of day's cash conversion cycle by 1 day is associated with a decline in ROA by 5.03%. The results suggest that managers can increase profitability of manufacturing firms by reducing the number of day's inventories and accounts receivable.

Keywords: Working Capital Management (WCM); Profitability and Manufacturing Companies

1. Theoretical background

Most firms have a large amount of cash invested in working capital, as well as substantial amounts of short-term payables as a course of financing. Firms have an optimal level of working capital that maximizes their value. On the one hand, large inventory and a generous trade credit policy may lead to higher sales. Larger inventory reduces the risk of a stock-out. Trade credit may stimulate sales because it allows customers to assess product quality before paying (Long, Malitz & Ravid, 1993; and Deloof & Jegers,

1996). Because suppliers may have significant cost advantages over financial institutions in providing credit to their customers, it can also be an inexpensive source of credit for customers (Petersen & Rajan, 1997).

Decisions relating to working capital and short term financing are referred to as working capital management (WCM). WCM ensures a company has sufficient cash flow in order to meet its short-term debt obligations and operating expenses. These involve managing the relationship between a firm's short-term assets and its short-term liabilities. The goal of WCM is to ensure that the firm is able to continue its operations and that it has sufficient cash flow to satisfy both maturing short-term debt and upcoming operational expenses.

The management of working capital involves managing inventories, accounts receivable and payable, and cash. Implementing an effective working capital management system is an excellent way for many companies to improve their earnings. The two main aspects of WCM are ratio analysis and management of individual components of working capital.

A few key performance ratios of a working capital management system are the working capital ratio, inventory turnover and the collection ratio. Ratio analysis will lead management to identify areas of focus such as inventory management, cash management, accounts receivable and payable management.

Guthmann & Dougall (1948) defined working capital as excess of current assets over current liabilities. This view was elaborated by Park & Gladson (1963) when they defined working capital as the excess of current assets of a business (for example cash, accounts receivables, inventories).

Over current items owed to employees and other (i.e., salaries and wages payable, accounts payable, taxes owed to government). Gole (1959) also held more or less the same view. This concept of working capital, as has been commonly understood by the accountants, is more particularly understood as net working capital to distinguish it from gross working capital.

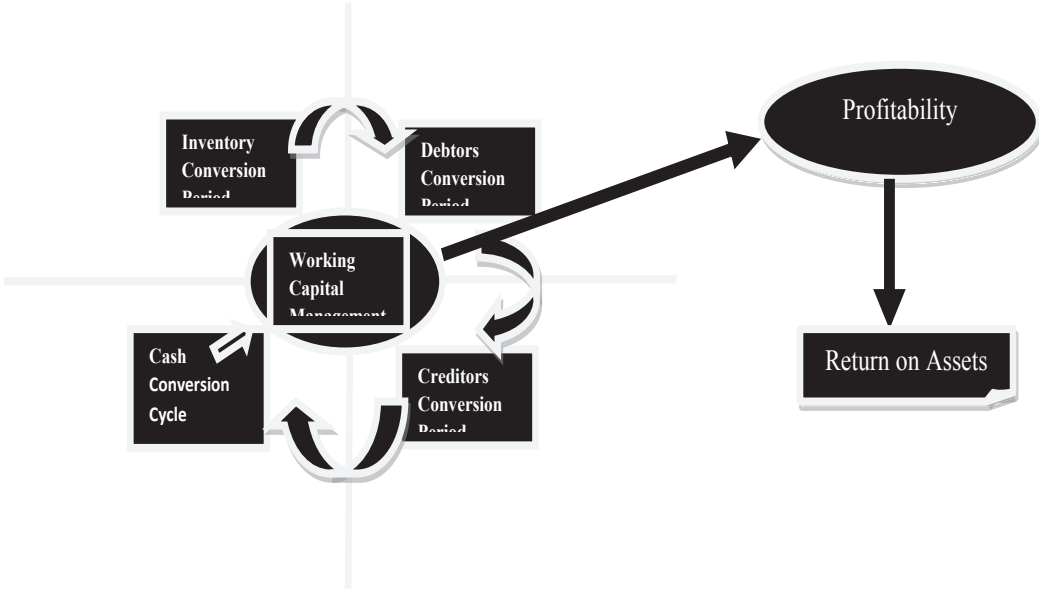
Michael (1997) stated that firms will optimally select a low dividend yield and low asset volatility over a greater range of firm asset values the shorter is the maturity of the firm's debt. Kesseven (2006) stated that high investment in investors and receivables was associated with lower profitability and a strong significant relationship WCM and profitability. Shin & Soenen (1998) investigated the relation between a measure of the cash conversion cycle and corporate profitability.

For a large sample of listed American firms for the 1975-1994 periods, they find a strong negative relation. This result indicates that managers can create value for their shareholders by reducing the cash conversion cycle to a reasonable minimum. Based on previous studies we can say that there are no sufficient studies on working capital management in listed companies in Sri Lanka. Hence, the present study is initiated on working capital management practices: a case study of listed manufacturing companies.

2. Research Model

Based upon related literatures, the research model is shown, which outlines the way in which examining WCM and its impact on profitability in listed manufacturing companies have provided the basis of study.

Figure-1: Research Model



3. Objectives

Following objectives are taken for the study.

1) To indentify the relationship between WCM and Profitability.
2) To recognise the profitability

4. Hypotheses

H_1: The WCM significantly impact on ROA of the manufacturing companies.

H_{1a}: ICP has impact on ROA of Manufacturing industries.

H_{1b}:DCP has impact on ROA of Manufacturing industries.

H_{1c}:CCP has impact on ROA of Manufacturing industries

5. Material and Methods

This section is divided into five sub-sections. The first sub-section presents the scope. The sub-second section discusses the period of the study. In the sub-third section, data sources are discussed. The sub-fourth section illustrates the reliability and validity whereas the last sub-section highlights the types of statistical techniques employed to test the hypotheses.

5.1 Scope

The scope of the study is listed manufacturing companies in Sri Lanka. Thirty one companies are listed under manufacturing sectors in Colombo Stock Exchange (CSE). Hence, out of thirty one, only ten companies were selected for the study purpose as a random sampling. These companies include (1) Abans Electricals Limited (ABAN); (2) ACL Cables (ACL) Limited; (3) ACME Printers and Package Limited (ACME); (4) Associated Electrical Corporation Limited (AEC); (5) BOGALA Graphite Lanka Limited (BOGA); (6) Central Industries Limited (CIND); (7) Ceylon Glass Company PLC (GLAS); (8) Dipped Products PLC (DIPP) Limited; (9) Kelani Cables Limited (KCAB); (10) Lanka Aluminium Industries Limited (LALU).

5.2 Period of the Study

The period of the study was five years from 2003 to 2007 financial year.

5.3 Data Sources

In order to meet the objectives and hypotheses of the study, data were collected from secondary sources mainly from financial report of the selected companies, which were published by CSE.

5.4 Reliability and Validity

Secondary data for the study were drawn from audited accounts (i.e., income statement and balance sheet) of the concerned companies as fairly accurate and reliable. Therefore, these data may be considered reliable for the study. Necessary checking and cross checking were done while scanning information and data from the secondary sources. All these efforts were made in order to generate validity data for the present study. Hence, researcher satisfied content validity.

5.5 Types of Statistical Techniques

In the present study, we analyze our data by employing correlation and Regression. For the study, entire analysis is done by personal computer. A well known statistical package like 'Statistical Package for Social Sciences' (SPSS) 13.0 Version was used in order to analyze the data. There are several tools to measure the efficiency of the company in managing working capital. The powerful indices, most commonly used, are ratio of inventory conversion period, debtors' conversion period, creditors' conversion period and cash conversion cycles which are discussed briefly below in table -1.

Type of Ratios	Explanations	Calculation
Working Capital Ratio		
The Inventory Conversion Period (**ICP**)	ICP is the time required to convert inventory into cash	$\frac{\text{Average Stock Value}}{\text{Cost of Sales}} \times 365$
Debtors' Conversion Period (**DCP**)	DCP is the time required to collect the cash from debtors.	$\frac{\text{Average Debtors}}{\text{Net Credit Sales}} \times 365$
Creditors'Conversion Period (**CCP**)	CCP is the length of time the firm is able to defer payments on various resource purchases.	$\frac{\text{Average Creditors}}{\text{Cost of Sales}} \times 365$
Cash Conversion Cycle (**CCC**)	CCC is the length of time between a firm's purchase of inventory and the receipt of cash from accounts receivable	CCC= ICP +DCP-CCP
Profitability Ratio		
Return on Assets (**ROA**)	It is based on the relationship between the sales and total assets of a firm.	$\frac{\text{Net Sales}}{\text{Total Assets}} \times 100$

6. Findings

Findings explain model, relationship between working capital management and profitability and working capital management and its impact on profitability.

6.1 Model

It is important to note that the ROA depend upon ICP; DCP; CCP and CCC the following model is formulated to measure the impact of working capital management on profitability.

ROA = f (ICP; DCP; CCP; CCC)-**Equation**

$ROA = \beta_O + \beta_1 (ICP) + \beta_2 (DCP) + \beta_3 (CCP) + \beta_4 (CCC) + e$-**Model**

Where as:

ROA = Return on Assets.

ICP = Inventory Conversion Period.

DCP = Debtors Conversion Period.

CCC = Cash Conversion Cycle.

e = error term.

Based on the above regression model ICP; DCP and CCP are considered as the dependent variables where as ROA are the independent variables. The detail analysis is carried out with the help of above variables.

6.2 Relationship between working capital management and profitability

Profitability is generally depending on working capital management, thus working capital indicators such as ICP, DCP, CCP and CCC should have a relationship with profitability indicators. In order to test the relationships, the correlation analysis was carried out and the results are summarized in the Table-2.

Table 2: *Correlation Matrix*

Variables	CCC	ICP	DCP	CCP
ROA	-0.127**	-0.050	-0.192*	0.004
ICP			.244	-0.127
DCP				.276

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

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

Table-2 shows that the correlation values between the variables. CCC and ROA are negatively correlated the value of -0.127 which is highly significant at 1 percent level of significance, which means that as the cash conversion cycle increases ROA decreases.

6.3 Working Capital Management and Its impact on profitability

Multiple regression analysis was performed to investigate the impact of working management on profitability which the model used for the study is given below.

The WCM (ICP; DCP; CCP and CCC) in the above model revealed the ability to predict ROA (R2 = 0.375). In this model value of R2 denotes that 37.5 percent of the observed variability in ROA can be explained by the different in activities of WCM namely ICP; DCP; CCP and CCC. This variance is highly significant as indicated by the F value

(F=45.431 and P = 0.000) and an examination of the model summary in conjunction with ANOVA indicates that the model explains the most possible combination of predictor variables that could contribute to the relationship with the dependent variable.

Table 2: *Predictors of ROA - Model summary*

Model	R	R^2	Adjusted R^2
1	0.612[a]	.375	-1.501

a. Predictors: (Constant), ICP; DCP; CCP and CCC

6.4 Hypotheses testing

Table 3: *Coefficients for predictors of ROA*

Models	Unstandardized Coefficients		Standardized Coefficients	t	Sig
	ß	Std.Effor	Beta		
1 Constant	127.636	116.085		1.100	0.470
ICP	3.170	4.934	2.775	-0.065	0.002
CCP	-1.510	2.784	-2.077	.642	0.636
DCP	-1.365	2.011	-1.036	-.542	0.684
CCC	-1.215	1.987	-1.015	-0.050	0.006

Source: Survey data

In the above model, t value for ICP is highly significant at 1 percent level. It indicates that with increasing level of ICP, ROA will be increased -0.065 levels. Hence H1a is accepted. On the other hand, CCP and DCP are not y significant. Therefore, H2b and H3c are rejected.

Further the coefficient of the cash conversion cycle variable is negative at a value of -0.0503 and p value is 0.006. H1 is accepted at 1% level of significant. This implies that an increase in the number of day's cash conversion cycle by 1 day is associated with a decline in ROA by 5.03%. So H1 is accepted.

7. Concluding Remarks

Main purpose of the study is to identify the impact of working capital management on profitability of manufacturing companies. ROA is used for the purpose of measuring profitability. The correlation values between

the variables. CCC and ROA are negatively correlated the value of -0.127 which is highly significant at 1 percent level of significance, which means that as the cash conversion cycle increases ROA decreases. In addition ICP is highly significant at 1 percent level. It indicates that with increasing level of ICP, ROA will be increased -0.065 levels. Further the coefficient of the cash conversion cycle variable is negative at a value of -0.0503 and p value is 0.006. H1 is accepted at 1% level of significant. This implies that an increase in the number of day's cash conversion cycle by 1 day is associated with a decline in ROA by 5.03%. The results suggest that managers can increase profitability of manufacturing firms by reducing the number of day's inventories and accounts receivable.

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Pension risk management in a developing economy: lessons from the nigerian capital market

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Abstract: *The killer risk in any pension scheme is the failure of pension asset sufficiency to meet the promised benefits to retirees. A Pension Risk Management aims at ex ante arrangement to protect retirees' standard of living. Nigeria introduced pension reforms in 2004 fatefully at the same time when extensive reforms were made in the banking sector. Prior to the Act being passed, there was a major proposition that pension funds should not be invested in Nigerian capital market. This paper reviews pension risks of the new DCS (Defined Contributory Scheme) and the implications of investing pension fund in the capital market of a developing economy. A trend analysis was performed on market index and capitalization and a simulated pension asset was subjected to pension risks. Despite the asset allocation guideline on investments by the Pension Commission, there is certainly uncertainty concerning guaranteeing pension payments in future due to unmanaged pension risks. This paper suggests investment policy should accompany a DCS based on the risk appetite of workers, minimum guarantee of returns on investment of pension assets and a range of interest rates for actuarially determined annuities. Further studies may examine wither PFAs should operate as closed end or open end mutual funds.*

Keywords: Pension risks, Actuarial risks, Defined Contributory Scheme, Annuity, Privatized pensions

1.0 Introduction

In 1944, the ILO (International Labour Organization) conference recognized that the nations of the world must set in motion an agenda to give minimum social security to workers and their dependants who need protection depending on each level of economic

development. This declaration and others had been basic drive for social security programmes, particularly pensions.

Pension plans are savings or promises to take care of old age living, and was seen as part welfare package for workers. Post- independence Nigerian workers from 1960s up to early 1990s perceive job security to be availability of an attractive pension scheme. The popular plans in Nigeria prior to 2004 were classified as public and private. The public scheme was government sponsored non-contributory and unfunded DBS (Defined Benefit Scheme); while the private schemes were a mixed grill of DBS and DCS (Defined Contributory Scheme). The global crisis of underfunding of pension pre-empted by World Bank in 1994 became more pronounced in Nigeria. There were no actuarially determined salary projections; longevity risks, survivor rates and interest rate structure. To add to the complexities Nigeria's life expectancy at birth was estimated to be about 47 years (CIA World Fact book, 2009). Pension risk management is a process that makes preloss plan to hedge retirement benefits receivable or benchmark from high volatility.

The significant difference between DBS and DCS is the degree of certainty of benefits payable post retirement. DBS benefit is prespecified and linked to terminal or average salary, and therefore to a greater extent more certain than DCS- a contribution linked to salary growth and accumulation rate of return (Modigliani and Muralidhar, 2004).

A switch to DCS by a developing country with an "infant" capital market, fragile banking sector and a nascent insurance connotes pension risk management may have to innovatively control pension risks to comply with ILO convention 102. Pension funds objective is to provide minimum certain benefit for the greatest number of old age persons. It is a risk management tool or insurance against post retirement life and survivor benefit in the absence of life insurance or other social assistance schemes sponsored by government.

According to PENCOM (Pension Commission of Nigeria)Act (2004), The Pension Fund Administrators (PFA) relay electronically daily returns to the commission on how pension funds are invested. Against this backdrop, there should be fewer worries about non-compliance and sharp practises against regulations due to almost seamless monitoring by PENCOM.

However, the moral hazard of not deploying high technical and fiduciary responsibilities by investment managers seems unattended to. The PFAs and PFCs (Pension Fund Custodians) are compensated by statutorily combined fees of 3% of collected pension fund; and are only additionally incentivised to earn more if returns on invested fund exceed a benchmark determined by PENCOM. There is no incentive to be morally and legally responsible to investment actions taken. To add more to the uncertainties of pension benefits under DCS, PFAs are for now not required to incorporate the risk tolerance of account holders into their investment policy and risk management strategy. Instead, PFAs are required to have Risk Management Committee and Investment Strategy Committee without stating their statutory objectives.

The market capitalisation and index of Nigerian Capital Market respectively grew from N276.1b and 6440.51 in 1998 to N748.73b and 12140.27 in 2003; a 171.2% growth in capitalization and 88.5% index growth within

five years annualised to 34% and 17.7% respectively. In another one year, by April 2004 index and capitalization grew by 66.9% per annum and 78.1% per annum respectively. This rosy investment environment can be perceived as a continuous trend; and sudden unforeseen circumstances such as a dangerously bearish capital and mortgage markets that are globally contagious set in. Then, pension assets can vaporize to the extent of jeopardising pension objectives.

Shaoul (2001) claims Holzmann predicts a few years back that by 2000, just under 20% of the age 65 and above and less than 30% of age range 15-64 would have some formal pension coverage. Aside from other old age stochastic liabilities, any effective pension scheme need to assure that there is confidence of receiving benefits of a minimum standard of living in old age. A non-specific rule or law on pension fund management is more or less likely to increase pension risks which comprises actuarial and investment risks.

Pensions provide a mechanism to reduce the risks of old age poverty and a means to smooth lifetime income to maintain living standards in retirement. Very often referred to as, a safety net for workers or deferred savings.

'Bailey's canons of investment-security of capital, profitability, liquidity and social objective- is still much applicable today as were in his time (Mishra, 2007). The delicate balancing of the four explanatory variables determines the efficiency of pension risk management, particularly in developing economies, such as Nigeria without deep financial markets.

The period 2004 -2009 experienced a sudden market bubble and burst unseen in the last 25-year history of Nigerian capital market. Financial experts believe the misfortunes of the capital market which escalated to the property market, may have been caused by poor financial expertise, regulatory lapses and shallowness of the financial market. Pension risks ownership transferred to the worker in DCS may be uncontrollably accentuated by lack of contractually defined investment policy between retirement account holder and pension administrators.

This paper focuses on analysing how a DCS can satisfy the cardinal objectives of pensions as a unique part of social security provision. After the introduction; section (11) reviews the literature, examining pension risks embedded in DCS in Nigerian financial market, section (111) analyses the performance of Nigerian capital market, section (iv) discusses probability of achieving Guaranteed Minimum pensions in view of pension, actuarial and investment risks, embedded in DCS and a weak financial market in Nigeria, and section (v) summarizes with concluding remarks made on prospects of developing economies having weak financial market adopting a privatized DCS model.

1.1 Statement of Problem

Post retirement life of the pensioner in a developing economy is the focus of this paper. Of relevance is the work of Modigliani and Ando (1963) referred to as the "life cycle theory" and that of Friedman (1957) the "permanent income theory". In either theory, the pensioner is visualized as having not only a current income from work and wealth but a meaningful expectations and plans about his future incomes from work and wealth. The retiree's future income from wealth will of course be higher to the extent that he chooses to save today, thus adding to wealth

(pensions saving) and its earnings; future income from wealth will be lower to the extent that he now reduces its wealth through this savings (Ackley 1978, 540).

There is a popular saying that "the end justify the means" which brings us to the question of what will justify the essence of the pension reform in Nigeria, for a worker who retires from active service of the private and public sector at a certain age, and is unable to maintain a minimal standard of living till the end, that is death, which globally is the essence of pension. A Review of the Pension Reform Act (2004), reveals several future pit falls awaiting Nigerian retirees particularly the first set retiring from the DBS between January 2008 and December 2010, considering unmanaged pension risks.

Both schemes have different investment options provided by Section 4 (1) of the Act which stipulates that "A holder of a retirement savings account upon retirement or attaining the age of say 50, whichever is later shall utilize the balance standing to the credit of his retirement saving account for a programmed monthly or quarterly withdrawals, calculated on the basis of an expected life span; annuity for life purchased from life insurance company licensed by the National Insurance Commission with monthly or quarterly payment; and a lump sum from the balance standing to the credit of his retirement savings account: provided that the amount left after lump withdrawals share be sufficient to procure an annuity or fund programmed withdrawals that will produce an amount not less than 50% of his annual remuneration as at the date of his retirement". Our view is that not up to 10% of the Nigerian work force is employed in the organised labour market. As it is pension risks may be increasing and unmanaged because of undeveloped financial market, lack of financial expertise, weak regulations, unstructured interest rate and double digit inflation. It is therefore a need to examine the probability of a retiree turning to a beggar after 70 years in developing economy such as Nigeria. Another concern is that this one sided approach by all the intending retirees signal danger of poverty at older age with everyone taken to the programme withdrawal after the programme period which is usually 20years as the case may be, a lot of beneficiary who lived longer might have to beg to survive. Similarly, many of them would not be looking at the long term effect of their decisions.

1.2Research Questions

➤Is there any influence of capital market returns on the overall return of pension fund?

➤Is the bond market return guarantee minimum return to pension fund investment?

➤Can the property market rate of return be predicted in Nigeria?

➤Does current investment guideline by Nigeria Pension Commission protect old age living in view of pension risks?

➤Are there financial expertises to manage pension fund in Nigeria?

2.0 Literature review

2.1. Background of The Study

Old age is a certainty just like death of human life. The age at which 'old age' commences is generally agreed to be between ages 55 to 65. Every human being is expected to have working life which begins at about

ages 20 to 25, and to work for about 30 years, and then retire. Pension is a financial plan to assist individual to live normally when he retires from active paid or self employment. A plan that goes on for over 30 years is long enough for uncertainties to vitiate the best financial plan.

Ogunshola (1984) citing Nigerian Income Tax Management Act 1961 defines Pension Fund as "any society, fund, contract or scheme, the assets of which are under irrevocable trusts and any scheme established by law in Nigeria or elsewhere, the main objects of which are, in the opinion of the Board the provision of non-commutable and non-assignable retirement pensions or annuities for an individual or his dependants after death, or for any group or class of such individuals and their dependants."

This was distinguished from a 'provident fund' defined as "any society, fund, contract or scheme not being a pension fund, established under irrevocable trusts or law in Nigeria, or elsewhere, the object of which are the provision of retirement benefits for an individual or benefits for his dependants after his death, or for any group or class of individuals and their dependants. "The non-commutability categorically places pension fund ahead of provident fund as a retirement plan; the cardinal objective of any pension plan being enablement of improvident individuals to plan for old age (Pension Reform Act, 2004).

Pension functional definition ensures non commutability of payments of benefits, but some form of annuitization. But, is there a guarantee that the promised annuities are adequate and available after retirement considering the combined effects of investment and actuarial risks?

Prior to 1994, when the World Bank instituted an investigation into a looming pension crisis; because facts and figures are already underscoring that funded pension plans are inadequate to meet pension liabilities, accentuated by pension risks (investment risks and actuarial risks); subsequently the research outcome of World Bank (1994) recommends a multi-pillar pension system with:

- A mandatory tax-financed public program designed to alleviate poverty
- A mandatory funded, privately managed program (based on personal savings account or occupational plans) for savings
- A supplementary voluntary option (through personal saving or occupational plans) for people who want more protection

This sweeping recommendation to adopt DCS as the main element of pension system may have not considered the peculiarities of the financial market of developing countries.

Pension risks (potential of outliving retirement income or asset diminutions below benchmark) could be very high if the correlation of shallow financial market combines with poor expertise and undefined regulation of risk management practises. Pension risks of DCS include: investment risks- the probability that investment made will not meet the target, and actuarial risks- the probability that actuarial assumptions used in generating estimates are wrong.

Technical expertise on pension investment and financial risk management are evidently still lacking particularly in developing countries. Modigliani and Muralidhar (2004); Muralidhar (2001) estimate that it will take over 50 years of data collation in other to differentiate superior managers from low

skilled ones, in volatile markets of developing economies like Nigeria.

As demographic forces continue to change the social insurance culture traditionally prevalent in African societies, the need for an effective pension risk management is unarguably must be sought to ensure social security in these developing economies.

2.2. Theoretical Framework

A DBS is more or less a regulated compulsory private saving and investment scheme to meet old age living or post-retirement life.

Human Life Value

The value of human life is quantifiable (Mehr, 1970), as a function of his *expected annual earnings, his life expectancy and an inverse linear function of his expected tax liability and his expected personal maintenance expenses.*

Personal expenditure is seen as inverse because during early life, it is rational to expect cost of living to continue to rise due to increasing family responsibilities of feeding higher number of people, education costs and health maintenance costs. This gradually declines as members of the family graduate into independent living. Pension is conceptualised to manage this reduced cost of personal maintenance in post-retirement life. A DCS is an accumulation of compulsory level savings and investment for the period of working life, and thereafter to immediately start earning from the accumulation based on life expectancy. This is more or less from actuarial perspective a Deferred Annuity.

If l_x represent number of persons living at age x, and l_{x+n}, number living at age (x+n); survivorship rate= $l_{x+n.}$

Deferred Annuity as a net single premium (NSP) represents the accumulated value of pension assets.

Then, the actuarial expression for:

$$NSP = \frac{V^{t+1}l_{x+t+1}+V^{t+2}l_{x+t+2}+.....+V^{t+n}l_{x+t+n}}{X}$$

Where 'x' represents years of working life, 't' is the retirement date and 'n' represents the annuity period.

'V' is the discount factor at an assumed actuarially determined discount rate for the present value of annuity payment.

It implies pension risk can be further impacted by a wrongly assumed discount factors and life expectancy.

The elements of DCS are to privately manage pension asset by maximising returns and minimising risk in a strongly efficient financial market. Hence, managing defined contributions does not differ from finance and portfolio theories.

Finance Theory

Finance theory explains direct linear relationship between risk and return, that is, the higher the risk the greater is the return. When an investment is made, income as cash flow is generated, but the uncertainties of the amount and the time of the cash flow is the risk.

If a pension fund invests at time interval t, the return R, is given by:

R = CV – IV + D/IV

Where CV = the cumulated value of pension fund at the end of interval t

IV = initial value of pension fund

D = cash distributions received by the pension fund

Risk is the variance or standard deviation of the probable distributions of returns received from a particular selected portfolio of assets. In the case of pension fund, financial assets are the only permissible investments in Nigeria.

Interest is the price paid by a borrower of fund to the lender for use of the fund within a specific period of time.

$CV = IV (1+ i)^n$.....*equation 1*

Where ***n*** is the time interval of investment, ***i*** is the per cent interest rate.

When series of fund like pension is invested (contract of borrowing/lending), Then,

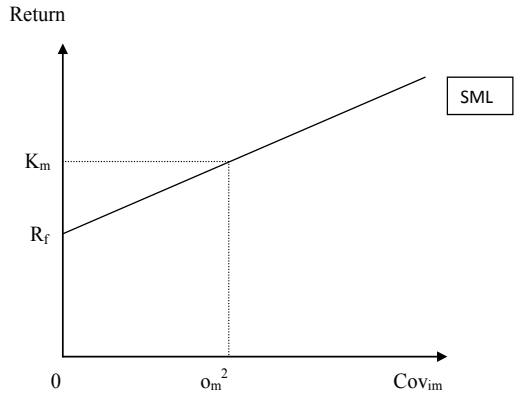
$CV = [IV (1+ i)^n - 1]/i$ .....*equation 2*

Portfolio Theory

By nature, investors are expected to seek maximal returns with minimal risk. Portfolio theory states that "the standard deviation of an investment's return is not of particular interest to investors holding diversified portfolios." A portfolio is a selection of various securities to earn an objective return. Managing the risk of a portfolio means effective measuring the risk. Increase in risk is measured by the degree of correlation between the existing portfolio variation and risk of the added stock. Modern portfolio theory identifies two types of risks; systematic and unsystematic, the systematic (market) risk cannot be diversified or reduced but unsystematic (unique) risk can be diversified.

Kevin (2006), Banerjee (2009), Crabb (2003) and Olowe (1997) cite the development of the Capital Asset Pricing Model, (CAPM) by Sharpe (1964), Lintner (1965) and Mossin (1966) discovering the systematic risk relationship with an asset return, and says that "the expected return on asset is the sum of the return of risk- free asset and the return commensurate with the asset risk." The risk of a stock beta, 'β' is a measure of systematic risk estimated by the slope of the Security Market Line (SML).

Figure 1: *Calculating beta from SML*



Source: Crabb (2003)

$$Ki = \frac{R_f + (K_m - R_f)\, Cov_{im}}{(\sigma^2_m - 0)} \quad \text{.....equation 3}$$

$$Ki = \frac{R_f + Cov_{im}(K_m - R_f)}{\sigma^2_m} \quad \text{.....equation 4}$$

$$Ki = R_f + b_i\,(K_m - R_f) \quad \text{.....equation 5}$$

The implication of these theoretical concepts mean, a level of risk or risk appetite (understanding the role security beta) must be assumed for a retirement account holder in other to achieve expected return. This also depends on return distributions peculiarities of the domicile capital market. A distribution

having fat tails have the probability of extreme values referred to as Paretian distribution (Fabozzi and Modigliani, 2009). A retirement account holder is exposed to these financial risk based theories under the DCS. This explains why new measures of risk are still being explored in finance theory to interpret extreme value behaviour.

2.3. What is Pension Risk Management?

Risk is defined by Banerjee (2009) as "the likelihood that the actual return from an investment may be less than the forecast return." Put in a different form, risk may be defined as the variability of returns from an investment. Fisher and Jordan (1995) share the same view by stating risk to be "the standard deviation around the expected return." The literature over the years have various understanding of risk. It is generally presumed to be a possibility of danger or probability of a loss. These conceptual definitions track our vision of risks in investment management that mirrors pension risk management. This study views risk in line with Banerjee and (Fisher and Jordan), because of the approach to managing pension risks. Variability measured by standard deviation around an expected return (benchmark) will more or less assure a pension fund of a guaranteed minimum return on pension asset in future.

A traditional meaning of risk management is the use of insurance to protect tangible assets and legal liabilities; but generally, it is a pre-loss arrangement to protect the attainment of an objective. Mangiero (2005) suggests a more comprehensive adaptation of the definition of risk management to mean "management of multiple risk types-such as financial, operational and legal risks." The complexity of these risks is more when investment risks and actuarial risks feature under the financial risk.

Pension risk management connotes hedging investment and actuarial risks embedded in pension management in other to guarantee some minimum annuity payments to satisfy post retirement life. A DCS is essentially an individual savings programme targeting future benefits to meet a contingent retirement life. Mangiero notes "how fiduciaries carry out their duties is a question of increasing interest to beneficiaries and regulators. Is there any incentive to manage pension risks?

The 'Black Monday' stock market crash of October 19, 1987 saw the Dow Jones Industrial Average lost 22.61% of its value-its largest one-day drop for more than 70 years. In the same vein, 'the Black Friday' of September 24, 1929 brought about a stock market crash that never came back to its 1929 peak until 1954. Investments in equities heuristically and empirically have demonstrated short and long term risks. Sometimes, it can wipe lifelong saving of 50 years in a 'buy and hold' strategy without appropriate diversification. Against the backdrop of 1987, financial analysts develop robust financial risk management devices called derivatives-futures, options, forwards and swaps. The market for derivatives is not yet available in developing economies such as Nigeria. Pension risk management in the Nigerian financial market deductively rests on portfolio diversification-selecting assets of a portfolio to minimize risk and maximize returns (Fabozzi and Modigliani, 2009). What then happens in shallow financial markets with; low volume trading, fewer listed equities, no market makers, no credible rating agencies, few Actuaries and undeveloped bond and mortgage markets. Ologunde, Elumilade and

Asalu, (2006:156) reiterate that Nigeria lacks a well developed capital market. How can a PFA manage pension assets to outperform a benchmark in Nigerian financial market?

Such markets characteristics require greater regulatory monitoring and control of DCS if old age living is to be sustained. Are there financial experts that can perceive a catastrophic stock market crash and move to prevent its effect on pension asset?

2.4. Investment of Pension Fund

The major shift in transiting from DBS to DCS is the privatization of pension management and transfer of pension risk ownership with the focus of providing consumption smoothing. The strategy to achieve this second pillar- type of pension is to provide a framework for pension risk management.

The admissible assets for investment as specified in PENCOM Regulation on Investment of Pension Fund Assets (2008) cited by Henshaw (2008) at www.pencom.gov.ng retrieved on 4th January, 2010 are a maximum of: (1) federal government bonds-100%, (2) 35% treasury bills, (3) 20% state government bonds, (4) corporate debt securities, (5) 25% quoted equities, (6) bank deposits and acceptances, (7) 30% mortgage backed securities (MBS) and real estate investment trusts (REIT), (8) 5% close-end and open-end funds.

The allocation of assets to each class becomes an investment strategy to achieve risk adjusted return. This portends that the managers are knowledgeable about asset class risks and portfolio management. In order to reduce investment risk the Nigerian regulators prescribed limits (attached as appendix 1) for investment in each asset class. The accumulation period of DCS carries unmitigated investment risk despite the statutory guide.

2.5. Regulation of Pension Fund in Nigeria

Nigerian financial market has had its heuristics undertones of fiducially irresponsible financial management resulting in bankruptcies of banks and financial companies in early 1990s. This occurring after wide deregulations in the banking subsector was implemented-relaxing the rules of licensing and allowing market driven interest rates.

Recently the banking reforms (Recapitalization) process just concluded in 2008 have nearly collapsed both money and capital markets due to unmanaged regulatory and market risks. Transiting from publicly sponsored DBS to a privatized DCS attracts new knowledge management, particularly pension risk management. Pension regulatory authorities (PENCOM) who are saddled with oversight functions for the administration of pensions may have come late in 2008 in prescribing investment rules for PFAs.

Pension reform (2004) prescribes that PFAs could only invest in: securities issued by federal or state government of Nigeria, bank deposits and shares of companies who have continuously paid dividend in the last five years. The period 2004 to 2008, PENCOM reported that the aggregate Return on Investment (ROI) on pension assets is about 0.83% per annum.

PENCOM may have sensed danger in pension management by 2008 by swiftly designing new investment rules. Investment in guided securities now requires credit ratings (attached as appendix 2). On the other hand payment of benefits is now to be guided by annuity guideline jointly issued by PENCOM and National Insurance Commission (NAICOM) is attached as appendix 3.

2.6Financial Market Returns In Nigeria

The financial market in Nigeria can broadly be divided into money and capital markets, without Real Estate Investment Trusts (REIT) and Derivatives Market. The money market displays active instruments such as, bank deposits and treasury bills; while capital market offers investment opportunities in equities and bonds. Of particular interest is the equity market which is reported as one of the fastest growing in emerging markets.

3.0. Data and methodology

Secondary data is collated from websites of Securities and Exchange Commission (SEC), Central Bank of Nigeria (CBN), Pension Commission of Nigeria (PENCOM); the daily official list of Nigeria Stock Exchange (NSE), and the 30-year price movement from research office of NSE.

A comparison of Nigerian capital market with other markets of the world is captured in the attached appendix 6, Table 1a and Table 1b.

Figure 2: *A pie chart comparing Nigerian capital market variables with other countries in other economic zones*

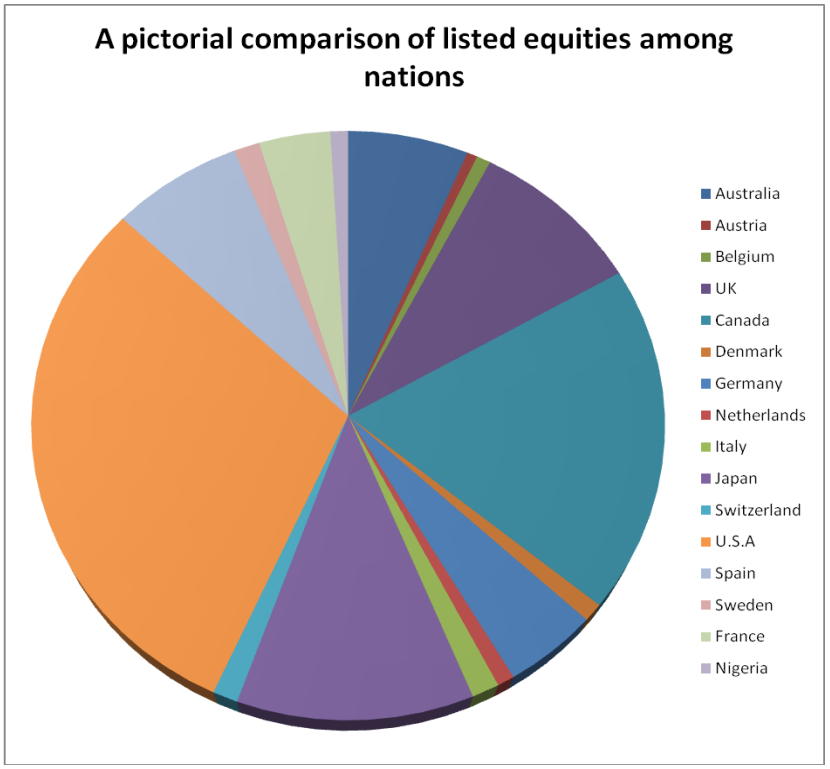
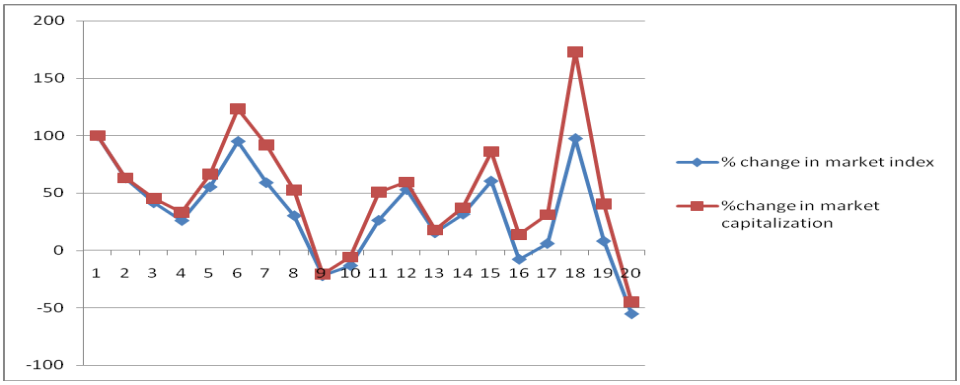


Figure 3: *The rate of change in market capitalization and market index 1990-2009 in Nigeria is presented below.*



The figure above show no regular pattern for market capitalization or index rate, thereby making investment planning a difficult aberration. A general overview of the irregularity in the period under study is that the market capitalization exhibit high erratic pattern than the market index. Specifically, from 1990 to 1993 while the market capitalization fell by 150% the index dropped by 125%. They both rose at different rate in the next two (2) years i.e. 1994-1995 by 175% and 75% respectively. Between 1996 and 1997 the market capitalization volatility was - 275% while the index dropped by 175%. An average volatility of 200% and 125% was experience by both variables respectively through 1998 and 2006 before the Nigerian capital market fell into recession following the global economic crises. The market capitalization had extreme volatility of 200% between 2006 and 2007, and -375% between 2007 and 2009 while the market index was less volatile with about 100% in 2006-2007 and – 200% between 2007 and 2009. Precisely, the experience of both variables in the past two decades portends financial instability hence, difficult environment for investment planning.

Figure 4: *Nigerian Bond Market Interest Rate Structure*

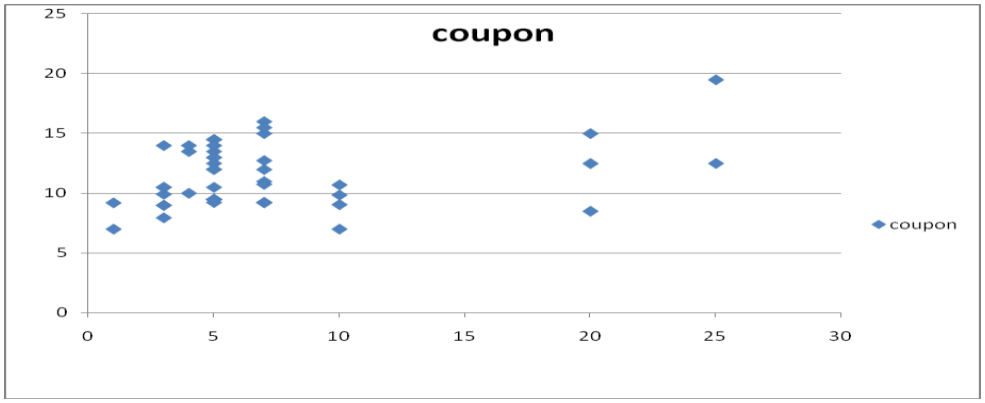


Table 4 in appendix 6 presents the interest rate structure relationship with years to maturity. Figure 4 plots the relationship between interest rates of different issued bonds by the Federal government of Nigeria and years to maturity. The outcome shows scattered points without any correlation which clearly negates the theoretical basis of linear relationship between interest rate and years to maturity. The implication is that Nigerian bond market does not offer opportunities to manage pension asset with interest rate risks through portfolio diversification of bond.

The Nigerian bond market does not currently experience active secondary market trading (no market price) hence, studies to compute the respective yields have being difficult. The coupon rate does act as proxy for yield to maturity (Malkiel Burton, 1962). The duration approximates the yield to maturity of respective bonds issued to date. To this extent, it will be difficult for investors, and investment or pension managers to employ duration-base immunization strategies. The 'cointegrated' factors of duration, coupon rate, time to maturity and price volatility are important to building duration-base immunization strategies. These strategies would match the durations of assets and liabilities within a portfolio for the purpose of minimising the impact of interest and inflation rate on the portfolio's net worth.

4.0. Analysis

4.1. Simulation of Retirement Benefit

Let us assume the following simulated data for pension assets as follows;

Assumptions

• An average Nigerian begins active work life at age 30, and puts in 30 years service, retiring at age 60

• It is expected that the retiree lives for the next 10 years and dies at age 70

• Most Nigerians in the formal sector earn an annual salary of Nigerian Naira, N1, 200,000.00 15% thereof or N180, 000.00 is contributed to a Retirement Savings Account (RSA), hypothetically.

• A salary increment of 20% every 5years, subject to maximum four times in work life. By the pension administration rule (PENCOM), a management fee of 3% is paid to both PFA and PFC

Net investible pension asset = N144, 000.00 (12% of N180, 000.00)

➤50% allocation to bond market @ 13% per annum (Stock exchange daily official list)

➤30% allocation to bank deposit @ 10% per annum

➤10% allocation to Treasury bill @ 5% per annum

➤ 10% to equity market @ 35% annualized return (Author computation)

If average inflation rate estimated from table 2 is 21.45% .

We apply Fisher's Law on interest rate,

real interest rate = nominal rate - inflation rate

Or

Nominal interest rate = real interest rate – inflation rate

Accumulation period of 30 years.

The simulated accumulated fund is as computed in table 5 in appendix 6.

4.2. Analysis of Simulation Result

From the table 5 in appendix 6, the future values of the individual DCS pension asset gives a positive value of over N800milllion. However in real term, considering the average inflation rate of 21.45% the present value equivalent of the future sum is N2.4million.

It should be noted that the average inflation rate in Nigeria for 20years is used as a proxy for the discount rate used in deriving the present value.

Generally, the Nigerian economy as an emerging market is unpredictable and largely subject to immense systematic risks, hence the average inflation rate used as proxy factor is rather superficial. Thus, while the simulated present value of the bond, money market and cash asset are not likely to yield favourable real returns, returns of the equity investments however stands out as the only reliable investment option. The Nigerian financial market may not be able to offer the needed environment for hedging pension risk management.

5.0. Discussion

The framework for managing a DCS slightly differs from that of a DBS, because a DBS is an employer or public sponsored program, sometimes described as a collective savings scheme while a DCS is an individual retirement programme. The pension risk ownership transfers from the sponsor to the retiree respectively in a transition from DBS to DCS. The transition to DCS worldwide on the recommendations of the World Bank (1994) was based on the failures of DBS to guarantee minimum pension. Though, the DCS is driven by joint contributions from employee and employer; but its management is the responsibility of the worker guided by government regulations.

In Nigeria, management of pension is delegated to PFAs and PFCs. The cruxes of pension risk management under DCS are investment risks and actuarial risks control by pension managers. The incentives for fiducially responsible management, aside from regulatory oversight are more or less non obvious in the Act and investment regulations.

A developing economy such as Nigeria depicted by tables 1a and 1b in appendix 6 has low volume and turnover due to few listed securities in the equity market and pension risks are further impacted by high volatility. Pension fund being long term in nature require vibrant deep markets for effective investment in portfolio of assets where risks can be minimised while achieving benchmark returns. Table 2 and 3 in appendix 6 shows Nigerian capital market is suspect to high volatility from the percentage change in all-share index and market capitalization. The bond market does not trail the theoretical interest rate structure relationship with years to maturity, indeed no correlation is observed at all in figure 4. The simulated invested pension assets under minimal inflation rate of 21.45% obviously portend danger for sustainable old age living.

6.0. Conclusion and recommendations

A DCS transfers pension risks to the worker without the government and pension administrators sharing any part. Thus, no incentive is created to optimise risk/return possibilities for pension assets by the regulators and administrators. In Nigeria, pension risk control is limited to effective diversification of pension assets by applying Markowitz's portfolio theory. Nigerian financial market is not well developed in investment instruments (Ologunde, Elumiade and Asalu, 2006); and has no financial risk management (derivatives) market.

Risk management processes commonly deployed in funds management are

regulatory oversight, investment policy of fund managers (Mitchell and Hsin 1997) and contracting investment objective into the policy. Obviously, this is the road map for a successful DBS in shallow financial markets where:

• The degree of expertise required to cumulate savings at a risk adjusted return that insure a minimum future value of pension is lacking- it takes average of 50 years to develop required expertise

• The financial market is not yet developed and having no financial risk market such as derivatives

• Regulatory risks on asset valuation techniques may prevail

• The pension system more or less is not multi-pillar in nature

• Penalties for mismanagement of pension assets should more stringent as a risk management tool. In the light of all this study, it is recommended that the future outlook should consider the following;

• The discount rate for annuities should be disclosed by either the PFA or Insurance company

• A minimum guaranteed nominal return with an assumed inflation rate may be considered as risk allocation mechanism for PFAs and contracted out with retirement account holders

• Allowing increase in contributions by employee without tax limitations

• More awareness on annuity functions, risk appetite or tolerance relationships with age, inflation trends are required.

• PENCOM must be invited to join the council of the Nigerian Stock Exchange so as to provide input in market regulation.

• The Nigerian Capital Market should review urgently its conditions for listing and quotation in order to attract more listings.

• That Nigerian pension fund manager should be allowed to increase the percentage asset allocation to foreign investment market.

• To evolve an effective interest rate structure for planning.

• The Bond market should be activated to allow for vibrant secondary market, attractive coupons, government patronage across all tiers, effective rating agencies.

• The Bond market should be re-vitalized to take up infrastructural investment desperately needed in the economy.

• The technical proficiency and investment skill of the PFA and PFC managers need to be improved towards complementing pension fund management with the hope of achieving a benchmark.

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The relevance of customer relationship management in the nigerian banking industry (A case study of Intercontinental Bank Plc)

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Abstract: *Customers relation management (CRM) is an emerging customer innovation focused on growing customers profitably by knowing, caring and delivering value to the customers in a bid to enhance customer intimacy, increase quality service levels and enhance business penetration supported by technological capabilities.*

The objectives of the study is to find out the relevance of CRM in the industry and the extent of the concepts adopted. Also to determine the extent to which the CRM concept assist to build up competitive advantage overtime. In order to ascertain the fact in this research work secondary data were collected and regression model technique were adopted to analyze result both in quantitatively and descriptively format. Also, the finding revealed that more resources should be invested in technology and personnel training in order to get the best out of the customer relationship management (CRM). Recommendation were equally offered for banks aiming towards crafting a niche for themselves in the turbulent industry.

Keywords: Customer Relation Management, Banking Industry, Regression model.

Introduction

In every economy, the Banking Industry plays very vital roles in the financial system and therefore is a crucial agent of the developmental process in the economy. Banks in their capacity as financial intermediaries channel savings and investment from the surplus units to the deficit units thereby increasing the volume of National Savings and investments and consequently the National output.

The organic growth of the Nigerian financial sector between independence in

1960 and the eve of SAP in 1986 was indeed remarkable; the growth in the number and variety of financial institutions as well as the financial instruments and operations during this period attests to the grave relevance of the sector in National Economy Development. The structural readjustment in the financial sector which commenced in 1986 was directed towards enhancing the Banks efficiency through increased competition, strengthened supervisory role of the Regulatory authorities and streamlined public sector relationship with the financial sector. Thus, since the early '90s', the phenomenal growth of the Banking Industry in Nigeria following the Deregulation of the industry has generated interest and enthusiasm amongst top notch stakeholders and institutions in the industry stressing the urgent need for strategic decisions.

Prior to the Liberalization of the Nigerian financial system, there was clear cut distinction between Merchant and Commercial bank. However, at the turn o the New Millennium and as a result of Liberalization, these distinctions were removed by the Central Bank of Nigeria to create a level playing field in the industry; endorsing the concept of Universal Banking in all it's ramifications, setting the stage for all players to develop niche areas where they were most efficient in the context of the philosophy of Guided Deregulation.

Most significantly in the year 2002, the Central Bank of Nigeria dismantled the divide between Commercial and Investment banking via the full introduction of Universal Banking; a culmination of a process commenced 2 years earlier with the Government's approval of the conversion of Merchant to Commercial banks. Universal Banking further heightened the competitive pressure in the banking sector with more merchant banks venturing into retail banking and subjecting operating margins to severe stress. This factor along with the new commercial banks that were licensed and the rapid branch expansion by operators in the system, re-echoed the need for banks to create more value-added services that would guarantee some competitive leverage.

Thus, Banks with a view of survival can no longer rely on their "efficient personnel" solely but must synchronize personnel capabilities with appropriate systems and structures in order to wade the storm of competition, survive the tide of changing customer needs and take advantage of emerging technology; shifting several old economy business practices towards organizing by customer segments (rather than by products), focusing on customer lifetime value (instead of transactions alone), focusing on stakeholders (and not through Advertising alone), focusing on customer Accusation, Retention and Satisfaction.

Popularized during the "internet Gold Rush" in the mid '90's, Customer Relationship Management- CRM suggests on overall shift from product-based making to a customer focused approach; rather than an "out of the box" software which can be effectively used with little or no customization, CRM expansively hinges on a technologically supported customer centric orientation that allows enterprises to take a far more individualized approach to their customers, tailor service offerings and monitor all activities from a customer needs perspective rather than from a vendor supply perspective (Paul 2001).

CRM thus, is a broad spectrum of Organizational, Operational and Technological elements; a business strategy

which provides seamless integration of all areas of business that touch the customer (marketing, sales, services), through the integration of people, Process and Technology to optimize profitability, revenue and customer satisfaction (Roland et al., 2000).

The Nigerian banking industry is at the threshold of change of such a magnitude as to completely alter the fabric of business and indeed lives, this change being rooted in the competitive nature of the industry which incidentally is expected to intensify as new players of Local and Global scope permeate the market and as the competitive terrain becomes more challenging to navigate due to the ever changing customer expectations and preferences, the challenges being churned up in the operating environment, and expectations of the Regulatory Bodies, competitors in the industry will indeed need to adopt New technologies, re-design processes and excellently manage their manpower in order to secure a competitive advantage.

Objectives of the study:

The following objectives will be pursued:

1) To find out the relevance of CRM in the industry and the extent of the concepts adoption
2) To examine the relationship between the elements (Technology and Personnel) and concepts of CRM and overall performance
3) To determine the extent to which the CRM concept assists to build up competitive advantage overtime

Literature review

CRM, an emerging customer innovation focused on growing customers profitably by knowing, caring and delivering value to the customer in a bid to enhance customer intimacy, increase quality service levels and enhance business penetration supported by the technological capabilities of databases, interactivity and mass customization is a business of strategy that has up till now remained latent with a greater emphasis on Mass Marketing and subsequently Target Marketing. However, with increasing competition and changes in customer expectations, the business strategy has been positioned in the frontline across the industry with the customer at the centre of all business activities.

CRM being a strategic business option and not a technology solution enables Banks build closer relationships with each customer as an individual; learning about them and communicating messages and offers that are unique to them especially in this period of economic meltdown. This customer centric approach to relationship banking with personalized communications enhances the bank's capability to providing "human touch" to its services and thereby increasing customer retention, loyalty, and ultimately profitability.

CRM Guru.Com (2004) officially defines CRM as "a business strategy to select and manage customers, to optimize long-term value, CRM requires a customer centric business philosophy and culture to support effective marketing, sales and services processing". In the words of Philip Kotler (2005), CRM is a skill which enables companies to provide excellent real-time customer service by developing a relationship with each value involved customer through the effective use of individual account information.

Hess and Ed (2001) views the CRM business strategy as "the superset of business models, processes, methodologies and

interactive technologies for achieving and sustaining high levels of retention and referrals within identified categories of values and growable customers".

In the expansive works of Peppers and Rogers (1996), CRM is viewed as the process of managing detailed information about individual customers and carefully managing all the customers loyalty. The challenge thus is to produce satisfied customers; several competitors can do this; the challenge is to produce delighted and loyal customers".

CRM thus is essentially a management initiative of developing and implementing business strategies and supporting technologies that close the gaps between a banks current and potential performance in customer acquisition growth and retention; a management approach that places the customer at the core of the firms processes. Lubin & Paul (1992) CRM leverages cutting edge technology, integrated strategic planning, up-close and personal marketing technologies and organization development tools to build internal and external relationship that increase profit margins and productivity within the enterprise.

The success of a CRM initiative however relies heavily on the Tripod connection of Systems, Technology and People within the industry. System and Processes have to be restructured to accommodate new changes and essentially give an enterprises wide picture of the bank as against a branch or zonal view to ease the collaboration of activities; acquisition of a leading edge technology to enhance seamless data integration between customer services, front office and bank office operations and marketing; and lastly securing the right crops of personnel who can be trained to merge the rudiments of banking with the art of relationship management through improved message, product and service delivery is highly enhanced. Roland et al (2000).

Challenges of CRM

If African countries cannot take advantage of the Information Revolution and utilise this great wave of technological change they may be crushed by it (World Bank Report 2003) being an enterprise wide undertaking, the installation and implementation of a CRM strategy can be very challenging and therein lies the allure. The challenge faced in embarking on a CRM strategy typically arises from the influences of Technology, process and personnel.

The success of CRM initiative is linked and enormously dependent on the quality of data and the ability of the bank to share consistent, accurate information across the enterprise. Most common among the data challenges are varied standards, bad data analysis, misspellings, misrepresentation of homonyms, missing and incomplete data. The cost implications, sourcing installation and customization of software applications is yet another challenge faced and coupled with the fact that most applications are not specific to financial services and therefore require significant customization to accommodate screens, work flow and other processes to enhance CRM. Paramount also is IT security, with the influx of hackers into IT world, security of information becomes a vital issue that must be diligently monitored; closely linked with this is the absence of software application which provides integrate capabilities for design, constructions and maintenance of scale able data warehouses and marts.

Secondly collecting an integrating customer data into single logical repository that the tellers, marketers and customers

service staff as well as the front and back office staff can all have access to is crucial to the success of any Bank undertaking the CRM initiative and usually calls for process restructures; yet another hurdle to be crossed in the Nigeria Banking Sector. This involves leveraging existing customer relationships and making optimal use of customer information across the enterprise-an integration of the systems (credit, transfers, deposits etc) used for both transactions and interactions. Front and systems that interacts with the customer e.g. phones, Website, ATMs, Smart cards, E-mail etc need to be fused with the Back and Systems e.g. Billing, Statements, etc to give a well synchronized perspective of the customer. This integration posses a great challenge because it calls for restructuring; an over hauling and imminent change to which Bank are just beginning to wake up to and on which more landmarks must be made.

Thirdly and perhaps most important is the people aspect of a CRM strategy, being the most valuable asset in any firm the personnel of a bank have to be well integrated, trained and developed to face the challenges of both the Local and Global Market in terms if relationship building, customer management and versatility in handling software applications. As the environment changes, a wide knowledge of the rudiments of baking no longer yields desired results, it must be complemented with the dexterity of customer relationship management skills in order to attain cut edge performances; little wonder forward looking banks constantly expose their manpower to training programmes, seminars and developmental programmes in a bid to fuse the raw knowledge of banking with the art of relationship management, the duo which ensure ultimate performance.

The process of CRM

There are no hard and fast chronological steps to CRM because to a large extent the nature, process and both the internal and external environment of a bank sets the pace for designing a CRM strategy. However, some fireproof steps are highlighted on which premise banks can make necessary shifts to suit their divergently congruent business orientation and goals, highlight below are some of these steps;

Create a Strategic CRM Vision

Acquiring the latest CRM software will hardly solve CRM challenges. While technology certainly plays a major role in supporting the success of CRM, CRM is in the real sense a strategic alternative. A clear vision thus, articulates, the position the bank would like to attain in the future, a powerful motivator to action, setting the pace, dictating the steps, leaps and bounds to attaining envisioned goals. The vision ensures that subsequent decisions are made on the basis of the overall goals and not driven by the functionality that a particular application might provide but how in the long run the bank wants to deliver values to its customer.

Craft a Customer Strategy

Successfully, implementing a CRM strategy rests on crafting a customer strategy. The good old-fashioned segmentation analysis designed to achieve specific goals as derived from the overall vision of the bank. The complex task of crafting a customer strategy aimed at figuring out which customer to build and those to cut off from can be placed on the right track where management provides answer to 4 fundamental questions:

➤How must our value proposition change to earn greater customer loyalty?

➤What is the potential value of increasing the loyalty of the customers?

➤ And how much does it vary by customer segments?

➤How much resources can be allocated to CRM right now?

The primary goal of CRM thus- of differentiating business from competitors is achieved by customization which meets the needs of segmented customers building customer loyalty overtime.

Process Re-Design

Installing CRM technology before creating a customer- focused enterprise is perhaps one of the major pitfalls of the CRM strategy. A CRM roll-out has higher chances of success after the business and its processes of job description, job design, analysis, specification, performance measures, compensation system, work flow, training programmes etc have been appropriately re-structured to optimally accommodate customer needs.

Paramount here is the evaluation of existing department, sectional and zonal structures as well as the product/ service structures. As simple as it sounds this is perhaps the most complex stage in the process, requiring a total overhauling of the whole enterprise, large capital outlays and executive commitment. Failure to appropriately manage this stage can be disastrous to the enterprise leading to erosion of customer base, profits and ultimately the death of the business.

Acquiring Technology

In the brave world of e-commerce, entry to the digital world is the fundamental shift from being a product centric to a customer centric enterprise providing a springboard to compete not only on the local, but also on the Global market place. Thus, in installing a CRM strategy, technologies congruent with the special need of the enterprise in terms of the products and services offered in line with the fundamental vision, goal and objectives of the enterprise must be acquired. This requires interactions with multiple vendors e.g. a system integrator, a contract manager, sales force vendor etc depending on the complexities of the enterprise, these application provide 3 essential benefits:

Analytical benefits- enables the bank "know" more about their customers via house-holding, disparate customer account and adding propensity indications such as likelihood to defect.

Interactive benefits-allows for centralized business rules across both personal and self-services delivery channels. E.g. Smart Cards and ATM's relational benefits-managing employee assisted interactions with customers by providing valuable information to employees while documenting contacts and tracking referrals service escalations and next steps.

Implementation

Having re-structured processes, acquired appropriate technologies and reoriented and re-trained personnel, the final stage in installing a formidable CRM business strategy is blending these principal elements together. Management must effectively lead and manage change, employ strategies, allocating scarce resources to create competitive advantage and superior performance and support personnel. Indeed the successful implementation of a CRM initiative rests largely on the wit and ability of

management to synchronize the triple elements of Process, Technology and Personnel. Blodgett and Mindy (2000).

Overtime, most executives have learnt that CRM is actually a foremost differentiating business strategy and a pervasive one of personalizing service around individual customers across the industry as opposed to the hype for manufacturing industries to tackle. Hess & Ed (2001).

The most visible evidence of a shift from the Traditional approach to Banking to a "customer centric" one is the range of products offered by Banks and the phenomenal rate at which services are brought to the doorstep of the average customer in terms of Branch networking by both the old and New generation Banks.

Intercontinental Bank Plc come into existence in March 1989 as a product of the partnership among some visionary Nigerian businessmen to provide innovative and customer-focused products and services that will satisfy the publics growing needs for sophisticated banking services via a wide array of products and services covering investment banking, retail, funds management and credit management. In July 1999, the Bank converted to a Commercial Bank and subsequently obtained the Universal Banking License to avail many more customers of it's unique and customized products and services as well as tap into other market opportunities in the Nigerian economy.

Following a resolution of the Board in October 2001, the Bank changed to a Public Limited Liability Company mid 2002, following up in July with an Initial Public Offer. From it's 5 branches as a Merchant Bank, the bank has phenomenally broadened it's Branch network to a whooping 205 branches, the fastest growth rate ever recorded in the industry, placing itself as the 4th largest bank in the country. Recognizing the diversity of its customer base, the bank has successfully developed a range of products to meet the growing needs of all it's customer segments, personalizing product offerings while extending the frontiers of baking beyond more savings and deposits, capturing the lifetime value of each customer. Some of the products include:

- Intercontinental Diamond Fund-IDF
- Intercontinental Value Yield-IVY
- Intercontinental Premium Servings Account-IPSA
- Intercontinental Classical Current Account- I-Class
- Intercontinental Instant Cash Transfer- I-Cash

Methodology

For the purpose of this paper, data were gathered from the Bank's Annual Reports and Financial statement spanning a period of 13 years (1997-2009) capturing a major proportion of the Bank's life cycle as both a Merchant and Commercial bank. These data were subjected to the Multiple Regression Analysis carried out on the SPSS upon which subsequent inferences were made.

Data presentation and analysis

Data gathered from the Financial reports of the Bank on it's Investment on Technology and Personnel and the corresponding value of it's Shareholders Equity over a period of 10 years are presented below:

N	Y	X1	X11
2009	16,067,600	2,185,670	6,110,020
2008	16,065,602	2,160,236	6,102,200
2007	15,454,340	2,086,210	5,983,540
2006	15,044,871	2,043,820	5,893,456
2005	11,956,654	1,786,430	3,118,259
2004	8,611,036	1,537,297	2,736,725
2003	7,483,757	227,804	1,575,906
2002	3,456,102	646,400	877,970
2001	2,775,957	294,231	570,790
2000	2,176,599	221,289	367,825
1999	1,905,734	120,889	268,464
1998	1662,204	87,805	192,218
1997	1,248,365	58,900	152,047

Source: Researcher's field survey 2010 (intercontinental bank), Annual Report 1997-2009

Y-represents the Shareholders Equity
X1-Investment on Technology
XII-Investment on Personnel

Data analysis

Table 1: *Model Summary*

Model	**R**	**R square**	**Adjusted R square**	**Std Error of the Estimate**
1	.972	.944	.928	1310089.67

Source: Researchers SPSS Printout 2007

Table 1: Coefficient

	Understandized coefficients		Standardized coefficients		
Model	**B**	**Std. Error**	**Beta**	t.	**Sig**
1(Constant)	1509503	572614.2		2.634	.034
X^1	1.118	1.477	.178	4.601	.474
X^{11}	2.118	.618	.805	7.575	.011

Source: Researchers SPSS Printout 2010.

From table 1 above, the R square figure of 94.4% clearly shows that the Total variation in the Shareholders Equity over the years can be rightly linked to the variation in the dual elements of Technology and Personnel; over the years, as the Investments in both forces were stepped up, the value of the Shareholders Equity geometrically increased, a strong indication that a very large extent, these elements has boosted the overall performance of the Bank. This thrust is best captured in the words of the CEO of the bank "we are reinforcing the grounding process through the exposition of our self-our most valuable asset to the latest trends in the Global as well as Local markets to imbibe them with skill and techniques relevant for excelling in today's increasingly, competitive challenging and racy financial intermediation process". Recognizing the pedestal role of Information Technology both as a key driver and platform for quality service delivery via product offering and the integrity of processes, the bank has a sturdy but flexible stock of IT infrastructure that can compete effectively in the Global arena of e-banking and e-commerce, such include the intercontinental money card.

The 't' figures shown in Table 2 also points to the strong correlation between investments in the dual elements of Personnel and Technology and the commendable overall performance measured by the Shareholders Equity over the years. Investment on personnel (X11) as shown on the table has approximately 100% significance in overall performance and as represented by the t value of 7.575 points to the predominant fact that increasing investment in the Human capital of the Bank in term of quantity and quality has over the years differentiated the bank from the fierce competition and has been a pedestal on which bank has been able to cave a niche for itself in the industry.

The 't' value of 4.601 also points the fact the Technology plays a vita role in effective Customer Relationship Management. Linking all interfaces together; providing a single repository of customer data enterprise wide while capturing the lifetime value of each customer. Overall, the dual elements of Human capital and Technology are vital as shown in the figures above in the CRM driver towards achieving and sustaining a competitive advantage in the face of stiff competition.

Conclusion

In recent times, there has been on-going flurry of CRM activities in the Banking industry with the plethora of banks creating various solutions to achieve the same results, the development is peculiar to the industry because it has unique characteristics that makes CRM particularly appropriate;

- The banking industry is highly competitive and dynamic;
- Typically the cost for customers to switch banks is low resulting in increased competitive pressures;
- The customers perception of customers service is often the key purchases influence and,
- The typical customer base is spread between high and low value customers with a small proportion of customers contribution most of the profits.

However, some of the benefits that accrue to banks undertaking the CRM initiative includes better communication with the customer, increased efficiency and effectiveness in dealing with customers' achieve via integrating front and Back office operations into a single customers focused operation which enables the Bank to collaboratively service customers and simultaneously improve customer Acquisition and Retention rates. Blodgett and Mindy (2000).

The promise of CRM is very captivating products and services based on the versatility of supporting systems and software specially designed to manage customer relationship e.g. Microsoft Great Plains Business solution and Great Plains Siebel front office etc these software also provides analytical tools for determining marketing campaign effectiveness, conversion rates, sales and performance etc.

Thus, investing in CRM strategies, banks stands greater chances of building better customer retention programs that maximizes the lifetime revenue, enabling customer relationships that "lock-in" customer to the business" gaining the customer differential as improved customer relationship tends to ultimately drive exponential business value.

Recommendations

For Banks aiming towards crafting a niche for themselves in the turbulent industry while maintaining and sustaining a competitive advantage, the following are recommended;

1) A highly qualitative and systematic means of sourcing the best hands within and outside the industry coupled with an in-depth
2) A well simulated enterprise structure, which help facilitate the diffusion of information across the bank.
3) Acquisition and installation of cutedge technology which can be easily customized to suit the specific needs of the Bank.
4) Provision of an air tight IT security to prevent the intrusion of hackers into the Bank's Information Repository.
5) A flexible management approach so as to be able to rise up to the challenges being continually churned out in the industry given the volatility of the economic, social, political environments.

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The role of information systems in management decision making – an theoretical approach

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Abstract: *In modern conditions of globalisation and development of information technology, information processing activities have come to be seen as essential to successful of businesses and organizations. Information has become essential to make decisions and crucial asset in organisations, whereas information systems is technology required for information processing. The application of information systems technology in business and organisations has opened up new possibilities for running and managing organisations, as well as has improved management decision making. The purpose of this paper is to give an understanding of the role that information systems have in management decision making and to discuss the possibilities how managers of organisations can make best use of information systems. The paper starts with identifying the functions of management and managerial roles and continue with information systems usage in three levels of decision making. It specifically addresses the way how information systems can help managers reduce uncertainty in decision making and includes some important implications of information systems usage for managers. Thus, this study provide a framework of effective use of information systems generally and offers an alternative approach to investigate the impact that information systems technology have in management decision making specifically.*

Keywords: information systems, decision making, management functions, managerial roles.

1. Introduction

Transition from industrial society to information and knowledge society has its impact on social, economic and cultural aspect of life. There are only few aspects of life nowadays which are unaffected by information technology . In recent years, information systems technology have become crucial and is playing a critical role in contemporary society and dramatically is changing economy and business. Business is conducted in a global environment and simply could not serve without computer based information

systems. Furthermore, we are entering the information age because of information technology and information systems usage. The use of information systems especially is often understood to be changing the way business and organisations work as well as help managers reduce uncertainty in decision making.

It is interesting to note that most authors (Lucey, 2005; Hicks, 1997; Gordon and Olson, 1985; Ward and Peppard, 2002) would agree that information systems are playing an increasingly important role in organisations of all types, regardless of their size. It is often stated that information systems is a tool to help improve management by using available information for decision making. According to Thompson and Beer (2000) in addition to more traditional systems which assist in the day-to-day business operations, information system is increasingly providing a competitive adventage for the organisation . Several studies have found and reported diverse findings regarding information systems usage in decision making (Davis and Olson, 1985; Hicks, 1997; Kumar and Mittal, Jawadekar etc.). We should emphasize that although decision making it is one of the areas that information systems have sought most of all to affect, there have been only a few existing studies that have dealt and examine the role of information systems in management decision making. To place this study in context, we turn to the papers by Lucey et al. (2005) and Haag and Cummings (2006). They noted that information systems support decison making in organisations and vary among managerial levells . Information systems usage to support managers in decision making falls into one of two general categories of systems that help users to analyze a situation and leave the decision up to him/her and systems that actually make some sort of recommendation concerning what action to take (Lucey, 2005; Haag and Cummings, 2006).

In this paper the focus is to give an understanding of the role that information systems have in managers decision making and to discuss the possibilities how managers of organisations can make best use of information systems. This study provide researchers with a framework of information systems usage in decison making and offers the ways how information systems can help managers reduce uncertainty in decision making. Furthermore, we consider that our study is important since it helps not only to understand the role that information systems have in decision making, but also help to understannd how this technology support major components of management and decision making functions. Information systems is especially important to managers at the lower or operational level since it appears that they receive the most aid, since computers and information systems are best able to deal with well-structured problems for which these managers are responsible (Hanić, 1998; Davis and Olson, 1985).

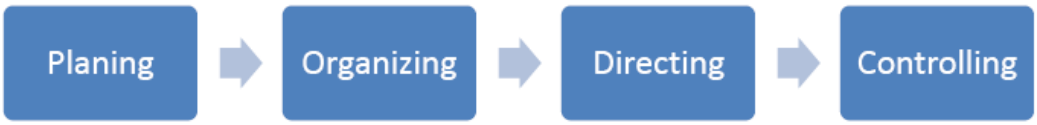
The paper also intends to provide a better understanding of management functions and roles and offers an alternative approach to investigate the role that information systems have in management decision making in organisations. The rest of article is organised as follows. In the following section we provide the functions of management and managerial roles and we than describe information systems and three levels of decision making. Lastly, we conclude our study with a suggestions that althought information systems intend to support management decision making and have made great contributions

to organisations, until recently these countributions of information systems have been confined to narrow, transaction processing area. Much work needs to be done in broadening the impact of information systems on profetional and managerial life and further research are needed.

2. The functions of management and managerial roles

Information systems claim to support managers, but they cannot be built in business and organisations unless we understand what managers are, what thay do and how they do it. An individual who gets the things done is a manager . It is necessary to distinguish between this tasks of managers and the functions of management. While managing, a manager may perform the activities such as accounting, selling, manufacturing, purchasing etc. These activities are called as tasks and not as functions. The activities that are performed through the managerial function are presented with the classical model of what managers do, espoused by writers in the 1920's such as Henry Fayol who identifies the following functions as the parameters of what managers do: planning, organising, directing (motivating) and controlling (Fig.1).

Fig. 1 - Functions of management



The management process has four functions and is executed through a variety of decisions taken at each function of management (Jawadekar, 13-14). According to Kumar and Mittal planing function of management it is the formulation of what is to be done. Organising function is a means by which human resources, physical assets, money and time are co-ordinated into efficient production of goods and services. The most vital function of management is directing or motivating function, which calls for the practice of high degree of skills based on sufficient knowledge. While, controlling function as the last stage in management tends to complete the full cycle of the process of management through which managers accomplish results (Kumar and Mittal, 20-22).

Fig. 2 - Functions and tasks of management

As shown in Figure 2, which summarises functions and tasks of management in his planning function management establish goals and develope strategies and tactics. Individuals and groups differ in their approaches to thinking and decision making. Knowing these differencies in their organising function managers assign respossibility to individuals and groups. Lead by motivating and communicating in the function of directing (motivating) they evaluate and adjust organisational performance (directing and controlling functions). Information systems as a tool for information processing can support these functions.

The activities of managers is characterised by decision making, which is a critical managerial function (Shajahan and Priyadharshini, 34). Managers need information to take decisions, but also in order to act in a variety of management functions. Therefore, it is usually that information systems are required when organisations grows and management function is performed by people who are specialized and may be removed from day-to-day activities. The attention of managers increase rapidly from one issue to another, with very litlle pattern. When problem accures all other matters must be dropped until it is solved. Therefore, usually there is simply not enough time for managers to get deeply involved in a wide range of issues. Research suggests that a manager's day is characterised by a large number of tasks with only small period of time devoted to each individual task. Furthermore, Crawford (1997), observed that given the nature of the work, managers tend to rely upon information that is timely and verbal even if this is likely to be less accurate then more formal and complex information systems.

According to Henry Mitzberg cited by Hicks (1997) managers play at least three separate managerial roles: interpersonal, informational and decisional. Information systems can support these roles in varying degrees. Managers need information from different sources in order to facilitate their ability to act in a variety of roles. A manager's interpersonal role flow directly from his authority and status and involves directing and coordinating the tasks to subordinates. Manager should be the best informed individual in the organisation. In informational roles manager gather and process large amounts of information as well as distributes information to others in the organisation. Decisional role include the enterpreneur role, in which manager initiates new projects and makes changes (Hicks, 1997). Information systems has less to countribute in the case of a managers's informational role than for the other two.

3. Information systems and levels of management decision making

The development of information systems technologies has accelerated changes to economy, organisations and in all areas of businesses. Traditionally, information systems were used to support operational functions, whith the emphasis on achieving information systems efficiency and effectiveness. Furthermore, the emergence of information systems goes back to the 1950's and 1970's when information systems were mainly transaction applications, named simply because they invovled processing accounting transactions. Advances in technology made it possible to access data more quikly and new programming systems helped to develop and refine operating systems, which provided the

organisational data necessary to run an organisation more efficiently on a day-to-day basis. Information systems started to provide reports and information that enabled managers to make more effective decisions and have become tools to support management.

Today, information systems is more complex than in 1970's or even in 1980's, when the emphasis was on operational needs. One reason for this is the recognation that information systems plays different roles in organisations and businesses and help managers reduce uncertainty in decision making (Thompson and Beer, 2000). With the rapid development of information systems technology prior to the 1980's, the role of information systems in businesses and organisations has changed, went out of style and was repliced with the term management information systems which was used to refer to the complete computer based information systems of a organisation (Hicks, 1997). Thus, in the past two decades from it's conventional function of supporting business operations, information systems role emerged as a strategic tool for decision making. This new role is highlighted in several studies (Davenport and Short, 2004; Porter and Millar,1985).

Lucey (2005) emphasises the decision focus of his definiton of information systems. He observed that "information systems is a system to convert data from internal and external sources into information and to communicate that information in an appropriate form to managers at all levels in all functions to enable them to make timely and effective decisions for planning and controlling the activities for which they are responsible" (Lucey, 2005). We consider that his definition express the essence of information systems usage to assist managers in decision making in three levels of management. Hicks (1997) observed that today, in many businesses the information systems have become a crucial asset and information systems are used extensively not only to support management in decision making, but it may also be designed to provide decisions for repetitive classes of problems (Hicks, 1997).

Nowdays, information systems are the means by which organisations and people, using information technologies, gather, process, store, use and disseminate information (Bocij, Chaffey, Greasley & Hickie, 2003). Whereas, firms are using information systems as a strategic weapon to gain competitive advantages and many business processes are redesigned to take advantages through the use of information tachnology and information systems (Hicks, 1997).

As noted earlier, decision making is often seen as the centre of what managers do, something that engages most of managers time. In order to take decisions, managers need the right information to serve a wider range of needs. In fact, information has long regarded as a very important aspect of decision making in the business environment because information gives power to decision makers. Combs (1995) poitned out that accurate, rapid and relevant information are considered to be vital to improving performance and competitive advantages of business and organisations (Combs, 1995). On the other hand Lucey (2005) suggests that relevant information is essential to any business decision (Lucey, 2005), and information systems have become an important factor in decision making. A systems approach to managing this demand can be met through information systems.

In fact, it is often stated that an information systems is a tool to help improve

management by using available information for decision making. Underlying this is a number of assumption. Firstly, the aim of an information systems is to produce information for action and secondly that if available, it will be used to facilitate decision making. This implies a relationship between information systems usage and management anddecision making. The main job of managers is to make decisons and information produced by information systems is linked to decision making.

Furthermore, information systems are designed to support management activities, in particular better decision making. To understand the relationship betweeen information systems and management decision making, we must look at several studies of well known and leading authors on information systems, such as Lucey (2005), Hicks (1997), Davis and Olson (1985) etc. who found that decision making is a complex proces and managers are involved in a complex and diverse contacts with customers, competitors, colleagues, government officials, and so forth. They should be able to define the type of information they need and require in each level of decision making. Managers should understand too what information systems is, and what information systems can and cannot do in order to help their organisation succedd (Haag, Baltzan and Philips, 2006).

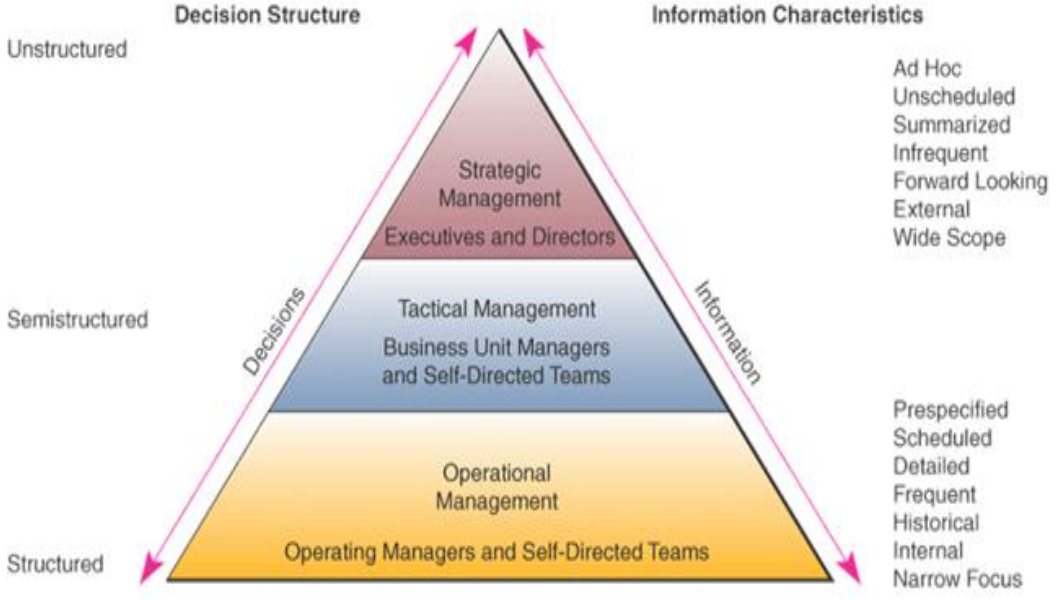
Decision making is a complex process involving many variables that we do not yet fully understand. However, many aspects of business decision making are clear and business decisions take place at each level of management in an organization although there are different characteristics at each level within organization. Gorry and Morton (1989) provide a useful framework for exploring the nature of managerial work that includes an understanding of both the purpose of management activity (involving planning and control at strategic, tactical and operational levels) and tha way in which managers solve problems and make decisions (Gorry and Morton, 1989). Decision making can be divided or distinguished from one another into three types: strategic, tactical (or control) and operational. Information are required at three different levels of management decision making and information systems has to support each level of decision making.

Decision making is an integral part of management and occurs in every function and at all levels of decision making. Decision making is based in information. Information is needed to define and structure the problem, to explore and choose between the alternative solutions and to review the effects of the implemented choice. Figure 3, summarises the main chatascteristics and information requirements of the three levels of management decision making .

The strategic level of management decision making occupies long term horizons of decisions. Strategic management (executives and directors) is responsible to develop organizational goals, strategies, and policies as part of a strategic planning process.Decision making is much more dependent on human factors and judgement. At the tactical level of management decision making managers and business professionals in self-directed teams develop short and medium range plans, schedules and budgets and specify the policies, procedures and business objectives for their subunits. At the operational level of management decision making decisions are short term and managers or members of self-directed teams have clear objectives and decision rules and develop short-range plans such as weekly production schedules.

Individuals make two general types of decisions: structured or programmed decisions and unstructured or nonprogrammed decisions . According to Lucey, (2005), Hicks (1997) and Davis and Olson (1985), in a programmed decisions the rules for making the decisions are explicit and decision can be specified in advance. The term does not necessarily mean that the decision is automated, althought many programmed decisions are automated. Nonprogrammed decisions deal with nonrepetitive and nodefined problems, and require human decision making. Nonprogrammed decision has no decision procedure, either because the decision is too infrequent to justify the organizational cost of preparing a decision procedure or because the decision procedure is not understood well enough (Lucey, 2005; Hicks, 1997; Davis and Olson, 1985).

Fig. 3 - Levels of Management Decision Making



4. Conclutions

Information systems form an integral part of modern organisations and businesses and are designed to support management activities, in particular, better decision making. Management has four distinct functions and each requires support from an information systems, as well as information are required at three different levels of decision making and information systems has to support each level. Although, effective use of information systems in management decision making gives power to managers and help organisation succeed, it is necessary to claim that there is not enough empirical studies and results that examine the role of information systems technology in decision making and much work needs to be done in broadening the role of information systems on profetional and managerial life.

Finally, it is possible to state while information systems have made great contributions to organisations, managers should rise their understanding what information systems is, and what information systems

can and cannot do. Today, undertanding the role of information systems as information processor has on an organisation, is crucial to running a succesful business. In the future information systems can be absolutely crucial to business survival.

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Integrated marketing communications: pathway for enhancing client – customer relationships

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Abstract: *The strategic coordination of marketing communication tools is vital and highly crucial for every result driven organization today. Companies must be able to deliver the right message to their target audience in order to elicit the right results. The objectives of this paper amongst others are to: (i) ascertain whether proper implementation of Integrated Marketing Communications can help reduce the cost of marketing communication or promotional budget. (ii) Establish whether the use of integrated marketing communications by firm through its advertising agencies can bring about profitable long-term client-customer relationships. The paper raises two hypotheses, which are stated in the null form. These are: The more an organization adopts Integrated Marketing communications, the more fund it will spend on promotional activities in the long run, and the less an organization adopts IMC principles, the more profitable Client-Customer relationship it will build. The paper uses survey method with structured questionnaire to obtain data that were later analyzed with correlation coefficient and analysis of variance test statistics. (ANOVA). Findings show that company will be able to save cost on marketing communication and promote lasting long-term client-customer relationships, if they properly adopt integrated marketing communication principles. The paper makes valuable recommendations which users of IMC will find useful in the ever dynamic and highly competitive world of marketing.*

Keywords: Integration; Marketing; Communications; Enhanced; Relationships

Introduction

The strategic coordination of the marketing communication tools is highly vital and crucial for every result driven organization today. Most companies strive to produce a clear, consistent and competitive message across to target audience. Effective marketing communication should be an integral part of every efficient and result oriented

organization with integrated market communications approach stressing consistency of messages. That is, communication efforts of a company through its different products must project a unified voice. Companies must be able to deliver the right message, in the right medium, across to target audience, in order to elicit the right results.

The simple argument for this clarion call for the use of Integrated Marketing Communication is that there are financial, competitive and strong laden customer relationships to be achieved as parts of the results of integration

Indeed, marketing is tending away from focus on individual transactions and now moves towards a focus on building value-laden relationship. Building strong company-customers relationship requires that all the company departments work together with the marketing unit as a team to serve the customers better. In other words, the entire company department must see and embrace marketing as an integrated management function.

Statement of problem and research objectives.

Modern Marketing is tending away from a focus on individual transactions and now moves towards a focus on building value-laden relationships marketing networks. Companies now seek better ways of delivering value-laden relationships to their esteemed customers. Relationship marketing requires that the entire company departments work together with the marketing units as a team to serve customers better. Integrated Marketing Communications is believed to be one of the methods of achieving these ideal client-customer relationships through its clear, consistent and highly competitive messages across to target audiences. There has also been anxiety in the minds of many organizational executives as to whether the use of integrated marketing communications will result in reduction in cost of Marketing Communication. Many companies are not sure of the synergy effects, which the use of IMC will bring to the organization. This paper intends to fill that intellectual gap by proposing that the use of integrated marketing communications can help companies minimize the cost of marketing communications as well as promote client-customer relationships.

The need for companies to fully adopt integrated marketing communication ideals is borne out of the fact that there are financial, competitive and relational benefits to be achieved through the synergy afforded by the process of integration, Picton and Broderick (2005).

The objectives of this paper, among others are to:

- Ascertain whether proper implementation of Integrated Marketing Communication programmes by an organization can help reduce the promotional fund/ budget of such an organization there by reducing the cost of marketing communication.
- Establish whether the use of integrated marketing communication by a firm through its advertising agencies can bring about profitable long-term client-customer relationship.
- Offer valuable recommendations which companies and advertising agencies will find highly valuable if faithfully implemented.

The paper raises two propositions, which are stated in the null form. These are:

• The more an organization adopts Integrated Marketing communications, the more fund it will spend on promotional activities in the long run, and

• The less an organization adopts IMC principles, the more profitable Client-Customer relationship it will build.

Literature review

Integrated Marketing Communication is the strategic coordination of all messages and the media used by an organization in order to collectively influence its perceived brand value (Duncan and Caywood, 1996). The American Association of Advertising Agencies (4As) sees Integrated Marketing Communication as "a concept of marketing communication planning that reorganizes the added value of a comprehensive plan that evaluates the strategies roles of a variety of communication disciplines – general advertising, direct response, sales promotion and public relations and combines these disciplines to provide clearly, consistency and maximum communication impact". Many definitions were reviewed in the course of the work. Most authors agreed that integration of the marketing communication mix elements would provide an organization with a clear, credible, consistent and better competitive message to target audiences/markets. The views of various scholars on Integrated marketing Communication emphasized the need for a synergistic marketing communication plan, that uses multiple tools of marketing communication apart from traditional advertising and capitalizes on the strengths of each, with the goal of achieving maximum communication impact. Most scholars portrayed integrated marketing communication mix as the specific mix of Advertising, personal selling, sale promotion, public Relations and Direct Marketing that a company uses to pursue its advertising and marketing objectives. The above view is supported by David Dolak (2006), Belch and Belch (2004) Jobber and Fahy (2003) and wright (2000), among others.

A number of scholars summarized the Objectives of marketing communications under three main heading.. These are: To Inform; Persuade & Remind .The above view is supported by Jobber and Fahy (2003), Kallmeyer and Abbratt (2004), Cornelissen (2201) amongst others. The Chartered Institute of Marketing, London (2008) added a fourth objective. The institute uses an acronym "DRIP" to describe this as thus: To: Differentiate; Remind; Inform-; Persuade.

The illustrative and insightful dimension added to promotional mix elements by Belch and Belch, (2004) in what the joint authors referred to, as IMC planning model is worthy of mentioning. The joint authors traced the genesis of marketing communication from an organizations review of its marketing planning. The organization goes ahead to analyze it's promotional programme situation, analyze its promotional budget and the firm thereafter determines its integrated marketing communication programmes. The firm could further take a strategic step by identifying all its promotional mix elements and then integrates its marketing communication strategies.

The findings from literature reveal that the development of marketing communication programmes require an in-depth analysis of the market. This analysis might make extensive use of marketing research as an input, which in turn provides the basis for the development of marketing strategies with

regards to product, pricing, distribution and promotion decisions. The above analysis, if effectively done and implemented could serve as the road map to follow in achieving the set marketing goals. The above view is supported by Duncan, (2002); Eagle et al, (1999); Gould, 2003; amongst others. Literature also reveals that IMC must show five significant features. These features, according to Kitchen et al (2004), where the joint authors adapted and modified the works of Duncan (2002) are:(i) The primary goal of IMC is to affect behaviour through direct communication. (ii) The process should start with the customer or prospect and then work backward to the brand communicator.(iii)IMC should use all forms of communication and all sources of brand or company contracts as prospects message delivery channels.(iv) The need for synergy is paramount with coordination helping to achieve a strong brand image IMC requires that successful marketing communication needs to build a relationship between the brand and the customer. Their view above, is also supported by Kallmeyer and Abratt, (2001); Low, (2000) and Kliatchko, (2005) among others.

The authors added that it is important to consider the relative strengths and weaknesses of each of the promotional mix components when deciding how to properly utilize the marketing communication mix in order to meet the set marketing objectives.

The strategic place of the marketing communication mix in the lives of different products is emphasized is most literatures. Picton and Broderick (2005) gave a summary view of the different marketing communication tools to be used at each stage of a product's life such as at introduction; growth; maturity/saturation stage and decline. This view is presented below.

Choosing the right and appropriate marketing tool is very essential if a firm is to meet the set marketing objective. Picton and Broderick (2005) presented all the promotional tools and how each of the tools has an overlap on the other tools. In all, the authors gave incisive picture of how each of the tools affects the others. The choice of a firm's marketing communication tool(s) is largely influenced by a number of factors such as business mission, business objectives, marketing objectives, promotional objectives, resources availability, competitors' activities and competitors' reaction pattern, target audience and the type of product, amongst others.

Relationship Marketing

The relevance of relationship marketing in achieving customer/client satisfaction and organizational marketing objectives is not in doubt especially in a developing economy, Such as Nigeria (Osuagwu 2004). Satisfaction, according to a Kotler (2000) is a person's feeling of pleasure or disappointment resulting from comparing a company's product perceived performance (or outcome) in relation to his or her expectations. If performance matches expectations, the customer is satisfied. If the performance exceeds expectations, the customer is highly delighted or highly satisfied. However, if performance falls short or expectations, the customer is dissatisfied. In the words of Achumba (2000), Higher satisfaction creates delight and an emotional bond between the customer and the company and its products. If marketers raise expectations too high and they are unable to perform to same level, then customers or consumers are likely to be dissatisfied.

Figure 1: *The product's life cycle and examples of the strategic use of integrated marketing communications*

Introduction	Growth	Maturity/Saturation	Decline
• Emphasis on awareness building especially among innovators and early adopters (pull strategies) • Emphasis is on trade push strategies to obtain distribution acceptance • Emphasis on PR activities and advertising to generate awareness and image building and assist in positive attitude formation • Emphasis on sales promotions to induce trial and encouragement of inclusion in customers' repertoire sets • Strong sales force emphasis may be a feature for some products in, for example, industrial durable market	• Emphasis continues on building awareness and adoption by new customer (early adopter, early majority) Emphasis on trade push strategies to gain distribution penetration • Advertising and PR may be increased as increases in sales revenue permit larger expenditures • As product moves into mass market, wider audiences are included in target specification • Sales promotion may still be emphasized as new customers are encouraged but as demand increases, price offers may be used less • Promotions encouraging 'loyalty 'may feature prominently • Effort to encourage positive word of mouth	• More emphasis may be required on brand differentiation. If competitive environment requires it, re-positioning may be considered • Emphasis on keeping customer (loyalty promotion) and sales promotions to encourage brand switching from competing brands • Reminder advertising encouraging customers to keep brand within repertoire set • Sales promotions to encourage increased usage • Trade promotions used to maintain distribution penetration prominence	• Promotional effort may be reduced to harvest brand profits • Before decline, consideration will be given to rejuvenating brand or reposition brand to new users or attract lapsed users • New, improved' version of the brand may appear and be promoted to extend the PLC

Source: Picton and Broderick (2005): Integrated Marketing Communications. Pearson Education limited, Edinburgh Gate, England P.438.

In the words of Achumba (2000), Higher satisfaction creates delight and an emotional bond between the customer and the company and its products. If marketers raise expectations too high and they are unable to perform to same level, then customers or consumers are likely to be dissatisfied. However, where a company sets expectations too low, it will not attract many customers. (Although, it may likely satisfy those who buy).

Relationship Marketing is the process of creating, maintaining and enhancing strong value laden relationships with customers and other stakeholders. Kotler (2000) opines that the goal of relationship marketing is to deliver long term value to customers and the measure of success is long-term customer satisfaction. It must be noted that marketing is now moving away from a focus on individual transaction and now moves towards a focus on building value-laden relationship marketing networks. Relationship marketing requires that the entire company department work together with the marketing unit as a team to serve the customer. The company must see marketing as an integrated management function.

A number of scholars on customer relationship building believe that there are different levels of relationship building in an organization. Scholars such as Kotler(2000) Belch and Belch (2004), Fill (2006), Copley (2004) among others asserted the Different levels of relationship building. These levels include: Basic marketing; Reactive marketing; Accountable marketing, proactive marketing and partnership marketing. It must be emphasized here that the least of relationship building from the point mentioned above is basic marketing while the highest level of relationship building is partnership marketing. A customer-oriented organization must not operate below the level of proactive marketing.

Table 1: *Summary of demographical data showing classification of participants*

Variable	Frequency	%
i. Consumers	520	47.7
ii. Marketing Communication Organizations	260	23.9
iii. Staff beverage Producing Companies	310	28.4
Total	**1090**	**100%**

Source: Field Survey, 2009

Methods

The work is empirical and exploratory. The study used stratified sampling technique. A set of well structured questionnaires were administered on three categories of respondents which are consumers of Nigerian Beverage products, staff of Beverage producing companies and staff of Advertising agencies or marketing communication organization. Likert Scale structured questionnaire was used with options of five variables, which ranges from Strongly Agree (SA); Agree (A); Undecided (U); Disagree (D); and Strongly Disagree (SD).

In all, 1200 questionnaires were administered on three categories of respondents described above. Out of these total of questionnaire administered, 1126 questionnaires were returned while 36 of these questionnaires were rejected because they were not properly filled. In all, the research made use of 1090 returned questionnaires. Below is the summary of demographical data showing classification of participants.

Table 2: *The level of perceived effective use of IMC as it affects funds/ marketing communication or promotional budget in the long run*

Variables	**No**	Consumers 520		Marketing Communication Organization 260		Staff of Beverage Producing Company 310	
		M	**SD**	**M**	**SD**	**M**	**SD**
Proper implementation of Integrated Marketing Communications (IMC) programmes by a beverage producing organization on its products will reduce the overall promotional budget on such a product in the long run.	1090	3.89	1.02	4.28	0.62	3.95	1.04
The use of marketing communications tools can help reduce the company's overall promotional budget thereby increasing the company's profit in the long run.	1090	3.46	0.21	4.24	0.24	4.00	0.84
The use of different communications tools such as Advertising, sales promotion PR etc by a beverage producing company can help reduce the amount of money the company spends on marketing communication budget.	1090	3.42	0.42	4.18	0.65	4.06	0.57
The use of Integrated Marketing Communications by a beverage-producing firm will be an efficient way through which overall cost of marketing communications can be reduced.	1090	3.64	0.21	4.28	0.21	4.24	1.02
The use of IMC by beverage firms will help reduce wastage in the amount of money use for marketing promotions by the company and this will thereafter increase the company's profit	1090	3.82	0.62	4.44	0.62	4.44	1.24

Source: Field Survey, 2009

Table 2 reveals summary descriptive Statistics of effective use of IMC on funds/promotional budget in the long run. One observes that the means of staff, customers and marketers perceptions on the effectiveness of Integrated Marketing Communication in promoting customers' patronage differ slightly, however, they all indicated that effective use of IMC has the potential of reducing the amount a company spends on its promotional budget or cost of marketing communications.

Hypotheses Testing

Two hypotheses were raised in this study. They were tested at 0.05 significant levels.

Hypothesis ONE: The less an organisation adopts IMC, the more fund it will spend on promotional activities in the long run.

Table 3: *Correlation Coefficient Matrix of Adoption of Integrated Marketing Communication and fund spent marketing communication actievities in the long run*

Variations	CPAIMC	MPIMC	SBOCPIMC	CPFSP	MPFSP	SBOCPFSP
CPAIMC	1	0.57*	0.82*	-0.52*	-0.61*	-0.68*
MPIMC		1	0.72*	-0.66*	-0.55*	-0.58*
SBOCPIMC			1	-0.73*	-0.60*	-0.68*
CPFSP				1	-0.65*	-0.66*
MPFSP					1	-0.74*
SBOCPFSP						1
Mean	16	18	16	8	12	10
Standard Deviation	0.46	0.44	0.42	0.40	0.32	0.24

CPAIMC-Consumers' Perceived Adoption of integrated marketing Communication
MPIMC-Marketers' Perceived Adoption of integrated marketing Communication
SBOCPIMC-Staff of Beverage Producing Company Perceived Adoption of Integrated Marketing Communication
CPFSP-Consumers' Perceived fund Spend on Promotion
MPFSP-Marketers' Perceived fund Spend on Promotion
SBOCPFSP-Staff of Beverage Producing Company Perceived fund Spend on Promotion

Table 4: *Summary of Analysis of Variance on perceptions of staff, customers and marketing*

Source	SS	Df	M S	F	Sig.
Between Groups	1644	2	822	1.875**	.322
Within Groups	474.570.6	1081	438.2		
Total	476214.6	1083			

Source: Field Survey, 2009
*Key: **Non-significant two tailed test*
a. Independent variables --staff, customers, and market organizations' perceptions
b. Dependent Variable: fund spend on promotional activities

The results of the ANOVA are presented in an ANOVA table 4. This table contains columns labeled "Source", "SS or Sum of Squares", "df - for degrees of freedom", "MS - for mean square", "F or F-ratio", and "p, prop, probability, sig., or sig. of F". The only columns that are critical for interpretation are the first and the last. The others are used mainly for intermediate computational purposes. The row labeled "Between Groups",

having a probability value associated with it, is the only one of any great importance at this time. The other rows are used mainly for computational purposes. The first column that researcher most probably first look at, is the value ".322" located under the "Sig." column. If the number (or numbers) found in this column is (are) less than the critical value ( ) set for the study, then the effect is said to be significant. Since this value set for this study is .05, any value less than this will result in significant effects, while any value greater than this value will result in non significant effects. If the perceptions are found to be insignificant using the above procedure, it implies that the means are not differ. In terms of the above finding, it would mean that the perceptions of staff, customers and marketers are not significantly differ about the organisation adoption of IMC, and the fund expended on promotional activities in the long run. This table does not tell the researcher anything about what the views were, just that there was no difference because non-significant difference was found, then the differences between the means are not great enough to allow the researcher to say that they are different. In that case, no further interpretation is attempted.

Therefore, the second null hypothesis that stated that "the less an organisation adopts IMC, the more fund it will spend on promotional activities in the long run" is upheld at f (2, 1083) is 1.875, 0.05 significant level.

Hypothesis TWO: The less an organisation adopts IMC principles the more profitable longterm client-customer relationship it will build.

Table 5: *Correlation Coefficient Matrix of Adoption of Integrated Marketing Communication and client-customer relationship*

column is (are) less than the critical value (α) set for the study, then the effect is said to be significant. Since this value set for this study is .05, any value less than this will result in significant effects, while any value greater than this value will result in non significant effects. If the perceptions are found to be insignificant using the above procedure, it implies that the means

Source: Field Survey, 2009

Key:

- *CPAIMC-Consumers' Perceived Adoption of Integrated Marketing Communication*
- *MPIMC-Marketers' Perceived Adoption of Integrated Marketing Communication*
- *SBOCPIMC-Staff of Beverage Producing Company Perceived Adoption of Integrated Marketing Communication*
- *CPCCR-Consumers' Perceived client-customer relationship*
- *MPCCR-Marketers' Perceived client-customer relationship*
- *SBOCPCCR-Staff of Beverage Producing Company Perceived client-customer relationship*

Table 6: Summary of Analysis of Variance on perceptions of staff, customers and marketing organization on the effectiveness of Integrated Marketing Communication to promote customers' patronage in beverage producing companies

Source	SS	Df	M S	F	Sig.
Between Groups	13698	2	6849	57.554**	0.05
Within Groups	128639	1081	119		
Total	142337	1083			

Source: Field Survey, 2009
*Key: **Non-significant two- tailed test*
a Independent variables staff, customers market organizations' perceptions
b Dependent Variable: Customers' patronage

In terms of the above finding, it would mean that the perceptions of staff, customers and marketers differ significantly about the organisation adoption of IMC and profitable longterm client-customer relationship it will build.. Therefore the second null hypothesis that stated, "The less an organisation adopts IMC, the more profitable longterm client-customer relationship it will build" is rejected at f (2, 1083) = 57.554, 0.05 significant level.

Conclusion

Successful marketing communication relies on the strategic coordination of options called the promotional mix. These options include advertising, sales promotion, public relation direct marketing, and personal selling. The Internet has also become a powerful tool for reaching certain important audiences. The role each element takes in a marketing communication programmes relies in part on whether a company employs a push strategy or a pull strategy. A pull strategy relies more on consumer demand than personal selling for the product to travel from the manufacturer to the end user. The demand generated by advertising, public relations, and sales promotion "pull" the good or service through the channel of distribution. A push strategy, on the other hand, emphasizes personal selling to push the product through the marketing channels. (The Channels of distribution). These two channels have been considered in this study and factors that promote the two channels were investigated the summary of the findings presented below.

- The more an organization adopts Integrated Marketing Communication the more fund it will spend on promotional activities in the long run
- The more an organization adopts Integrated Marketing Communication the more client customer relationship it will build
- The more an oraganisation adopts Integrated Marketing Communication at difference stages of a product life cycle, the more market share it will build.

Findings from this research show that the development of Integrated Marketing Communication requires an in-depth analysis of the market. This analysis might make use of marketing research as input, which in turn will provide basis for the development of market strategies. Finding also show that

there is need for companies to properly integrate itself with its Advertising Agency (Client-Agency integration) so that a better communication can be produced which will be sent across to target audience.

Recommendations

The views of respondents on factors that can promote the usage of Integrated Marketing Communications are summarized and they form part of the recommendations of this work. These recommendations comprise of those given by marketing producing companies as contained in the open-ended questionnaire:

• There should be increase in the display of professionalism on the part of marketing communications organizations. As professionals in marketing communication, they stand in vantage positions in advising their clients on the best way to combine the various promotional tools in order to achieve clarity, consistency and competitive messages.

• There should be better coordination of the marketing communication budget. This, they asserted would lead to reduction in the overall promotional budget and thus have the multiplier effect of increasing the profitability level of such companies.

• It needs be pointed out that most respondents from marketing communication organizations stressed the fact that marketing and promotional objectives must be realistic, measurable, achievable, specific and time bound. This will make firms to know whether or not the objectives are being achieved

• The place of adequate resources to achieve set objectives cannot be over-emphasized. Firms need to back the set marketing objective with enough or adequate financial muscle. This will not allow competitors to take undue advantage. This is because competitors will certainly respond to the firm's promotional drive..

• Companies will be able to achieve set promotional objectives if they produce quality products. Respondents emphasize the production of quality products that can meet people's taste. Respondents believed that firms would be able to beat their competitors with their marketing promotions if such promotions are used on better/quality products produced. Certainly, you cannot continue to deceive the consumers at all times.

• Better, effective, and reasonable pricing policies must be given consideration. Respondents believe that firms should not over-price themselves out of the market. Respondents believe that marketing communications will be more impactful if such products are priced effectively and at a degree of reasonability.

• Many respondents re-emphasized the use of children and youth in promoting beverage products. Most beverage producing companies are already employing this strategy of "catch them young". Today one easily sees beverage logos and photographs been displayed conspicuously on walls of many nursery/primary schools, signboards of secondary schools, etc. All these have the effect of registering the products well in the minds of these youths right from primary/secondary schools.

• Sponsorship of events such as schools' inter-house competitions will help promote promotional messages. Firms must seek when most popular schools are embarking on their inter-house competition. In fact, it will be a cheap way of selling the company's

promotional messages in the minds of these youths. During schools inter-house competitions, free products could be given to children and companies can also sell at reduced prices. This will certainly register the company's sales efforts/messages in the minds of the youths. Moreover, there is need for Nigerian beverage producers to take sponsoring of some major event in the sports arena. Such events according to respondents include NUGA games, African Cup of Nations. All these events usually draw the attentions of Nigerian youths together. These, respondents believe, will help promote the use of Integrated Marketing Communications.

• There is need for companies to start exploring the use of Internet in selling their products to distributors. Placing such "distributors wanted" on the net can also help in promoting a company's selling effort.

• Belch and Belch (2004) stressed that the greatest benefit derived from integration of marketing communication is synergy. Synergy can be described as the addition 3+3 = 7 phenomenon. By bringing together the various facets of marketing communications in a mutually supportive and enhancing way, then the resulting "whole" is more than the simple sum of its parts. Each elements of the marketing communication enhances and supports the other in a consistent fashion when integrated marketing communications approach is used.

• Marketing communication messages must stress the products benefits and strengths. This, respondents believe would help to strengthen the belief and faith of consumers on the products being promoted.

• Companies need to properly integrate their marketing communications agencies, Advertising Agencies & Public Relations firms with one another in order to ensure clarity of messages, consistency, credibility and a highly competitive message across to target audience..

• There is need for an organization to be consistent and not conflicting about its marketing communication because consistency in message creates better awareness, reinforces the message and helps in building a solid brand while conflicting messages confuses and could even scare away customers.

• Needs for organizations to institute regular cross-functional meetings e.g. meetings involving all departmental heads that are involved in the IMC programmes. Again, firms should also foster inter-departmental communications to ensure that each group is living up to expectations where necessary, to identify unexpected problem or challenges.

• Proper training must be accorded to employees (staff) of both client companies and those from marketing communication agencies. This will yield better marketing communication results.

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Job satisfaction of academic professionals: A comparative study between the public and the private universities in Bangladesh

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Abstract*: Job satisfaction has been widely researched in the field of human resource management and organizational behaviour. It is defined as an individual's general attitude regarding his or her job. The study aimed at exploring the difference between academic professional of public and private universities in Bangladesh with respect to overall job satisfaction. It is found that academic professional of the public universities in Bangladesh are more satisfied with their jobs than those of the private universities. The study also offered some policy implications for improving the job satisfaction of academic professionals and other employees of universities in Bangladesh and other similar countries*

Keywords: Job satisfaction, Academic Professional, Public and Private Universities

1. Introduction

In today's dynamic and ever changing environment the job satisfaction has emerged as the key fact for motivating employees towards the organizational goals and objectives. This issue has also been identified as one of the most important issues in today's all sector (i.e, private and public sectors). In the development of information and communication technology (ICT), the fact of job satisfaction is becoming more complex day by day. To cope with the changes and upcoming challenges, organisations must identify the factors, which have profound impact on organisational performance as well as job satisfaction. But, unfortunately, very insufficient number of studies has been conducted in this area context of Bangladesh and other developing countries. To augment the contemporary knowledge base of job satisfaction of developing country context, this study has been undertaken.

2. Job Satisfaction: Conceptual and Empirical Overview

Job satisfaction has been widely researched in the field of human resource management and organizational behaviour. It is defined as an individual's general attitude regarding his or her job (Robbins, 1999, p.142). The most referred definition of job satisfaction was offered by Locke (1976) who defined job satisfaction as a pleasing or positive emotional state resulting from the evaluation of a person's job (Haque & Taher, 2008). Mullins (1993) mentioned that motivation is closely related to job satisfaction. According to Robbins (1999), a satisfied workforce can increase organizational productivity through less distraction caused by absenteeism or turnover, few incidences of destructive behavior, and low medical costs.

Various factors such as an employee's needs and desires, social relationships, style and quality of management, job design, compensation, working conditions, perceived long rage opportunities, and perceived opportunities elsewhere are considered to be the determinants job satisfaction (Byars & Rue, 1997, p.316: Moorhead & Griffin, 1999,p.69).

A study conducted in the jute and textile sectors among the mid level male industrial managers found that job satisfaction and job involvement are positively correlated and it identified salary as the most contaminating factor in this relationship (Haque, 1995). In another study effort was made to find out the effects of organisational climate on job involvement, job satisfaction and personality of mid level managers (Jahan & Haque, 1993). It found some significant influence of organisational environment on job satisfaction of managers. Khaleque & Rahman (1987) found that the satisfaction variables are not unidirectional in their effects. Job facets can be sources of satisfaction as well as dissatisfaction. Overall satisfaction of industrial workers appears to be influenced by the satisfaction with job facets and personal life. The degree of satisfaction seems to depend upon the satisfaction with the number of job facets as well as their perceived importance.

Hence, the above literature shows that there have been several studies around the globe focusing on job satisfaction. However, studies portraying the comparative scenarios of the job satisfaction of academic professional of the public and private universities have not yet received proper attention.

3. Objectives

This study aimed at exploring the difference between academic professionals of the public and the private universities in Bangladesh with respect to overall jobsatisfaction. The study also offered some policy implications for improving the job satisfaction of academic professionals of the universities in Bangladesh.

4. Hypotheses

As per the objectives of the study, the following hypotheses were developed for testing.

H_1: There is a difference between the academic professional of the public and the private universities in Bangladesh with respect to overall job satisfaction.

H_0: There is no difference between the academic professional of the public and the private universities in Bangladesh with respect to overall job satisfaction.

5. Research Methodology

Research methodologies of the present study are outlined below.

5.1 Sample

A sampling frame of eleven public and private universities was prepared comprising of three public universities[Chittagong University(CU), Chittagong University of Engineering & Technology(CUET) and Chittagong Veterinary and Animal Sciences University(CVAS)] and eight private universities[Independent University of Bangladesh (IUB), Premier University(PU), Southern University(SU), International Islamic University of Chittagong (IIUC), East Delta University (EDU), BCG Trust University, University Science and Technology University (USTC), University of Information Technology Studies (UITS)] located in Chittagong, Bangladesh under the University Grants Commission of Bangladesh.

5.2 Data Collection

Questionnaire survey method was used to gather data in the present study. Job satisfaction was measured by a eleven-item (i.e., content of the work; salary; promotion; peers relations; workplace; relationship with chairman; suggestions; chairman's leadership styles; achievement; prise of the chairman and overall satisfaction) on seven-point Likert summated rating scale (where 1= strongly disagree to 7= strongly agree). The structured questionnaire was sent to the academic professional of all the public and private universities, Finally 202 useable questionnaire were obtained for the study (69 from public and 133 from private universities).

5.3 Reliability and Validity

Before applying statistical tools, testing of the reliability of the scale is very much important as its shows the extent to which a scale produces consistent result if measurements were made repeatedly. This is done by determining the association in between scores obtained from different administrations of the scales. If the association is high, the scale yields consistent result, thus is reliable. Cronbach's alpha is most widely used method. It may be mentioned that its value varies from 0 to 1 but satisfactory value is required to be more than 0.6 for the scale to be reliable (Malhotra, 2000; Cronbach, 1951). In the present study, we, therefore, used Cronbach's alpha scale as a measure of reliability.

***Table 1:** Reliability value of the Scale*

Scale	Cronbach's Alpha (α)	
	Public Universities	Private Universities
Job Satisfaction	**0.867**	**0.878**

Source: Survey data

From the table-1, it is seen that reliability value was estimated to be α=0.867 and 0.878 of public and private universities respectively, If we compare our reliability value with the standard value alpha of 0.6 advocated by Cronbach (1951), Nunnally & Bernstein (1994); and Bagozzi & Yi's (1988) we find that the scales used by us are highly reliable for data analysis. Validation procedures involved initial consultation of the

questionnaires. The experts also judged the face and content validity of the questionnaires as adequate. Hence, researchers satisfied content and construct validity.

5.4 Analysis

To analyze the data, this study used descriptive (mean, standard deviation) and difference inferential statistics (t-test, F-test). All statistical calculations were carried out by statistical package for social science (SPSS) v. 13.0.

6. Findings and Analysis

H_1: There is a difference between the academic professional of the public and the private universities in Bangladesh with respect to overall job satisfaction.

H_0: There is no difference between the academic professional of the public and the private universities in Bangladesh with respect to overall job satisfaction.

Table 1: *Descriptive statistics of the overall job satisfaction*

	Type of Universities	N	Mean	Std.Deviation	Std.Error Mean
Job Satisfaction	Public	69	5.176	.887	.106
	Private	133	5.010	1.026	.092

Source: Survey data

Table 2: *Independent sample t-test for overall job satisfaction*

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig(2-tailed)
Job Satisfaction	Equal variances assumed	2.770	0.098	.515	200	.000
	Equal variances not assumed			.545	160.529	.000

Source: Survey data

To test the above hypothesis, independent samples t-test was run with SPSS. Before t-test, Levene's test for equality of variances was carried out to be certain about the homogeneity of variances of the comparing groups.

This was deemed necessary to compare the public and private universities as two sectors had unequal sample size. From the Levene's test for equality of variances, it was found that 'equal variances

not assumed'should be used here (F=2.770, p<.10). Accordingly, independent samples test was run. It was evident that the difference between academic professional of the public and private universities with respect to overall job satisfaction was statistically significant (t =.515, P <.01).

Hence, the null hypothesis was rejected and it can be concluded that the overall job satisfaction of academic professional of public universities (Mean =5.176) in Bangladesh is significantly better than that of academic professional of the private universities (Mean = 5.010).

7. Concluding Remarks and Policy Implications

It is found that academic professional of the public universities in Bangladesh are more satisfied with their jobs than those of the private universities. Therefore the private universities should take measures with respect to supervision, working conditions, and career development to improve the job satisfaction of the academic professionals.

Future studies may be conducted in context of the service and manufacturing enterprises. Case studies, focus groups, and longitudinal studies may also be undertaken.

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Bank capitalization and market share in the Nigeria deposit banks (1986-2006)

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Abstract*: This study investigates the impact of shareholders' fund on bank performance (market share) in the Nigerian deposit banks (1986-2006). The study captured performance (market share) and employed cross sectional and time series of bank data obtained from Central Bank of Nigeria (CBN).The formulated models were estimated using ordinary least square regression method. The study found a strong relationship between bank capital funds and bank deposits, loans and advances (proxies for market concentration). The result shows that shareholders' fund and total assets of the banks have positive and significant impact in influencing the level of total deposits. The implication of this study, among others, is that adequate shareholders fund can serve as a veritable stimulant in strengthening the performance of Nigeria commercial banks and also heighten the confidence of customers especially in this era of global economic melt-down that has taken its toll in the Nigerian financial system.*

Keywords: Concentration theory, Concentration Ratio, Market share.

1.0 Introduction

Bank capital can be seen in two ways. Narrowly, it can be seen as the amount contributed by the owners of a bank (paid –up share capital) that gives them the right to enjoy all the future earnings of the bank. More comprehensively, it can be seen as the amount of owners' funds available to support a bank's business (Athanasoglou, Brissimis and Delis et al., 2005).While the growth in the financial services sector is experiencing geometric progression and a boom, the other sectors of the economy, such as the productive sector are contracting and the whole economy continued to plunge deeper into recession. To gain a fair share of the market in a highly competitive environment, the financial services sector especially the banks need to be innovative. In the 1990's, the financial

sector witnessed the development of some innovative products and services, massive investment in information technology and a continuously re-engineering of financial instruments to meet the needs of discerning customers by banks that wanted to maintain their leading position and competitive edge

Consolidation and strengthening of the banking system were taken to constitute the first phase of the reforms designed to ensure a diversified, strong and reliable banking sector which will ensure the safety of depositors' money, play active development role on the Nigerian economy and as competitive players in the African regional and global financial systems. The goal of the reforms is to help banks become stronger players, and in a manner that will ensure longevity and hence higher returns to their shareholders over time and impact positively on the Nigerian economy. The beneficiaries in the Nigerian economy will include the ordinary men and women who can put their deposits in the banks and have a restful sleep; the entrepreneurs who can now have a stronger financial system to finance their businesses; and the Nigerian economy itself which will benefit from internationally connected and competitive banks that would also mobilize international capital for Nigerian development. In United States of America (USA) there were over 7000 mergers between 1980 and 1998. The nineties recorded the largest mergers in the banking history of the US as the number of banks in the US declined by more than one third between 1980 and 1997.Consequently, the proportion of the banking assets declined sharply from 75 percent in 1980 to nearly 50 percent in 1997. The same trend occurred in the United Kingdom and other European countries (Boyd e tal, 1993).

In the period 1997 -1998, 2003 cases of bank mergers and acquisitions took place in the Euro area. In 1998, a merger in France resulted in a new capital base of $688 billion, while the merger in Germany resulted to a capital base of $541 billion. In many emerging markets including Argentina, Brazil and Korea, bank capitalization/consolidation became prominent as banks try to reposition their operations in order to cope with the growing challenges in the globalized banking systems. Most mergers that took place in countries were as a result of the government efforts to restructure inefficient banking systems (as in many Latin American countries), or from intervention following banking crises (as in Korea and Southeast Asia).

Just like Nigeria, in Asia the capitalization/consolidation of the financial services was more or less government-led rather than market-driven. Bank mergers in this region were motivated by the need to strengthen capital adequacy and promote financial viability of many smaller, often family owned banks that were affected by the 1997-1998 crisis. Soludo (2004) posited that:

"In Malaysia, the first round of bank consolidation was initiated by the government in 2000, when it imposed a $526 million capitalization requirement on banks. The then 54 existing banks were ordered to merge into 10 core groups, so called anchor banks. The government has fully liberalized the sector in 2007. In Indonesia, four of the seven state banks existing before the crisis were consolidated into a new state bank (Bank Mandiri), which now controls about a quarter of the total commercial bank deposits. In Singapore, a country with about three million people, banks are being consolidated to about six and further moving down to three,

with the second largest having a capital base of about $67 billion'.

The concentration ratio gives us an idea of the percentage of the total market and how it is controlled by the biggest 3, 4 and 5 firms in an industry. Hence, if for the Nigerian banking industry CR3 = 80, then we can say the three biggest banks in Nigeria control 80% of the market share in Nigeria. The examples below on Table 1a shows United States aggregate economic concentration of Fortune Magazine's data for 1988 as cited in (Bronfenbremmer e tal :1990). Part 1a list the sales of the 10 largest industrial firms in the United States and their cumulative percentage of the sales of the 500 largest U.S industrial firms. General Motors (one-fifth of 1 percent of the 500 largest firms) accounted for 6% of their sales, one percent of these firms (the top five) accounted for nearly 20% of the sales of the top 500, and 2% accounted (of the 10 firms listed) accounted for 29 percent of their sales. Similarly, for Part 1b commercial banking sector's aggregate concentration, as measured in assets, is quite high. The five firms listed (5 percent of the largest 10 firms) accounted for 26% of their total assets.

Table 1a: *United States Industrial Sector*

Rank (by Sales)	Company	Sales (in millions of dollars)	Cumulative Percentage of 500 largest
1	General Motors	121,085	6.0
2	Ford Motors	92,446	10.6
3	Exxon	79.557	14.5
4	I.B.M	59,681	17.4
5	General Electric	49,414	19.9
6	Mobil	48,198	22.3
7	Chrysler	35,473	24.0
8	Texaco	33,544	25.7
9	E.I. Du Pont de Nemours	32,514	27.3
10	Phillip Morris	25,860	28.6

A Sample of Fortune Magazine's Data for 1988 Cited in Economics (1990) p.6

Two common measures of concentration, the four-bank concentration ratio, CR4, and the Herfindahl-Hirschman Index (HERF), are used. CR4 is defined as the ratio of the total deposits of the four largest banks to the total deposits of all the banks in a given year.CR4 should be closed to 0 for a perfectly competitive market and 100 for a monopoly. HERF is defined as the sum of squared market shares of deposits of the sample of banks in a given year. The index is slightly greater than 0 for a perfectly competitive market and 100 for a monopoly. HERF takes into account both the number of banks and the inequality of market shares. Generally, the more banks there are in a market, the lower is the value

of HERF, ceteris paribus. HERF increases as the market shares of a given number of banks become less equal (Waldman and Jensen, 2001). However, Hay and Morris (1991) criticized the HERF measures because it uses a particular weighting between the inequality of the firms' market share and the number of firms. Nonetheless, HERF and CR are the most common used in virtually all the published studies. In this paper, CR4 and CR10 are employed to depict the market share in the Nigeria banking industry with respect to deposit, asset, loans and advances, capital etc. Bronfenbremmer e tal (1990) stated that HHI is an alternative measure of market concentration, which includes all of the firms in a market and gives proportionately greater weight to the market shares of the larger firms in the market. It takes into cognizance of both the number of firms in the market and their relative size. Hence, if for the Nigerian banking industry CR3 = 80, then we can say the three biggest banks in Nigeria control 80% of the market share in Nigeria. A Concentration Curve provides us a visual aid in measuring the concentration.

Table 1b: *U.S Commercial Banking Sector*

Rank (by assets)	Company	Assets (in millions of dollars)	Cumulative Percentage of 100 Largest
1	Citicorp	207,666	9.6
2	Chase Manhattan Corp	97,455	14.1
3	Bank America	94,647	18.5
4	J.P Morgan & Co.	83,923	22.4
5	Security Pacific Corp.	77870	26.0

A Sample of Fortune Magazine's Data for 1988 Cited in Economics (1990) p.653

In this paper, Market Concentration (Mc) is measured by market share of bank assets, bank credit and bank deposit. To what extent does capitalization lead to increase in market concentration so that banks can control sizeable market share? This paper precisely will determine the relationship between bank capitalization and market concentration in order to find out if it has enhanced competition. Section 1 above discusses the introduction; Section 2 examines the theoretical framework and literature review while Section 3 discusses the method of analysis. Section 4 and 5 dwells on data presentation and implication of findings/results. Section 6 ends the paper with conclusions and recommendation.

2.0 Theoretical framework and literature review

2.1 Concentration Theory

Concentration refers to the degree of control of economic activity by large firms Sathye (2002). The increase and magnitude of concentration levels could be due to

considerable size enlargement of the dominant firm(s) and/ or considerable size reduction of the non-dominant firm (s). Similarly, curtailment of the concentration levels could be attributed to considerable size reduction of the dominant firm (s) and/ or considerable size enlargement of non-dominant firm (s) Athanasoglou e tal (2005). Bank concentration theories and pro-deconcentration theories exist in the literature and Nigerian banks capitalization/consolidation exercise takes it roots from these theories. Protagonists of banking sector concentration posited that economies of scale stimulate bank mergers and acquisitions (increasing concentration), so that increased concentration goes hand-in-hand with efficiency improvements Demirguc-Kunt and Levine (2001).In his study, Boyd and Runkle (1993) examined 122 US bank holding companies and found an inverse relationship between size and the volatility of asset returns. In the US situation consolidation was voluntary while in the Nigerian case the consolidation exercise was by compulsion. In Allen and Gale (2000); Beck, Demirguc-Kunt and Levine (2004) their theoretical arguments suggests that concentrated banking sector with many small banks is more prone to financial crises than a concentrated banking sector with a few large banks.

In the literature of finance, there are cases that link bank capitalization and market concentration especially where institutional behaviours by regulatory has pushed for a policy of minimum capital requirements. There are those by (Berger, Demsetz and Strahan, 1999); Shih (2003); Studart (2001, 2003), Yacaman (2001). For instance, Studart (2001, 2003) found that four Latin American countries' effort towards instituting an efficient and competitive banking pushed for a policy of concentration in the period (1997-1998).This was facilitated by more effective supervision by the apex banks. The tightening of the regulatory environment resulted in "more international and more concentrated banking sector" Studart, 2003). Therefore, in this study, the relationship between bank capitalization and market concentration (market share) in the Nigerian banking industry will be investigated. The issue of bank capitalization which often metamorphose into consolidation of banks around the globe has fuelled an active policy debate on the impact of consolidation on financial stability, Beck, Demirguc-Kunt and Levine (2003), Boyd and Graham (1991 and 1998). In the literature, concentration levels have been a major determinant of banking system performance by way of efficiency. Berger, e tal (1995) find evidence that the increase in the proportion of banking industry assets controlled by the largest banking organizations in the 1990s, due to the liberalization of geographic restrictions on banking in the United States, may have been responsible for part of the credit crunch observed in 1989-1992. Peek and Rosengren (1996), combining a single cross-section data on lending businesses in the New England states for 1994 with some information on mergers and de novo entry, find that after big banking organizations merged with smaller organizations, the consolidated organization typically reduced the amount of small business lending that was conducted earlier by the acquired institution.

Reduced concentration in a banking market results in increased competition among banks and vice-versa. Concentrated banking systems contribute to enhanced performance of the banks profit and also lower bank fragility. Enhanced profits provide a

bulwark against adverse shocks and increase the franchise value of the bank, reducing incentives for bankers to take excessive risk. In addition, a few large banks are easier to monitor than many small banks, so that regulatory control of banks will be more effective and the risks of contagion less pronounced in a concentrated banking system, Beck, Demirguc-Kunt and Levine (2003). The protagonists of this 'concentration- stability' view opined that larger banks can diversify better so that banking systems characterized by a few large banks will tend to be less fragile than banking systems with many small banks, Allen and Gale (2003).The present structure of Nigerian banking industry (commercial banks) is a clear demonstration of their strength when compared to the situation before 2005 bank capitalization in Nigeria. Therefore, we can say that there is a linkage between adequate capital and market share. Capital has a big role to play in helping bank to compete effectively. The Pro-Deconcentration theories such as Chong (1991) in his finding indicate that bank consolidation tends to increase the risk of bank portfolios. The proponents of banking sector deconcentration argue that concentration will intensify market power and political influence of financial conglomerates, stymie competition and access to financial services, reduce efficiency, and destabilize financial system as banks become too big to discipline and use their influence to shape banking regulations and policies (Demirguc-Kunt and Levine: 2000); Beck, Demirguc-Kunt and Levine (2004) and Bank for International Settlements (2001). On the one hand excessive competition may create an unstable banking environment, insufficient competition and contestability in the banking sector may breed inefficiencies. In concentrated banking systems, bigger, politically connected banks may become more leveraged and take on greater risk since they can rely on policymakers to help when adverse shocks hurt their solvency or profitability.

Similarly, large, politically influential banks may help shape the policies and regulations influencing banks activities in ways that help banks, but not necessarily in ways that help the overall economy. For instance, powerful banks may argue against granting generous deposit insurance since that levels the playing field for smaller banks that do not enjoy the too-big-to-fail policy of most governments in economies where concentration levels are high. But it can also reduce the number of banks. According to Demirguc-Kunt and Levine (2000) if concentrated powerful banks unduly influence the formation of policies and regulations, this may hinder political integrity and reduce tax compliance. Advocates of concentrated banking structure noted that larger banks frequently receive subsidies through implicit 'too big-to-fail' policies that small banks do not enjoy. According to Boyd and Runkle (1993), this occurs when regulators fear potential macroeconomic consequences of large bank failures. Capitalization experiences in some of the countries reviewed has taken the form of consolidation.

3.0 Method of analysis

This section tries to capture empirically the relationship between bank capitalization and market share. When we speak of bank capitalization we are referring to Shareholders. Therefore, our equation looks at the extent to which shareholders funds and total assets has facilitated/enhanced market share of these Nigerian deposit banks.

Further, the crux of this paper is to find how bank capitalization and consolidation in Nigeria make funds available for the realization of adequacy of capital and performance (market share). Obviously, we can only look at a number of years given the fact that bank consolidation took place only five years ago. This is what makes it impossible to make use of time series analysis because we have only five years to seriously discuss issues. This is why the use of panel data is preferred in this exercise to time series analysis. Also, we have not used cross sectional data analysis in this paper because it is not possible to complete set of data on any bank for any particular year if only because merger has taken place randomly and banks have also come into existence randomly. The panel data methodology provides a useful answer to all these. Hence, the choice. This paper uses the econometric approach in estimating the effect and to be specific it uses the E-view software employing panel of data.

3.1 Population and Sample

The population of this research is drawn from the Nigerian banking industry (Nigerian deposit banks) referred to as the conventional banks because they are deposit-taking institutions. This is because they dominate the financial sector in terms of number and coverage. Despite the involvement of other financial institutions such as non-bank financial institutions - insurance companies, development banks, finance houses, etc in the intermediation process, commercial banks still control the major proportion of the nation's deposits and savings. There were eighty-nine commercial banks in Nigeria before the 2005 bank recapitalization exercise and the number has been reduced to twenty-five banks after consolidation and to 24 (after merger of IBTC & Stanbic bank to Stanbic-IBTC) in 2008. Of the twenty – four banks, four of them that is: Unity bank, Sterling bank, Spring and Skye banks are new creation of mega banks. A sample size of fourteen out of the twenty four commercial banks was employed in the study. The sample (of fourteen commercial banks) was drawn from both the old and new generation banks using the Stratified sampling technique based on simple random sampling supported by Judgment Sampling (See table 2). The selection process is restricted to banks quoted in the Nigerian Stock Exchange Daily official List (SEDOL). The sample drawn from the population was grouped into categories based on the size of their capital as at the 2006. The sample size consists of both old generation and new generation banks. Banks that commenced operation before 1988 are old generation banks while those that commenced operation from 1989 are new generation banks. Amongst others new generation banks started aggressive marketing a departure from armchair banking which old generation banks were noted. New generation banks also introduced new technology for efficient service delivery change. There is a modified sample size for banks in this study. Since this study is between 1986-2006, banks that are not quoted are eliminated because their data are not readily available. During the field work, it was observed that these banks had no data bank for their Annual financial statements. Hence, such banks are not considered. Thus in our sample size banks such as Nigerian International Bank, Standard Chartered Bank, Equatorial Trust bank that are not (listed) quoted were eliminated and this reduced our population of study to twenty-one. This represents 14/21

(67%) of the quoted banks in Nigeria. The study analyses the data as contained in the financial report of 14 commercial banks out of the 24 banks operating in Nigeria as at the end of 2006, representing about 60% of the commercial banks and about 67% of the quoted banks. The bank data were obtained from CBN Banking Supervision and Annual Reports, (2006-2007) and Annual financial Statements from various years of the selected banks for the years 1986 -2006 are used for the analysis. The end of the cut-off date represent just one year after the bank consolidation mandate of 2004 by the Central Bank of Nigeria which took effect on 31st December, 2005. The study of bank capitalization and performance thus covers the period from the structural adjustment program of 1986 to 2006. The period of 1986 was the beginning of bank deregulation and liberalization (more banks were licensed) while we projected from 2005 the commencement year of the study to a cut-off date of 2006 (one year after bank consolidation) when financial statements of banks are expected to be available. Audited bank financial statements most time fall in arrears.

As stated earlier, this study employed the Stratified Sampling Technique. In stratified sampling, the population is categorized into groups that are distinctly different from each other on relevant variables. Each group is called stratum (plural strata). In applying stratified sampling, we categorized the population and stratified using bank capital (See table 2) below. As stated earlier, this study employed the Stratified Sampling Technique. In stratified sampling, the population is categorized into groups that are distinctly different from each other on relevant variables. Each group is called stratum (plural strata).

In this study, the elements in a particular stratum are the same with respect to the relevant parameter (bank capital). The banks are grouped into stratum and were selected using simple random sampling supported by judgment sampling (non-probability) methods. Our table above shows that 11 banks (9 banks excluding non-quoted banks) fall into the frequency of bank capital between N25 < N34.9. This means that 2/3 multiplied 9 gives approximately 6 which were selected from the first stratum. The name of nine banks were written on a piece of paper, wrapped and put in a tray from where they were picked. The six out of the nine banks picked are Access bank, Fidelity bank, First Inland bank, Wema bank, Spring bank and Diamond bank. However, Spring bank was dropped because the data is only for one year (that is 2006) and would not be very useful. Using Judgment sampling an additional bank that is Afribank was selected to complete our simple random sampling of 2/3 x 9 = 6 in the first stratum of N25 < N34.9 billion frequency.

The remaining eight (8) out of the twelve (12) banks were also selected by writing the names of the banks on a piece of paper, wrapped and put in a tray from where they were picked. Our table above shows that of the 13 banks (12 banks excluding non-quoted banks) fall into the frequency of bank capital between N35 billion and above that is 2/3 multiplied 12 gives 8. The following banks were picked Oceanic bank, Guaranty Trust bank, Intercontinental bank, First bank of Nigeria, Union Bank of Nigeria, United Bank, Zenith and IBTC/Stanbic bank

At the of end of the selection process, 60% that is six (6) out of the nine (9) banks fall into the frequency of between N25 billon < N34.9 billion while 72% that is eight (8) banks out of the twelve (12) banks fall

into the frequency of between N35 billion and above. The selection process picked 50% (seven) of the old generation banks and 50% (seven) of new generation banks.

Table 2: Population of the study

S/N	Name of Banks	Frequency of bank Capital	Bank Capital "billion"	Remark
1	Access	"	28.8	
2	Bank PHB	"	28	
3	Fidelity	"	25.6	
4	FCMB	"	25.2	
5	ETB	"	28.4	N.Q.B
6	First Inland	"	29.4	
7	Standard Chartered	"	26	N.Q.B
8	Spring	"	25	
9	Afribank	"	26	
10	Wema	"	34.8	
11	Diamond	"	34.7	
12	GTB	"	36.4	
13	Sterling	"	35	
14	NIB	"	35.2	N.Q.B
15	Oceanic	"	37.1	
16	Ecobank	"	35.3	
17	Skye	"	37.7	
18	Unity	"	35	
19	Intercontinental	"	53	
20	FBN	"	58.9	
21	Zenith	"	93	
22	UBA	"	47	
23	UBN	"	95.6	
24	IBTC/Stanbic	"	60	

Source: CBN Banking Supervision Annual Report 2006 And 2007
N.Q.B = Non-Quoted Banks

3.2 The Panel Data Method

Instead of using time series data or a cross section of banks, this study looks at a panel data specification for individual banks. In Cross section analysis, data are collected across units of observation at a given point in time. For cross section unit we observe the same attribute on different people, geographical units, etc using same year. For example, one can collect data on total deposits of banks

in say 2006. Here the variation is across the units, that is different banks and not for different years, say time. In Time series, data span across time a horizon usually on quarterly or yearly basis. An example is the total deposits of First Bank from 1986-2006 as could have been used in this study. In this case the variation is over time.

Panel data or data set is a technique that combines the features of both time series and cross section methods. For example, total deposits of banks (one of our explanatory variables) in Nigeria from 1986-2006 as used in this study. Thus, panel data has the features of time series and cross section.

Table 3: *Aggregate Concentration Ratio of Ten Big Banks in the Banking Industry (Using % Method)*

YEAR	TA (MSP)	TCP (MSP)	TD (MSP)	L&A (MSP)	SAMPLED BANKS	Banks
1986	11.28	11.22	11.16	11.35	1	29
1987	33.58	65.75	50.4	32.8	5	34
1988	40	73.14	64.39	38	5	42
1989	45.18	69	82	41	8	47
1990	42	51	70	32	9	58
1991	38	52	67.38	24	10	65
1992	40	41	70	32	10	65
1993	40.4	66.33	63.54	37.8	10	66
1994	44	89	70.23	27.39	10	65
1995	43	95	81.68	30.4	10	64
1996	53.25	95	87	37.87	10	64
1997	65.87	81	86	36.67	10	54
1998	54.8	63.77	83.37	38.1	10	54
1999	49.68	67	77.27	37.28	10	54
2000	47.8	49.3	75.42	41	10	54
2001	43.59	39	71.97	27.88	10	90
2002	43	42.11	61	32	10	90
2003	47	43.3	71	31.5	10	89
2004	42.7	60.6	66	34.43	10	89
2005	53.11	51	77	39.6	10	89
2006	67	54	87	55.47	10	25

Source: Computed from bank annual report and financial statement of the selected banks

4.0 Data Presentation

Table 3 and 4 (Aggregate Concentration ratio in the banking industry), gives us an overview by percentage of the market share and by extension market concentration of the ten (10) and four (4) big banks in the Nigerian deposit banks for the period under evaluation.

Table 4: *Concentration Ratio of Four Big banks in the Banking Industry (Using %)*

YEAR	TA (MSP)	TCR (MSP)	TD (MSP)	L&A (MSP)	BIG 4 (MSP)	BANKS
1986	11.28	11.22	11.16	11.35	1	29
1987	32.91	65.74	49.21	32.03	4	34
1988	39.73	71.7	62.37	32.6	4	42
1989	42.79	65.33	72.56	39.9	4	47
1990	39.11	46.11	64.82	30.56	4	58
1991	35.11	44.65	63.27	16.66	4	65
1992	36.06	34.79	65.44	28.89	4	65
1993	36.44	55.19	58.84	33.08	4	66
1994	37.2	67.28	60.65	22.56	4	65
1995	42.14	66.54	72.93	23.11	4	64
1996	44.03	78.68	75.72	29.83	4	64
1997	54.6	54.44	71.88	22.48	4	64
1998	44.27	46.62	68.25	27.32	4	54
1999	39.02	42.86	62.63	26.07	4	54
2000	37.23	37.18	60.94	27.52	4	54
2001	33.1	26.32	56.57	18.97	4	90
2002	30.95	27.63	45.97	21.78	4	90
2003	34.51	29.85	51.78	19.11	4	89
2004	30.75	38.46	46.95	21.54	4	89
2005	32.06	24.41	47.69	21.4	4	89
2006	39.31	31.06	52.77	27.62	4	25

Source: Computed from bank annual report and financial statement of the selected banks

5.0 Implications of the study

Model 1 will test to the extent to which shareholders fund of the (10) ten big banks have significantly influenced market share specifically bank deposit of Nigerian deposit banks in Nigeria (See table 11). The model 1 has the proposition which state in null hypothesis that shareholders fund and total assets have not significantly influenced the ten big banks to compete effectively by way of control of market share (bank deposit)

between 1986-2006. The times series data for the banks are consolidated. The functional relationship in implicit form is represented below:

Bank deposit = f (shareholders fund, total assets, μ).....Eq.**1**

When presented in explicit form, we have it as:

Bank deposit $= a_0 + a_1SHF + a_2TA + \mu$.....Eq.**2**

Where the a priori expectation is stated as: $a_1, a_2 > 0$.

The equation above relates total deposits with factors that influenced it, which are shareholders fund (SHF) and total assets (TA). The variables were regressed using log transformation due to the fact; logathmic relations bring variables to a more comparable manner because it examines their rate of change. It equally helps to minimize the problem of heteoskedasticity. The result in table 5 below shows that the shareholders fund and total assets of the banks had positive and significant impact in influencing the level of total deposit. The coefficients, which denote elasticity of financial performance with respect to the individual explanatory variables, imply that a unit increase in shareholders fund and total assets will lead to about 0.22 and 0.96 units increase in total deposit respectively. Besides, both variables are positive and are significant at 5% for shareholders fund while total assets is at 1%.This conform to theory that an increase in shareholders fund (capital and reserve) will heighten confidence of bank customers, hence, increase in bank deposit.

Table 5: *Dependent Variable: TBD (Market Share Method: Least Squares)*

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LSHF	0.2168	0.0839	2.5811	0.0188
LTA	0.9637	0.1090	8.8382	0.0000
C	-0.3021	0.2742	-1.1015	0.2852
R-squared	0.9378	Mean dependent var	-	4.1943
Adjusted R-squared	0.9309	S.D. dependent var	-	0.4301
S.E. of regression	0.1130	Akaike info criterion	-	-1.3908
Sum squared resid	0.2299	Schwarz criterion	-	-1.2416
Log likelihood	17.6030	F-statistic	-	135.7926
		Prob(F-statistic)	-	0.0000

Sample: 1986 -2006

With regards to the model; the result in table 15 shows that R2 (Coefficient of determination) is 94% and R2 adjusted shows that about 93% variations in total deposit is explained by both shareholders fund and total assets. The F-statistics, which is significant at 1%, implies that the model had good fit and as such the result from the test can be relied in making useful inference.To further validate the reliability of the model, the study carried out diagnostic and confirmatory test. To examine the efficiency of the model statistically, some standard diagnostic tests were carried out as reported in table 6. From table 6, the Jargue-Bera test points out that the stochastic term in the model were randomly distributed.

Table 6: : Diagnostic Tests/Confirmatory). Dependent Variables: Dlogbd

Variables	F-Statistic	Prob.
Jargue-Bera	0.1889	0.9098
B-G Serial Correlation	1.4237	0.2697
White Heteroskadasticity	0.8969	0.4886
Ramsey's RESET		
Chow Breakpoint	5.516	0.7012
Arch	0.3311	0.5721

Source: E-View Software Package: Computer Print Out

It could be observed that Jargue-Bera (J-B) test that normality assumption cannot be rejected, meaning that asymptotically; the error terms are identically independently distributed. This is supported by the Breuch-Godfrey (B-G) serial correlation test, which indicates that the results are free from first order auto correlation. In addition, the white's heteroskedaticity test reveals that the regression results do not suffer from this problem i.e the ordinary least square (OLS) assumption of homoscedasticity is not violated. The Ramsey's regression specification error test (RESET) test also elucidates that our null hypothesis is rejected in favour of the alternate hypothesis. Table 17 below also shows that shareholders fund and total assets of the bank had a positive and significant impact in influencing the level of loans and advances.

The second measure of market share can also be stated in equation. The functional relationship in implicit form is represented below as follows:

Loan and advances (LA) = f (shareholders fund, total assets, μ).....Eq.3

When presented in explicit form, we have it as:

$LA = a_0 + a_1SHF + a_2TA + \mu$.....Eq.4

Where the a priori expectation is stated as: $a_1, a_2 > 0$.

Market concentration by way of control of bank credit, bank asset and bank deposit determines the market share control by the banks. Before the N25 billion bank recapitalization in 2006 the big four (UBN, UBA, FBN and Afribank) controlled a larger proportion of the banking industry in terms of assets, capital, profit, loans & Advances and deposit. To what extent has this changed market power since the last capitalization on 31st December, 2005.This is expected to have changed after recapitalization. We therefore expect market concentration to be positively related to capital investment in the banking industry. Market concentration can also influence market power of banks. The size of bank capital reflects the concentration theory in this case.

The coefficients, which denote elasticity of financial performance with respect to the individual explanatory variables, implies that a unit increase in shareholders fund and total assets will lead to about 0. 5units and 0.72 units increase in total loans and advances. Total assets had significant impact on loans and advances. This conforms to theory that increase in the level of deposit

will impact on the magnitude of loans and advances extended to customers provided capital is not eroded. We therefore accept the alternate hypothesis that total assets have influenced the market share of the ten big banks between 1986-2006. Our model 2 will test to what extent shareholders fund of the (4) four big banks have significantly influenced bank deposit (See table 12). The time series data for the banks are consolidated. Our model 2 has the proposition which state in null hypothesis that shareholders fund and total assets have not significantly influenced the four big banks to compete effectively by way of control of market share (bank deposit) between 1986-2006.

Table 7: *Table 7: Dependent Variable: TLA (Market Share)Method: Least Squares*

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LSHF	0.0439	0.1089	0.4032	0.6916
LTA	0.7204	0.1414	5.0954	0.0001
C	0.6099	0.3556	1.7154	0.1034
R-squared	0.7874	Mean dependent var	-	3.4963
Adjusted R-squared	0.7638	S.D. dependent var	-	0.3015
S.E. of regression	0.1466	Akaike info criterion	-	-0.8713
Sum squared resid	0.3866	Schwarz criterion	-	-0.7221
Log likelihood	12.1491	F-statistic	-	33.3332
		Prob(F-statistic)	-	0.0000

Source: E-View Software Package: Computer Print Out

The functional relationship in implicit form is represented below as follows:

Bank deposit = f (shareholders fund, total assets, μ).....Eq.5

When presented in explicit form, we have it as:

$$Bank\ deposit = a_0 + a_1 SHF + a_2 TA + \mu \text{.....Eq.6}$$

Where the a priori expectation is stated as: $a_1, a_2 > 0$.

The above relates total deposits with factors that influenced it, which are shareholders fund (SHF) and total assets (TA). The variables (See table 12) were regressed using log transformation due to the fact, logathmic relations bring variables to a more comparable manner because it examines their rate of change. It equally helps to minimize the problem of heteoskedasticity. The result in table 18 below shows that the shareholders fund and total asset of the banks had positive and significant impact in influencing the level of total deposit.

The coefficients, which denote elasticity of financial performance with respect to the individual explanatory variables, implies that a unit increase in shareholders fund and total assets will lead to about 0.08 and 0.20 units increase in total deposit respectively. Though, shareholders fund is not significant, total assets is positive and significant at 1%.This conform to theory that a decrease in shareholders fund (capital and reserve) will dampen the confidence of bank customers, hence, lower the growth of bank deposit.

With regards to the model; the result in table 8 shows that R2 (Coefficient of determination) is 94% and R2 adjusted shows that about 93% variations in total deposit is explained by both shareholders fund and total assets. The F-statistics, which is significant at 1% for total assets, implies that the model had good fit and as a result from the test can be relied in making useful inference. To further validate the reliability of the model, the study carried out some diagnostic and confirmatory test. This was validated by serial correlation LM test; which shows that there was no problem of autocorrelation while the white test shows that there is no problem of heteroskedastic. From the table 9 below, the Jargue-Bera test points out that the stochastic term in the model were randomly distributed.

Table 8:*Dependent Variable: TBD (Market Share) Method: Least Square*

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LSHF	0.0783	0.0781	1.0023	0.3295
LTA	1.1959	0.1229	9.732695	0.0000
C	-0.5521	0.2849	-1.937404	0.0685
R-squared	0.9378	Mean dependent var	-	4.0123
Adjusted R-squared	0.9309	S.D. dependent var	-	0.3969
S.E. of regression	0.1043	Akaike info criterion	-	-1.5509
Sum squared resid	0.1959	Schwarz criterion	-	-1.4017
Log likelihood	19.2844	F-statistic	-	135.7149
Durbin-Watson stat	1.1759	Prob (F-statistic)	-	0.0000

Source: E-View Software Package: Computer Print Out

Table 9: *: Diagnostic Tests/Confirmatory). Dependent Variables: Dlogbd*

Variables	F-Statistic	Prob.
Jargue-Bera	3.001	0.2229
B-G Serial Correlation	1.3742	0.2813
White Heteroskadasticity	1.0234	0.4249
Ramsey's RESET	0.188	0.6700
Chow Breakpoint	0.416	0.8865
Arch	1.5033	0.2359

Source: E-View Software Package: Computer Print Out

Table 10: *Dependent Variable Variable: TLA. Method: Least Squares*

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LSHF	0.2895	0.1474	1.9643	0.0651
LTA	0.2911	0.2318	1.2558	0.2252
C	1.0798	0.5376	2.0086	0.0598
R-squared	0.5569	Mean dependent var	-	3.2017
Adjusted R-squared	0.5077	S.D. dependent var	-	0.2805
S.E. of regression	0.1968	Akaike info criterion	-	-0.2814
Sum squared resid	0.6973	Schwarz criterion	-	-0.1322
Log likelihood	5.9550	F-statistic	-	11.3136
		Prob(F-statistic)	-	0.0007

Source: E-View Software Package: Computer Print Out

Table 10 also shows that shareholders fund and total assets of the bank had a positive and significant impact in influencing the level of loans and advances. The coefficients, which denote elasticity of financial performance with respect to the individual explanatory variables, implies that a unit increase in shareholders fund will lead to about 0.29 units increase in total loans and advances. Though, a total asset is not significant, our shareholders fund had considerable impact on loans and advances at 10%. This conforms to theory that increase in the level of deposit will impact on the magnitude of loans and advances extended to customers provided capital is not eroded. We therefore accept the alternate hypothesis that shareholders fund has influenced the market share of the four big banks between 1986-2006.

Table 11: *Aggregate Concentration Ratio in the Banking Industry-Ten Banks (Using % Method)*

YEAR	TA (MSP)	TCR (MSP)	TD (MSP)	L&A (MSP)	SAMPLED BANKS	BANKS
1986	11.28	11.22	11.16	11.35	1	29
1987	33.58	65.75	50.4	32.8	5	34
1988	40	73.14	64.39	38	5	42
1989	45.18	69	82	41	8	47
1990	42	51	70	32	9	58
1991	38	52	67.38	24	10	65
1992	40	41	70	32	10	65
1993	40.4	66.33	63.54	37.8	10	66
1994	44	89	70.23	27.39	10	65

YEAR	TA (MSP)	TCR (MSP)	TD (MSP)	L&A (MSP)	SAMPLED BANKS	BANKS
1995	43	95	81.68	30.4	10	64
1996	53.25	95	87	37.87	10	64
1997	65.87	81	86	36.67	10	54
1998	54.8	63.77	83.37	38.1	10	54
1999	49.68	67	77.27	37.28	10	54
2000	47.8	49.3	75.42	41	10	54
2001	43.59	39	71.97	27.88	10	90
2002	43	42.11	61	32	10	90
2003	47	43.3	71	31.5	10	89
2004	42.7	60.6	66	34.43	10	89
2005	53.11	51	77	39.6	10	89
2006	67	54	87	55.47	10	25

Source: Computed by the Author. Where:
MSP=Market Share Percentage
TA=Total Assets
TCR=Total Capital & Reserves/Shareholders fund.
TD=Total Deposits
LA=Loans & Advances
Banks=Commercial Banks

***Table 12:** Concentration Ratio in the Banking Industry - Four bank (Using % Method)*

YEAR	TA (MSP)	TCR (MSP)	TD (MSP)	L&A (MSP)	BIG 4 (MSP)	BANKS
1986	11.28	11.22	11.16	11.35	1	29
1987	32.91	65.74	49.21	32.03	4	34
1988	39.73	71.7	62.37	32.6	4	42
1989	42.79	65.33	72.56	39.9	4	47
1990	39.11	46.11	64.82	30.56	4	58
1991	35.11	44.65	63.27	16.66	4	65
1992	36.06	34.79	65.44	28.89	4	65
1993	36.44	55.19	58.84	33.08	4	66
1994	37.2	67.28	60.65	22.56	4	65

YEAR	TA (MSP)	TCR (MSP)	TD (MSP)	L&A (MSP)	BIG 4 (MSP)	BANKS
1995	42.14	66.54	72.93	23.11	4	64
1996	44.03	78.68	75.72	29.83	4	64
1997	54.6	54.44	71.88	22.48	4	64
1998	44.27	46.62	68.25	27.32	4	54
1999	39.02	42.86	62.63	26.07	4	54
2000	37.23	37.18	60.94	27.52	4	54
2001	33.1	26.32	56.57	18.97	4	90
2002	30.95	27.63	45.97	21.78	4	90
2003	34.51	29.85	51.78	19.11	4	89
2004	30.75	38.46	46.95	21.54	4	89
2005	32.06	24.41	47.69	21.4	4	89
2006	39.31	31.06	52.77	27.62	4	25

Source: Computed by the Author. Where:
MSP=Market Share Percentage
TA=Total Assets
TCR=Total Capital & Reserves/Shareholders fund.
TD=Total Deposits
LA=Loans & Advances
Banks=Commercial Banks

Table 13: *Banking industry: Four firm con.Ratio using five years interval (1986-2006), using percentage method*

YEAR	TA(MSP)	TCR(MSP)	TD (MSP)	LA (MSP)	Av No. of Banks
1987-1991	38	58.7	62.46	31.35	8.13
1992-1996	39.17	60.5	66.71	27.49	6.17
1997-2001	41.64	41.84	64.05	24.47	6.32
2002-2006	33.52	30.28	49.03	22.29	5.24

Source: Compiled from table 3

Table 13: Banking industry: Ten firm con.Ratio using five years interval (1986-2006), using percentage method

YEAR	TA(MSP)	TCR(MSP)	TD (MSP)	LA (MSP)	Av No. of Banks
1987-1991	32	62.18	66.83	33.58	15
1992-1996	44.13	77.26	74.49	33.09	15
1997-2001	53.35	60.01	78.81	36.18	16
2002-2006	50.56	50.2	72.4	38.6	13

6.0 Summary, conclusion and recommendation

Summary of Finding

This study has attempted to find the relationship between bank capitalization and market share. The following are the findings:

• We find evidence in support of a significant impact of bank capital on market concentration (market share). There is also a strong relationship between bank capital funds and bank deposits, loans and advances (proxies for market concentration). Prior to the recent bank capitalization, many Nigerian banks were passive players in the financial markets.

• The result shows that shareholders' fund and total assets of the banks have positive and significant impact in influencing the level of total deposits. In the same vein, shareholder fund and total assets of the bank had a positive and significant impact in influencing the level of loans and advances. The diagnostic tests also lend credence to the results.

• Tables 11, shows banking industry (deposit money banks) as a highly concentrated industry from 1987 to 2006. Save for 1998, 2004, 2005 and 2006 where Zenith bank broke into the big four, First Bank (FBN), United Bank for Africa (UBA), Union Bank of Nigeria (UBN) and Afribank bank had the largest total assets, total capital and reserve (shareholders fund), total deposits and loans and advances from 1987-2006. Even when the total number of banks increased from 29 in 1986 to 65 in 1991, decreased to 64 in 1996, increased to 90 in 2001 and 25 in 2006, the four giants banking firms more less maintained their market power of 33.52 percent of total assets, 30.28 percent for total capital and reserve, 49.03 percent for total deposits and 22.29 for loans and advances.

Conclusion

We strongly suggest that to reduce market concentration in the Nigerian banking industry, capital, technology, customer care, aggressive marketing and efficient service delivery are tools that can be used to attract more customers to shore up bank deposit. This will also help to reduce market concentration and also break the monopoly power of the big banks. With respect to bank capital and market power (market share), for Nigerian banks to be major players in domestic and international financial market, its capital must be kept above the minimum regulatory requirement at all times. To enhance market share (Concentration), Central Bank of Nigeria should ensure that bank

management/managers apply customers deposit for worthwhile projects instead of using such for prefer prestige, wrong loan application, power and status, luxurious offices and building, company cars and other perquisites of office.

When bank loans are profitably employed it will definitely lead to increase in profit and consequently shareholders fund. When banks are able to influence the other sectors in the economy through extension of loans, it would lead to multiplier effect in the long run, reduce inflation and appreciate the naira. Bank management owes it a duty to keep watch and constantly monitor the quality of assets, especially the risk assets must be improved upon. If the existing ratio falls below the benchmark of 20%, excessive and unnecessary growth of the loan portfolio volume must be minimized. Bank capital cannot on its own influence bank deposit as depicted by our result. There is no doubt that the days of armchair banking are over and intense competition in the Nigerian banking industry has come to stay. Besides these lapses of unfavorable enabling environment (excessive operational expenses, shareholders fund/total assets that is risk of default), mismanagement of assets, there is the issue of bad governance on the part of bank management which has failed in all respect to provide positive leadership.

Recommendations

A bank without good management (input) may worsen the position it was before the injection of new funds. Where managers prefer prestige, power and status, it would be reflected in the amount they receive in form of expense account and luxury. Management capability should be better supported, for the best of assets can be overturned in short period by poor management. It is a known fact that CBN plays an important role in the selection of bank executives at the directorate level. The policy for the selection of this class of bank workers should emphasize strict consideration of good track records and sequential growth phase through the ranks as some of the imperatives. On the basis of the theoretical and empirical findings of this study, and considering the fact that the days of armchair banking has been overtaken with the intense competition in the Nigerian banking industry, we recommend the following:

• Shareholders' fund and total assets of the bank should be periodically evaluated. The regulatory authorities will need to put in place appropriate machinery or tool that will address issues of bank liquidity and shore assets quality in the industry. Bank management in conjunction with the regulatory authorities should at all times address causes of illiquidity rather than the systems. In this way, lost confidence can once again be restored in the Nigerian banking industry. It is important to carry routine checks, periodic examinations on bank returns.

• We strongly suggest that apart from capital, technology, customer care, aggressive marketing and efficient service delivery are tools that can be used to attract more customers to shore up bank deposit. This will also help to reduce market concentration and also break the monopoly power of the big banks.

• With respect to bank capital and market power (market share), for Nigerian banks to be major players in domestic and international financial market, its capital must be kept above the minimum regulatory requirement at all times.

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Impact assessment of microfinance institutions in Nigeria: gaps, inefficiencies and emerging solutions

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Abstract: *Microfinance has received a lot of attention recently, both from policy makers as well as in academic circles. Microfinance interventions have contributed significantly to small business development. The success story of microfinance schemes notwithstanding, they have the problem of excluding the poorest of the poor and at times do not have the characteristics that encourage entrepreneurial development. This paper reviews the achievements of the 'microfinance revolution', through reference to the now extensive literature. It finds that there are many opportunities to improve and innovate. The interpretation reveals that as more the number of years of formal education of respondents, the more the level of enlightenment which will determine the level of annual savings. It is also confirmed that there is negative relationship between the nature of business enterprises and social cultural expenses. This negative relationship could be explained as the more the expenditure on social and cultural issues the less the annual savings. To illustrate this finding, the paper concentrates on examining what we need to know to design and deliver better financial products to the poor, especially the poorest. It argues that financial services for the poor are essentially a matter of helping the poor turn their savings into sums large enough to satisfy a wide range of business, consumption, personal, social and asset-building needs.*

Keywords: Microfinance, Institutions, Financial Services, Business, Capital, Informal Sector.

Introduction

Microfinance grew out of experiments in Latin America and South Asia, but the best known start was in Bangladesh in 1976, following the wide-spread famine in 1974. Advocates argue that the microfinance movement has helped to reduce poverty,

improved schooling levels, and generated or expanded millions of small businesses. The idea of microfinance has now spread globally, with replications in Africa, Latin America, Asia, and Eastern Europe, as well as richer economies like Norway, the United States, and England. Among the features of microfinance is disbursement of small size loan to the recipients that are normally micro entrepreneurs and the poor. The loan is given for the purpose of new income generating project or business expansion. The terms and conditions of the loan are normally easy to understand and flexible. It is provided for short term financing and repayments can be made on a weekly or longer basis. The procedures and processes of loan disbursements are normally fast and easy. Additional capital can also be given after the full settlement of the previous loan. Microfinance is an alternative for micro entrepreneurs, which are normally not eligible or bankable to receive loans from commercial banks. (Rahman, 2007)

Microfinance is described also as banking for the poor. Microfinance programmes provide loans, savings and other financial services to low-income and poor people for use in small businesses. Originally based on traditional forms of community financing (a cross between finance and development assistance), microfinance is found all over the world in places such as Africa, Latin America and Asia. (Enugu Forum, 2006).The remainder of this introduction consists of a short review of the existing literature on the topic.

Literature

Microfinance means "programme that extend small loans to very poor people for self employment projects that generate income in allowing them to take care of themselves and their families" (Microcredit Summit, 1997). The World Bank has recognized microfinance programme as an approach to address income inequalities and poverty. The microfinance scheme has been proven to be successful in many countries in addressing the problems of poverty. According to the United Nations (UN), in 2002 almost one fifth of the world population (i.e. 1.3 billion people) were living in extreme poverty, earning less than one dollar a day. In recent public debates microfinance has been mentioned as an important instrument to combat extreme poverty. According to the United Nations (UN), microfinance can contribute significantly to the achievement of the United Nations Millennium Development Goals, as agreed upon by world leaders at the UN Millennium Summit in September 2000, and which aim at halving extreme poverty by 2015. (Lensink and Hermes, 2007).

Provision of rural credit can either be formal or informal. Formal intervention involves paper work and official procedures while informal intervention is based on social interaction with little or no paper work. Formal interventions in the provision of rural credit in Nigeria have been bedeviled by a multiplicity of problems such as gross inadequacy in staffing, organization and management as well as poor loan recovery (Soyibo, 1997). Apart from this, the interest rate charged by the formal sector is usually high, accessibility may be difficult because of requirements for collateral and the formal sector never gives incentives that will lead to entrepreneurial development. While the formal sector has performed woefully in the provision of credit the informal sector is doing reasonable well.

Informal microfinance is provided by traditional groups that work together for the mutual benefits of their members. These groups provide savings and credit services to their members. The informal microfinance arrangements operate under different names: 'esusu' among the Yorubas of Western Nigeria, 'etoto' for the Igbos in the East and 'adashi' in the North for the Hausas (CBN, 2000). The key features of these informal schemes are savings and credit components, informality of operations and higher interest rates in relation to the formal banking sector. The informal associations that operate traditional microfinance in various forms are found in all the rural communities in Nigeria (Otu, et al, 2003). They also operate in the urban centres.

Microfinance programmes and institutions have become an increasingly important component of strategies to reduce poverty or promote micro and small enterprise development. However, knowledge about the achievements of such initiatives remains only partial and contested. At one extreme are studies arguing that microfinance has very beneficial economic and social impacts (Holcombe, 1995; Hossain, 1988; Otero and Rhyne, 1994; Remenyi, 1991; Schuler, Hashemi and Riley, 1997). At the other are writers who caution against such optimism and point to the negative impacts that microfinance can have (Adams and von Pischke, 1992; Buckley, 1997; Montgomery, 1996; Rogaly, 1996; Wood and Shariff, 1997). In the 'middle' is work that identifies beneficial impacts but argues that microfinance does not assist the poorest, as is so often claimed (Hulme and Mosley, 1996; Mosley and Hulme, 1998).

Given this state of affairs the assessment of microfinance programmes remains an important field for researchers, policymakers and development practitioners.

Roles of the Micro Finance Institutions

Micro Finance continues to assume increasing importance as a result of the foregoing. The emphasis on micro credit in this century is such that the Global conscience believes that if unemployment is reduced, the world would be a better place as there would be a reduction in poverty, an improved living condition, increased productivity, and an overall resultant effect of an enhanced economic performance. Khandker (1998) observes that the lack of savings and capital makes it difficult for many poor people to become self-employed and to undertake productive employment generating activities.

Goals of Micro Finance Banks

The establishment of microfinance banks has become imperative to serve the following purposes:

- Provide diversified, affordable and dependable financial services to the active poor, in a timely and competitive manner, that would enable them to undertake and develop long-term, sustainable entrepreneurial;
- Mobilize savings for intermediation;
- Create employment opportunities and increase the productivity of the poor in the country, thereby increasing their individual household income and uplifting their standard of living;
- Enhance organized, systematic and focused participation of the poor in the socio-economic development and resource allocation process;
- Provide veritable avenues for the administration of the micro credit programmes

of government and high net worth individuals on a non-recourse case basis. In particular, this policy ensures that state governments shall dedicate an amount of not less than 1% of their annual budgets for the on-lending activities of microfinance banks in favour of their residents; and

• Render payment services, such as salaries, gratuities, and pensions for various tiers of government. With the effective implementation and monitoring of the on-going micro finance policy in Nigeria, it is expected that the issue of unemployment in Nigeria will be a thing of the past by the year 2020.

Over the past two decades, various development approaches have been devised by policymakers, international development agencies, nongovernmental organizations, and others aimed at poverty reduction in developing countries. One of these strategies, which has become increasingly popular since the early 1990s, involves microfinance schemes, which provide financial services in the form of savings and credit opportunities to the working poor (Johnson & Rogaly, 1997).

Research Methodology

The area of study includes the five (5) divisions of Lagos State namely Epe, Ikorodu, Ikeja, Island and Badagry. Lagos State has a total land area of 358,861 hectares or 3,577 square kilometers and is located in the Southwestern part of Nigeria on the narrow coastal plain of the Bight of Benin. The State lies approximately between Longitudes 20421 and 30221 East of the Greenwich Meridian (London) and between Latitudes 60221 and 60421 North of the equator. It is bounded in the North and East by Ogun State of Nigeria, in the West by the Republic of Benin, and stretches over 180 kilometers along the Guinea Coast of the Bight of Benin on the Atlantic Ocean. The method of analysis was based on Descriptive statistics (such as frequency counts, percentages, means and standard deviations) were used to summarize and describe the data. Data were obtained from a field survey of the five (5) divisions of Lagos State i.e. one hundred (100) in each division. Questionaire for the survey were amended based on experience acquired from pre-testing exercise. Information was sought on age, sex, occupation, saving culture, income e.t.c.

The descriptive statistics such as frequency table, mean, median, standard deviation, coefficient if variation and percentages were used to summarize socio-demographic variables of the respondents. A multiple regression model was used to analyze the factors affecting savings of respondents.

***Table 1:** Respondents' Genders*

Gender	Frequency	Percentage (%)
Male	128	27.06
Female	345	72.94
	473	100%

Source: Field Survey, 2009

From Table 1 above, it is shown that 27% of the respondents were male and 73% of the respondents were female. The distribution showed that there were more female than male. This supports the findings of UNCDF (1997), Adebayo (1997), ADB (2000, 2005) Olomola (2001) and Adeyeye (2003) that members of microfinance beneficiaries are mostly women who along with children from the group that is vulnerable to poverty. This makes microfinance service delivery in the area a truly poverty alleviation.

Table 2: *Respondents' age Structure*

Range of Ages	Frequency	Percentage (%)
18-25	126	26.64
26-45	289	61.1
46 and above	58	12.26
	473	100%

Source: Field Survey, 2009

Table 2 above shows that the majority of the respondents fall between the age 18 – 45 years which constitutes 88% of the total sampled respondents. Therefore, the majority of the respondents are middle-aged people. The implication is that respondents were within close age bracket suggesting a very strong peer influence in group formation.

Table 3: *Respondents' Business Enterprises*

Agricultural Activities	Frequency	Percentage (%)	Non-Agricultural Activities	Frequency	Percentage (%)
Fish Farming	92	53.80	Trading	156	51.66
Poultry	64	37.43	* Artistry	114	37.75
Arable Farming	15	8.77	Food Processing	13	4.30
			Transportation	19	6.29
	171	100%		302	100%

Source: Field Survey, 2009

Table 3 above shows that more respondents i.e. 64% were involved in non-farming businesses than farming businesses (36%). In addition, more respondents were also into fish farming (54%) than poultry farming while more respondents (52%) were into trading activities than artistry activities (38%).

Table 4: *Respondents' savings culture/habit*

Level of Savings	Frequency	Percentage (%)
High	149	31.50
Medium	248	52.43
Low	76	16.07
	473	100(%)

Source: Field Survey, 2009

About 32% of the respondents has high level of savings habit while 52% of the respondents has medium savings culture and 16% of them have low saving habit. This support the findings of Alade (2006) that long-term savings in Nigeria accounted for 10% of the population while short-term savings was about 56% and medium-term accounted for 34%.

Table 5: *Respondents' borrowings from Microfinance institutions in 2008 & 2009*

Amount Borrowed	Frequency	Percentage (%)
1-50,000naira	131	27.70
50,001-100,000naira	225	47.57
100,001-200,000naira	65	13.74
200,001-300,000naira	23	4.86
300,001-400,000naira	17	3.59
400,001+	9	1.90
Not Applicable	3	0.63
	473	100 %

Source: Field Survey, 2009

About 76% of the sampled respondents obtained loan size of 1-50,000 and 50,001-100,000 19% of the respondents received loan size 100,001-200,000 naira 200,001-300,000 naira. From the study 6% of the respondents obtain 400,000 naira and above. These amounts given out as loans may seem small to people in Industrialized countries, but as a matter of fact the loans are a good start to the respondents (i.e. beneficiaries) in order for them to work their way out of poverty.

Table 6: Respondents average annual savings for 2008 & 2009

Savings	Frequency	Percentage(%)
1-5,000naira	19	4.02
5,001-10,000	45	9.51
10,001-20,000	152	32.14
20,001-30,000	124	26.22
30,001-40,000	67	14.16
40,001-50,000	34	7.19
50,001-100,000	23	4.86
100,001+	9	1.90
	473	100 %

Source: Field Survey, 2009

About 86% of the respondents had savings below 50,000 naira (equivalent of less than 30,000 naira annually), while only 14% saved 50,000 naira and above annually. Amount of annual savings can be said to be low because many respondents earn very low. The fact that savings by respondents is very low was supported by the findings of Adewunmi (1996) who observed that savings are low in Nigeria because the citizens earn low income.

Table 7: Respondents average annual income for 2008 & 2009

Income	Frequency	Percentage(%)
1-50,000naira	43	9.09
50,001-100,000	195	41.23
100,001-200,000	128	27.06
200,001-300,000	75	15.86
300,001-400,000	12	2.54
400,001-500,000	10	2.11
500,001-1,000,000	7	1.48
1,000,001+	3	0.63
	473	100 %

Source: Field Survey, 2009

Annual income of the respondents is presented in Table 7. The poorest respondents earned 18,530 naira, while the richest earned 299,100 naira. 50% of the respondents earned 100,000 naira or below per annum. However, 19% of them earned over 200,000 naira.

Correlation Matrix of the Determination of Respondents Level of Savings

As mentioned in the analytical procedure a functional relationship was formulated to ascertain whether Microfinance services resulted into significant increase in savings using the Pairwise Correlation Matrix.

A linear equation was chosen as the lead equation as follows;

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon_t$$

Where the dependent variable Y is the annual savings of sampled respondents, X1 is the educational level of respondents, X2 is the annual income of respondents, X3 is the nature of businesses of respondents, X4 is the socio-cultural expenses of respondents and X5 is the respondents gender.

Table 8: *Correlation Matrix of the Determinant of the level of Savings of Microfinance Institutions Beneficiaries.*

	Y	X1	X2	X3	X4	X5
Y	1					
X1	0.6149	1				
X2	0.4364	-0.1923	1			
X3	-0.0394	0.1822	0.1919	1		
X4	-0.1764	0.2282	0.4716	0.4163	1	
X5	0.5246	0.0345	-0.1947	0.6184	-0.1156	1

Source: Field Survey, 2009

Regression Result of the Model

$Y = 6245.91 + 41.44 X_1^* + 196.79 X_2^* - 506.72 X_3$
(69.87) (18.19) (68.21) (+441.04)
$-0.39 X_4 + 386.81 X_5^*$
(0.075) (161.13)
$R^2 = 0.67789$
Adjusted R = 0.6119
F-statistics = 19.1928
Significant @ 5%

From the correlation matrix presented above, it can be shown that educational level of the respondents annual income and gender of respondents are positively related to level of savings while another variable i.e. nature of business of respondents are negatively related to level of saving. This is interpreted as the more the number of years of formal education of respondents, the more the level of enlightenment which will determine the level of annual savings. It is also confirmed that there is negative relationship between the nature of business enterprises and social cultural expenses. This negative relationship could be explained as the more the expenditure on social and cultural issues the less the annual savings.

Conclusion

This paper studied the impact assessment of Microfinance Institutions in Nigeria, with particular emphasis on the five divisions that make up Lagos State. Microfinance Institutions are established mainly to provide poor people with effective financial services helps them deal with vulnerability and can thereby help reduce poverty. However, the relationship is driven by complex livelihood imperatives and is not simple. Microfinance is not a panacea that converts the poor into the non-poor. Rather, it can be a platform that raises the likelihood of success of the strategies to escape poverty that poor households pursue. The paper concentrated on examining what we need to know to design and deliver better financial products to the poor, especially the poorest. It argues that financial services for the poor are essentially a matter of helping the poor turn their savings into sums large enough to satisfy a wide range of business, consumption, personal, social and asset-building needs.

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Relationship marketing and customer loyalty: a customer service approach in nigerian companies.

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Abstract: *This paper examines relationship marketing and customer loyalty from the approach of customer service-using some selected companies in Nigeria as a case study. The study clarifies the role of relationship marketing in customer services toward the achievement of customer loyalty via customer services among a sample of some selected companies in Nigeria. The study is a survey which uses a literature based research instrument [questionnaire] to measure the application of relationship marketing in customer services to achieve customer loyalty. Structured, close ended questions were used to collect primary data from the respondents. A six point likert scale ranging from "very high extent" to "no extent at all" was used to measure the level of the application of relationship marketing through customer services that aid customer loyalty. 2,400 respondents were selected based on convenience sampling method and stratified into the categories of Manufacturing, Service and Others, operating in Nigeria. Data were analyzed using descriptive statistics and chi-square analysis. The research instrument shared high reliability and validity. The major findings of the study were as follows: In Nigeria, there is significant relationship between relationship marketing practice in customer service operation and customer loyalty, relationship marketing can be used to increase sales through customer loyalty via effective customer services and that relationship marketing has positive effect on customer satisfaction and organizational profitability.*

Keywords: Relationship Marketing, Customer loyalty, Customer Service, Relationship Marketing Strategy and Nigeria.

Introduction and purpose

The study of relationship marketing in customer service operations and its influence on customer loyalty has long attracted the attention of marketing researchers and practitioners. In spite of this, very limited research has been conducted on the correlates of

relationship marketing in customer service operation and its subsequent effect on Customers' loyalty. Thus, the connection between relationship marketing in customer service operation and customer loyalty has been a neglected subject in developing nations, Nigeria inclusive.

The purpose of this study is to identify and examine the level of relationship marketing practices in Customer service operations and its effect on customer loyalty. The study is guided by the following questions:

1) Is there any significant relationship between the level of relationship marketing adopted in Customer Service Operations and Customer loyalty?
2) Can the adoption of relationship marketing in Customer Service Operations be used to increase Sales revenue?
3) Do relationship marketing practiced in Customer Service Operations in Nigerian companies influence its customer satisfaction and organizational profitability?

The rationale for raising these questions is that the main objective of any organization in the business environment is to be able to attract, retain and maintain its customers so that the company can enjoy customer loyalty hence the need for relationship marketing as a strategy in their customer service operation.

Literature review

The study conducted by Grönroos [1990] revealed that the concept of relationship marketing emanated from service marketing and industrial marketing fields and it is concerned with establishing, maintaining and enhancing relationships between and amongst relevant business parties in order to achieve the objectives of the relevant parties. Grönroos also posit that such relationship is usually, but not necessarily, always long-term oriented and that the mutually beneficial relationship makes it possible for customers/clients to avoid transaction cost associated with shifting from one market to the other.

Gregory [2010] posit that relationship marketing focuses on using customer service and quality of service as benchmarks in a company's marketing activities. Relationship marketing campaigns are developed by looking at the lifetime relationships with clients rather than the individual dealings in order to increase short term profit. However, the study conducted by Main [2008], shows that relationship marketing involves using methods and tactics to develop long-term relationships with customers in order to retain and grow them. An organization must exceed their customers' expectations in order to satisfy, retain and develop a healthy relationship with them. Relationship marketing involves the organization undertaking a number of important activities. First of all, the company must put in place strategies to attract customers. Methods used to attract customers may include promoting the product and brand, offering good quality products/services and competitive prices. Secondly, customers that are attracted to the organization have to be retained. The Harvard business school Newsletter executive Education [2009] suggests that brand loyalty can only be secured through relationship marketing. However, Gregory opined that relationship marketing itself is to be achieved through effective customer service.

According to Jamier [2002], Customer service is a series of activities designed to

enhance the level of customer satisfaction – that is, the feeling that a product or service has met the customer's expectation. Customer service may be provided by a person or automated means called self-service. Example of self service media are internet sites. Customer service plays an important role in an organization's ability to generate income and revenue. Some scholars have argued that the level of customer service has decreased in recent years, and that this can be attributed to a lack of support or understanding at the executive and middle management levels of organizations and the absence of a customer service policy. It is believed that providing a high level of customer service, which may be referred to as customer live through relationship marketing practice is the only way to enjoy customer loyalty and business growth. Recently many organizations have implemented the adoption of relationship marketing strategy in their customer service operations. According to Kotler. [1997], the main steps in establishing a relationship marketing program in a company are as follows:

• Identify the key customer meriting relationship marketing.

• Assign a skilled Relationship Manager to each key customer.

• Develop a clear job description for the Relationship Managers. The job description should describe the relationship managers' reporting relationships, objectives, responsibilities and evaluation criteria. The Relationship Manager is responsible for the clients. He provides all necessary information about the client, and is the mobilizer of company services for the client.

• Appoint an overall manager to supervise the relationship manager.

• Each relationship manager must develop long range and annual customer relationship plan. The annual relationship plan will state-objectives, strategies, specific actions and required resources.

When a relationship management programme is properly implemented, the organization will begin to focus as much on managing its customers as on managing its products. This has been shown to be useful as it allows companies to improve their customer service before the customer defects, thus making it far more likely that the customer will return next time. Good customer service is all about bringing customers back, that is turning customers into loyal customers.

However, Kotler and Keller [2006] posit that customer loyalty describes the tendency of a customer to choose one business or product over another for a particular need. Increased customer loyalty is the desired end result for any product and this is the desired benefit of relationship marketing. Customer loyalty can make the organization achieve revenue and market share growth and cost shrinkages, as the expenses associated with acquiring and establishing relationships with new customers and replacing old ones declines. As cost go down and revenue go up, profit increases as a third-order effect of loyalty.

However, according to Holetzky [2009], customer loyalty is the behaviour of repeat customers offering favourable word of mouth to friends and family about a certain product and/or organization. He posits that the keys to happy customers are manage project profitably, lead them, build trust and create value. He also believes that, the term customer loyalty is used to describe the behaviour of repeat customers, as well as those that offer good ratings, reviews, or testimonials.

Some customers do a particular company a great service by offering favourable word of mouth, publicly regarding a product, telling friends and family, thus adding them to the number of loyal customers. Holetzky also went further to say that relationship management is a process, a program, or a group of programs geared towards keeping a client happy so he or she will provide more business. It can be achieved in some cases by offering a quality product with a firm guarantee through rebates and other rewards and incentive programs.

Lawfer [2009] state that loyal customers are easier to do business with, are more predictable and do not attract the additional expense usually associated with attracting new customers. Companies with a substantial loyal customer base enjoy greater profitability in good economic times and depend on their loyal customers to help them survive difficult financial conditions and economic down-turns. The adoption by an organization of customer service operation with the influence of relationship marketing strategies to achieve customer loyalty deserves some empirical research attention.

Hypotheses

Based on a review of the extant literature on this subject, we hypothesize as follows:

1. There is significant relationship between the level of adoption of relationship marketing strategies in customer service operation and customer loyalty.

2. The adoption of relationship marketing in customer service operation can be used to increase sales.

3. The level of use of relationship marketing in customer service operation significantly influence customer satisfaction and organizational profitability.

Research method

The research is a survey that used both primary and secondary data. Primary data were obtained with the aid of standardized instrument [questionnaires] while secondary data were obtained from extant literature. The questionnaire was operationalised into 20 variables of relationship marketing in customer service and customer loyalty issues in section A, and the demographic profiles of the respondents in section B. Sixty firms operating in Nigeria were conveniently selected and stratified into three categories, viz: services, manufacturing and others. 40 questionnaires were then administered on each of the 60 firms. The use of convenience sampling method has been found relevant in previous studies [Hall and Lockchin, 2000]. Out of the 2,400 total sample size, 2,220 useable questionnaire were returned, representing a response rate of 92.5%. The data was analyzed using inferential statistics, chi square [X2] test, correlation analysis and sample percentage.

The questionnaire used for data collection was pre-tested on a group within the manufacturing and service sectors in Nigeria, in order to reinforce the questionnaire's content validity. Based on the pretest, few adjustments were made to the questionnaire before final administration. It must be stated, that although the judgement of content validity is subjective, the procedures used in the present research are in accordance with extant marketing research practice [Churchill, 1995]. During the pretest, a series of personal interviews were conducted with relevant academics and professionals in business. As a result of these interviews, certain items were removed from the questionnaire due to the lack of

conceptual and lexical relevance. The predictive validity of the present research was assessed via zero-order correlation co-efficient [not reported here] while the Cronbach reliability coefficient measure was used to test the reliability. The coefficient alpha values exceeded 0.70 suggesting adequate reliability [Cronbach, 1947].

Table 1: *Descriptive Statistics*

Variables	N	Minimum	Maximum	Mean	Std. Deviation
1	2220	1	4	3.70	.772
2	2220	1	4	3.49	.726
3	2220	1	4	3.46	.686
4	2220	1	4	3.35	.818
5	2202	1	4	3.33	.919
6	2220	1	4	3.00	1.073
7	2218	1	4	3.16	.861
8	2220	1	4	2.59	1.103
9	2180	1	4	3.54	.706
10	2220	1	4	3.18	.703
11	2220	1	4	3.23	.853
12	2220	1	4	3.03	.875
13	2220	1	4	3.14	.941
14	2220	1	4	3.24	.791
15	2220	1	4	2.76	1.132
16	2220	1	4	3.03	.860
17	2220	1	4	3.14	.956
18	2220	1	4	3.03	.950
19	2220	1	4	3.12	.849
20	2220	1	4	3.39	.679
21	2202	1	4	1.99	1.181
22	2202	1	4	2.19	1.296
23	2220	1	4	3.22	.969
24	2202	1	4	3.24	1.120

Source: Field survey, 2010.

From the mean values in table 1, question 1 of the research questionnaire recorded maximum mean of 3.70 out of the stipulated mean of 4.00. This confirms that the level of relationship marketing strategies in customer service operation will determine how loyal your customer will be.

APPENDIX: Key to research variables used in Table 1.

1. The relationship you keep with your customers in customer service operation determines how loyal they will be.

2. Keeping a sound relationship with your customers boost their morale about your company.

3. Establishing a sound relationship with your customers gives them the psychological satisfaction of being special.

4. Retaining current customers is the major basis for keeping a relationship with them.

5. Your company increases its customers' chances of choosing to do business with it, when it keeps a sound relationship with such customers.

6. Your customers don't switch to competitors brand when you establish a sound relationship with them.

7. The company that practice relationship marketing as its major strategy in customer service is interested in mutual benefits between the parties involved in the relationship.

8. The company that practice transaction marketing is only interested in what to benefit from particular transactions.

9. A company will prevent its customers from switching to competitors' brands if it keeps a good relationship with them.

10. There are difference between relationship marketing and transaction marketing.

11. The practice of effective relationship marketing in customer service operation makes your company's customers to commit themselves to you a long period.

12. The company that practice relationship marketing concept in its customer service operation achieves high customer loyalty.

13. There is a significant relationship between relationship marketing and customer loyalty.

14. The practice of relationship marketing by your company makes its customer to increase their business transaction with the company

15. Your company spends less in keeping relationship with their current customers than the cost of attracting new ones.

16. Relationship marketing can be used to increase sales while reducing the cost of attracting new customers.

17. Your company treats its key customers as partners in business rather than just buyers of its products.

18. Relationship marketing practice in customer service operation has positive effect on customer satisfaction and organizational profitability.

19. Your company practice of relationship marketing makes the Sales tasks of its salespeople easier.

20. Your company salespeople are able to overcome their customers' objections easily when they keep a sound relationship with them.

21. Your company is only interested in making sales rather than keeping relationship with its customers to make them loyal.

22. Your company's practice of relationship marketing in its customer service operations make it to focus only on its key customers.

23. The relationship a company keeps with its customers contribute to the image the customers form about the company.

24. Your company should increase its relationship marketing effort in its customer service operation, in order to increase the level of its customer loyalty.

Question 9 in the research questionnaire recorded the second maximum mean of 3.54 out of the stipulated mean of 4.00. This implies that a company will prevent its customers from switching to competitors' market offering if it implements good relationship marketing strategies in its customer service operation.

Question 2 in the research questionnaire recorded the third maximum mean of 3.49 out of the stipulated mean of 4.00. This also revealed that keeping a sound relationship with your customers boost their morale about your company.

Question 21 in the research questionnaire recorded a minimum mean of 1.99 out of the stipulated mean of 4.00. This shows that the surveyed companies are not only interested in making sales, but also keep relationship with their customers so as to make them loyal.

Question 22 in the research questionnaire recorded the second minimum mean of 2.19 out of the stipulated mean of 4.00. This implies that the companies' practice of relationship marketing does not focus only on their key customers.

Tested hypotheses

The formulated hypotheses were duly tested using chi-square [x2] statistical technique through SPSS.

Table 2: *Test Statistics*

	Hypothesis I	**Hypothesis II**	**Hypothesis III**
	There is significant relationship between the level of adoption of relationship marketing strategies in customer service operation and customer loyalty.	The adoption of relationship marketing in customer service operation can be used to increase sales.	The level of use of relationship marketing in customer service operation significantly influence customer satisfaction and organizational profitability.
Chi-square df A symp. sig.	25.243 3 .000	55.946 3 .000	24.8111 - .000

O cells [o%] have expected frequencies less than 5. The minimum expected cell frequency is 18.5.
Source: Field survey, 2010

Hypothesis 1 states that there is significant relationship between the level of adoption of relationship marketing strategies in customer service operation and customer loyalty. At 3 degree of freedom and 5% level of significance, x2 table value = 7.81 and since x2 calculated value [25.24] is greater than x2 table value, we accept the stated hypothesis formulated above.

Hypothesis 2 tested showed that the adoption of relationship marketing in customer service operation can be used to

increase sales. At 3 degrees of freedom and 5% level of significance, x2 calculated [55.94] is greater than x2 table value [7.81]. Hence we accept the stated hypothesis.

Likewise, hypothesis 3 which states that the level of use of relationship marketing in customer service significantly influence customer satisfaction and organizational profitability is hereby accepted because from the analysis, at 3 degrees of freedom and 5% level of significance, x2 calculated [24.81] is greater than x2 table value [7.81].

An analysis of the responses of the respondents and their demographic statistics with respect to age, marital status, gender, educational status, occupational status, position in organization, and work experience suggests that the research sample represents a rich data set.

Table 3: *Demographic Statistics*

	% of Respondents
Age	
21 – 30	43.2
31 – 40	33.8
41 – 50	16.2
51 – 60	6.8
Total	100.0
Marital Status	
Single	31.1
Married	63.5
Not given	5.4
Total	100.0
Gender	
Male	62.2
Female	37.8
Total	100.0
Educational Status	
O' Level	21.6
NCE/OND	27.0
HND/B.Sc	31.1
Postgraduate	20.3
Total	100.0
Position in Organization	
Top Management Staff	9.5
Senior Staff	47.3
Junior Staff	32.4
Others	10.8
Total	100.0

	% of Respondents
Work Experience	
01 – 5 years	27.0
06 – 30 years	51.4
31 – 45 years	18.0
45 – above	3.6
Total	100.0

Source: Field survey, 2010.

Conclusion and suggestions for further research

The result of this study shows that there is significant relationship between the level of adoption of relationship marketing concept in customer service operation and customer loyalty. This is confirmed by the decision reached with respect to hypothesis I. Furthermore, 80% of the respondents as shown in a bar chart [not reported here] strongly agreed/ agreed that there is a significant relationship between relationship marketing and customer loyalty in their respective companies – see Question 13. This means that the practice of relationship marketing influences the level of customer loyalty.

This research has also shown beyond doubt that the adoption of relationship marketing in customer service operations can be used to increase sales. This was confirmed by the logical decision of the Researchers to accept hypothesis 2 as stated. An analysis of the responses to question 16 of the questionnaire shows that 88% of the respondents, as revealed by a bar chart [not reported here], strongly agreed/agreed that relationship marketing can be used to increase sales, while reducing the cost of attracting new customers at the same time. This means that relationship marketing do result in increases in sales and cost reduction in attracting new customers.

The picture resulting from this study has shown that the level of use of relationship marketing in customer service operations significantly influence customer satisfaction and organizational profitability. This is confirmed by the decision to accept hypothesis 3. The response of respondents to question 18 of the questionnaire corroborates the acceptance of this hypothesis and position. 80% of the respondents as revealed by a bar chart [not reported here] strongly agreed/agreed that relationship marketing has positive effect on customer satisfaction and organizational profitability.

From the above study and analysis, we conclude that relationship marketing has a positive effect on customer satisfaction and organizational profitability. Therefore relationship marketing strategies should be properly and ingeniously conceived and implemented by organizations in order to encourage their customers to remain active and committed to doing business with the organization on a long term/life-time basis. This is particularly important in B2B marketing. It is suggested that future research should be conducted to examine the rate of implementation of relationship marketing by companies in Nigeria. It is also suggested that future research replicates this study in other developing countries for better understanding of the implementation problems and current status.

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The role of public - private partnership in preventing and managing disaster

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Abstract: *The importance of experts from public and private sector participation in the process of elaboration and implementation of protective measures should be understood through the need to ensure awareness by all stakeholders of tasks and duties assigned to them, during and after solving emergency situations arising from different vulnerabilities or risk factors. In this context, to the partnership with non-governmental organizations is assigned a support function.*

Keywords: partnership, prevention, risk sharing, disaster reduction

1. Introduction

The current context and events of the last decade show an increase in frequency of extreme risk incidence. For the period „1980 - 2000 it is estimated that 75% of the world population has been affected at least once of a disaster" (Eliza Teodorescu, Lavinia Andrei, Alexandru Manafu, Anca Ciucă, Cristina Butnariu)[1]. In Romania, the same increasing frequency of disasters has generated many debates and consequently alignment to the global standards and regulations in force in the field of prevention and protection in the context of natural hazards and technological accidents. Actual increase in the frequency of catastrophic natural events founded in pre-

[1]Teodorescu, Eliza; Andrei, Lavinia; Manafu, Alexandru ; Ciucă, Anca; Butnariu, Cristina, Managementul riscului de dezastru. Ghid de lucru pentru ONG-urile de mediu în prevenirea dezastrelor, p. 5, http://alma-ro.ngo.ro/doc/brosura_management_dezastre.pdf, accesat: 23 octombrie 2010

sent, and their overall costs can be attributed to several factors:

➤the cyclicity of various natural hazards;

➤global population growth, its concentration in large conurbations;

➤the increase of the vulnerability in human communities;

➤neglect of planning, insufficient preventive measures and activities;

➤the increased public awareness and the request from a public increasingly concerned about his safety and security.

The author of „Disaster and the Sequence-Pattern Concept of Social Change, from The American Journal of Sociology" (Lowell Juilliard Carr)[2] says that we tend to see the development as a process to encourage positive social change and social change accelerates disasters catastrophic - in order to bring the whole debate in the field of social change, itself a part of the human factor.

Along with natural characteristics that determine the degree of vulnerability, man creates or aggravates vulnerability through many ways: settling, for economic reasons, in vulnerable areas, increased urbanization and industrialization in the sites at risk; dependency, increasingly high, of the urban to different technical networks, which are susceptible to be disturbed, either naturally or anthropogenic (such as destruction of water pipes, heating, electrical and telecommunications cables, etc..); increasing mobilization of underground space in the service of urbanization (metro lines , tunnels, underground parkinguri) broadens the spectrum vulnerability in a worrying manner.

[2]Carr, Lowell Juilliard, Disaster and the Sequence-Pattern Concept of Social Change from The American Journal of Sociology, Vol. 38, No. 2, 1932

At the state level, there is a pressing concern for policy makers to create an optimum environment at national regulatory level and placing under control of these phenomena, to mitigate their effects. In this context, to the partnerships with non-governmental organizations is assigned a function designed to support tasks that may have some NGOs in collaboration with ministries and central agencies.

2. Literature review

The current state of research is based on two models of public - private partnerships:

➤ The role of corporate social responsibility issues in disaster reduction

➤ The French model of CAT NAT

An important contribution to the model public - private partnerships for prevention and management of extreme situations is remarked in the paper „Corporate Social Responsibility and Disaster Reduction. A Global Overview„ (John Twingg)[3]. In the content of this work, the author points out that disasters caused by natural hazards are a threat to sustainable development. Thus, a study conducted between 1988 and 1997 by the International Federation of Red Cross shows that natural hazards cause victims of 56,000 people annually. In the same period, natural hazards affected directly each year, on average 171 million people (caused property damage, crops and local infrastructure), while indirect damage, such as increased prices or increased unemployment, are incalculable. The average annual economic losses caused by natural hazards in the period 1988 - 1997

[3]John Twingg, Corporate Social Responsability and Disaster Reduction. A Global Overview, Benfield Greig Hazard Research Center, University College London

were 62 billion dollars, of which 26 billion were recorded in Europe and U.S., and 34 billion dollars - in Asia (according to International Federation Red Cross, 1999). Thus, the risks associated with natural hazards and their reduction remains a major problem in development plans, political commitment is relatively low, and actions to prevent disaster are not settled at the individual level but at the collective one on the long term. In these circumstances, the private sector plays an important role in the process of reducing the consequences of natural disasters through campaigns of social responsibility (CSR)[4] .

First calls for greater private sector involvement in disaster reduction dates back for many years. For example, Berke and Wenger, in the study on measures for disaster recovery from Hurricane Hugo, point out that for the prevention of disasters in public sector programs are recommended, to include private sector actors. In 1991, Pan American Health Organization has proposed private sector to consider not only their own safety, but integrated programs including disaster prevention for the surrounding communities.

In the content of the paper (Corporate Social Responsibility and Disaster Reduction. A Global Overview "(John Twingg), nonprofit organizations occupy an important place among the forms of intervention such as corporate social responsibility.

The author noted that the nonprofit sector has advantages over the direct involvement of corporate social responsibility campaigns:

• NGOs are focused on objectives and are not concerned of commercial pressures;

• NGOs are stable, unlike companies which can change the direction of interest at any time, depending on resources and benefits;

• NGOs are an opportunity for companies to work collectively, they will generate additional resources for initiatives mitigation of the risks; they are also a support platform for economic actors involved in CSR activities;

• NGOs gained credibility from both companies, since they come from the private sector and the public and civil society, because interest is not in generating profit, but in carrying out tasks for which they were created;

Other types of corporate social responsibility to prevent disasters are found as: sponsorship, technical support, and fundraising. These three forms are interconnected because they require the generation of income and resources to carry out the proposed actions. The advantages of these forms are directly related to resources. Thus, the generation of resources leading to greater impact of prevention or mitigation of natural disasters risks, though, with the consumption of resources, the activity of these forms is almost inexistent. Therefore, it can highlight the great big disadvantage: corporate social responsibility actions such as sponsorships, fundraising and technical support are discontinuous, leading to the decrease in the impact of the prevention of risk and low visibility at both private and public sector.

A no less important model for the components of public - private partnership is offered in „The Public-Private Sector Risk-Sharing in the French Insurance - Cat. Nat. System" (Nathalie de Marcellis-Warin and Erwann Michel-Kerjan)[5] presenting CAT NAT

[4]Corporate Social Respnsability

[5]Nathalie de Marcellis-Warin, Erwann Michel-Kerjan, The Public-Private Sector Risk-Sharing in the French Insurance "Cat. Nat. System", Centrul interuniversitar de cercetări și analiză organizațională (CIRANO), Montreal, noiembrie 2001, ISSN 1198-8177

model, so far unique, initiated by France 20 years ago. The model assumes a system of insurance to cover damages due to natural disasters. CAT-NAT system combines private insurance and state-guaranteed public reinsurance, by the national Treasury.

Before 1982, French insurance companies refused to cover damage caused by the most of natural disasters. Following the serious flooding that occurred in late 1981, the French government established a single compensation scheme for those who are victims of natural disasters, called Cat Nat[6]. The French government has created this security system that operates as a public-private partnership for natural hazards considered uninsurable. Extreme situations covered by the application of this system are: earthquake, floods, droughts, landslides, avalanches, tidal effects, landslides. In France, two systems are co-existing for to two major natural events: „Cat.Nat guarantee scheme" designed for natural and uninsurable events, „Storm guarantee system" designed for insurable events such as hurricane, ice and snow. Still in France, the term "natural disaster" is more precise than is usually the case. In a case of big storm, no guarantee is made by the national insurance system, but solely by the private insurance system, without any government intervention.

There is, of course, the possibility that both sectors can work together to allocate the claims. For example, the damages from major storms in December 1999 included both operating systems. The direct insurances caused by wind damage were compensated solely by the private system, and flood damage has been compensated by Cat.Nat system.

This system is based on a combination of the principle of national solidarity (each insured person pays the same percentage regardless of location) and public-private partnership, having the objective of effective compensation: each person should be compensated as soon as possible after assessing the damage caused by natural disaster.

Also, the French system of public - private partnership is based on a triad of stakeholders containing: French Government (Treasury), public private insurers and reinsurers (Caisse Centrale de Réassurance-CCR). Each partner's role in the system Cat. Nat is presented in the scheme below.

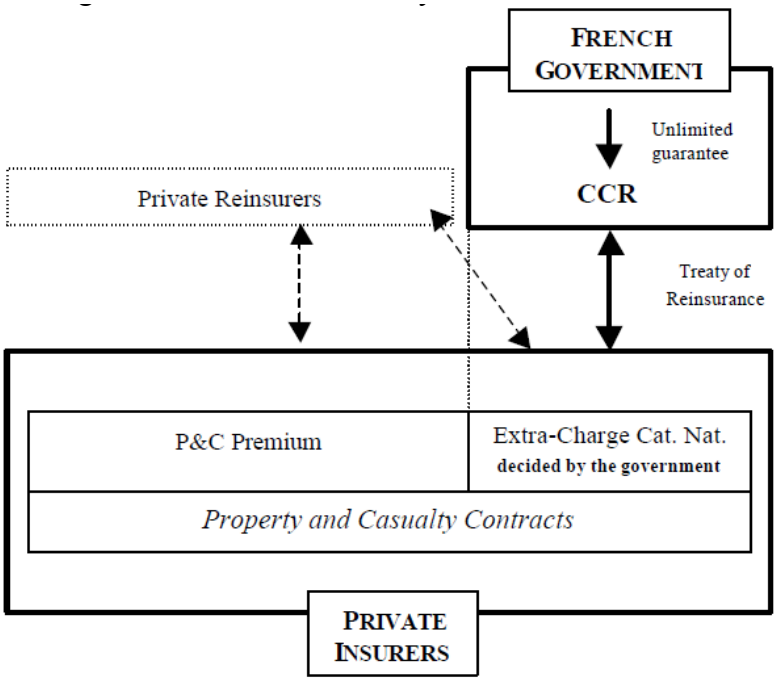
First, the compensation process requires a statement of disaster by the state. The statement of disaster is declared by ministerial decree: the government decides the compensation.

Secondly, the government decides the level of extra-duty rate which will be applied to every contract of insurance in a disaster situation. The total amount of extra tax is transferred to private insurers (as an insurance bonus) to pay compensation within three months if it is a case of natural disaster.

Thirdly, to settle the insolvency of insurers participating in the scheme Cat.Nat., the government offers the possibility of private insurance against such risks reinsured by a public reinsurer, Caisse Centrale de Réassurance-CCR, but without imposing binding. One feature of the system is that the French government provides a guarantee through CCR without limit, which means that the government is lender of the last resort. Therefore, the government guarantee granted to the CCR is a very important element for balancing the system. For insurers, this translates into the fact that they are reinsured by a reinsurer that will never be bankrupt.

[6]Catastrophes naturelles

Fig. 1 CAT. NAT French System



Source: Nathalie de Marcellis-Warin, Erwann Michel-Kerjan, The Public-Private Sector Risk-Sharing in the French Insurance „Cat. Nat. System"

3. Paper Content

The general objectives of public-private partnership projects to assess the ability of resilience of critical infrastructure serving the community, as a rule, are:

- examine the vulnerabilities and interdependencies of a critical infrastructure elements operating in the "community";
- assess the degree of resilience to a possible disaster scenario, the risk of technical failure or terrorist attacks;
- assessment of gaps in capacity for resilience, the degree of preparedness and response to the scenario developed in different hazard analysis report, etc.;
- assess the preparedness of the population response and specialized configurations for intervention;
- economic and social impact assessment of natural or man-made hazards on critical infrastructure sectors managed because of their interdependence;
- setting priorities for specific investments in the equipment and staff training, aiming to increase resilience, preparedness and response capacity of citizens and authorities, in critical situations;
- development of documentation such as "case study" that can be used as a model approach for other communities in the regions.

Specialist - Dr. Ing Septimius Caceu noted that active participation is essential, according to the authority of each structure, representatives of state authorities with responsibilities in the field of economic operators, of the economic operators who are

managing critical infrastructure and services, of technology and security specialized companies, of private security organizations, NGOs and representatives of academia and media for projects important to the safety and security of communities and citizens.

An important step in achieving this objective is to regulate the relationship of collaboration between public and private sector with the advent of Law 178/2010 on partnerships between public and private sectors[7]. In accordance with this law, public-private partnership will cover the following:

a) cooperation between the public partner and private partner;

b) the manner of financing the public-private partnership project is private;

c) In a case of public-private project, the role of partners is to fund and implement the objectives of public interest and to comply with public-private partnership contract;

d) allocation of the risk in the public-private partnership project is proportionately and equitably between the public and private partner.

Initiating a public-private partnership project belongs to the public partner. Centralized coordination and monitoring of the conduct of public-private partnership projects are carried out by the Central Unit for Coordination of Public-Private Partnership. The main task of this unit is represented by: the guidance and monitoring of public partners and private investors interested in the work of organizing and carrying out a public-private partnership project, ruled by the law. Also at Community level, the European Union Council Directive 2008/114/EC evaluates significant private sector involvement in the supervision and risk management, continuity planning and post-disaster recovery and a whole community approach to encourage private sector involvement. In order to help improve critical infrastructure protection at EU level is necessary to elaborate a methodology for identification and classification of risks, threats and vulnerabilities of infrastructure assets. Thus, Member States will identify critical infrastructure assets and will evaluate existing security solutions. The procedure of this directive is as follows:

- identification of important assets;
- conduct a risk analysis based on major threat scenarios, vulnerability of each asset, and the potential impact they might have;
- identification, selection and prioritization of measures and procedures with a distinction between:

a) Permanent security measures - identifying the necessary security investments and means that are relevant to be deployed at any time. This position will include information on general measures such as technical measures, organizational measures (including procedures for warning and crisis management) control and verification measures, communication and information systems security.

b) Security measures gradually, which can be activated by different levels of risk and threat.

Also, the authors of „Critical infrastructure protection decision making" (Dennis R. Powell, Sharon M. DeLand, Michael E. Samsa)[8] underline the need of a detailed assessment of risks and threats, vulnerabilities and uncertain consequences associated with terrorist activities, natural hazards, disasters and accidents.

[7]Legea 178 din 1 octombrie 2010, publicat în Monitorul Oficial 676 din 5 octombrie 2010

[8]Dennis R. Powell, Sharon M. DeLand, Michael E. Samsa, Critical infrastructure protection decision making, p.2

The importance of participation of the experts from public and private sector to develop measures of protection must be understood through the need to ensure that knowledge by all stakeholders, tasks and duties assigned to them, to prevent, during and after solving situations emergency caused by various elements of risks or vulnerabilities.

The specialist Septimiu Caceu[9] states that through a joint effort is possible to create an unified and coherent framework of action for prevention and management of various emergency situations, reducing the significant economic losses, population and personnel injuries and to ensure an optimal, adequate answer to each type of risk identified.

He proposed a scheme to summarize the relationship between private and public partners to manage emergency situations.

In this scheme is presented the fundamental role for the prevention of emergency situations which is attributed to the private companies operating in the security sector, members of the Romanian Association for Technology Security (ARTS). From the Declaration of Principles of the Association ought to remember the following:

- ARTS wants to become a dialogue partner of public authorities; to support and promote proposals to improve legislation on security systems;

- Arts will collaborate with other associations in the country and abroad to assist in the development or acquisition of principles and professional standards in the field;

- Arts will develop a code of conduct for companies operating in the field of security systems, mediate disputes in which the association's members will be involved;

- ARTS aims to increase the professional level of staff members, will establish a training center for years to come.

ARTS also signed a partnership with the Romanian Industry Security Association whose objectives are:

- creating a unique representation of the Private Security Services Industry in front of the institutions and bodies in Romania, which can acquire legal personality in accordance with the decision of the signatories of this Protocol;

- creating an unique representation of the Private Security Services Industry in Romania, to march along the bodies of European Security Services and other international organizations to which the three organizations already signed the protocol or will become parties;

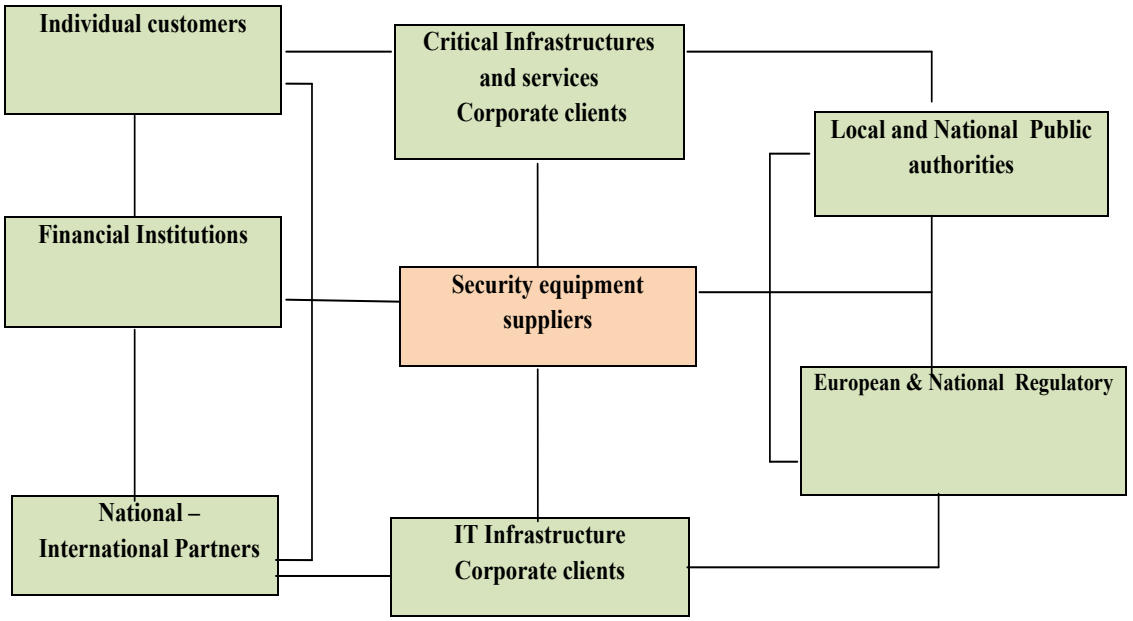
- Working to create an organized framework to promote the legitimate interests of private security services industry, the members of these three organizations and creating an environment for discussion, exchange of ideas in the Private Security Services Industry.

Therefore, the establishment of Arts and of partnerships created[10] represents an important step for a major contribution in the management of risk by private companies

[9]Caceu, Septimiu, Reziliența infrastructurilor critice la nivelul comunităților locale, Institutul european pentru managementul riscului, securității și comunicării

[10]Parteneriate încheiate cu: Asociația Română a Industriei de Securitate, Asociația de Standardizare din România, Inspectoratul General al Poliției Române, Inspectoratul General al Poliției Române prin Institutul pentru Cercetarea și Prevenirea Criminalității, Inspectoratul General pentru Situații de Urgență, Societatea de Instalații Electrice și Automatizări din România, Societatea de protecție împotriva focului

Fig. 2. The relationship between public and private partners to manage emergencies



Source: Caceu, Septimiu, Rezilienta infrastructurilor critice la nivelul comunitatilor locale, Institutul european pentru managementul riscului, securitatii si comunicarii

with public institutions in Romania and the European Union.

Another important step on the public - private partnership for the management of extreme risk events are open to a collaboration with NGOs. This collaboration became official with the advent of OUG 21//2004[11] on the Management of National Emergency Situations. This act regulates the establishment, at central and territorial level, of structures with responsibilities in emergency management, namely the coordination, planning and decision support, temporary or permanent activity, placed in the criteria of a hierarchical system of administrative-territorial and the area of responsibility.

[11]Ordonanța de urgență nr. 21/2004 din 15/04/2004; Publicat în Monitorul Oficial, Partea I nr. 361 din 26/04/2004 privind Sistemul Național de Management al Situațiilor de Urgență

These structures provide consistent and ongoing management of all the activities of prevention planning and implementation, limitation and elimination of the destructive effects of emergencies.

National Management System of Emergency Situations is organized by the government and consists of a network of bodies, organs and structures authorized in emergency management, based on levels or areas of competence and have the infrastructure and resources to perform the duties. The structure of the national regards:

- Emergency committees;
- General Inspectorate for Emergency Situations;
- Professional public services for community emergency;
- Emergency operational centers;
- The commander of the action

To the partnership with NGOs is assigned a support function and covers the following tasks that may have NGOs, ministries, and other central bodies[12]:

- Monitoring of specific hazards and risks and their negative effects;
- Information, notification and warning;
- Planning and preparation of resources and services;
- Communications and IT;
- Search and rescue of trapped persons;
- Evacuation of persons or of the property endangered population;
- Provide emergency medical assistance;
- Prevention of illness in the mass;
- Locating fire and fire fighting;
- Undermining the effects of hazardous materials;
- Providing transportation to the intervention forces, to evacuated people and to other resources;
- Providing water and food supplies for people and animals affected or discharged;
- Providing accommodation and housing to those affected or discharged;
- Providing energy for lighting, heating and other utilities;
- Perform cleaning and decontamination;
- Maintaining and restoring public order;
- Logistics assistance;
- Rehabilitation of the affected area;
- Provide first aid need, compensation and social and religious assistance.

The regulation refers in particular to emergency management without taking into account the collaboration regarding the mechanisms to prevent such situations. Therefore there is a need of urgent national legislation to consider prevention mechanisms. In the paper „Background Paper for a Consultative Meeting on a Global Network of NGOs for Community Resilience to Disasters"[13] it is specified the need for methods and tools for the involvement of NGOs in disaster risk reduction. The need is justified in terms knowledge of the locals and cultural practices and application of methods and approaches that people understand and integrate them into their lives easily. Another explanation is the fact that only through the government and institutional disaster intervention "from top to the bottom", it is often an insufficient approach, because it might contain a poor understanding of the dynamics, perceptions and needs of the community. In many cases local people and organizations are key actors in disaster risk reduction and disaster intervention. NGOs can act locally, with local communities and organizations as partners and have a participatory approach in planning development. This allows them to better respond to local priorities and to develop the local capacity. Also, NGOs enjoy greater operational flexibility, since they are quite bureaucratic separate structures and systems and are able to respond and adapt more quickly and more easily. One last very important attribute is which recommends NGOs as a strong partner in preventing and managing extreme events (natural hazards and technological accidents), is that they often work together on behalf of most needy groups.

[12]Anexa 2 a Ordonanței de urgență nr. 21/2004 din 15/04/2004; Publicat în Monitorul Oficial, Partea I nr. 361 din 26/04/2004 privind Sistemul Național de Management al Situațiilor de Urgență

[13]Background Paper for a Consultative Meeting on a Global Network of NGOs for Community Resilience to Disasters, Geneva, 25-26 Octombrie 2006

According to OUG 21/2004, administrative structures with responsibility for crisis management of disasters see NGOs mainly as a service. Thus, it is expected that these NGOs to join the state bodies and institutions with responsibilities for civil emergency - disaster, to make known the services offer that can ensure and establish relations with state authorities since before the natural disasters. The contribution of NGOs can substantially and their concerns enter the scope of understanding and involvement of communities in solving problems they face.

Areas in which NGOs are expected to offer their services[14]:

- civilian communications, both at intervention proven in many circumstances, and by connecting to the national system;
- the transport supply and disposal auto, on water and / or air;
- ensuring food on a long-term preservation;
- an identification and provision of temporary accommodation for people affected by any disaster;
- a medical insurance through assistance at the scene of disaster by location, medical surveillance, at the accommodation-evacuation spots;
- a liaison between the national crisis units and the civil organisms in case of emergency situations and / or disasters;
- supporting cooperation activities in case of disaster to ensure an acceptable level of living for the population;
- preparing and updating databases on the possibilities of providing logistical support, availability of forces and means available arrival time, etc.

The legal document leaves opened the possibility for all availability above to be included in a joint plan prepared by national authorities and NGOs, who may appeal to the plan in a boundary situation.

4. Conclusions and implications

The increased incidence number of extreme risk events led to an increase in domestic and international concerns about public safety issues. Specialized institutions in Romania, together with partner institutions abroad had concluded that the partner seeks to promote both at the legislative and executive level more effective forms of intervention with specific methodologies and adapted to the new political, economic and social context. One of the action mechanisms on prevention and emergency management is considering funding a strong partnership between the public and private sectors. The importance of experts participation from public and private sector to develop measures of protection must be understood by the need to ensure awareness by all stakeholders, tasks and duties assigned to them, to prevent, during and after solving emergency situations caused by various elements of risks or vulnerabilities. According to OUG 21/2004, administrative structures with responsibility for crisis management of disasters see NGOs in the field concerns mainly as a service. Thus, it is expected that these NGOs to join the state bodies and institutions with responsibilities for civil emergency - disaster, to make known the services offer that

[14]Teodorescu, Eliza; Andrei, Lavinia; Manafu, Alexandru ; Ciucă, Anca; Butnariu, Cristina, Managementul riscului de dezastru. Ghid de lucru pentru ONG-urile de mediu în prevenirea dezastrelor, p. 31-32, http://alma-ro.ngo.ro/doc/brosura_management_dezastre.pdf, accesat: 23 octombrie 2010

can ensure and establish relations with state authorities even before disasters. The contribution of NGOs can substantially limit the circumstances and concerns within the scope of understanding and involvement of communities in solving problems they face. Thus, the joint action, joint effort can lead to the creation of an unified and coherent framework of action for prevention and management of various emergency situations, reducing the significant economic loss, injury population and to ensure an optimal response, appropriate to each type of risk identified. Regarding international approach to public - private partnerships, the paper analyze the role of the insurance sector, the model taken from the work "Managing Large-Scale Risks in a New Era of Catastrophes. Insuring, Mitigating and Financing Recovery from Natural Disasters in the United States "in which is highlighted that the regulation of insurance companies and insurance markets has an important role in situations of disaster risk management. Each state exercises considerable authority over spending and incomes of insurers, financial statements, rates, products, and other activities of their complaints. The regulators cannot dictate results, but their policies can support the development of insurance markets or can create some problems and distortions of these markets. Two other models of partnership are being developed in this paper content and include: private sector which plays an important role in the process of reducing the consequences of natural disasters through social responsibility campaigns and the French model of public - private partnership "CAT NAT".

Therefore, we conclude that the models presented above can be used as examples of good practices and are adapted by countries which still seek effective solutions to reduce risks caused by extreme events.

Without claiming to have exhausted all of the problems in the risk reduction of natural hazards, the authors create a conceptual framework for: the study of government intervention forms; the study evaluating the effectiveness of the ways of intervention with a specific methodology; the study of the action mechanisms of public-private partnerships.

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Features and behavioral principles in the business context

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Abstract: *In the contemporary market economy constant improvement of business environment is an important element in achieving business. Digital economy affects business growth, innovation and technological progress became also important instruments in the activity of any organization.*

Organizations are trying to find and develop intelligent tools and strategies for the new business models. Managers' major concern is to find intelligent solutions for the business management. In our days being an entrepreneur it is a difficult choice. The entrepreneur must deal with difficult and risky situations which can affect his/her activities. The purpose of this paper is to present those elements which can less or more affect the existing business environment. Today is important how an entrepreneur acts on the potential market. Performance obtained by him/her depends on his ability to apply strategies and to use advanced information systems.

Keywords: digital economy, strategy, coaching, management, communication.

Nowadays literature review shows the importance of the business management in the structure and economy of any organizations from our country. The implementation of an efficient business management can affect the economic and commercial results which are obtained by the firms. We often ask "what a manager does?" and what is the role he has in leading a company. The most important responsibilities that he can have are to make decisions and to start actions which can lead to achieving the targets of the firms. If we are thinking of the functions management we can say that a good manager must provide, organize, co-ordinate, coach, control and estimate through the management

processes. Managers' characteristics can influence the coordination of any activities. Communication is an essential process which can transmit the necessary information for the good function of the interpersonal relationship between the managers and employees. Communication can be formal, and submits the transmission of information which is strictly necessary for the business activity, and informal, which submits the transmission of information with informal content. Nowadays a company must confront with customers' wishes which are always in permanent diversification. Communication appears like an essential element. Its application in the business context is useful and brings positive results. In business the main forms of communication are:

A). In terms of information flow: vertical communication – from the chief to the subordinate; horizontal communication – at approximately the same competence; mixed communication- with influence from the vertical and horizontal communication.

B). If we are thinking at the character of communication we are presenting the following forms: internal communication- shows the flow of messages, data and information inside the organization, also with informal and formal character; external communication- consist in collecting information from the socio-economic environment; financial communication- shows information and communicational routes which have the following targets: financial instruments which consist in managing the net turnover, managing the budget, the structure and destination of the profit, the value added dimension, finance and credit sources.

If we are thinking of a few behavioral principles in business we can formulate the following principles: principle of ability and professional competence, principle of business ethics, principle of successful strategies, principle of flexibility, balance principle in the form of mutual respect.

In business is like in real life. The chance is the one who dares and takes the initiative even if he commits mistakes. An essential element which can influence the company' managerial activity is represented by managers and employees resistance towards changing. This process can freeze the communication. Today we can talk about an obvious need for changing in business, where a technological innovation generates visible changes. Managers' activity is influenced both by innovation and globalization, and also by demographic, economic, social and psychological changes. Competitiveness which exists between the companies involves important changes in their activity. The performance is achieved only if the companies adapt their activity to the dynamics of the business environment which is changing permanently. Managers who work in big companies have to face the competition. They can obtain performance only through achieving ethical, competitive, legal and realistic goals both on a short period of time, and over a long period of time. Managers' are training to cope with unexpected changes which appear in the business environment. So, "coaching" is a term which is often used in business. Coaching is an elegant way to raise awareness of the imbalances that exist and to help those who are formed to find a progress way which can bring benefits to their work. Coaching which leads to success is a way through which a disciple is formed by his coach, the main scope being the improvement of the performance at work. The

communication style and relationship between the coach and disciple are the results which are given by the coaching application.

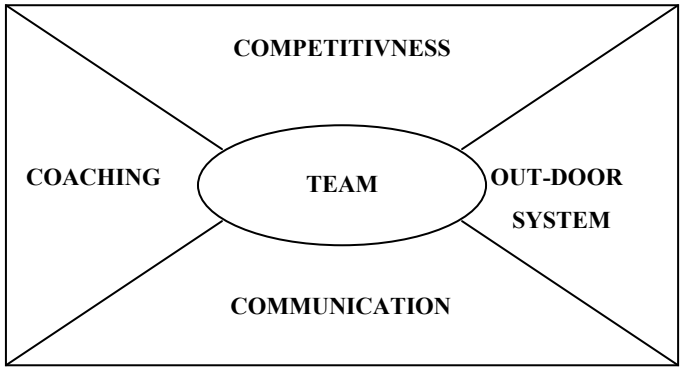
A manager must know how to improve efficient strategies. He must see and analyze the signs of change and must try to transform the potential situations in benefits. These situations can appear during his activity. Romanian companies must identify global strategies for the improvement of the competitive advantage in a dynamic competitive environment.

To succeed in any business an entrepreneur, manager or leader who runs a business has to establish the rigorous targets and to implement successful strategies.

In the literature review are presented two types of strategies: global strategies and partial strategies. The implementation of the global strategies on longer periods of time (3-5 years) is an important premise in achieving the partial strategies. Partial strategies must be developed in those companies that want to increase a certain area which has a bigger importance in their activity. Literature review presents the following partial strategies: managerial strategies- their implementation aims to develop the management system components; commercial strategies- their implementation is used in the marketing area; financial strategies- their implementation could identify the category of profitability parameters in any company; innovational strategies- their implementation aims to develop new opportunities, innovation and technological progress are important elements in achieving companies targets.

Managers' training is a compulsory element for the future of any organization. The most useful tools in business are the strategies and communication principles. In this context, practical training in "out-door" system of the businessmen (managers, leader of the big companies) is to develop their capacity to react and to be ready for any problems which could suddenly appear. "Executive Challenge" from S.U.A is the oldest training center in "out-door" system. Strategies used in "out-door" training are following an important element: "motivation" that leads the company to obtain positive results in his way towards success and profitability. An important place in the managerial activity is occupied by a "team" because the success is not obtained by an only one person.

Performance tools



Source: Authors

It is obtained together whit other persons. In these conditions, a businessman must implement intelligent strategies which can lead to achieve their goals.

To summaries, a manager must use intelligent strategies and must have a team. Performance is obtained by a team through adequate processes as is seeing in the figure.

Today, when traditional business tends to become an electronic business, digital economy creates changes in the business environment. So, businesses are affected and their complexity grows. Information and technological progress have a significant role.

In literature review business are classified as it follows: traditional business- are carried on the business market by a trader who transacts a tangible product; electronic business- are those businesses that hold the supply and sales processes, and also the economic process; mobile business- are defined by Nicholas D. Evans like "an integration of the business processes with electronic business and wireless communication"; "I"-business- are realized through the mobile business: "I" comes from "intelligence", "idea" and "innovation".

Automation and knowledge have an important place in the business environment. Organizations must adapt their activities to the existing business environment where the traditional business tends to become electronic business. For the best performance an organization must rely on innovation, the new technology and on those employees who have knowledge about business and new technology. Management models for the electronic business must provide tools and techniques that managers can use to obtain performance and success.

Conclusion

Business intelligence depends on the management performance which represents a great solution for the implementation of the management processes. Organizations are using a variety of tools and techniques to obtain benefits and profits. Information technology evolves rapidly. Electronic commerce becomes a necessary tool in achieving "I"-business. For facing new changes and new technologies an organization must be flexible and must develop intelligent strategies. Managers must have teams, must use reliable tools and must define clearly their targets. They should be well prepared for the future.

Improving relationship with customers and suppliers, a good communication in the interpersonal relationship brings value to the business. Innovation leads to the growth of the product quality, and making decision with the help of new technology is a prerequisite for the business future success.

Therefore, the main elements of the contemporary business environment which influence it are:

- competitiveness;
- coaching;
- communication;
- out-door system;
- sustainable strategies.

Through these elements, a company may easily change its behavior from a simple one to a complex one, from a static reaction to a dynamic attitude strongly oriented toward the concrete objectives. Thus, an entrepreneurial behavior may define real features according to the environment for intelligent companies.

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Transferring lean management infrastructure for increasing productivity

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Abstract: *These years, manufacturing function have been transferred rapidly and globally from matured countries to emerging countries . In this paper is about the critical elements for successful transfer of lean management among sites and countries. Based on this general descriptive analysis, current global transfer activity of Lean as well as its future direction is also described. According to the gradual progress of lean management transfer, necessity of its refinement/reinforcement is recognized and some research subjects are proposed for contributing further encouragement of its global activities. In this paper, based on this understanding, requisites for transfer of lean management are discussed through investigating global activity of Lean and specification of infrastructure enabling its smooth transfer is examined.*

Keywords: Lean Management, Global Transfer, TPM, KAIZEN, TQM

1. Introduction

These years, manufacturing function have been transferred rapidly and globally from matured countries to emerging countries . Even global industries, which have multi-national basis, are trying to make aggressive direct investment to new operation sites where low procurement cost of manufacturing resources and rapid economic growth are expected . However, in such situation, there are usually serious shortages of labour resources with necessary skills, facility resources with necessary function as well as proper maintenance function, suppliers with required performance etc. Then, companies have another burden of these new management problems.

To overcome these tough problems, management technology such as improvement methods carries out significant role for many years in Japan. This technology is

supposed to perform its relevant role to cope with new dimensional management problem solving in current ongoing rapid globalization. On the other hand of this aspect, serious shortage of management engineers in younger generation is pointed out. This phenomenon is not only the case in Japan, but also in most of matured countries depending on its seriousness. In industrializing countries, on the contrary, structure of population maintains almost Pyramid shape and it is recognized to be a serious problem how to transmit the know-how of management technology to mass of young generation. Shortage of skilled management engineers, who are the drivers to contribute performance of manufacturing function, is now world common biggest problem.

In this paper, based on this understanding, requisites for transfer of lean management are discussed through investigating global activity of Lean Management and specification of infrastructure enabling its smooth transfer is examined.

2. Literature review

The face of manufacturing has changed in the space of a decade. The advent of the Internet and ubiquitous implementation of Web-based technologies and business strategies—so integral to today's commerce that one almost has to labor to remember what business life was like before their existence—have dramatically changed the marketplace. Local has become global. Push has become pull. Time has become real time. Monolithic enterprises have given way to extended supply chains, and the considered focus of manufacturing executives now has to expand beyond their own companies per se to include suppliers, partners and, above all, customers.

Today, the real cost reduction opportunities for many companies are in the linkages to suppliers and customers. As orders are processed through digital channels, demand changes moment by moment. In order to respond to such change—and keep the costs of responding at minimum levels—companies must have the capabilities to meet demand as it occurs.

Conventional mass production manufacturing models lack the flexibility to respond as rapidly as necessary in today's marketplace. Push-based mass production models that evolved from a bygone era result in extended lead times, excess inventory, poor quality and a vicious cycle where high inventory translates to longer lead times and a value stream that is no longer responsive to the customer and the changing needs of the customer. An accounting mentality of "low per piece cost" led to pursuit of volume – at the piece part level – with questionable decisions about manufacturing equipment, flows, organization, etc. taking place. Volume covered all ills – whether it is high setups, quality issues or any of a number of other problems.

Before the emergence of Toyota Production System in 1940, mass production which came from Henry Ford in the early 20th century, famously for the Ford Model-T was popularized around the world for many years, a large number of companies adopted this revolutionized production system, even now, many industries are still only appropriate for mass production rather than lean production. Because of the weak economic environment after World War II, companies in Japan could not afford too much cost in manufacturing products as western companies;

they had to explore some other production patterns with less cost and high efficiency. The automotive manufacture Toyota was the one that succeed in contriving a novel production system that had the contribution to reduce costs, increase efficiency and produce better quality compared to mass production. Consequently, this remarkable production pattern, as one of key factors of the success of Toyota makes Toyota prosper and become one of the most important automotive manufactures in the world.

In 1990, Americans James P. Womack and Daniel T. Jones extracted the most important and essential principles of Toyota Production System and created a new production philosophy named "Lean production" in the book The Machine That Changed the World (Womack & Jones, 1990). Lean production is a combination of mass production and craft production . Mass production which was from USA and famous for Ford Model can produce a large amount of standardized products once on the production lines, however, the lack of variety and flexibility could be resulted due to the standardized production, which means it is not flexible to change or redesign those products that are already on the production lines. Craft production is a traditional production technique that was used in the earlier time of manufacturing. During that period, the order was very few, sometimes only one or two and every product was produced manually. As the consequence, high variety and good quality could be achieved but less output. Therefore manufacturers can produce products that completely satisfy the customers' need.

The reason why lean production is designed is that the manufacturers want to have more competitive in the market, meet varieties of customers' need, acquire higher quality of products, and obtain more profit. Lean production aims to surpass the quality of craft production and reduce the waste of mass production. The products which are manufactured using lean production strategy will have both the craft production' good quality and mass production' large amount, as well as the lowest waste and cost. There are 7 deadly wastes (Taiichi,O., 1988) defined by Toyota (see the table.1).

Table 1. *The seven deadly wastes*

Waste Category	Description	Countermeasures (Lean Tools)
Overproduction	Making something before it is truly needed. This is considered a particularly serious form of waste because it leads to excess inventory (e.g. safety stock) that typically masks many other underlying problems and inefficiencies.	• Pace production so that rate of manufacturing matches the rate of customer demand (Takt Time). • Use a pull system to control how much is manufactured (Kanban). • Reduce setup times so that smaller batches can be economically manufactured (SMED).

Waste Category	Description	Countermeasures (Lean Tools)
Waiting	Time when work-in-process is waiting for the next step in production. It can be truly illuminating to look at the time interval from order to delivery and ask – how much of that time is actually spent on true value-added manufacturing.	• Design processes so that the flow is continuous and there are minimal (or no) buffers between steps in production (Continuous Flow). • Use standardized work instructions to ensure that a consistent method and consistent times are used for each step of production (Standardized Work).
Transport	Unnecessary movement of materials, work-in-process or finished goods.	• Make sure work-in-process is not placed into inventory (Continuous Flow). • Design a linear, sequential flow from raw materials to finished goods (Value Stream Mapping).
Motion	Unnecessary movement of people.	• Ensure that work areas are neat and organized (5S). • Work with plant floor employees to brainstorm improvements in their work areas (Kaizen). • Consider alternate arrangements of equipment that reduce motion (Value Stream Mapping).
Over processing	More processing than is needed to produce what the customer requires. This is often one of the more difficult wastes to detect and eliminate.	• Review sales and marketing requirements and compare them to finished goods (Hoshin Kanri). • Look for potential simplifications to the manufacturing process (Kaizen).
Inventory	Production (raw materials, work-in process, or finished goods) that goes beyond supporting the immediate need.	• Refer to Overproduction countermeasures (Takt Time, Kanban, and SMED). • Reduce or eliminate buffers between steps in production as these also hold inventory (Continuous Flow). • Bring raw materials in only as they are needed (Just In Time).

Waste Category	Description	Countermeasures (Lean Tools)
Defects	Production that is scrap or requires rework.	• Design processes so they are less likely to produce defects (Poka-Yoke). • Design processes to detect abnormalities so they can be immediately corrected (Jidoka). • Look for the single most frequent defect and determine why it occurs (Root Cause Analysis). • Create work instructions that provide a consistent way of manufacturing the part. (Standardized Work).

Five fundamental and essential principles of lean production are briefly explained following and also some examples of the principles can be found in literature:

• **Value**. Precisely identify the value according to the final customer's perspective, which means that companies should precisely understand the specific requirements from the customers view not from the companies viewpoint.

• **Value stream.** This is a route of all specific actions required to produce a product from the raw materials to the end customers. In this step, enormous numbers of muda will be exposed by using a tool called Value Stream Mapping (VSM) which greatly helps to identify and reduce the waste in the value stream. Three types of activities are indentified in this step: Value-adding activities, Non-value adding activities and Non-value adding but necessary activities.

• **Flow.** Design the value-adding activities to be a continuous and smooth single product flow, which leads to short lead time, less cost, good quality and no inventory between processes.

• **Pull.** It is the most famous and important principle of lean production. Pull strategy indicates that not produce anything until receive a customers' order, which means manufacturing is pulled by end customers completely. It is the opposite of push strategy that suggests that manufacture a large amount numbers of products in inventory in advance according to demand forecasting, which would result in high inventory, unnecessary over producing and slow response to changes.

• **Perfection**. Pursuing perfection is the final essential of lean production and also the result of continuous improvement. The aim of perfection is to find and eliminate all muda (wastes) in the processes in order to provide customer with better products or service. Continuous improvement, Six Sigma, TQM (Total Quality Management) and visual management, and etc. are usually used to gain perfection.

Moreover, some ***tools and techniques of lean production*** based on those five principles above are presented: Eliminating non-value adding activities, Continuous improvement, Flexible information system, Takt-time, Standardized work, Visual control, Just-In-Time (JIT) production and delivery, Multi-team-based working, Integration

of suppliers. There are 25 (Masaki, I., 1997) very useful Lean tools that were standardized in the last 20 years (see the table.2).

3.Culture difference and organizational changes

The relationship between lean production and culture is just the same as the relationship between the footstone and the building. Same footstone can be built into different buildings which are varied and decided by architects, cost and functionality.

Lean production concept is the footstone and the basic principles are the same; culture, policy and people like the architects, cost and functionality, they will decide which principles of lean production concept should be used, where they should be applied, how many of the principles should be adopted and to what extent they should be utilized in terms of different conditions.

In fact, a different culture is not the essential problem for implementing lean production, but is something within it. It is unavoidable that different countries have different local custom and different industrial environments: labor density, degrees of development, industrialization, education, traffic situation, price of land and so on. All make companies have to be taken into account when putting lean production into practice because factor variations could lead different results when applying lean production, and sometimes, lean production is not suitable at all in some extreme situations. Therefore, finding the appropriate principles of lean production is the crucial step for companies executing lean production successfully.

In short, culture differences indeed exist in different geographical regions. Nevertheless, the essential factors of affecting the implementation of lean production, just as mentioned above, is not the culture itself but something within it and companies' policies are another fundamental aspect for carrying out different lean production. The implementation of lean production changes the structures of organization and administration of companies dramatically, but it indeed makes a positive impact on administration performances and the overall competitiveness.

Table 2. *Top 25 Lean tools*

Lean Tool	What Is It?	How Does It Help?
5S	Organize the work area: • Sort (eliminate that which is not needed) • Set In Order (organize remaining items) • Shine (clean and inspect work area) • Standardize (write standards for above) • Sustain (regularly apply the standards)	Eliminates waste that results from a poorly organized work area (e.g. wasting time looking for a tool).

Lean Tool	What Is It?	How Does It Help?
Andon	Visual feedback system for the plant floor that indicates production status, alerts when assistance is needed, and empowers operators to stop the production process.	Acts as a real-time communication tool for the plant floor that brings immediate attention to problems as they occur– so they can be instantly addressed.
Bottleneck Analysis	Identify which part of the manufacturing process limits the overall throughput and improve the performance of that part of the process.	Improves throughput by strengthening the weakest link in the manufacturing process.
Continuous Flow	Manufacturing where work-in-process smoothly flows through production with minimal (or no) buffers between steps of the manufacturing process.	Eliminates many forms of waste (e.g. inventory, waiting time, and transport).
Gemba (The Real Place)	A philosophy that reminds us to get out of our offices and spend time on the plant floor – the place where real action occurs.	Promotes a deep and thorough understanding of real world manufacturing issues – by first-hand observation and by talking with plant floor employees.
Heijunka (Level Scheduling)	A form of production scheduling that purposely manufactures in much smaller batches by sequencing (mixing) product variants within the same process.	Reduces lead times (since each product or variant is manufactured more frequently) and inventory (since batches are smaller).
Hoshin Kanri (Policy Deployment)	Align the goals of the company (Strategy), with the plans of middle management (Tactics) and the work performed on the plant floor (Action).	Ensures that progress towards strategic goals is consistent and thorough – eliminating the waste that comes from poor communication and inconsistent direction.
Jidoka (Autonomation)	Design equipment to partially automate the manufacturing process (partial automation is typically much less expensive than full automation) and to automatically stop when defects are detected.	After Jidoka, workers can frequently monitor multiple stations (reducing labor costs) and many quality issues can be detected immediately (improving quality).

Lean Tool	What Is It?	How Does It Help?
Just-In-Time (JIT)	Pull parts through production based on customer demand instead of pushing parts through production based on projected demand. Relies on many lean tools, such as Continuous Flow, Heijunka, Kanban, Standardized Work and Takt Time.	Highly effective in reducing inventory levels. Improves cash flow and reduces space requirements.
Kaizen (Continuous Improvement)	A strategy where employees work together proactively to achieve regular, incremental improvements in the manufacturing process.	Combines the collective talents of a company to create an engine for continually eliminating waste from manufacturing processes.
Kanban (Pull System)	A method of regulating the flow of goods both within the factory and with outside suppliers and customers. Based on automatic replenishment through signal cards that indicate when more goods are needed.	Eliminates waste from inventory and overproduction. Can eliminate the need for physical inventories (instead relying on signal cards to indicate when more goods need to be ordered).
KPI (Key Performance Indicators)	Metrics designed to track and encourage progress towards critical goals of the organization. Strongly promoted KPIs can be extremely powerful drivers of behavior – so it is important to carefully select KPIs that will drive desired behavior.	The best manufacturing KPIs: • Are aligned with top-level strategic goals. • Are effective at exposing and quantifying waste. • Are readily influenced by plant floor employees.
Muda (Waste) Scheduling)	Anything in the manufacturing process that does not add value from the customer's perspective.	Eliminating muda (waste) is the primary focus of lean manufacturing.

There are also some changes caused by implementation of lean production, including reducing workforce and identifying duties of the rest, training employees to be multi-skilled, building cross-functional teams or departments, blurring boundaries among departments, building convenient and fast information system and so on.

Actually, the failure of lean production in some traditional companies is caused by the failure of organizational changes. Thus, administration and organization management are crucial for implementing lean production. Communication and education are two keys to apply lean production successfully:

• ***Lean production emphasizes cooperation and teamwork, thus communication*** is an absolutely indispensable part to achieve lean production successfully. Some evidence

shows that most of poor communication happens among departments or external companies, such as supply chain. Therefore, communication needs to be carried out not only within workers and teams, but also among departments, it should be penetrated the whole companies from management level to shop floor operators, from internal to external and from suppliers to customers. Managers should work and communicate with shop floor workers closely and frequently in order to get information about manufacturing accurately and in time, and then plan economic scale schedules, which leads to improve efficiency, reduce cost and time.

• ***Education*** is another important factor to organizational changes caused by lean production especially for traditional companies. Employees are accustomed to traditional manufacturing style, and might reject these new concepts at the beginning; moreover, employees may feel difficult to learn these new concepts without managers' help. Consequently, in order to help workers to adapt lean production as soon as possible, managers need to: first, explain clearly what the lean production is and why they need to implement it; second, provide some materials or training lessons to help workers to join in lean production process; last, show a implementation plans and point out the goal they will achieve. In addition, some encouragement policies such as remuneration system are good and easy for workers to understand the complex goal of lean production.

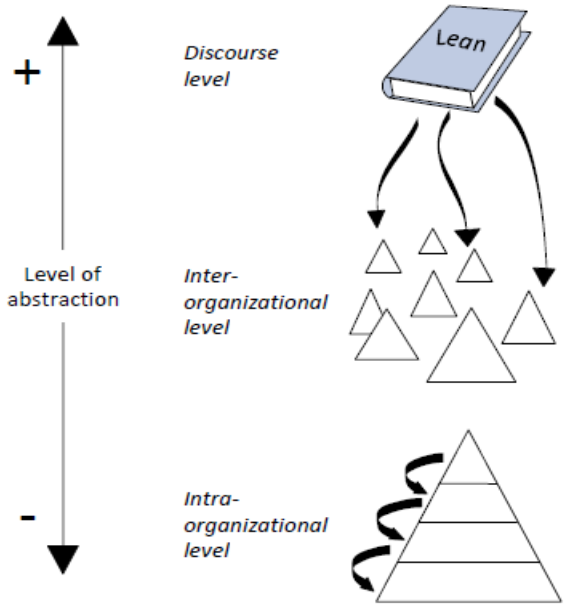
4. Transfering lean production infrastructure

The translation of management concepts, according to the proposed model is to be interpreted as a circular process, feeding on and feeding back to the discourse. Given a certain point in time, we can identify a set of institutionalized practices and ideas in the management discourse.

Coming from a period where organizational culture, participative strategies and customer focus has been predominating factors in the management discourse, we are perhaps starting to see a move transferring lean production from a normative to a rational management discourse. Management concepts are reconstructed and commoditized and then disseminated to organizations through the process of inter-organizational transferring. Once inside the organizational framework, the concept will be met by networks of actors. Based on the transferring competence within the organization, different modes of interpretation of the encountered idea will be applied and the idea will be transferred by individuals and networks of actors within and outside the organization (e.g. consultants, business partners etc.) intra-organizational transferring. The transferring competence within these networks will determine the basis for application of the concept. Since the concepts themselves are always more or less ambiguous in nature they need to be transferring to fit the context, thus creating a need for transferring competence within the transferring network in the organization.

In order to provide a concept with strong inscriptions, it would need to be adapted to a specific branch of industry, a certain category of organizations, or limit its applicability in some other way. A management concept with the universal range of applicability as argued (Womack ,1990) requires weak inscriptions, so that the concept can be interpreted to fit the organization that chooses to take it in.

Fig. 1. Lean production from the academic discourse to practice within organizations



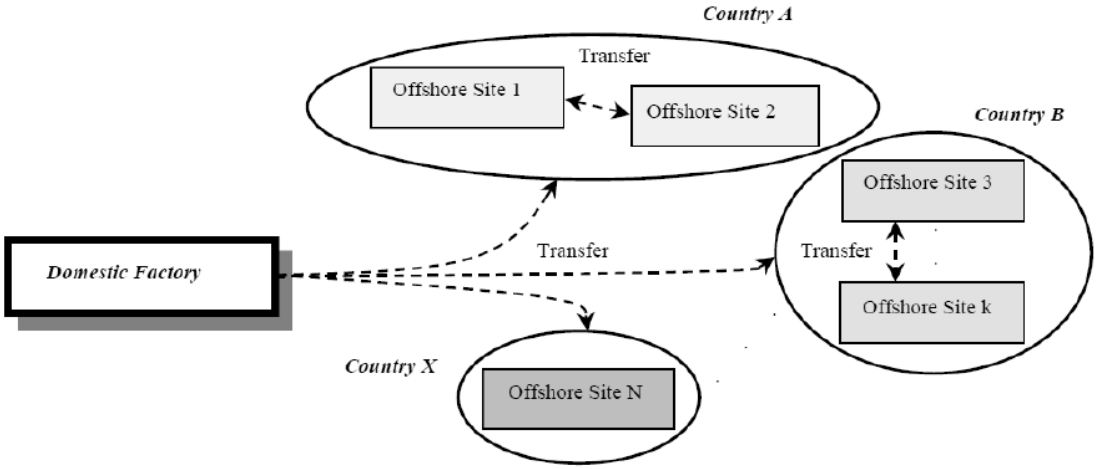
During the intra-organizational transferring process, the concept will be subject to many possible modes of transferring. When considering several networks and/or actors within an organization, framework can be expanded to include combinations of the two modes of translation, i.e. translations that are both intentional and unintentional at the same time. When the opinion of one translating actor or network differs from that of another, this combination may come into play. The management concept is interpreted in different ways and conflicting action programs are produced. The strongest action program will be the one that has supporting devices with the strongest inscriptions. If a concept related action program has sufficiently strong inscriptions, it could be seen as a prescription and the possibility/risk of further transferring of the concept is minimized. This allows us to speak of direct application of the idea, provided that the practice undergoes actual change and the application is successful. If the idea does not deliver the promised results, the effort will most likely be characterized as a failure. The application may then be seen as a potential success story that may be taking out of context and fed back to the discourse by similar means as discussed above, strengthening the discourse surrounding the idea. If, however, the transferring networks within the organization have insufficient transferring competence, the inscriptions in the idea and the devices mobilized in its support may be too weak to ensure an effective application. The idea may be further transferred to suit the needs of other networks, leading to decoupling between the transferring and the effectuating networks.

5. Direction and requisites of future lean management

Nowadays, Lean is one of the well known management scheme all over the world because of its rapid globalization. Therefore, in this chapter, the feature of this scheme together with improvement tools is investigated to extract the essential elements for successful global transmission. Due to recent rapid globalization, Lean scheme has to reinforce various aspects of its feature and there are 3 major directions. These are now progressing in terms of simultaneous improvement:

1) Geographically horizontal expansion (See Fig. 3).

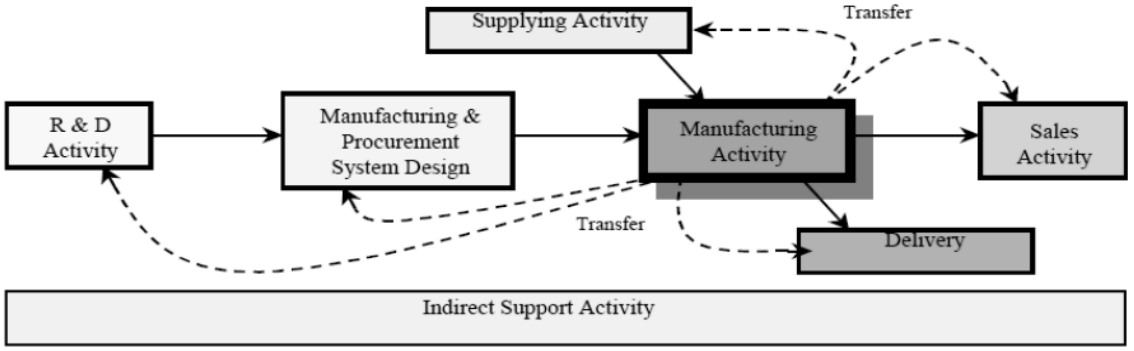
Fig. 3. Geographic Transfer of Lean Management Infrastructure



This extension is improvement technology transfer to offshore sites operating under various business environments. This activity is classified into 3 categories, i.e. transfer from mother factory to offshore factory in the same country, transfer among offshore factories originated in the same country and transfer among offshore factories originated in the different countries.

2) Functionally horizontal expansion (See Fig. 4) .

Fig. 4. Functionally horizontal expansion



This extension is to transfer improvement technology from manufacturing to other business functions, which has been developed and accumulated in manufacturing industries, especially in its major function, i.e. factories. This includes transfer to R&D, sales, production engineering such as process design, purchasing, delivery divisions. Further, transfer to other industries such as service sector is also in this scope.

3) Vertical transfer.

This extension is to reinforcing the linkage between corporate strategy and improvement activities which is different perspective from above pattern of transfer. This indicates not only physical transfer of technology to horizontal sites/functions but also qualitative enhancement based on the rational linkage with these is extremely important for improvement of company performance.

The reasons and incentives to promote lean management transfer can be summarized into 2 major issues:

1) Reinforcement of manufacturing function. Necessity to respond the world trend of qualitative and to the quantitative requirements for manufacturing industries and necessity to respond to the maintenance requirement of world resources through ultimate elimination of loss.

2) Establishment of transfer business of lean management and its refinement. Promotion of lean recognition as an advanced country in this area and establishment of its exporter's stand point and establishment of world-class training/education function as a leading country in this area.

6. Transfer methodology for Romanian manufacturing organization

Lean Manufacturing is currently the most effective management system activities of an organization. Doing Business in Romania, located in a permanent changing, requires rapid adaptation to market requirements. Globalization of markets means increasing competition in domestic markets. Since there is a divine right to stay in business, every company in Romania must realize that sooner or later solution on the market survival is an ongoing effort to increase competitiveness. Lack of productivity is evidenced by the average weekly working, 45.9 hours in Romania, compared to 38.2 hours in the EU. Regarding the distribution of working hours in Romania only 13% of employees working less than 30 hours week and more than a fifth of the population say that out weeks working over 60 hours, respectively an average of 16.6 hours per day in Romania - well above average of other European countries. The analysis of the indicators mentioned above, working in Romania long day, and the general perception is that the pace is very intense, but recorded low productivity, limited competitiveness, and a gross national product than below the European average. It is indeed clear that the need for improving skills with direct consequences on labor productivity and competitive performance.

Before applying Lean Manufacturing principles and tools is necessary knowledge of the situation, on which you can choose the strategy of improvement and determining priorities for action. Lean Thinking uses a proven methodology with clients in its approach.

The approach is as follows:

- Deeply analyze and understand the current situation.
- Initial Pilot Activity. Create a value stream based on lean principles.
- Integration. Replicate to other areas

while taking the pilot to the next level of improvement.

This may seem simplistic; however the need to deeply understand the actual situation (versus what should be happening) is exactly what leads us to create a base line understanding of the "real current state". The path forward is based upon the company's understanding of their reality against the principles of lean. The path forward is a step by step approach. Lean Thinking consultants have the experience to be the sensei (teacher) on this journey. The activity is structured to ensure a "learning by doing" approach. Process improvement without acquisition of knowledge and lean skills is a superficial outcome and has been proven to be not sustainable. As a guideline, the following would be the typical of the methodology used:

1. Preparation. (1 – 2 days) ; (2 – 4 weeks in advance of start date):

➤View operations with key leadership stakeholders.

➤Identify suitable pilot value stream for activity.

➤Clarify expectations and the role of leadership.

➤Confirm participants for initial activity.

➤Develop Communication Plan for all employees.

2. Initial Analysis. (1 – 2 weeks) :

Cross functional team including a representative from top management. Team size depends on size of organization. Around 5 – 8 members - ideally from within the value stream.

➤Create the Material and Information Flow Diagram (Value Stream Map) of the selected pilot: Initial draft – clarifying customer's perception of "value"; Validate information by actual checking of the processes; Clear identification of the points of mura and muri ; Communicate with pilot line key members for confirmation.

➤Develop a Future State Map and Action Plan for the pilot: Provide training in appropriate lean thinking and methodology to enable the team to create the future state model line; Validate with leadership and process owners the proposed future state and plan.

3. Pilot Line Implementation Activity. (6 – 12 months typically):

➤Introduction of visualization of abnormalities and real time practical problem solving activity (RTPS) at the process.

➤Application of lean methodology and team member training to achieve the following: Stability ; Flow ; Pull / Level ; Kaizen.

➤Daily follow up by Process Leaders to practice the Lean Leadership roles and behaviors.

➤"Learn by doing" together and reflecting on progress and issues.

➤Continuous communication of activity and results to all employees.

4. Integration (2 – 5 years typically):

Scope of expansion depends on the following:

➤Will of Senior Leadership.

➤Robustness of the pilot line for sustainability.

➤Capacity of the organization to expand.

➤Ability of the model line members to support and guide the expansion to other areas as the "internal sensei".

Many companies have implemented lean. Not all are truly successful in their efforts. To ensure your success with the implementation of Lean it is important to understand some of the key factors. Companies that have realized a sustainable transformation have some common key success factors:

1. Senior Leadership actively engaged in the activity at the process.

2. Company functions are aligned and share a common philosophy, principles and concepts of the company direction.

3. Change is managed through the core business process owners:

• internal "lean experts" play a coaching role to support the core;

• accountability is clearly defined and rests with Management .

4. Lean is not perceived as "a program"

• Toyota have been on this journey for 60 years and they admit there is still so much waste;

• some companies use the term "company lifestyle change".

5. Strong supporting department engagement for kaizen:

• maintenance / Engineering have strong kaizen capabilities and responsiveness;

• supporting Business Departments are pulled in to breakthrough problems and process / system improvement opportunities.

6. Emphasis is on creating a heightened understanding of flow.

• issues that stop the flow of value are taken very seriously;

• Muri and Mura are considered Management responsibility ;

• not a "tools based approach" ;

• selection of "Lean team members" is the future company leaders.

Founder of the Toyota Production System – Taiichi Ohno was once quoted as saying *"No company will be able to successfully apply TPS unless they are facing a crisis"*. He believed it was this crisis which forced Toyota to explore and breakthrough with their Toyota Production System.

7. Conclusions

The purpose of this paper has been to contribute to the knowledge base concerning the transferring of management concepts with a specific focus on Lean Production. The underlying ambition has been to take a holistic perspective on the matter and demonstrate how different theoretical perspectives can be combined to form a model for analyzing these processes of transferring. This leads to potential communication difficulties when discussing the matter, which could be reduced through an increased awareness of the different perspectives that are associated with the concept as well as the processes that produce them.

Within industry, the concept cannot be said to be associated with a certain set of practices, but rather seems to be a label that is used to describe a variety of applications. Taking these results together indicates that it is unreasonable to expect the concept to provide certain results, but rather that these are determined by the way the concept is interpreted and translated within the organization that seeks to implement it.

Although weak inscriptions (ambiguity) of management concepts are required at the discourse level, these can cause problems when a management concept is brought inside an organization. It is indicated that insufficient transferring competence will lead to weak inscriptions, which in turn may lead to an uncontrolled and potentially ineffective

translation process, increasing the risk of undesired decoupling. Transferring should not be approached normatively. Just as with Lean Production, one cannot say that translation is good or bad, but is dependent upon the situation. One should therefore not generally strive for a certain 'level' of transferring within an organization.

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Value-creation and networking in coopetition and public value management – The two challenging complementing frameworks of management studies

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Abstract: *Managerialism, emphasising on competition, is a leading penetrable practice or method in public and business management. However, managerialism is not a unique principle to manage public and private organisations. In this study we introduce, in addition to managerialism and its backgrounds, the challenging contemporary practices or paradigms of public and business management, such as cooperation, or simultaneous cooperation and competition, that is coopetition, and public value management (PVM), and show their practical and theoretical significance in the management discussions. Regardless of the possibility to dispute the existence of both coopetition paradigm because of the contemporary dominating competition and cooperation paradigms, and PVM because of the different versions of post NPM viewpoints, we introduce the complementary roles of coopetition and PVM frameworks for the management studies and practices.*

Keywords: Value-creation, networking, coopetition, public value management, post-new public management

1. Introduction

Contemporary business life is highly turbulent and multifaceted entirety (Himanen, 2003). The significance of projects, services and public sector have grown. Also, the business environment and the role of stakeholders in business have become more important. The public sector is one of the most important stakeholders and participants in the modern project-based business environment (See, e.q. Crawford & Helm, 2009). This tendency will justify the viewpoints of business and public management. This paper is concentrated to show the new contributions coming from the simultaneous consideration of public and private sectors in management studies.

In the literature and theory of management the border between public and business management is ambiguous. These two

branches have followed the same frameworks and paradigms of management, not necessarily simultaneously, however. Thus, the theoretical discrepancy between public and business management is only apparent: the field of public management has followed the same theoretical frameworks and viewpoints as business management. Taylor (1911), Ford, Fayol and Weber (1911/1946) are remarkable masters both in the branches of business and public management presenting scientific and bureaucratic management or "traditional public administration" in the specific applications for public sector (see, e.g. Lynn 2001, 155; Stoker, 2006; O'Flynn, 2007). Thus the tendency for generic management theory is obvious, which has also similar generic reflections to public and private sector practices.

Also, a contemporary dominating approach or paradigm, managerialism, and in the context of public sector, new public management (NPM), is leaning on the viewpoints or practices of business management. There was in the public management and practices some kinds of "counterblow" for the traditional public administration and its weaknesses, such as uncontrolled increasing public sector, in the 1980's in Great Britain, USA and e.g. New Zealand with the leader figures Margaret Thatcher and Ronald Reagan (See, e.g. Hood, 1995; Rusko, 2009). The concept NPM was invented later on. Perhaps, Christopher Hood coined first 1991 the term NPM in his article "A Public Management for All Seasons?". Initially this movement was called "thatcherism", "reaganism" or "monetarism" and in 1993 Osborne & Gaebler used as "Reinventing". Later on, Andrew Dunsire 1995 also used notation NPM, in other words "New Public Management" (Gruening 1998).

Actually, the transition from traditional public administration to NPM was beginning in Great Britain, already late 1970's, after two oil shocks. Before that, traditional public administration or bureaucracy was leading tendency in public management over half a century. However, it is possible to even open the question whether there has been any traditional public administration as a paradigm (See, e.g. Lynn, 2001). NPM has been now in Great Britain about 30 years prevailing tendency or paradigm in public management, in other countries NPM has been about 20 years dominating practice and paradigm in public management. The previous paradigm shift in public management was happened because of the 1970's economic crisis based on oil shocks and expanded public sector. Interesting hypothetic question is whether it already time for new paradigm shift: namely mid-2000's became a new paradigm, public value management, which have not still get established status as a paradigm. However, a contemporary global economic crisis resembles the situation in the 1970's providing reasons for "reinventions" again, also in the field of public sector.

In the literature of business management is manifested a couple of simultaneous paradigms: traditional competition paradigm is based on the traditional assumption of competing firms in the market. The task of the managers is to act efficiently maximizing profits of the firms in competing markets. During resent decades has been also alternative paradigm, which is based on cooperation and networks of the firms. (See, e.g. Padula & Dagnino, 2007). In the public management the dominating paradigm, new public management, emphasises managerialism and efficiency of public units. Actually, NPM is

based rather on competition paradigm than cooperation paradigm (Rusko, 2009).

Business management consist of also viewpoints, such as co-evolution or coopetition, combining elements of competition and cooperation. Furthermore, especially coopetition viewpoint emphasises also value net and value creation in the same way as public value management and some other post-NPM viewpoints in the literature of public administration. The main aim of this article is to compare these two frameworks, coopetition and networking based or/and value based post-NPM viewpoints, such as public value management and establish linkages between these two frameworks for the discussions of management literature and for the needs of practical management.

The structure of the article is following. First we introduce Public Value Management and some other Post-NPM viewpoints and compare their main characteristics. Then we consider theoretical background of value creation in the management studies considering particularly studies of coopetition and of public value management. After that we compare the most important characteristics of coopetition concept and public value management paradigm. We noticed one environment especially fruitful for comparison between these two approaches. Namely, in contemporary business environment the roles of projects and public sector in them are important characteristics. We call these projects as "semi-public" projects. We will consider these in more detail in fourth section because they provide the research base which makes possible to find similarities of networking characteristic between PVM and coopetition. Finally, we have discussion about the general importance of public value management and its connections to coopetition concept.

2. Public Value Management and other Post-NPM viewpoints

2.1. Public value management

Although the viewpoints of public value management have been called as a "paradigm", there are only view scientific articles of reports focused on public value management. Mark Moore invented Public Value Management -concept in the 1980's and wrote 1995 a book Creating Public Value. In this section we introduces most of literature focused on public value (management) and their main findings, especially the launch for "public value management" concept, which was a report, also named Creating Public Value written by Kelly, Mulgan and Muers (2002) for the needs of reforming public services in Great Britain. Report was part of the conversations, background of the preparing the public service reform, it was not the official attitude of the government of that time. This ambitious report concentrated to determine concept of "public value" in many ways. In this report they made suggestions to re-organise the public management practices and structures.

According to Kelly et al. (2002), public value is created by government, through services, laws regulation and other actions. "Value is determined by citizens' preferences, expressed through a variety of means and refracted through the decisions of elected politicians". Their starting point is that public sector is really adding value and the legitimacy of government depends on how well it creates value. By using input-output framework to interpret their ideas, we can say that

the outputs must be higher than the inputs to the public sector. Their consideration is not based only on monetary terms, e.g. sacrifices "can also involve granting coercive powers to the state (e.g. in return for security), disclosing private information (e.g. in return for more personalised information/services), giving time (e.g. as a school governor or a member of the territorial army) or other personal resources…". They emphasise the role of opportunity cost and value creating in three forms: better outcomes, services and trust.

There are many practical problems involved in this value creation logics of public sector: how to calculate value creation, costs and benefits of public sector, if there are also non-monetary characters involved in the framework. Also, the structure and order of importance in public values will change gradually and each stakeholder has different opinions about values of e.g. a particular public service. Kelly et al. (2002) admit these problems and notices that "public value is best maximised neither by competitive private markets nor by monopoly public provision." In other words, public value management provides alternative to unilateral cost reduction of public services, i.e. tendency for "buying rather than making", both of them typical for New Public Management, or authoritarian traditional public management (see, also O'Flynn, 2005).

Stoker (2006) included the concept of public value management in the networked governance discussions. According to Stoker, people have motivational force for networks, involvement and successful relationships. However, also public value management meets the question of metagovernance, influencing processes of self-governance (see, e.g. Bogason & Musso, 2006). In other words, public management is not able to lean on only voluntary networking activities of people. There must also be interaction between governors and governed (Bogason & Musso, 2006).

Generally, public value management is focused on the assumption of national state: "public" in these discussions means public actions in a national state. There are not any international or cross-border extensions for this concept. This is natural, because public value management is some kind of counterblow for the popularity of new public management, which is also based on the public administration especially in the national state. However, this extension towards international and cross-border arenas should be possible and topical in these discussions: the economic areas, such as European Union, have today more public power as earlier. Also, multinational companies have effects on several countries at the same time. Thus, globalisation and international institutions are important contemporary actors (see, e.g. Djelic & Quack, 2003).

Compared to NPM, PVM provides broader measure than NPM covering outcomes, "the means used to deliver them as well as trust and legitimacy" (Kelly et al., 2002). In the NPM - in spite of its macroeconomic starting-points – has a tendency for narrow micro-management and lack of attention given to democratic engagement citizens and stakeholder groups (Kelly et al., 2002).

Although public value is more complicated to measure than private value, Kelly et al. (2002) emphasise some characteristics in public value creation, which are common also in business value creation, such as co-production between producer (public sector) and consumer (citizen). Relationship between customer and producer have been

emphasised also in the discussions of value co-creation (Ordanini and Pasini, 2008; Vargo et al., 2008) or coopetition (Brandenburger & Nalebuff, 1996; Walley, 2007).

2.2. The relationship between PVM and other Post-NPM viewpoints.

It is possible to link public value management up the post-NPM viewpoints, such as new governance, new public administration or new public service, for example. These viewpoints have several similar aspects with each other. Furthermore, all these viewpoints have some characteristics similar to NPM or to managerialism. NPM or managerialism is based on economic efficiency in public activities and services. All these viewpoints are aiming to attach efficiency. The differences between them are, however, based on the way how efficiency is understood and possible to achieve according to different viewpoints.

In table 1 is compared post-NPM viewpoints, mentioned above. The characteristics, which we use in this comparison, are *public interest, performance objective and associated models of human behaviour, accountability, background or characterisation, To whom are public servants responsible, Role for public participation and Goal of managers.*

Table 1. *The comparison between the characteristics of NPM, PVM and other post-NPM viewpoints (See, e.g. Kelly et al., 2002; Bogason & Musso, 2006; Frederickson, 1996; Denhardt & Denhardt, 2000)*

Characteristics	NPM	PVM	New governance	New Public Administration	New public Service
Public interest	Aggregation of individual preferences, demontrated bycustomer choice	Individual and public preferences (resulting from public deliberation)	To encourge citizens to participate in decisions that affect their lives	Social equity, the common or shared interests of citizens.	Results of dialogue about shared values
Performance objective and associated models of human behavior	Managing inputs and outputs "economic" man.	Multiple objectives - Service outputs - Satisfaction - Outcomes -Maintaining trust/ legitimacy Cooperation/ networking	The expansion of citizen participation or engagement (the "franchise") and the scope and authenticity of democracy.	Value being served through administrative action Citizens are member of a social and political community including rights and responsibilities.	Strategic rationality, multiple tests of rationality (political, economic, organisational)

Characteristics	NPM	PVM	New governance	New Public Administration	New public Service
Accountability	Upwards through performance contracts; sometimes outwards to customers through market mechanisms	Multiple - citizens as overseers of government - customers as users - taxpayers as funders	Accountability for collective decisions; advance political equality while educating citizens. Contributing to citizens' moral development.	Democratic citizenship.	Multifaceted-public servants must attend to law, community values, political norms, professional standards, and citizen interests
Background/ characterisation	Post-Bureacratic, Competitive Government, Economic theory	Post-competitive	TNetworking, participation.	Change in administration, process orientation.	Democratic theory, varied approaches to knowledge including positive, interpretive, and postmodern
To whom are public servants responsible	Customers	Citizens as taxpayers	The public as interest group (pluralist), consumer (public choice), re-presented voter, client, and citizens.	Citizens	Citizens
Role for public participation	Limited – apart from use of customer satisfaction surveys	Crucial – multi-faceted (customers, citizens)	Multifaceted: citizens and stakeholders	Synergy between the public and private sectors	Multifaceted-Focused on democracy and citizens
Goal of managers	Meet agreed performance targets	Respond to citizen/user preferences, renew mandate and trust through guaranteeing quality services.	Negotiation and persuasion, collaboration, and enablement, which includes activation, orchestration, and modulation skills.	Positive, proactive and responsive administrators	Public service, desire to contribute to society

The comparison shows that the differences between PVM and NPM are greater than the differences between PVM and other post-NPM approaches. PVM and other post-NPM viewpoints emphasise the importance of citizens, networking and multifaceted role for public participation. Democracy is more important guiding principle in PVM and in other post-NPM viewpoints than in NPM. There are also other similar characteristics between PVM and other post-NPM viewpoints e.g. in the case of servicing. Both new public service and PVM emphasise services as an important function of public sector. In NPM the aim is to provide services as efficiently as possible. The main difference between NPM and post-NPM viewpoints (including PVM) is in the way how the efficiency is defined. In NPM efficiency is based on only cost reduction, but post-NPM viewpoints define efficiency in more multifaceted way, the way of stakeholders and citizens.

We have noticed that PVM is a reasonable representative framework for several post-NPM frameworks because of their several similar characteristics. It is impossible to say which one of these several viewpoints are the most challenging for NPM paradigm. However, in this study we emphasise especially the characteristics of PVM.

3. Theoretical background for value creation in the management studies

In contemporary management studies win-win framework is very popular. In win-win situation both of the counterparts gains because of the value creation process of cooperation. There are dozens of ways, concepts or theories, in the management literature, to consider win-win processes and structures. In this section we introduce some of them, which have connections to coopetition concept and public value management.

The most important target for cooperation is to get higher common benefit via cooperation. In the traditional neoclassical economics, cartels are an illegal way to organise competitive market in order to attach monopoly power and higher joint profits. Different forms of cartels were usual forms of cooperation already in the 19th century. In the 20th century competition legislation and antitrust laws were established to prevent economics from harmful cartels, which raises market prices and reduces production, i.e. cartels have decreasing effect on consumer surplus.

Gradually, also other cooperation forms as illegal cartels or collusions gained ground in the management literature and practices. For instance, alliances or strategic alliances, which are especially popular contemporary ways to organise cooperation between entities, was mentioned already in 1955 by M.S. Estey (1955), The Strategic Alliance as a Factor in Union Growth. In this paper the focus was semi-public environment, in labour market institutions. In business management strategic alliances was used not until late 1980's for example by Darrough and Stoughton (1989) and the use of concept "strategic alliance" stabilized by Jorde and Teece (1990, 85). (See, e.g. Rusko, 2008). According to definition of Jorde and Teece (1990) strategic alliance is an interfirm agreement, "which can be defined as a bilateral or multilateral relationship characterized by commitment of two or more partner firms to a common goal". Already this definition consists of the idea for common value creation of the firms. This value creation character of strategic alliances were especially emphasised later on by Doz & Hamel (1998). They focused not only

on value creation but also value capturing in the context of strategic alliances.

Value creation in the form of "competitive advantage" or especially "competitive advantage of nations" has been on the background of the literature of many management scholars, such as Michael Porter. Especially cluster or "diamond model", introduced by Porter (1990), is based on intentional or unintentional (local) cooperation of firms. Via this cooperation the products of cluster will achieve also international competitive advantage.

Value creation connected with cooperation is the main character also in many other conversations of management. For instance, in co-evolution (e.g. Lamberg and Laurila, 2005; Zettinig and Benson-Rea, 2008) the focus is on the long-term beneficial collaboration and evolution between firms and sometimes also public sector is involved in these considerations. Furthermore, the studies of service co-creation or value co-creation (e.g. Ordanini and Pasini, 2008; Vargo et al., 2008) emphasise the value creation between supplier-purchaser relationships in Business-to-Business or Business-to-Consumer transactions. In these considerations customers are producing and providing together with the producers the meanings for the product. In other words, customers are in the role of "prosumer" (See, e.g. Toffler, 1980).

Also, in the case of coopetition –concept, value creation is very important. In one of the earliest text book of coopetition, Brandenburger & Nalebuff (1996) formulated a "value net", a framework which involves in connection between several actors, or stakeholders, of the business environment of the firm. Competitors, complementors, customers and suppliers have linkages with a firm via this value net. Coopetition is defined to be simultaneous cooperation and competition between firms. The main idea of coopetition is "to create a bigger business pie, while competing to divide it up." (Brandenburger & Nalebuff, 1996; Luo, 2004b). Luo (2004b) has considered especially the cases where the competing multinational firms e.g. in China cooperate to establish more suitable infrastructure and education for the needs of production together with local authorities.

Coopetition studies have focused on three main themes. As mentioned, Luo (2004a, 2004b, 2005, 2006, 2007) has researched inter-firm coopetition especially in the case of multinational companies (MNCs), also e.g. Vapola et al. (2006) have considered MNC's and coopetition. Vlaam and Jong (2002), M'Chirgui (2005), Dowling et al. (1996), Mandal and Antunes (2005), Gnyawali et al. (2006), and Bengtsson & Kock (2000) have studied inter-firm coopetition. Another popular area is coopetition in intra-organisational networks (see e.g. Tsai, 2002; Luo et al., 2006; Amburgey and Rao, 1996), for example, between subsidiaries of a company.

Coopetition has been characterized to provide win-win situation for the participating two firms, which situation is called also dyadic coopetition (Bengtsson & Kock, 2003). If there are more than two participants, coopetition is called e.g. multifaceted coopetition (Dowling et al. 1996). One particular multifaceted form of coopetition is situation in which also the consumers will gain from coopetition. These kinds of situations are called also as win-win-win game (Walley, 2007), because there are at least three entities gaining from this arrangement.

Also in the public value management, value or value creation has been noticed to be important character in the literature and in the practice. For instance, Moore (1995)

and Stoker (2006) has emphasised the idea that public managers (politicians or officials) should create public value. One of its targets is to get "officials to work more effectively with politicians" (Stoker, 2006). Opposite to the new public management, in the public value management there is not aim to commercialise public sector. Especially Stoker (2006) emphasise the importance of networked governance and the motivations of individuals by involvement in networks and partnerships in the context of public value management.

Thus, it is easy to notice some linkages between the viewpoint of coopetition in business management discussions and of public value management in public management discussions. Both of them consider value creation and cooperation networks. In next section we compare these viewpoints or paradigms and find possibilities to establish a combined viewpoint for these approaches.

4. Similarities and differences between coopetition approach and public value management approach

There are many similarities between coopetition and public value management approaches. Cooperation is one of them. Furthermore, especially the multifaceted forms of coopetition and public value management paradigm have many similar characters: both of them are based on networks and management of relationships with stakeholders. In the field of coopetition, this networking characteristic is called as "value net" and in the field of public value management there are connections with "networked governance".

In some papers both coopetition and public value management (or networked governance) have been characterized to be emergent strategy (Mariani, 2007; Stoker, 2006; Bogason & Musso, 2006; Rhodes & Wanna, 2007) in management studies. Mariani (2007) noticed that in the case of semi-public activities and projects in the branch of opera houses the emerging strategy was coopetition.

The competing opera houses belonged to the same projects coordinated by public sector. Because of these projects, these competing opera houses learnt to cooperate with each other. In this case, the coopetition strategy comes emergent because of the affects of public management. Project-based organizing generally provides opportunities for cooperation between competing firms. Generally, many project organisations have connections to public sector, i.e. it is possible to call them as "semi-public".

For many local semi-public organisations and management, simultaneous competition and cooperation or co-evolution is a natural form of strategy (see, e.g. Kylänen, 2005; Visser & Atzema, 2008). One can ask why not also for the strategies of the public organisations and generally for public management? One reason is that the public organisations have not any competitors – at least in same way as in private or semi-public organisations. The increased importance of public sector may rise, however, according to the rate of cooperation. Also, in public value management, cooperation and networks are important, as already noticed.

5. Multifaceted activities, public value management and coopetition in the case of projects

We have noticed that PVM and coopetition have on the background multifaceted

networking or collaboration. In multifaceted coopetition also the importance of public sector is significant. In the contemporary economic activities, public sector is one of the most important stakeholders and participants in the modern project-based business environment (See, e.q. Crawford & Helm, 2009). When the public sector is involved in a project or activity and the rate of cooperation and networking for this reason increases, it is possible to interpret that public sector is trying to increase the value creation or benefits as a result of that project. Public sector will create coopetition situation in this kind of project by following the ideas of public value management. These kinds of findings, which emphasise the significance of public value management in the context of projects, have been noticed also in article of Crawford & Helm (2009). Also, Chaudhri & Samson (2000) considered projects in which the role of public sector is essential, which we call here as the "semi-public projects", or actually they considered business-government task forces in the context of value creation and coopetition. In this section we concentrate the connections between coopetition and public value management paradigms as a one possible guiding principle in project management. The basic idea of public value management introduced especially by Kelly et al. (2002) was meant as a starting point for macro level public service reform in UK. However, in their reports there were several micro-level examples how to follow the idea of public value management. This paradigm is based on public services, cooperation, networks, stakeholders, value creation and emergence. All these factors, in the same way as in coopetition, are also involved in the successful semi-public projects between competing firms or entities. In this section we show that the basic ideas of public value management are suitable, for example, in semi-public activities and projects.

In Table 2 we have comparison between typical location-based activities : totally private activities with firms, semi-public activities and totally public activities using two dimensions as a measurement: private sector vs. public sector and multi-faceted vs. single-faceted.

Table 2. *Public value management and coopetition in the context of private, public and semi-public activities.*

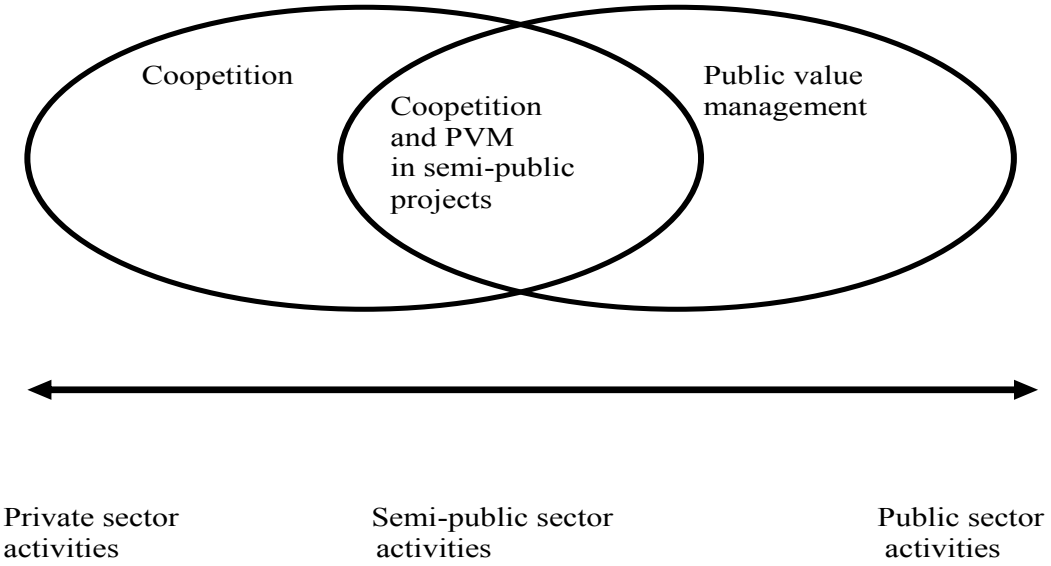
	Private sector (business) based activity	**Semi-public project or activity**	**Public sector based activity**
Multi-faceted activity	Multi-faceted coopetition without any particular effects of government. Win-win-win – project (Compare Walley, 2007).	Typical semi-public project. "Perfect" multi-faceted coopetition including government. Contains many characters of public value management. Several stakeholders involved in project. Win-win-win –project (Compare Luo, 2004b)	Public sector dicates totally the content of the project. Public sector is the main producer and purchaser. Involves apparently, however, several stakeholders and nuances for public value management.

	Private sector (business) based activity	Semi-public project or activity	Public sector based activity
	Cooperation (coopetition) project between firms involving one or a couple of stakeholders without any particular effects of public sector.	Semi-public project including only a couple of actors of the private and public sectors. Have some characters of public value management and possibly of coopetition.	Public sector based project with minor cooperation with some stakeholders.
Single-faceted activity	Typical cooperation project with firms. (If two competing firms: dyadic coopetition). Even cartels are one possible outcome. Win-win (or win-win-lose) –project. (Compare Brandenburger & Nalebuff, 1996)	Semi-public project with simplifications and a very few partners, e.g. one partner from public and private sectors.	Typical project of public sector. Cooperation between units of public sector. Win-win (or win-win-lose) –project. Efficiency is not ensured.

Public value management is typical for multifaceted semi-public projects, which participants both from the public and private sectors are involved in (see, e.g. Kelly, et al., 2002). These kinds of projects contain several stakeholders such as public authorities, households and local firms. Public sector is, however, remarkably involved in the project and is somehow controlling its success. These kinds of project are based on co-production, co-marketing, co-financing, co-purchasing or/and co-research and development between firms, public units and other entities. If the cooperating firms are horizontally integrated, it also contains typical multi-faceted coopetition (Compare, Luo, 2004b). If these kinds of semi-public activities are successful for long a time, also a co-evolution of public and private entities are possible. This kinds of co-evolution has been noticed e.g. in the forest industry (Lamberg & Laurila, 2005) and tourism (Rusko et al., 2009).

Table 2 shows that difference between coopetition concept and public value management in the context of local semi-public project or other activities is actually minor. It is even possible to interpret that there is no difference between the concept of coopetition and puclic value management in the case of multi-faceted activity in which there are participants from the public and private sectors, that is, in the multi-faceted semi-public projects. Figure 1 also outlines the same conclusion.

Figure 1. *The concepts of coopetition, public value management and their connections in multi-faceted public, private and semi-public projects.*



5. Conclusions

There are some dominating paradigms in the contemporary management studies: competition and cooperation paradigms in the business management and managerialism or NPM in the public management. This paper shows that there are both theoretical and practical connections between public management and business management. NPM is based on efficiency and competition paradigm, but nearly not at all on cooperation paradigm. In spite of the dominance of these paradigms, there are also so challenging viewpoints or paradigms, such as coopetition, which combines characteristics of competition and cooperation paradigm, and post-NPM viewpoints in the field of public sector. We picked up especially one of these post-NPM viewpoints, namely Public Value Management (PVM), which emphasises networking, citizenship and other multifaceted aspects. Also coopetition is focused on networking and other multifaceted viewpoints, such as win-win-win strategy.

Thus, finally the focus of this study was on two viewpoints: the coopetition concept and public value management paradigm. The article provides several linkages between these two viewpoints. Value creation, networks, cooperation and tendency to be emergent strategy seemed to be common characteristics of them.

The PVM literature has remarkable macro-level targets. However, it is easy to find micro-level applications to PVM efforts. One obvious application, which has several joint features with business management

concept coopetition is "semi-public project" environment. Multi-faceted forms of coopetition and public value management framework are the different sides of the same coin in the context of semi-public activities and projects –or at least they combine each other.

By using these theoretical concepts such as coopetition and PVM, and their central characteristics, we find it possible to establish a new framework for project management in the semi-public context.

It is not only coincidence that coopetition concept of business management and public value management paradigm resembles each other: they are the latest challenging contemporary management frameworks or paradigms in the management studies. They have "invented" nearly at the same time and both of them have not so far reached significant role in the field of management. However, there are good opportunities for that: the prevailing dominating paradigms of management have not been successful recent years. The macroeconomic problems are obvious. In this context it is reasonable to remember that the current paradigm of public sector, new public management, was born because of the remarkable macroeconomic problems in USA and UK 1970's and 1980's. Meanwhile, we can already notice the significance of PVM and coopetition in micro-level context, such as semi-public project management.

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