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## *Individual Responsibility*

*I believe responsibility is an effect of one's confidence in oneself. How should we educate the generations in the spirit of self-confidence? The cult for work can lead to appreciating the others' effort and imposes an exemplary conduct in the social relations.*

*The education of the „living“ is more demanding than the education of the „survivor“. It imposes a positive, practical, hence responsible attitude.*

*The survivor lives by „I'll handle it“. The living takes risks, and also takes responsibility for failures. Management means individual responsibility and implicitly group responsibility.*

*Prof. Ph.D. Paul Marinescu*



# Management Information Systems in Info-Documentation

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~ Lecturer Ph.D. **Niculina Vârgolici** (University of Bucharest)

**Abstract:** All civilizations used knowledge formally and informally in economic growth and in social development. In today's knowledge age intellect and creative, innovative and inventive ideas have been recognized and leveraged to become a primary source of advantage and wealth.

Essence of this emphasis on knowledge lies in the management of information. The Information Communication Technology (ICT) revolution at the end of 20th century has revamped the ways in which information can be created, harvested, assembled, combined, manipulated, enhanced and channeled. This has increased the efficiency and effectiveness of using knowledge for economic growth and development to the extent that it is becoming the leading factor for adding value and for wealth creation in the market economy. All aspects of human lives have been profoundly affected, be it agriculture, health or environment. Legal issues of protection of information of bio-diversity and genetic pool, intellectual property and indigenous knowledge are major concerns today.

**Key words:** information management, knowledge society, information and documentation systems.

The concept of management theory developed in the first half of the twentieth century, although its practice to meet since antiquity. The wording of the principles of scientific basis of management started from theorization concrete situations: a concept was correlated with a practice. After some

specialists, many theories of management is in correlation with the types of organizations, and therefore in the development of management theory, have been numerous "schools".. In early twentieth century, researchers in the field have tried to order and systematized concepts with operating management. The

concept of management information appeared after 1950, with the development of computing and, implicitly, a program dedicated to information management. The flood of current information, and changes in the business environment prompted more and more firms in terms of information, generating some difficulties faced by managers today. That is why the use of information systems for information management has become vital.

Today, information management encompasses a broad range of solutions. These solutions may be approached differently in terms of design, organization and technology. Their goal is anyway, to gather all the information company, to make them available for employees to conduct business and to help in their work.

For a firm, an intelligent management of information involves: flow of information clearly and effectively reduce unnecessary activities, ease of detection and communication problems; circuit simplified documents and ordered, eliminating overlapping activities, speed in making correct decisions at all levels, etc. . The emergence of information systems in various branches of activity (industry, banks, trade, etc...) Created the practical application of the concept of management information.

Information Management encompasses all activities (processes) on identifying, collecting, evaluating, organizing, processing, storage and distribution of data in a system so that it becomes effective in relation to an objective set. Obviously, information management, as a process, including: planning, organization, coordination, command and control operations carried out by the identification by the distribution of information.

The most common approach to information management is the handling and organizing information. This vision encompasses all the processes that act on information in order to achieve a particular objective, here are included and technologies (computers, networks, software, etc.). In other approaches, information management is viewed in terms of information resources management, and science is directly linked to the mechanisms by which information is collected, organized, organized, run. The Management Information System appeared and developed in the years 1960-1970. According to the theory of MIS that period, analysts system must identify the requests for information, the information needs of any manager in an organization and to design an information system to be able to provide information to current and / or upon request. In recent years, the impact of new information technologies and current reorganization and decentralization have resulted in increased demand for information supplied by MIS at all managerial levels. Specialists define management information system (MIS) as a combination of human resources and information aimed collection, storage, organization, communication, distribution and use of data and information that managers used in exercising the functions of management, in order to achieve a management effectively.

A particular form of MIS is a decision support systems (DSS), which gives managers all the necessary information to fundaments the decisions on management strategies and organizations concerned. DSS allow direct operation of computer makers or the personnel responsible for management functions of the system. As you can see, information management is a



concept that strictly defines actions related to processing and dissemination of information

The specific information an organization can be categorized into two main categories: information systems for the production and services implemented in the run; information systems for management, dedicated to supporting the processes of decision on various levels of management

In the first category includes systems known in the literature under the symbols: CAD Computer-Aided Design (a discipline of computer science, providing know-how in hardware and software in systems analysis and engineering methodology for specification, design, the introduction and use of computer-based systems for design, in close correlation with other departments of the enterprise, which compete to a product), CAE - Computer Aided Engineering (representing technical integration of all activities necessary to achieve a product) CAI - Computer Aided Industries (representing the integration of technical and organizational activities with the commercial, economic, near all areas of activity of an enterprise, using a common database, expanded. CAM - Computer Aided Manufacturing (carried out supervision and management means of production manufacturing process, CAO - Computer Aided Organization (representing organizational activities and commercial computer-assisted), CAP - Computer Aided Planning Work (aims at preparing the manufacture by making lists of parts and technological documentation), CAQ - Computer Aided Quality Assurance (quality control of computer-assisted), CIM - Computer Integrated Manufacturing (representing the integrated system of production), PPS - Production Planning System (organizational planning, command and supervision

of the conduct of takeover bid by selling as quantitative aspects of time and capacity ).

In the history of development systems, dedicated processes of decision have identified five categories:

- Systems for processing transactions (TPS - Transaction Processing System);
- Systems management (MIS - Management Information System);
- Systems automation business office and secretarial (OAS - Office Automation System);
- Expert systems (ES - Expert System).

This classification system is not separated, they can be made in the organization into a unified concept, with procedures, operations, resources and hard and soft shared neredundante. Systems including systems for management are considered "tools of the particularly useful for measuring output in services".

SID's (information systems and documentaries) are operating with information, aimed primarily of the collection, processing, organization and information dissemination. Accordingly, a system patented on such systems include all the processes that work together to achieve business basics. Activities common to any organization (personnel, accounting, etc..) May also be computerized, but they are not subject systems implemented in the SID.

The notion of information system and documentation (SID) is used to denote the generic any institution or structure of an institution, organization, company etc., which deals with the information and documentation of any kind. The result of the work consists of products and information services. A system of information and documentation

is an assembly organized by the procedures manual and / or automatic (which is included human resource), which aims mainly at collecting documents and information processing, organization and turning them to its beneficiaries. The emphasis of information systems and documentation reside in the fact that they operate with documents and information, producing documents and information. In the SID's traditional, so the information collected, and has produced the paper. In the SID's automated, electronic information is predominant, and product information can be represented both on a classical, traditional and electronic form.

In the information and documentation are characteristic of three types of SID-ROMs, which give a full picture of the types of products and services for information and documentation provided to users:

- 1) SID sites that provide information and documentation on the processing of documents printed or electronic documents (digital documents). In this type of systems are three main categories: SID sites that provide information and documentation, mainly on the basis of processing documents in their possession; SID sites that provide information and documentation on areas of knowledge (technical, economic, legal, social etc.). SID sites that provide information and documentation for special categories of documents such as patents, standards, etc;
- 2) SID sites that provide information and documentation on a particular topic of public interest, based on the processing of information derived from official documents (laws, regulations, regulations, decisions of the central and local government, etc.). In this category are contained information systems for citizens in relation to government structures chosen and appointed, with legislative structures (parliamentary structures);
- 3) SID sites that provide information and documentation to the level of enterprises, organizations, companies, etc... On the basis of processing information obtained through any channels of communication and media information. These systems are implemented within an organization, companies, and etc. companies. And that the main objective of providing information to meet the needs of information. This type of system has become a development with everything with great use of extensive tools for communicating and processing information in conjunction with the growing need of managers for background on the basis of knowledge as accurate as the environment in which they operate (legislative information, financial, competitive, etc.)..

The institutions of information and documentation are primarily the following functions:

- Identifying the main sources of interest (primary documents), acquisition, management and conservation of them;
- Processing of the primary sources, the purpose of identification of an unambiguous document - individual document;

- Collecting information on primary sources in other systems, and relevant objective information system; information to be collected will vary depending on system and service recipients;
- The information obtained as a result of primary processing of documents and gathering information from other systems (such information as the specific criteria);
- The information products and services through information provided to beneficiaries;
- Ensuring access to traditional documents or documents stored on electronic media - usually, CD-ROMs.

In essence, information systems and operating information and documentary information obtained on stream processing. Another category of information is represented by the demands of the users, in fact, random requests for information or default, from individuals or institutions. In recent years, due to increased flows of information between different information systems, they were forced to focus activity and by processing the information received and the transmitted

Therefore, the categories of information which are subject to processing technologies specific activities of information systems and documentaries are: information on documents held by institutions, requests for information (or services required) users, information received through cooperation and collaboration with other information systems and documentation, information obtained as a result of research in electronic databases available on the Internet.

In modern computerized systems, information processing is done through information technology and communications. Therefore, outputs information call to be transmitted (disseminated) in electronic communication technologies.

To understand the methods used in the SID, it is necessary to analyze each process conducted in terms of information. This means identifying the category and information carriers, the transformations that are subject to the information and outcome information obtained from those operations.

In information systems and documentaries, at least in the process of collecting, processing and organizing information, they consolidate the proceedings to another. This means that each operation added new information to a given information structure, information neredundante, achieving the value-added information from one operator to another

It means using information which is made with material information to get a bill that satisfies a need for information. To use a product information means that the item hire a need for information, whether the object continue to exist (talk then use), is amended (wear) or disappear (consumption). Ultimate goal of a product and an information system should be thinking in terms of use: what are the facts and information resulting from the effects of such uses on the activities of users. The most important function of the product, so the system is the manner in which information amended conducts these activities.

Knowing the need to allow information to understand why people undertake in-process research information. What leads a person to search for information? The existence

of a problem to solve a goal to achieve and finding an abnormal state of awareness, insufficient or inadequate.

Distinguish the use of information and documentation users and non-users. Non-users are people who do not ever call for a system of information. This does not mean that they do not need information, but what is trying to prove is that the need for information, when there is a need derived commissioned for the development of basic needs.

Two major classes of information needs, both derived from basic needs are taken into consideration: the need for information and knowledge need information on the action.

Need information on a need to know is derived from the desire to know and need information on the action is a need derived from material needs through the development of human activities, professional activities and individual activities. A control or to master the information involves a series of training activities which coexist and complement each other: pre-university and university training, training of adults (different ways of training and self-users).

Information culture is a set of theoretical knowledge and practical skills, enabling the identification of information needs, followed by the location, evaluation and use of information designed to approach solving a problem, find a response and communication of information held and processed.

A classic model of training culture of information is the following:

- Knowledge structures for information and documentation (location, organization, services, offers);
- Training regarding the investigation;
- Training in the use of information (the location and operation of information regardless of source of information);


In conclusion we can say that NTCI have changed instruments work, led to the creation of new services and products have resulted in a new approach in light of management information and content information. The purpose of research, however, remains the same: the construction of meaning from the sources identified and creating products that effectively communicate and express that sense, the significance.

To achieve this end, each individual must define precisely the need for information, to effectively locate sources of information, to critically assess the information and information sources, to integrate information selected his base, to use information effectively to achieve the proposed activity ; To understand the economic, social and legal accompanying information to use in an ethical and legal.

Also, we can say that the emergence of digital economy, globalization of business, development of communications networks in a knowledge-based society have resulted in a reassessment of the role of information systems and business management.

## REFERENCES:

1. **Bawden, D.**, *Information systems and the stimulation of creativity*, Journal of Information Science, nr.12;
2. **Banciu, Doina**, *Sisteme automatizate de informare și documentare*, Editura Tehnica, București, 1996;
3. **Drucker, Peter**, *Despre profesia de manager*, Editura Meteor Press, București, 2006;
4. **Levy, Pierre**, *Cyberculture*, Editions Odile Jacob, 1997;
5. **Militaru, Gheorghe**, *Sisteme informatice pentru management*, Editura All, București, 2004;

6. **Oprea, Dumitru; Fotache, Marin; Dinu, Airinei**, *Sisteme informaționale pentru afaceri*, Editura Polirom, Iași, 2002;
  7. **Oprea, Dumitru; Mesnita, Gabriela**, *Sisteme informaționale pentru manageri*, Editura Polirom, Iași, 2002
  8. **Victor, B., Pine, B.J. & Boynton, A.C.** *Aligning IT with new competitive strategies*. In J. N. Luftman (Editor), *Competing in the Information Age: Strategic Alignment in Practice*, Oxford: Oxford University Press;
  9. <http://www.clubitc.ro>
  10. <http://www.nemetschek.ro>
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# Diplomacy and Diplomatic Protocol

~ Lect. Ph.D Oana Iucu (University of Bucharest)

**Abstract:** The present study aims to observe relationships and determining factors between diplomacy and diplomatic protocol as outlined by historical and contextual analyses. The approach is very dynamic, provided that concepts are able to show their richness, antiquity and polyvalence at the level of connotations, semantics, grammatical and social syntax. The fact that this information is up to date determines an attitude of appreciation and a state of positive contamination.

**Keywords:** Diplomacy, diplomatic protocol, diplomatic ceremonial, etiquette, courtesy, diplomatic law.

## 1. Diplomacy – Overview

From an etymological point of view, the word *diplomacy* comes from the Greek word “*diploo*”, meaning “to double”. Greeks used to hand two documents to messengers: a recommendation letter for the proxenos called *symbolia* and written instructions, folded into two, called *diploma*. The current meaning of the word diplomacy was introduced later; accordingly, in the Homeric era Greeks called their messengers *keryx anghelos* and later, in the classical era, they called them *presbeis*.

Roman messengers were called *nunti* or *oratores*. The representative of the Pope in the Byzantine Empire was called *apocrisiar*.

For a long time, the term was used in official papers referring to international relations, contracted on the basis of mandates granted by monarchs. Only later, in the XIX<sup>th</sup> century, a new idea was beginning to catch contour, according to which diplomacy was the activity that mediated the representation of states’ foreign interests. Therefore we can

identify several definitions given to diplomacy, corresponding to different historical stages:

- “the science of foreign relations based on diplomas or written papers granted by sovereigns” – De Flassan, *Histoire generale et raisonnee de la diplomatie francaise vu de la politique de la France*, Paris et Strasbourg, 1811;
- “dealing with affairs between states through peaceful means” – Sir Ernst Satow, *A guide to diplomatic practice*, London, 1859;
- “the science of rapports and mutual interests of states or the art to reconcile peoples’ interests” – Charles de Martens, *Le guide diplomatique*, Leipzig, 1866;
- “applied nations law”
- “dealing with the foreign affairs of an international law subject through peaceful means, mainly through negotiation” – Paul Pradiere – Fodere, *Cours de droit diplomatique*, Paris, 1899;
- “the official activity of state representatives in foreign affairs and mainly of diplomats run through treaties, mailing and other peaceful means to reach goals and accomplish tasks of foreign policy to defend the rights and interests of the respective state abroad. This is the most important means of conducting the foreign policy of states” – Mic dictionar diplomatic roman, Bucuresti, 1967;
- “activity specific to state institutions specialized in foreign affairs” – Ludvik Dembinski, *The modern law of diplomacy*, Boston, 1988 ;

- “a science and an art... as an art its main goal is to carry out international negotiations, including the ability to coordinate and run political negotiations, supported by full understanding” – P. Fauchille, *Traite de droit international public*, Paris, 1926.

Diplomacy is the ensemble of juridical papers which diplomatic law relates to adopting, dissolving or modifying juridical rapports. Most of juridical papers are mutually developed, while the possibility for a unilateral act to cause bilateral effects is not excluded as in the case of ending diplomatic relations.

However the rapports between states cannot develop in good circumstances, furthermore they cannot be profitable unless they occur in a certain mutually accepted organizational form based on respect from partners, full rights equality, acknowledgement of the fact that each state entity belongs to the international community and that its attitude, action or lack of action affects the entire community.

## 2. Diplomatic protocol

According to the described context protocol, courtesy, good manners and etiquette represent crucial tools. They create the atmosphere needed in the activities of diplomatic missions, in the collaboration between sovereign partners. The protocol and the ceremonial contribute not only to the proper foreign manifestation of a state but especially to the quality of its relations to different foreign states. Regarding this issue academic Mircea Malita states that protocol and ceremonial “can be considered true barometers that



indicate the state of relations between countries". European diplomat T.F. Sullivan had the following point of view on the subject: "In the absence of protocol communication between states would be much more difficult, international relations would encounter many obstacles, there would be less harmony and more friction, even more wars". Diplomatic protocol and ceremonial offer the framework favorable for establishing and developing correct relationships between states through rules unanimously accepted by the international community.

The emergence of the above mentioned type of protocol and ceremonial is rooted in the transition from the practice of sending messengers/temporary diplomatic missions with punctual tasks (like expressing the will of two ruling families from two different states to develop closer relations or even negotiating an agreement) towards establishing permanent diplomatic representations with ambassadors having their residence in the capital of the country in which they are accredited (Manciur, Emilian, *Protocol institutional*, Editura SNSPA, Bucuresti, 2003).

The first residential embassy, the way we understand it nowadays, was accredited in 1450 by the duke of Milan in the Florentine Republic. During the years that followed this example inspired other Italian and European states. The chiefs of these representations were initially called "resident orators", while the term ambassador – coming from Celtic and meaning servant – came into use later, in the middle XVI<sup>th</sup> century (Harold Nicholson, *Arta diplomatica*, Editura politica, Bucuresti, 1966).

Starting with the XVII<sup>th</sup> century the institution of diplomatic representation was

developing into a more accurate one, therefore it began to grant a certain diplomatic hierarchy. The diplomatic protocol and ceremonial followed the principle of equality between states. Thus, at the Vienna Congress in 1815 the European powers adopted a "Ruling" that established a priority order for chiefs of diplomatic missions according to the date they presented their accreditation letters and years later, in 1818, the great powers decided through a protocol signed in Aix-la-Chapelle that signing treaties should be realized in the alphabetical order of contracting countries (Harold Nicholson, *Arta diplomatica*, Editura politica, Bucuresti, 1966).

Nowadays the activity of diplomatic and consular missions is sustained according to "The Vienna Convention on Diplomatic Relations" (April 18<sup>th</sup>, 1961) and to "The Vienna Convention on Consular Relations" (April 24<sup>th</sup>, 1963) as well as to worldwide norms of courtesy which are widely applied in spite of the fact that they have no juridical character, recognizing their merit in creating and maintaining an atmosphere favorable to developing relationships between states (Manciur, Emilian, *Protocol institutional*, Editura SNSPA, Bucuresti, 2003).

## 2.1. Protocol – General description

The term "protocol" consists of two words coming from ancient Greek: *protos* meaning "first" and *kollao* meaning "to attach", i.e. "something attached first". The term initially referred to the first sheet of paper stuck on a papyrus roll containing written information on its origins. In the VI<sup>th</sup> century the word referred to the first page of an official document which authenticated its origins. It later defined the original text



of a public notary paper, the register containing all these texts and the catalogue of models used to write administrative texts. Eventually, in early XVII<sup>th</sup> century protocol referred to “a formulary used in mailing according to rank” (Louis Dussault, *Protocolul, instrument de comunicare*, Editura Galaxia, Bucuresti, 1996).

This evolution explains the meaning used nowadays regarding norms of use in official activities, especially in ceremonies, rigorously established relations between public personalities, protocolar order, the use of symbols for countries and nations.

The term protocol has various meanings, among which the following:

- an ensemble of ceremonial rules and practices applied to official festivities in diplomatic relations;
- an office in an institution with the main task of officially organizing the protocol and ceremonial activities, celebrations and other similar actions (for instance the Protocol Service of the Foreign Affairs Ministry);
- a diplomatic document which includes agreements and decisions made during an international reunions;
- in the business world this concept refers to a convention or an agreement reached as a result of negotiations between business partners.

## 2.2. Protocol – Historical evolution of the term and semantic connections

When used as a synonym of the word “document”, the term “protocol” has two meanings. It can be used to refer to a treaty, to a convention or to the report of a conference.

These only apply to the basic meaning of the word. Thus, we can make the following statements: “Romania and Bulgaria signed an agreement protocol regarding the circulation on the Danube” or “The Ministry of Education and Research signed a protocol with the representatives of the didactic personnel regarding the... salaries’ growth”. The term can also refer to a form used in didactic papers’ writing in which case it is a printed paper made of questions or incomplete phrases and blank spaces filled in by the person who writes the document. The two meanings hint at the grammatical dimension: “protocol” used as a noun.

When used as an adjective, “protocolar” refers to formal customs as recommended by the protocol. We will use the term as follows: a protocolar visit. In equal measure we may say that a person is “protocolar” when very keen on the formality of social relationships; the meaning in this case is somewhat derogatory. An important protocolar provision refers to outfits mandatory to certain events, to the duration or positioning of those who attend a certain event. As a consequence, a garden party requires comfortable but at the same time elegant garments while the Opera Ball requires a smoking or a night gown respectively.

The term protocol also refers to the organization, service or office in charge with problems regarding the preparation and progress of official activities: “the Protocol Service in the Foreign Affairs Ministry”. In medicine protocol describes the stages of a surgical intervention. In publishing, the word refers to conventional signs used in proof reading. In informatics it is applied to the means of interconnecting the systems. In psychology it

refers to conducting a test, interpreting it or to the elements of a therapeutic intervention.

We also use the expression "love protocol" to describe behaviors dominating affective relationships between people or even between animals. Protocol can be defined in a wide sense as the totality of conduit rules which ought to be respected in society (Louis Dussault, *Protocolul, instrument de comunicare*, Editura Galaxia, Bucuresti, 1996).

### 2.3. Protocol and etiquette

A paper on this subject suggests that protocol includes the following:

- the relation between sovereign countries, stately organized, whether the mentioned sovereignty is foreign or domestic, domestic only or limited to goals pursued by the respective state;
- norms adopted in the relations to these countries and generally in the field of foreign affairs;
- the hierarchical rapports established between institutions and within institutions, rapports between decision making factors and their relationships to subordinates.

Other authors restrain the meaning of protocol to "imperative prescriptions that decide the place corresponding to each official character and the respective behavior" (Serres, Jean, *Le protocole et les usages*, Editura Presses Universitaires de France, Colectia „Que sais-je?", Paris, 1963).

The term etiquette refers to "the formalism of individual relations no matter if the rapport is a hierarchical one or not (Dussault, Louis – *Protocolul, instrument de comunicare*, Editura Galaxia, Bucuresti, 1996). Etiquette

is part of the larger domain of social behavior. This behavior often represents "an outer ceremonial which can make someone glimmer but not shine" since the true brilliance of a human being comes from the inside and not from the outside (Vasile Izdraila - *Bunacuviinta si comportamentul civilizat*, Editura Facla, Timisoara, 1988).

Sometimes an exaggerated etiquette can have the opposite result, can defy any standard hence good taste and common sense (Serres, Jean, *Le protocole et les usages*, Editura Presses Universitaires de France, Colectia „Que sais-je?", Paris, 1963).

It is a protocol rule for the president of the state to moderate a meeting and not to be interrupted while he addresses the audience. Likewise, when it comes to monarchs, waiting until you are spoken to is a question of etiquette. The first example refers to exercising power; the other refers to a certain type of behavior that ought to be respected when meeting someone who requires a protocolar treatment.

The combination of these terms is so powerful that the norms established for one can also be applied to another except for the fact that protocol has restrictive effects. Not applying them may result in negative consequences that impinge on the entire community while not applying etiquette rules has an impact on the respective persons only. The difference between the two terms is that protocol is applied to inter-institutional relations while etiquette to individual rapports.

Another aspect leading to the confusion between terms is related to the etymology of etiquette. In the beginning of the XV<sup>th</sup> century it referred to activities in progress at the court of a sovereign which were written on

paper labels – nowadays we would use the word notebook. The term shifted from the meaning “happening at the court” to “how things happen at the court”. Etiquette at the court of Charles the Fifth remained famous throughout history for its rigidity and multitude of rules.

The etymology of the word *etiquette* *ab originem* was based on an interdiction imposed in the Versailles Park by the chief gardener at the court of Louis XIV<sup>th</sup> who ordered that inscriptions be planted asking for no trespassing on his newly planted lawns. But as the nobles kept ignoring the message, the gardener succeeded in receiving a royal decree which made these “etiquettes” mandatory. Since then the word entered the current use as referring to a behavior according to norms.

### 2.3.1. Etiquette and its extensions – social, cultural, regional

► A crucial role in the development of European society is *Spanish etiquette*. Its most prosperous epoch is related to Charles the Fifth (1500-1558). Spanish etiquette like many other types of etiquette originates in the religious ceremonial. During Charles the Fifth's reign all visible elements, hierarchies and formalities encountered at the Spanish court had the role to prove the mightiness and richness of the king. In Spanish etiquette soberness was the dominant feature which is why black and heavy velvet as well as black jewelry had their unique role. Journeys required special ceremonies. The sometimes rigid provisions of this etiquette lead to tragicomic situations. One of Spain's queens almost lost her life when she fell from a horse and her foot got stuck in the iron while the

animal kept running. Although she was in a desperate situation no one dared to rescue her because touching a queen was considered a crime of lese majesty, and the ones found guilty received the death punishment. Finally two nobles helped her and then fled the court.

► *French etiquette* is related to the Burgund ceremonial rather than to the Spanish one. Its most prosperous epoch started with the decay of the Spanish etiquette. The French ceremonial appeared at the court of Louis XIV<sup>th</sup>, the Sun King, but was not limited to the royal court only. The 1789 Revolution troubled the entire French society and people's behavior. It was a time full of contradictions in which many rules of conduit were abandoned and new ones adopted. The revolution was smothered and spectacular ceremonies returned. But there still was a rupture caused in part by the crowning of Napoleon, the new emperor: “When in the most solemn moment Pope Pius VII<sup>th</sup> lifted the crown over his head and wanted to place it on the emperor's head – just as one of his predecessors had done it a thousand years earlier, seated on Saint Peter's chair when crowning Charles the Great – at that precise moment Napoleon abruptly nabbed the crown and placed it on his head himself”.

► *English etiquette* played a crucial role in the development of European etiquette, incorporating all the features of Spanish and French etiquette, but maintaining its own distinct personality. English etiquette can be considered as more rigid and more direct than the Spanish and French ones. When European bourgeoisie started its ascension this type of etiquette imposed in the public consciousness the term “gentleman”. Nowadays English etiquette is considered the most polite form

of communication in diplomatic life and in business, not only in Great Britain but also in all the countries which are influenced by the Anglo-Saxon culture and civilization. In spite of the influence from other types of etiquette, the English one preserved its unique character and specific features which are still valid (there is an English placement, an English breakfast and so on).

► **Russian etiquette** – Russia represents a special chapter in the history of European etiquette. The Slav culture was decisively influenced by the Byzantine Empire. In time, the Orthodox Church became a decisional factor in state business as well as in private business. On the other hand, during Peter the Great's reign Russian etiquette was strongly influenced by the French one.

► **American etiquette** – The development of rules and social contact forms in America differ from the similar process in Europe. For an entire society, the ideal figure was that of the businessman. In the Middle Ages that figure belonged to clerks, in the classical period in France to the courtier and in the British colonial empire to the trader and to the adventurer. The American way of life puts a great emphasis on prestige, safety and success as observed in the typical American behavior.

American protocol borrowed many elements practiced at the French and Spanish courts, especially regarding hierarchies, clothing and ceremonial. The American middle class adopted behavioral rules established by these etiquettes.

### Concluding remarks

The present study aimed to observe relationships and determining factors between diplomacy and diplomatic protocol as outlined by historical and contextual analyses. The approach was very dynamic, given that concepts were able to show their richness, antiquity and polyvalence at the level of connotations, semantics, grammatical and social syntax. The fact that this information is up to date may determine an attitude of appreciation and a state of positive contamination useful in multicultural circumstances and in complex activities taking place in international backgrounds. An important contribution made by this study, a successful one we hope, was the assertion that in this field no detail, gesture, state, feeling, emotion or attitude can be considered as vetust or outdated. The only functional factor and criterion is constituted by the opportunity element.

### REFERENCES:

1. **Bonciog, Aurel**, *Drept diplomatic*, Editura Fundației „Romania de mâine”, București, 2000
2. **Dussault, Louis**, *Protocolul, instrument de comunicare*, Editura Galaxia, București, 1996
3. **Gerogescu, Toma, Caraiani, Gheorghe**, *Uzante diplomatice și protocol în relațiile internaționale*, Editura Sylvi, București, 2002
4. **Kissinger, Henry**, *Diplomația*, Editura ALL, București, 1999
5. **Malita, Mircea**, *Diplomația, școli și instituții*, Editura Didactică și Pedagogică, București, 1973
6. **Manciur, Emilian**, *Protocol instituțional*, Editura SNSPA, București, 2003
7. **Marinescu, Aurelia**, *Codul bunelor maniere astăzi*, Editura Humanitas, București, 2002
8. **Maxim, Ioan**, *Manual diplomatic*, Editura Didactică și Pedagogică, București, 1997

9. **Nicholson, Harald**, *Arta diplomatică*, Editura Politică, București, 1966
10. **Pârvu, Vasile, Pârvu, Cristian Dan**, *Diplomație, protocol, negocieri internaționale*, Editura Universitaria, Craiova, 2001
11. **Serres, Jean**, *Le protocole et les usages*, Editura Presses Universitaires de France, Colecția „Que sais-je?”, Paris, 1963
12. **Tanasie, Petre, George, Marin, Dan Dumitru**, *Uzanțe diplomatice și de protocol*, Editura Independentă Economică, Pitești, 2000
13. **Vedinas, Verginia**, *Elemente de protocol*, Editura Lumina Lex, București, 2000

## The Role of E-mail in Organizational Communication

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**Abstract:** *The present article aims to briefly describe the advantages of the e-mail communication, the constraints of such communication means, as well as a set of rules which should be complied with in order to ensure efficient organizational communication. The fact that communication is such a universal, normal, daily and natural can make us forget sometimes about its particular complexity. Every moment, people communicate with one another, meaning they exchange information, and for this they use various means. Electronic message is an invention which makes our life easier, shatters distances and inhibitions, helps us rediscover and open ourselves to others, casts loneliness away, can bring us closer, but also can set us apart, because it has its rules and traps, of which we should be aware. We consider that nowadays knowing the e-mail related conduit refers to more than simply avoiding long messages written in caps lock, as such can really make a difference between profit and loss. Communication is indispensable, but we should compare and view any information we receive and send with a critical sight.*

**Keywords:** organizational communication, electronic support, digital signature, info-excess, netiquette

### Electronic Mail (E-mail)

We live in a “world of communication”, as more and more it is said, and the reasons of communication (to inform, to teach, to influence, to persuade etc.) have amplified to the same extent as the means by which the transfer of information is performed.

Communication is such a natural area in our lives, that many times we forget how much tact and flexibility are necessary while communicating. Communication is an art!

A distinction should be made between communication and communication means. Communication is the specific human



activity, while communication means refers to the tools, techniques, technologies used by communication. Along with the evolution of multi-media computers, the connecting of such to local and public networks, as well as by Internet, the possibility has been created for once separated technologies (telephony, information technology, image processing etc) to be interconnected and for completely new application areas to occur, of the highest importance for institutions. The Internet (a network of networks) has already changed a lot the world of institutions and will continue to do so in the future in an even more radical way. Thus, business transactions and communication processes of companies are more and more performed under new shapes. This has of course consequences on both the companies' organization, as well as for their employees.

The electronic mail service, known mostly under the name of "e-mail" is today the most used Internet service. E-mail occurred and has become as a simple, rapid and cheap electronic communication means. It is due to e-mail that the Internet has evolved so spectacularly. Its great advantage is that the message is sent almost instantaneously by the Internet in any place in the world. If the addressee is not available when the message is sent, then the message remains in his/her Inbox.

Another important facility provided by e-mail is that various types of files can be attached to the messages (text, graphic or sound). When the addressee receives the message, the attachment is delivered as an icon which can be saved on the disk or opened when the message is read. The partial functions of the electronic mail system are: receiving messages, sending messages,

auto-reply message confirming receipt, keeping files and messages, compiling and editing (re-processing) messages to be sent, distributing electronic correspondence, archiving the inbox or sent items. The *carbon copy* (cc) function allows for copies of a message to be sent to one or more persons. A received message can be forwarded to another person in the received form or modified, together with comments.

The economic advantages of electronic mail have been rapidly exploited. Trades worldwide have used electronic mail in their direct marketing campaigns (promoting products by contacting each individual client or potential client), and savings obtained in terms of advertisement budget have been consistent. Shortly an information excess was reached, which was in the disadvantage of addressees the inbox of which became full of undesired messages, there was no more room for the useful ones. In the same time, uncertainty existed regarding the correctness of recording the personal data of the addressees (name, e-mail address, preference for certain products) by traders and regarding the usage of such data.

After e-mail had been for a long time favored by marketing people, they are returning now to direct mail. This is explained by the fact that for marketing and PR managers it is important to know what happens with the sent e-mails. They want to know if such reach their addressees or not, if they are read or not, if their content is interesting to the addressee or not. It is true that lately large companies are paying more and more attention to selecting the right moment and way for selling a product. E-mail can be very efficient, yet direct mail remains the best way of reaching the most various public.

The first and most important component of the e-mail structure is e-mail address. Addresses have the same structure for all Internet users, for instance:

The symbol @ in the middle of the address divides it in two: the name of the user on the left, and the name of the domain, internet service on the right (such domain name is allocated to a certain computer in the Internet network). The Internet network analyses the name of the domain, it finds the number associated with such (the address of the computer sending the mail messages) and it uses the said number to send the message to the right place. Here is an example of e-mail address ittenis@yahoo.com.

#### *Similarities and Differences Compared to Classic Mail and Direct Conversation:*

Due to the increased speed and to the possibility of viewing messages on the screen of a computer, e-mail is significantly different from classic letters. It is rather similar to a conversation than to a letter, because the addressee can receive the message rapidly and he/she can also answer quickly. Also, in the case of a classical letter it is important for such to be clear and unambiguous, because the addressee does not have the possibility of requesting clarifications on the spot. By e-mail, however, clarifications can be requested immediately, which makes electronic mail a lot more similar to direct speech. Although it is similar to direct speech, e-mail is not a synonym of such. The lack of vocal inflexions, of gestures, ambiance, makes the communication process less humanly profound as an actual conversation or phone discussion would be. It is for such reasons why electronic mail is different from both classical letters and direct speech.

#### *Similarities with Classic Mail:*

- Both in the case of e-mail and in the case of classic mail, an address is necessary;
- The receipt of the message is not guaranteed;
- Communication is not protected (messages can also be read by other people);

#### *The Differences are the Following:*

- E-mail is quicker (we can communicate worldwide within only a few seconds);
- It is less expensive (cheaper than sending a mail message and often cheaper than a phone discussion);
- It is more comfortable. User groups can be created, which could allow for a message to be written and then sent to all the persons in that group.

For organizational communication, e-mail represents an excellent way of communicating decisions, of requesting details, sending information to colleagues in other departments of the company, and also to business partners, collaborators. That is why it is necessary for any employee, regardless the area he/she works in to have electronic mail using knowledge. It is increasingly obvious that the world today can no longer live without technology and especially without Internet, and amongst the applications of the Internet the most used one is e-mail. The ever wider using of e-mail also arises from the possibility of verifying it by various means (laptop, PC, phone, etc). We mention a few areas in which electronic mail can be applied in companies: general information for employees (postage board); agreements and current debriefings; informing team members;



coordinating terms; planning and coordinating projects; preparing meetings etc.

The most “convinced” e-mail users are employees. They admit that they check their e-mail a few times a day (some every 5 minutes, and others even more often), that they receive and send numerous messages daily, and that they check their work e-mails even from home. This implies a large number of hours in front of the desktop. Researchers have reached the conclusion that this e-mail addiction is not a beneficial one. Advanced countries such as Japan or China have started to take measures in order to protect people from the damaging effects of the Internet.

Nonetheless, the advantages of using the e-mail in an organizational framework cannot be ignored. A survey performed in America shows that over 80% of the questioned people admitted that by using the e-mail in their daily activity their working capacity had increased, their relations with the co-workers had improved and their job tasks had become easier. This survey demonstrated that those who used e-mail as a means of communicating in business obtained an increased yearly income than those who did not use the new communicational technologies.

In order to improve internal communication, many companies have created a generic e-mail address, so that to help employees to solve some problems. The person behind this address “sees” if the e-mail was sent to the appropriate department and, most important, he/she follows-up on the e-mail’s receiving a rapid response.

The increasingly usage of electronic support in the business world calls for the existence of the same feeling of trust and safety from partners as in the case of “classical” businesses. This aspect has been solved by introducing digital signatures.

A digital signature – say IT specialists – provides a higher securitization degree than hand signature, because the addressee of a message which has been signed with a digital signature can verify if the original message belongs to the person the signature of which has been attached and if the message has been modified intentionally or by mistake from the date of its being signed. Moreover, digital signatures cannot be denied, and the person signing the document cannot invoke forgery in order to avoid liability. Although in Romania some reticence exists from managers to use electronic signature, Europeans and Americans are currently using it. This reticence of Romanian managers might also arise from the fact that digital signature does not ensure document confidentiality.

More and more specialists are speaking about “e-mail intelligence”, meaning the ability of translating the values of emotional intelligence (self-control, empathy, correct use of relationships) first into e-mail communication principles and then into practical processing techniques. It is unanimously admitted that the e-mail messages represent the image of a company, its “business card” and that they can influence the success or in-success of a business. Although they admit the stake of e-mail messages, many users do not know how to write them, do not know the unwritten politeness code and it is only after having pressed the send button that they realize the consequences. Things are even more severe in the case of communication between persons who come from different cultures. Actually, for those who are not used to write, e-mail can be a painful act, and for those who are used to write, it is a challenge because they need to put into words in a personal style the entire complexity of a face-to-face communication.

The question is: is there a good conduct code for e-mail messages in Romania? It is clear that one cannot speak of efficient and pleasant communication unless for common sense and etiquette.

For the Romanian Internet, compared to the English language based one, the initiative of a set of netiquette rules has only just begun. What should this code contain? Here are some rules:

- Messages should be clear and concise, and grammatically correct. Many times the message writing standard can generate the perception of the clients over the provided products or services;
- Short sentences should be used, simple words, yet with a large impact over the addressee; the messages editing manner can be efficiently customized, including in using salutation line, templates, signatures and others alike, by using the options provided by Microsoft Office Outlook 2003;
- E-mail should be read before sending;
- E-mail is not made for a particular type of humor, sarcasm, irony or criticism;
- Before pressing the send button we should ask ourselves "Would I want to receive this sort of a message?";
- There should be a double-checking on whether the addressee is the one to whom we want to send the message; when sending an attachment, there should be checked if the file has been attached;
- The company e-mail address should not be used to receive and send "personal" messages.

According to a study published by Ziarul Financiar of November 30, 2005, a

quarter of the corporate e-mails are personal, and 62% of the employees send business e-mails from their personal e-mail accounts. When employees send work related e-mails from their personal e-mail accounts they can subject companies to certain risks. Although the reasons for which they do such things might be harmless, companies cannot monitor this sort of e-mail messages, and it is possible for employees to send commercial secrets outside the company.

There is no strict regulation in our country regarding the use of e-mail. In many companies, the employees have the right of using the Internet, of sending personal (private) e-mails from their job, under the condition of not making abuses. In France, for instance, *Commission Nationale de l'Informatique et des Libertés* establishes some conditions: the duration of using, it forbids access to pornographic websites, and personal messages should be saved in a personal file with the name "private" etc. The start moment and limit of using the e-mail, as well as the Internet access are regulated by internal regulation, which is viewed as official document. Breach of this regulation can be sanctioned by losing the user rights or even end of license:

- e-mail should not be used for sending strictly confidential information (for this purpose the phone discussions or face-to-face meetings are preferred), as such information could reach bad-willing persons;
- messages should not be written when one is angry, as an e-mail sent by a furious person is impolite and could affect one's career; we should wait for 24 hours before pressing the send button (after replacing the angry message with a professional one);

- messages should not be written in caps lock (as messages written only in caps lock are difficult to read and can be interpreted as a call for help);
- messages should not have attachments that are too large;
- abbreviations should not be used excessively, and those that are used should be known by the addressee;
- unsolicited messages should not be sent;
- no icons should be used in business messages;
- messages should be signed, even if our address is visible to the addressee;
- messages received from unknown persons should not be forwarded (they could have viruses);
- e-mail should not be used in order to express condolence or sympathy to someone;
- salutation and closing lines should not be omitted, and such can be formal or not depending on the addressee;
- familiar first name based addressing should not be used, unless the addressee has allowed for such or if he is known to the sender;
- the subject should be carefully decided; a message with the title Hello or Read this will not be read immediately, while a message with the title "Message from the accountancy" will become a priority;
- e-mails should be as simple as possible; the numerous formatting possibilities provided by the computer should not be abused;
- e-mail should not be used when the sender does not have the courage of communicating face-to-face with a

person (some employees ask for a salary raise, bonuses or send their resignation form by e-mail);

- when sending an invitation to an event by using the e-mail, the addressee should be referred directly; if the same invitation is sent to more than one person, carbon copy or blind carbon copy should not be used, as this would be an impoliteness, especially in the business world.

We think it is essential to know and respect some etiquette rules in writing e-mails, and that this means more than simply avoiding long messages or caps lock writing. This could make a difference between profit and lose. A company's image can be severely damaged by incorrect messages and then why invest in products promotion or advertising?

If managers and employees have admitted the importance and also the dependency on e-mail in organizational communication, a recent survey has demonstrated that young people have already started to view it as outdated, as the first place is now taken by SMS, which are far more rapid, allow for immediate feedback, there is no need for a particular location in order to send an e-mail; also, the reply time and intimacy play an important role, as they say.

But is e-mail an already outdated communication tool? Will SMS, blogs, socializing networks defeat electronic mail? In countries such as Japan, South Korea and even in Romania young people are following a global trend, a fashion movement. And while fashion exists in any area, is it possible for a comeback of electronic mail on the leading position it has a few years ago?

It is true that many companies use the e-mail as an internal communication means

due to the rapidness and ease by which it can be used, but in the case of employees who do not have Internet access, other communication means can also be used: face-to-face meetings, group meetings, internal magazines and publications, closed network television, postage boards. Each manager should know what communication means best fits the company he/she manages, by considering the resources of that company, and not what is fashionable or not.

### **E-mail – a Stress Source for Employees?**

While 10-15 years ago e-mail was viewed as an extraordinary outbreak, it has become a stress source for employees. Is it a necessary evil? According to some surveys, many suffer from stress caused by the large number of work messages. Most times, employees who are addicted to computers reach desperation when they notice at the end of their working schedule that because of the large number of e-mails they had to read or write, they have done far less than they had aimed for that day.

After sending an e-mail control is lost over the effects that message will generate and it becomes a stress source to wait for the message. In case the answer is delayed, we ask ourselves what happens: either the e-mail has not reached destination, or the addressee is not interested by the content of the message, as well as we do not know what answer we might receive, if any. The time is passing and messages turn business schedule upside down, and the patience and tolerance of the employees are becoming almost inexistent. This waiting time can induce the feeling to the employees that they are not productive enough or good enough on their jobs.

Also, specialists have proven that out of every five e-mail messages we receive, three call for an answer, and this means that for every five e-mail message one sends one receives at least three other in return. People receive a lot of information, much without any value, and that is how e-mails keep piling in; one should learn how to ignore those without any value and to manage the useful ones. Against info-excess there should be considered: to reduce the volume of e-mails, which means less messages to store; to improve their quality; to train others on sending efficient e-mails; to bookmark and rapidly find information; to use a highly efficient virtual folder system (by this avoiding the overloading of the Inbox folder). There has been demonstrated in practice that an important connection exists between the efficiency of the e-mails and the way in which information is stored.

In the book *Revolutia hamsterilor: Cum sa va gestionati mesajele de e-mail inainte ca ele sa va gestioneze*, authors Mike Song, Vicki Hasley and Tim Burrell suggest that in order to make the e-mail more efficient a series of questions should be asked: *Is e-mail necessary?* Does the addressee really need our e-mail in order to solve his/her job tasks? Here are some useless e-mails: the *FYI message – For Your Information*. Such messages, say the authors, are sent under the idea that sometimes some colleague might need that information, which is stored without being read. Also, thank you messages for routine tasks become annoying for many business people; *Is it Adequate?* (appropriate, professional, harmless? We know that e-mails are property of companies and that they should comply with the internal regulation and in force legislation); *Is it correctly distributed?* (If the

message is sent to an appropriate number of addressees by the best channel). Precise distribution is the most efficient way of reducing the time dedicated to e-mail messages, which implies reducing the use of *Reply-to-all*, *CC – Carbon copy and distribution lists*. If one carefully considers these questions and correctly answer to them, then results will soon be visible.

*In conclusion*, there can be said that electronic support provides employees, communication and marketing managers numerous advantages, yet incorrect and inefficient use due to unknowing minimum rules can lead

to loses that are difficult to measure both in terms of the company's image, and of the sale of products or services. Today messages occupy almost a quarter of the work day of a regular specialist and this is why in order to ensure time management and professional success he/she should have a strategy for e-mail messages management. *Productivity of the informational work will become the economic challenge for the information society. On it will the competitive position of any country, of any activity area and of any institution in the society depend (Peter Drucker).*

## REFERENCES:

1. **Bensaude, Alain**, *Supervision de flux d'échanges d'information dans les forums électroniques*, in: *Communication, Societe et Internet*, Paris, L'Harmattan, 1998;
2. **Cavanagh, Christina**, *Managing Your E-mail: Thinking Outside the Inbox*, Editura John Wiley and Sons, 2003;
3. **Combescot, Laurence**, *Guide pratique de l'assistante de direction*, Editura Chiron, Paris, 2005
4. **Negroponte, Nicholas**, *Era digitala*, translation Mihai Manastireanu, Editura All, Bucuresti, 1999
5. **Olivesi Stephane**, *Comunicarea manageriala*, translation: Mona Moldoveanu and Valentina Pricopie, Editura Tritonic, Bucuresti, 2005
6. **Song, Mike; Halsey, Vicki; Burrell, Tim**, *Revolutia hamsterilor. Cum sa va gestionati mesajele de e-mail inainte ca ele sa va gestioneze*, translation Mihai-Dan Pavelescu, Editura Meteor Press, Bucuresti, 2007
7. <http://www.eva.ro>
8. <http://www.portalimm.ro>
9. <http://www.netichedta.ro>
10. <http://www.netsun.ro>
11. <http://www.datasecurity.ro>

## The Role of Knowledge, Research, Innovation and Competitiveness According to the Romanian Strategy for 2007-2013

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**Abstract:** The engine for the development of the Romanian knowledge society will be from now the Research, Development and Innovation (RDI) system. This offers the opportunities to sustain performance through innovation in all areas contributing to the welfare of the citizens, while reaching scientific excellence recognized at international level. We emphasize in our paper the new stage from Romania defined by the necessity to build a knowledge-based society, focused on solving problems arisen from the demand to innovate, as expressed by economy and society.

It is a big challenge from our country, and in order to respond to this challenge we have to build and consolidate an international scientific environment based on a new changed educational system. Ensuring a real openness will depend on the way the knowledge demand will be concentrated and directed towards the RDI system, within the thematic priorities reflecting the medium- and long-term social and economic needs.

The correlation of the national need of innovation with the evolution of science and technology in the world will take place through research-action networks, where the multidisciplinary international cooperation will be targeted to the resolution of specifically identified problems.



*From Romania is the best moment to reach the European average for the basic indicators describing the structure and performance of the research, development and innovation system, laying down the bases to focus in the future on niche areas, where Romania would have the critical mass and the performance level needed for leadership. Meanwhile, the 2007-2013 RDI Strategy intends to support the social and economic development of our country, with a real opportunity to create a knowledge-based economy, well managed and competitive at the global level.*

**Keywords:** Knowledge-based economy, Knowledge creation, Knowledge management, research, development, innovation, increase social quality and competitiveness of the Romanian economy

## 1. INTRODUCTION

The Romanian society is concern about the role of science, technology and innovation for the development of the knowledge society. Taking into account the fact that Romania is from 2007 member of EU, the National Research, Development and Innovation (RDI) Strategy for 2007-2013 provides the consistency with the main specific political documents at the Community level.

To prepare the new Strategy for 2007-2013, a broad analysis of the current state of the Romanian RDI system was performed too, including strengths, weaknesses, opportunities and risks. It was take into account the national social and economic context existent at that time and was analyzed, in the mean time, the aspects concerning the globalization and the integration into the European Union.

Representative personalities in the fields of science and technology, economy, civil society, central and local public administration, and non-governmental sector were consulted, and they identified deadlocks in the system and directions for intervention and due to their implication they reaffirm the role of the state in the field of RDI, i.e. So they conclude to lay down the conditions and to induce on the one hand the creation of knowledge, and, on the other hand, the application of knowledge for society's interest, through innovation.

The Strategy provides the ground for RDI system's organization and defines the main areas and the way in which the public investment will be concentrated in research and development to support innovation in the coming years.

### **The specialists established the basic principles in the field of RDI, referring to:**

- ex-ante evaluation of policies and actions;
- international evaluation of policies, programmes and projects implementation;
- international evaluation of public institutions (universities and research institutes);
- correlation between performance and institutional funding;
- career promotion based on internationally-recognized professional performance;
- support for researchers mobility; involvement of young doctoral students, post-doctoral researchers, and experienced, performant researchers of any nationality;
- increase of scientific cooperation connections with the Romanian scientific Diaspora;
- development of international cooperation and support for the participation to programs and projects;

- support for innovation, also by increasing the public demand for innovation;
- increasing the share of state aid dedicated to innovation support; constant dialogue with society.

This special strategy, allows to our country to demonstrate its political decision in building a knowledge-based society, open to international values and competition. In this context is very important the international cooperation and partnership in advanced research which must be encouraged, for the topics of general scientific and technological interest. It is also important to emphasize the fields where they can contribute by solving the national scientific and socio-economic problems, while providing the desired competitive level of the Romanian RDI system.

Obviously the Strategy has the main goal to eliminate the disparities between Romania and other European countries and to prepare the Romanian RDI system for identifying and consolidating, through international openness, partnership and competition, those unique areas where Romania can excel.

## 2. IN THE CONTEXT OF THOSE NEWS CHALLENGES

### 2.1. About the international context

According to the new era of IT, the creation and use of knowledge have become vital sources of boosting the global wealth. As we already know the central element who determines competitiveness is knowledge. That why, the countries of the world, especially the developed ones, have engaged for generating knowledge in a systematic way, developing sophisticated national systems and international interactions.

Without reducing the importance of the complex of local factors in adapting and using knowledge, the intensification of the globalization has led to an increased importance for the international cooperation and to the explicit exchange of knowledge and has also created strong international scientific communities.

Consequently, in that environment, both collaborative and competitive, the significance of excellence rise exponentially, and in such special medium, the entities and individuals are the chance to reach the excellence level. As they have the ability to attract resources and to influence both the scientific environment and the socioeconomic systems, they become extremely valuable. This is exactly the explanations for the developed countries where people work so hard both to attract brilliant scientists and engineers and to reach the critical research mass in strategic fields.

We can see Education-Research-Innovation (RDI) knowledge like a triangle. The innovation knowledge is the most closely element associated with the impact on welfare. But there is also a problem, because in the same time innovation is the most problematic as regards the connected policies. Innovation, as a process with many variables, is centered on the cooperation between research and industry. That why in the last decade, developed countries have proposed intermediary entities or forms of interaction and cooperation establishing bridges between these two sectors, providing those entities increased public financial resources.

In order to reduce the economic growth gap as compared to the United States, the European Union made efforts putting the



RDI domain at the core of those efforts. It was a wise decision to allocate 3% of the GDP for research and development in the European Union in 2005 at Lisbon. Most European states have already rallied behind that objective; however, the level of private investments is still seen as too ambitious.

Now, the main challenges for the European Union in order to enhance the capacity to innovate are related to the insufficient concentration in poles of excellence able to compete at a global level, the poor integration of the elements in the knowledge triangle, the insufficient trans- and interdisciplinary research focusing on innovation needs, the absence of models of research and education governance and organization at European level, the high patenting costs in the EU and the low level of researcher's mobility.

After Lisbon reunion, for the period 2007-2013, the European Union, has launched a set of initiatives regarding research and innovation, the global competitiveness of universities and research institutes, the development of entrepreneurial skills and the transfer of knowledge into goods and services. The established policy guidelines have the correspondence in the programs provided within the Financial Framework 2007-2013, respectively: the Seventh Framework Programme for Research, the Competitiveness and Innovation Programme, the Programme Education and Training 2010, the economic and social cohesion programs.

All of these programs will have a very significant role in the context of a new and exciting generation of technologies, able to contribute in an essential way to launch Joint Technology Initiatives, involving substantial public and privates' resources, to supports

innovation and development in SMEs, providing financial support, at least for their start-ups. Its also purpose is to sustain the transnational technology transfer network and many other initiatives, in the benefit of the education and training system in order to achieve the Lisbon goals, including for this purpose a mobility and cooperation component. There is no doubt that, at this reunion was pointed the relevance of the economic and social cohesion programs, where the Member States, including their regions, admitted the necessity to sustain them with substantial funds, in order to reduce the structural gaps, because the RDI area is definitely a recommended high priority.

## 2.2. About the internal context

As everybody already knows, for Romania was a very difficult period after 1989, not to mention the previous one: the underinvestment and delayed restructuring only permitted a connection to the global trends in science and technology and only in some isolated cases. We can say there was a fragile enterprise sector in Romania. It was a real need for research, development and innovation.

The R&D system was fragmented, as the various components tried to survive with the minimum available resources, mainly by public funding, within mostly formal and autarchic systems.

In fact it was about the low attractiveness of the research career which determined qualitative losses of the human resources. Due to chronic underinvestment, the number of researchers decreased drastically from 1990 to 2004, while the average age of

scientists increased. To attract top young people into research was extremely difficult. Consequently, many good researchers choose to leave the country. The low wages in RDI system might be considered as main reason for the low attractiveness, but in reality the reasons are complex, and they are connected to the delayed institutional reform, the poor quality of the research & development infrastructure, the absence of an evaluation system fostering and compensating the real performance – the excellence.

But, first of all, one of the strongest reasons of such a situation was about the absence of clarity and transparency concerning the professional career. Still there are great opportunities for our country because of his valuable human resources and long tradition in several areas of science and technology. So there is a hope that the current strategy will create the basis for recognition and fosters their development.

In the new circumstances, the negative impact which affected mainly the international cooperation and the participation to European research projects and networks is no longer valid. Now the period which generated isolation, which disconnected Romania from the main European research goals and which reduced the access to performant products and technologies, necessarily to the Romanian industry and services, are gone.

The managerial ability and the absence of minimal institutional resources for supporting research laboratories generated dysfunctions even in places where there was a performant infrastructure. The low degree of utilization was also generated by the reduced capacity to provide requested services, especially to the economic operators.

Although the RDI system did not succeed to generate impressive examples in transferring research results into the social and economic field, it has managed to preserve or develop actors (among them universities, institutes, research teams) with a clear international visibility and that may become or already are poles of excellence.

The project-based funding, by competition, which was launched in 1995 and was expanded in 1999, generated essentially an increase of performance and a change of attitude regarding the access to resources.

The GDP share of the public expenditures allocated to research and development was doubled in 2005-2006, with a subsequent increase target of 1% in 2010; it was a big step for Romanian research and development. From now we can observe a radical changes starting with 2005. The CEEX-Research of excellence program launched in 2005 by the National Authority for Scientific Research has contributed this time, to direct public expenditures for research towards developing the Romanian Research Area. It is an important moment for the scientific community of our country which meant to prepare the Romanian research and development community for the successful participation to the next EU Framework Research Programme, FP7, for the period 2007-2013.

In a wider context, the innovation culture is still low, both in the enterprise field and in the academic environment. The enterprise innovation level has not been consistently supported by an operational technology transfer system, and the risk capital may be considered absent.

With the RDI strategy for the period 2007-2013, Romania intends to reach the European average for the basic indicators

describing the structure and performance of the research, development and innovation system, laying down the bases to focus in the future on niche areas, where Romania would have the critical mass and the performance level needed for leadership. Meanwhile, the strategy intends to support the social and economic development of Romania, with a real opportunity to create a knowledge-based economy, competitive at the global level.

### 3. THE RDI SYSTEM AND HIS STRATEGIC OBJECTIVES

In order to increase the competitiveness of the Romanian economy, to improve the social quality and to enhance the knowledge likely to be valorized and to be used for expanding the horizon of action, the research, development and innovation (RDI) system in Romania has our days a significant role to develop science and technology.

According to this specific role, the RDI system has to stress on three strategic objectives: *knowledge creation, increase competitiveness of the Romanian economy through innovation, increase social quality through the development of solutions, including technological solutions.*

#### a) Knowledge creation

Rooney and Mandeville referring to knowledge management at the national level, consider that:

"As the global economy becomes more knowledge intensive and the wealth of nations more dependent on their knowledge assets being harnessed, it is essential for policy makers of having frameworks for the development and the utilization of national knowledge assets".

In their *abstract of their paper* they argue that a policy framework can be developed through which policy initiatives in a range of policy areas can be filtered in order to meet the challenges of the knowledge economy.

"We have developed an approach that has previously been applied to managing intellectual capital in firms and adapted it to the public policy arena. In doing so we question policy orthodoxies such as the assumption that free trade automatically facilitates international knowledge flows, that participation in a global knowledge economy necessarily challenges national sovereignty, and that online delivery of education is necessarily a progressive strategy".

It is definitely a necessity to recognize schools of excellence internationally. This aspect will be supported, having the critical mass and the needed facilities for high performance research, experience in training young researchers through doctoral studies, and good conditions for young post-doctoral researchers.

By financing projects recommend by personalities with the highest potential, recognized at the international level, in particular young ones, the specialists will established poles of excellence. The training of young researchers in doctoral or postgraduate schools of excellence will be specifically emphasized, and that would provide them an appropriate training and the development of the ability to carry on advanced research. For that purpose, the schools will have to attract performant researchers, experienced in supervising young doctoral students, of any nationality.

In these circumstances, the role of *Knowledge Management* is essential if we consider that conceptualizing of an organization

as an integrated knowledge system, and we understand that the management of an organization is for effective use of that knowledge, which refers to human cognitive and innovative processes,

Ikujiro Nonaka (1998) has some very interesting observations concerning the **knowledge creation, referring to a company:**

*"[...] few managers grasp the true nature of the **knowledge-creating company**, let alone now how to manage it ... The reason: they misunderstand what knowledge is and what companies must to do to exploit it. [...] A company is not a machine but a living organism. Much like an individual, it can have a collective sense of identity and fundamental purpose. This is the organizational equivalent of self knowledge – a shared understanding of what the company stands for, where it is going, what kind of world it wants to live in, and most important, how to make that world a reality ..."*

In such a company the creation of new knowledge is not only a specialized activity of the research and development department. It is much more. It is a way of being. Every worker is a really *knowledge worker*, so his role is extremely important and he must be very responsible of his activities.

*"In this respect", continue to stress Nonaka, "the **knowledge creating company** is as much about ideals as it is about ideas. And that fact fuels innovation".*

Dalke Neef expresses, in his specific and synthetic way, the role of a technological and organizational **knowledge:**

*"In the knowledge-based economy it is the **production of ideas, not goods, that is the source of economic growth, and the reason that the new computing and telecommunications***

***technologies are so economically revolutionary in their nature is that they allow ideas** – in the forms of techniques, research results, diagrams, drawings, protocols, project plans, chemical formulae, marketing patterns, etc. - to be distributed instantaneously and in a coherent way to anyone, anywhere in the world".*

#### **b) Increase competitiveness of the Romanian economy through innovation**

International cooperation and partnership in advanced research will be fostered, for the topics of general scientific and technological interest, emphasizing the fields where they can contribute by solving the national scientific and socio-economic problems, while providing the desired competitive level of the Romanian RDI system.

The new economy is based our days on create knowledge, used in economy, science, technology, especially by **innovation**. In this new context, innovation has the capacity to assimilate and to convert knowledge in order to improve the productivity, or to create new products or services.

Without innovation we can't talk about a new economy. That why the new economy encourages the creation and the development of innovative enterprises. Such enterprises can be a result of international cooperation and partnership between firms, government, universities or organizations in advanced research, publics or even academics.

Now we have to admit that every business is on his turn an „information business". Information plays a surprisingly critical role, and the process of capturing, storing, processing, and retrieving information is not only difficult, but complex and, many times, very expensive. Information dominates processes

as well as products and, no doubt, information and the mechanism for delivering it represent the glue that holds together the structure of every business. But when we talk about information we have to consider his relevance, his power, his quality. So that's way is so important that the formal organizational structure of any company must be a fundamentally set of channels for the rich exchange of information among the employees.

*" ... When everyone can communicate richly with everyone else, the narrow, hardwired communications channels that use to tie people together simply become obsolete. And so do all the business structures that created those channels or exploit them for competitive advantage."*

The objective of **increasing competitiveness of the Romanian economy through innovation** has a great impact upon the economic operators and the transfer of knowledge into economic practice. This objective concerns the achievement of high level technological results, complex problem solving research of local, regional or national relevance, or requested by the economic operators, as well as the development of innovative technologies, products and services, with direct applicability.

As a realistic solution we can mention these one who put a real accent on partnerships between universities, research institutes and economic operators. It is about a plan that must be supported, with medium-term financing and/or co-financing, from five to seven years. The financing schemes will consider the issues related to the state aid for RDI.

**c) Increase social quality through the development of solutions, including technological solutions**, generating direct benefits for the society.

This category includes solutions to local, regional and national problems, to social cohesion and dynamics, an increased effectiveness of the policies and issues related to health, environment, infrastructure, land management and utilization of national resources.

#### **4. THE NECESSITY OF CHANGES IN A NEW GLOBAL WORLD LEAD FROM NOW BY RDI**

Obviously Romania from now will support advanced research, directed towards world-class scientific results, but in the mean time it is necessary to encourage the development of the research career and the establishment of poles of excellence.

If we have to take into account the significance of fundamental research for knowledge development and the training of highly skilled human resources, no doubt will be emphasized the excellence, the interdisciplinarity and the international visibility. It's the time for a new vision about the whole world which must sustained research more and more complex, situated in frontier areas including the participation to international excellence research networks.

The relevance of that type of research is for the long term, with no other priorities established for the funding of research topics, except the proposals coming from the researchers. Advanced research may be directed towards strategic or technological priorities, as necessary for solving complex problems, with social and economic impact. The evaluation will be in the peer review system and the panels will include international participants.



From the scientific world of European Union there will be a strong focus on the better integration of the Romanian scientific community into the international scientific environment, through the broad access of the researchers to information resources, participation to international conferences, organization of international scientific conferences in the country and, finally, through the participation to European scientific clusters and technology platform.

The research projects will have to provide the necessary conditions for the exploitation of the performance related to research career stage of the participants, ensuring their further development. The development of human resources in the context of national priorities will aim at the achievement of an expertise level permitting the correlation of the knowledge regarding the global technical developments with the possibilities of national adaptation.

One of the most important targets is to establish *the poles of excellence* in the form of interdisciplinary research networks and, in particular, of competence's centers. To avoid the formalism of such entities, a gradual financing strategy will be approached, on the project-network-centre of competence direction.

According to the importance, there are some **priority areas**, as follows:

- Information society technologies,
- Energy,
- Environment,
- Health,
- Agriculture, food security and safety,
- Biotechnologies,
- Innovative materials, processes and goods,

- Space and security,
- Socio-economic and humanities research.

## 5. CONCLUSIONS ABOUT THE IMPORTANCE OF IMPLEMENTING THE STRATEGY OF RDI

### 5.1. Major principles guide in implementing the Strategy of RDI

Some major principles guide the implementing of the Strategy of RDI. Amongst them we have to mention the social responsibility, the transparency and the performance.

**a) Social responsibility** is a relevant principle because the provision of public funds to the RDI system has to be taken as an investment serving the wider societal interests;

**b) Transparency** offers to everyone access to all the information regarding the policies, the instruments and the results obtained; access to the information on RDI funding opportunities from public funds, the stage of the Strategy, including e-governance. It is the most normal way to simplicity and clearness of the procedures for obtaining public finance for RDI.

**c) Performance** represent a way in order to asses the degree to which the objectives have been achieved, in comparison to the investments deployed.

The monitoring, evaluation and correction mechanisms will ensure the capacity to adjust and adapt the strategy in accordance with national and international developments.

The ex-post evaluation of the implementation will take place both at mid-term, in 2010, and at the end of the implementation period. The evaluation will be made

independently, preferably on an international basis. The evaluation of the impact following the implementation of the strategy will provide the information needed for the formulation of future policies.

## 5.2. Monitoring and evaluation

The monitoring and evaluation of the Strategy will be based on the performance indicators of the subsequent implementation plans, and on the indicators of the whole RDI system, corresponding to the specific objectives of the Strategy.

Annually, a report will be prepared and published, which would monitor the achievement of the objectives; the independent mid-term evaluation report will be published in 2010, and a post-implementation and impact study will be prepared at the end of the implementation period.

The correction of the strategy will be based both on the evaluation of the results achieved, on the system evaluation, and on prospective elements related to the development of science and technology.

## REFERENCES:

1. **Thomas D. Davenport, Laurence Prusak**, *Working knowledge: How Organizations Manage What They Know*, Harvard Business School Press, 1998.
2. **Mihai Drăgănescu**, *Societatea cunoașterii și cartea electronică, comunicare*, Simpozionul Cartea Electronică, Academia Română, 21 iunie 2001.
3. **Peter F. Drucker**, *Beyond the Information Revolution*, The Atlantic Monthly, Digital Edition,
4. **David Rooney and Thomas Mandeville**, *The Knowing Nation: A Framework for Public Policy in a Post-industrial Knowledge Economy*, Prometheus 16 (4) pp. 453-467, 1998,
5. **Dalke Neef**, *Rethinking Economics in the Knowledge-Based Economy*, p. 9. in *The Economic Impact of knowledge*, Butterworth-Heinemann, Boston, 1998.
6. **Ikujiro Nonaka**, p. 175-187, in Dale Neef a.o., Eds, *The Economic Impact of knowledge*, Butterworth-Heinemann, Boston, 1998.
7. **Dr David Skyrme**, *Knowledge Management: Making it Work*,
8. **European Commission**, Community research, ISTAG, *Scenarios for Ambient Intelligence in 2010*, Final Report, February 2001, Seville
9. **Government of ROMANIA**, Ministry of Education and Research National Authority for Scientific Research, *National research, development and innovation strategy 2007 – 2013*.
10. <http://www.theatlantic.com/issues/99oct/9910drucker3.htm>
11. [www.skyrme.com/pubs](http://www.skyrme.com/pubs)



# Causes that Determine Wage Inequality in Contemporary Economy

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**Abstract:** Differences in income have increased both in respect of full-time employees with university studies and those with secondary education and in respect of employees of non-productive sector and those in the industry. Differences have increased both in the '80, and end the years '90, despite the growth of real income of labor as a whole. Among OECD countries, increasing differences can be seen in France and Japan (although World Bank study in France in 2007 considered an example of shrinkage differences in income), but it is insignificant in Germany or Italy.

**Keywords:** Inequality, globalization, discrimination, unemployment

Analysis of economic inequalities of income can be seen from at least two perspectives: the perspective of liberal and neoliberal theories and theories from the perspective of social democratic (protectionist).

In recent decades, more and more economists feel that the phenomenon of income inequalities has developed and it became an object of study for many of them (Feenstra, 2007).

The poor population increase as a share demographic, the rich and the very rich grow as a share of their wealth in GDP. The trend

toward inequality is a fact of the contemporary economy. In the figures, things are as follows: average income of the poorest fifths of the population decreased by aprox.5%, while the richest fifth was enriched to 15%. In the 90s the poorest fifth of the population had 3.7% of GDP, while the richest fifth had more than half of GDP. Statistics presented the situation is that of the U.S. economy. Even if the figures are not the same, the trend toward inequality began to increase and in the european economy (Lemieux, 2007).

In Europe, studies of international institutions (IMF, World Bank, etc.) upon European countries shows that the analysis of inequality based on Gini coefficient reveals a reduction in the inequalities until the '80, after which more than 50% of European countries have considered increases in inequalities, generally attributable to factors of globalization. For example, Spain, a country with the greatest inequality of income in 1980, proves to be first and twenty years later, followed by a very open economy and globalization namely Switzerland. In 2001, the Nordic countries, Germany, Austria and the Netherlands were considered the most fair, according to the respectively study.

Developing countries in Asia, the emerging economies of Europe, Latin America or the new industrialized Asian countries and developed ones are those that have increased inequalities in the above mentioned, while the African sub-Sahara or the Commonwealth of Independent States (CIS), have decreased inequalities. An interesting aspect is that in the initial period of globalization (1965-1989), East Asian countries, whose economies have grown rapidly, have diminishing inequalities of income and a better (equal) redistribution of them, because of their active economic policies how was the reform of land ownership policy of building public housing or investments in the health sector, infrastructure and manufacturing industries oriented to exports.

Among OECD countries, the greatest inequality of income we meet in the U.S. and Britain, and differences in income are growing.

Inequality like exclusion should not be accepted as an inevitable and especially should not be accepted in this way that the

actual distribution of income is an inevitable and a necessity for most people to live better now than 20-30 years ago. Created the problem, that of social dissolution by financial self-centredness, you should not groom anyone. Upheavals increasingly frequent in big cities of Europe or the U.S., the riots are excluded from the effect of such carelessness.

The causes of inequalities of income varies from country to country, there were disputes between economists on the prevalence of cases against the other.

The most important causes that determine the appearance, maintenance and amplification of this phenomenon are:

- Technological changes;
- Changes in the structure of national economies;
- Globalization;
- Education;
- The labor market.

### Technological changes

Further technological developments in some branches of national economies to the other led the emergence of income inequalities even among categories of the active population with equal level of training.

Using the large-scale computers and other high-tech equipment requires highly qualified workers to work with these modern technologies.

Heart specialists in the fields of „new“ technology such as the IT & C (programming, web design, e-commerce, telecommunications) increasing the revenue in these types of services to the other and in relation to other branches of economy.

Increasingly many entrepreneurs from different areas prefer to invest in new

technologies that combined with reducing the number of personnel necessary to achieve the production cycles determines increase productivity and maximize profits. This choice is justified for two reasons: first reason is the increased quality goods made and services rendered, and the second reason is the lower cost of depreciation of new technologies compared with the costs of personnel that would be needed to achieve the same volume of production.

### **Changes in the structure of national economies**

The changes that have taken place in the structures of national economies, in particular the transition from the economy based on the industry - which is specific equalizing wages - at the service economy - which is a dispersion of specific occupational categories and inequality in the system of salary of these categories - had as a consequence the emergence of differences of income.

The transition from an economy based on industry at the service was conducted in developed capitalist economies after the Second World War, and in the case of communist countries with start of dissolving the Communist bloc.

This transitional period has resulted in the emergence of differences in the pay of active people with the same level of educational preparation but with different specializations due to orientation to the „new“ areas of economic activity.

Another question that resulted in the emergence of inequalities of income was the transition from a closed economy (for example, the economies of communist societies), which is based on a economy of self-

consumption and equalizing wages to an open economy that is based on international exchange of products and Capital and the differences in income are enhanced.

### **Globalization**

Globalization can be both a source of inequality of income - where financial globalization - but can lead to equalizing incomes and - if globalization of trade (for example a country has access to technologies from developed countries lead to increased productivity in less developed countries and increasing trade deficit of developed countries).

The question that needs to be answered is how much further growth of existing inequalities can be attributed to globalization. To be able to outline a response to this problem, economists used an explanatory model based on the Stolper-Samuelson theorem, which can be summarized as follows: in an economic model with two countries with two factors of production exuberance different, increasing openness to trade (by reduction of customs duties) in a country in developing countries, where labor is relatively poorly qualified abundant, will increase revenue and decrease those with more specialized skills and high, and consequently reducing inequality. After taxes on imports will be reduced, the price of an imported product „labor-intensive qualified“ falls, and the same will happen with the revenue factor highly qualified employment, while prices of export products (created with labor weak qualified) increase. For a developed country with high labor qualified relative abundance, is going backwards and thus inequalities will increase.

Inequality, result of globalization, more and may take another form explanatory: differences in remuneration of factors of production. Globalization, say some economists, increase revenue factor capital, to the detriment of those in work. Thus, increased income from interest, dividends, repatriated profits, fees or royalties, to the detriment of wages. However, few studies done have failed to conclude in the direction of a significant effect of this redistribution on the inequalities of income.

The European Union is, without a doubt, the best example of free trade in contemporary society, and for an economist this means globalization. Free trade involves challenges that take different forms: first there is an impact of trade on income becoming a problem in Europe, secondly there is a question regarding the ways in which free trade affects the productivity of firms. Thus improving productivity expects that these gains are reflected by low prices and therefore higher revenue. The answer to the second question involves of course the impact of globalization on workers.

The influence of globalization on inequality should not be interpreted but the unit, several trends are observable: countries integrate into the world economy have reduction of the difference in income between the various developed countries with abundant labor force of international openness led to the reduction of inequality, determining the effect of emigration, in countries with labor mobility, opening the increased inequalities, as is the case of OECD Member; inequalities will persist and in a fully integrated, but will be lower than in any of the stages of its segmentation.

## Education

I consider that there are three ways through which education affects social inequality. The first is that there are differences between individuals involved in the process of working with different levels of preparedness. The second way by which the social inequality has to do with different degrees of payments corresponding to a level of education. The third way is to influence changes in the curricula of schools that may contribute to widening income inequality.

One of the problems the economy of the past 50 years has been generated by the increase to differences in income between workers with a level of preparedness higher compared to those with a poor level of training.

There is a view that education can lead to greater inequality of income. Analyzing the current situation of increasing inequalities in most developed societies in which there is a high level of education, with schools that are financed by public funds, we can reach the conclusion that a labor force educated young will be associated with an increase in inequality of income, so education does not reduce social inequality, reducing inequality is necessary for the education of the active population is high but one uniform (Telhado Pedro Pereira, Pedro Silva Martins, 2000).

There is a strong link between skills and education: the higher level of education will be even stronger impact on revenues skills, because skills are more easily deprive through education. Enhance skills is a consequence of a high level of education.

Statistics show that parents with a low level of education do not invest too much money in the education of their children, especially in their academic studies, this

phenomenon with the consequence that a differentiation between children who are not receiving a proper education potential of some of them.

Income is transmitted from generation to generation through parents investments in the human capital of children.

In general, workers in the field need more training because they perform administrative work with a greater responsibility than those employed in the production involved in textiles and assembly of goods that require a level of preparation lower.

### **Labor market**

On the labor market there are certain segments where there is absorption due to demand for specialists with certain qualifications who needs an economy at a time, but due to pressure and are in excess supply and falling demand for specialists in areas that no longer is a priority for the economy.

The influence of external markets on domestic labor market and the absorption of increasingly intense lead to a shortage of real balance between demand and supply of labor because of excessive migration of the workforce in certain areas resulting in increased salaries of persons remaining in the country of origin because increasing demand and low supply more manpower.

The phenomenon of migration of labor are as a result of widening income inequalities reported in other areas of the economy but also relative to the incomes of working abroad and those who work in the country of origin doing the same work.

Hidden unemployment is another face of inequality, namely the one who revealed that the price for a reduced rate it is increasing

inequalities among those who already had a job. Once, poverty was a consequence of the lack of a job, now it appears even when you have a job. Nearly 17 of the 32 million living below the official poverty threshold had a job. Among those who work full time, the number of poor increased by 45%. Differences between the highest salary in a company and the average salary of the same company have increased from 1/12 after tax in 1960, 1/70 in 1998. Similarly, differences between the salaries were increased depending on the level of training, a graduate of the college winning twice more than the average preparation.

These short information, and correlated with sectoral differences between the salaries we are to believe that low wages are the price for maintaining a busy active population, as the increases in production and productivity have not been reflected in further gains for ordinary workers but only for those in the top of the pyramid. Hidden unemployment, due to technology and unfair distribution of income is another element contributing to the current unemployment picture, without being considered by the Keynesian model.

A problem that should solve any function of demand in a modern economy is to identify which is the threshold at which uneven redistribution of income will lead to a slump long? What is the point to which the excess consumption of the lowest parts of the population with the highest incomes will be lower than the decrease in demand the other party, much of the population with low incomes? Continuous decrease in the rate of savings is a first indication of a future threshold of rupture. Even if a strategic solution would cover goods to emerging markets in Europe or in Asia, the large number of people is not a sufficient argument to support the

idea of a high demand for long-term, in circumstances where the average salary is somewhere near 100 dollars (and this in terms of optimistic statistics).

An interesting aspect, attributable to change the content of work, due to the phenomena accompanying globalization is that in OECD countries, income from employment become more unequal, while income from working full-time, no. This is because the inequalities of income are beginning to

appear increasingly as much attributable to unemployment, and activities with reduced schedule. Other phenomena which increases the differences in income, "attributable to globalization, are opening the labor market to immigrants access to productive activities with lower wages, trade liberalization, the outsourcing. Equally important are weakening labor unions, lack of skills, technological change that increases the demand for highly qualified labor.

## REFERENCES:

### Books

1. **Ciutacu, Constantin, Luminita Chivu**, *Evaluation and economic analysis of state aid*, Expert Publishing House, Bucharest, 2006
2. **Jean Francois, Rischard**, *The twelfth clock. 20 global problems, 20 years to solve them*, the Romanian Banking Institute, 2004.
3. **Michael Chossudovsky**, *The globalization of poverty and the new world order*, Publisher: Global Outlook, Canada, 2003
4. **Molnar, Maria; Poenaru, Maria**, *Social Protection in Romania. European benchmarks*, Bren Publishing House, Bucharest, 2008
5. **Sen, Amartya**, *Development as freedom*, Economic Publishing House, Bucharest, 2004
6. **Vasile, Valentina; Zaman George**, *Labor migration and sustainable development in Romania*, Expert Publishing House, 2006

### Working papers

7. Aaron, Steelman; John A. Weinberg, „What's Driving Wage Inequality?"; 2006
8. Antonovics, Kate, „Persistent Racial Wage Inequality", 2002
9. World Bank, the Ministry of Labor, Family and Equal Opportunities, National Institute of Statistics, Romania: Evaluation Report, 2007
10. Bernstein, Jared, Mishel, Lawrence, „Has wage inequality stopped growing?", 1997
11. Bivens, Josh, Globalization, „American Wages, and Inequality - Past, Present, and Future", 2007
12. Blau, Francine D., Kahn, Lawrence M., „The Us Gender Pay Gap In The 1990s: Slowing Convergence", 2003
13. Daniela, Andr n; Thomas, Andr n; "Occupational Gender Composition and Wages in Romania: From Planned Equality to Market Inequality?" 2007;
14. Feenstra, Robert C., „Globalization and Its Impact on Labor", Viena, 2007
15. Gindling, T. H., Terrel, Katherine, „Minimum Wages, Inequality, and Globalization", 2005



16. Hsu, Kuang-Chung, „Outsourcing, Innovation, and Wage Inequality in the United States: What Happened to the Outsourcing Effect on Wage Inequality in the 1970s? ”, 2007;
  17. Is Skill Upgrading the Culprit?, 2007
  18. Jonathan, Heathcote; Kjetil, Storesletten; Giovanni L. Violante ” The Macroeconomic Implications of Rising Wage Inequality in the United States” ; 2004;
  19. Josh,Bivens; ”Globalization, American Wages, and Inequality Past, Present, and Future”; Economic Policy Institutel, 2007;
  20. Michael, Kremer; Eric, Maskin; ” Wage Inequality and Segregation by Skill”; National Bureau oif Economic Research; 1999;
  21. Mihaly, Simai; ” Poverty and Inequality in Eastern Europe and the CIS Transition Economies”; DESA Working Paper; 2006;
  22. Pedro,Telhado , Pereira; Pedro, Silva, Martins, „Does Education Reduce Wage Inequality? Quantile Regressions Evidence from Fifteen European Countries „ – reserch paper, 2000;
  23. Robert C. Feenstra ”Globalization and Its Impact on Labor”; Vienna Institute for International Economic Studies; 2007;
  24. Steelman, Aaron, Weinberg, John A., „What’s Driving Wage Inequality?”, 2005
  25. Thomas, Lemieux; ” Residual Wage Inequality: A Re-examination”; University of British Columbia; 2004;
  26. Thomas, Lemieux; ” The Changing Nature of Wage Inequality” ; Nber Working Paper Series; 2007;
  27. Thomas, Lemieux; ”Post-secondary Education and Increasing Wage Inequality”; University of British Columbia and NBER; 2006;
  28. Thomas, Hyclak ” Rising Wage Inequality. The 1980s Experience in Urban Labor Markets”; 2000;
  29. Tomohara, Akinori, Yokota, Kazuhiko, „ Foreign Direct Investment and Wage Inequality:
  30. Wälde, Klaus, Weiß, Pia, „ International Competition, Downsizing and Wage Inequality”, 2006
  31. Wheeler, Christopher H., „ Evidence on Wage Inequality, Worker Education, and Technology”, 2005
- 



## The State and Market Failures

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**Abstract:** *Considering the theoretical and practical importance of this matter, a veritable theorizing has been made of the role played by the state in the economy. The difficulty of such undertaking arises among others from the multiple belonging of the researched theme, calling for enough thoroughness regarding the used concepts, techniques and methods of investigation.*

*By this article we have aimed for a brief analysis of the content and economic functions played by the state. The gained experience and complexity of the current economic issues emphasize the imperfect nature of the market and State and call for an equilibrium of such economic regulation mechanisms.*

**Keywords:** welfare-state, market failures, state failures, mixed economy, public intervention, state strategies.

The state's intervention in the economy represents one of the oldest traditions ever since the 16<sup>th</sup> century, however especially after the industrial revolution.

Consequent to the increased speed in the changes and the increased number of "players" in the economic system, state activities have become increasingly numerous and diverse, however the diversity and particular features of the various national economies make it necessary for nuanced approaches to be used, far from expressing generalities

regarding the state's economic role. Also, this role should be analyzed based on the existence of the two conceptions regarding the state's role in the economy: the state in a strict sense, based on a restrictive conception according to which the state identifies with public administrations and organisms of social security. It is based on such delimitations that the nature, length, tools and implications of the state's intervention in the economic life should be assessed.

The traditional measure supporting the economic role of the state is supported by the share of fiscal collections and social contributions. By such, the state's intervention has referred to two correlated aspects, the social one (family, society and so on) and the economic intervention.

For a long time period, the public expenses of the state were destined to financing some activities (upholding the order, justice and national defense), corresponding to the "guarding state".

In the first half of the 20<sup>th</sup> century the economic and social intervention of the state has increased. The situation specific to the after war period, the increased concern of the state for simultaneously ensuring full occupation level, economic growth and social justice contributed to the establishment in 1945 of the "providence state". In a strict and historical sense, this refers to the state's intervention in the social field by means of social securities, aiming to guarantee a certain income for persons affected by social risks (labor injuries, illness, unemployment, aging etc.). The providence state or welfare state is the one supplying the material means necessary for this collective projection. Nonetheless, expenses for social securities explain only in part the social intervention of the state. In the same time, it supports economic growth and occupational level, ensuring the orientation of production.

Depending on the state intervention level, a number of *types of economic systems* have occurred, which have had decisive influences over resources allocation and incomes distribution. Thus, throughout the 20<sup>th</sup> century the *mixed economy* has occurred and developed, which was characterized by coexistence of specific market means for resources

allocation upon public sector manifestation. The transfer towards such an economy occurred due to the extension in the state's activities and the state's increased role. The state permanently expanded its objectives, by taking over some functions which had previously been achieved by the public study or by the market sector of the economy. The object of the *public sector economy* is to analyze the effects of public expenses and taxes over the economic system. Thus, it is important to establish the effects of the public sector over resources allocation in the private or market sector, as well as on the allocation of wealth throughout the economy. Such characteristic of the modern economies calls for a nuance analysis of the state's economic role in the public and private sectors.

Therefore, economic literature defines the role of the state in the following areas: efficient resources allocation, ensuring the correct resources distribution and stabilization of the macro-economy.

Nonetheless, in the opinion of many specialists the state also fulfils the role of correcting the macro-economic imperfections (insufficiencies) of the market economy. Thus, there are of relevancy in the economic theory six large *types of market imperfections*, representing as many reasons justifying the state's intervention: business cycle, public goods, externalities, information insufficiency, monopoly and market power, redistribution of incomes and merit goods.

In the opinion of R. A. Musgrave, the existence of more categories of market imperfection determines the manifestation of the state's role in a number of directions: the resources allocation role, the distribution role, concretized in ensuring social equity and justice in distributing incomes and welfare

under market system conditions; the stabilization role by intervention in the economy upon budgetary, fiscal and monetary policies in order to solve problems regarding inflation, unemployment, payment balances disequilibrium and so on; the regulatory role, represented by setting up the general system of laws to direct the economic agents' sector.

In the same time, it is also admitted the existence of certain imperfections of the *state's intervention*, as well as the fact that sometimes governmental programs can act less efficient. Mainly, weaknesses in the state's activities are a matter of the fact that the intervention consists in changes which are many times impracticable, of the difficulty in clearly setting out the objectives of the governmental policies, bureaucracy accompanying the government's activity and so on. Furthermore, those emphasizing the low efficiency of the state's intervention assert that the state serves the interests of the strong social groups, as well as the private interests of politicians and bureaucrats.

This proves that on the contrary, the market and the state are imperfect institutions.

However, the optimization of the economic system should be grounded on the correct assessment of the imperfections, and the option regarding the share of one or the other of such institutions (market or state) should have as a criterion the number and length of the imperfections.

### **The Economic Functions of the State**

The functions the state can or have to fulfill have represented a widely controversial theme amongst economists, sociologists and politics theoreticians.

The political conception over the state represents the defining element in establishing its economic functions. Designing typologies of such functions represents a daring attempt, grounded on the very diversity of the approaches regarding the state.

Not few are the cases when the functions are undertaken with no difference whatsoever being made, eluding the specific area of the state's activity, the exercising level, the achievement means and tools and so on.

When referring to the state's activity in the field of economic processes, the term of "intervention" is preferred to the one of "function". The first term, say some authors, can be used in order to reveal the relation between the state and the economy. This option is supported by the fact that it refers to a set of activities or results which can manifest or not, as well as by their rather flexible nature and the possibility of emphasizing that the presence of the state in the economic activity takes various, national and transnational forms.

The state's functions can be grouped in a variety of forms, and some can be found in more than one category.

The consecrated analyses of the state's functions emphasize the mobility and possibility of transferring some of the said towards the market. By demonstrating the improvable nature of the state and market, the preference is suggested for that category of institution which, upon a certain moment, provides the lowest number of insufficiencies. Such types of comparisons lead to the conclusion that certain functions can be delegated to the private sector.

As regards the functions undertaken by the state, various opinions exist. Some argue that the state should only provide for those

goods and services which cannot be provided by the markets. For others, no limits should exist in defining the state's objectives, because such represent the materialization of the citizens' will and the expression of the political process. The theory of public elections, studying the way in which the state directs the economy and establishes its choices, makes a distinction between the regulatory role of the state – meaning types of economic functions which the state should undertake – and positive analysis, aiming to describe the state's behavior.

To a great extent, economists have undertaken the classification of the state's general functions as it was designed by R.A. Musgrave: efficient resources allocation, correct incomes distribution and macroeconomic stabilization.

The American economists P. Samuelson and W. Nordhaus treated both the economic functions of the state, and the main economic functions undertaken by the state in a modern mixed economy.

a) Establishing the legal framework allowing for the market economy regulation. It should be noted the continuous evolution of this legal framework representing a condition for the economic behavior.

b) Interventions over the resources allocation for the purpose of improving economic efficiency.

c) Stabilization of programs for improving incomes distribution.

d) Economy stabilization by macroeconomic policies. Stabilizing the economy represents the economic function most recently undertaken by Western states.

An important role is played by public authorities not only in correcting the market's microeconomic insufficiencies (pollution,

public goods and so on), but also of macroeconomic insufficiencies of the market economy. The premise is used that the market economy is instable by default and that the public behavior refers to the economic policy tools used in order to promote macroeconomic stability. These include taxation and expenses policies, banks control policies, interest rates and financial markets and so on.

The opinion also exists objecting to the instable nature of the private economy and saying that to a great extent unemployment and inflation are due to economic policy errors. By such attention is drawn that governmental programs can act less efficient.

The state's economic role is achieved on a micro and macroeconomic level. The four economic roles can be summarized as it follows: allocation, distribution, regulation and stabilization. While the first three ones are exercised on a microeconomic level, the stabilization role is of macroeconomic content. It should also be noticed the interaction of these roles regardless the level where they are achieved. Thus, the action of the fiscal policy, which is characteristic to the stabilizing role, calls for changes in the taxation and public expenses programs, also affecting the incomes distribution.

Despite the complexity of the governing forms, certain basic functions exist, which are common to all states. Nonetheless, over time both the volume of the functions, and the size of the achieved operations. Thus, a standard set of functions exists, which is applicable to most states. Some are market insufficiencies, others are not. Gradually, new functions have added to the basic ones, destined to contribute to increasing the social welfare.

The performed functions, which also define the economic role of the state, can be

either compatible or conflicting. Thus, expenses for fighting against unemployment have at the same time economic and social objectives, however not all governmental objectives are compatible. Incomes re-distribution, to the extent in which it contributes to reducing investments, can affect the economic growth stimulation policy.

In some countries, it is entirely to the central authorities to perform some functions or such can be transferred to local authorities. In federal government states (USA, Germany, India, Nigeria), the performance of functions can be in charge of feudal, state or local governments. The scission and volume of the performed functions can be established by the political and economic system, as well as by the level of economic development.

Rationality and intervention techniques are closely dependant on the ways or types of achievement. In general, the types of intervention refer to the ways in which political strategies pursue the rebuilding and reorganization of a certain configuration of the social system. Their features can be emphasized by presenting the main dominant state strategies.

a) The neo-liberal strategy represented a new intervention of the modern policies in the USA and England and produced an ideological mutation in the political discourse. From the maxim occupational level objective, achieved by expansionist fiscal policy, the accent is shifted to the control of inflation and reduction of payment balances deficits, by using incomes and monetary policies. By such the transfer is registered of the governmental economic policy towards the micro level and the economy of offer.

b) Neo-state strategies (France, Japan), characterized by fighting against the market forces and by strong bureaucratic control. Contrasting to the neo-liberal strategy, neo-state strategies include an active structural policy for improving and directing the market forces.

c) Neo-corporatist strategies (Sweden, Denmark), the essence of which consists in building strong mixed economies, characterized by combining liberal and Keynesian elements.

As regards the nature of their effects over the economic system, the public intervention modalities can be classified as it follows: urging interventions (markets organization, promoting competition and monopoly control, correcting externalities, coordinating certain behaviors of economic agents); productive interventions (public production and competition with the private sector, monopoly public production, public orders, supplying collective goods); redistributive interventions (creating incomes and ensuring equity; redistributing incomes by direct taxation and transfers).

The types of interventions are changed from one phase to another. The state has always pursued economic objectives, even if such have not been explicit and have been expressed in non-economic terms. However its role of manager of the economy, with explicit and certain purposes has developed after the Second World War II. Thus, this function of economic management is a relatively new one.

Intervention tools, namely the mechanisms used in situations when public action are justified have become increasingly diversified, and their manipulation, increasingly frequent. For the purpose of stimulating economic policies more and more sophisticated economic models are being used.

Establishing the types and tools for achieving the state's intervention should be subordinated to the prerequisite of instating an optimal level of such. With good reason,

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it is considered that the main problem is not the global reduction of the intervention, but the increase of its efficiency.

#### REFERENCES:

1. **Ives Crozet**, *Analyse économique de l'État*, Armand Colin, Paris, 2005
  2. **Luc Weber**, *L'État, acteur économique*, 3e édition, Economica, Paris, 1997
  3. **M.B. Bealeuvallet, F. Mayneris**, *Le Role de l'État*, Brèal, 2006
  4. **R.A. Musgrave, P.B. Musgrave**, *Publi Finance in Theory and Practice*, McGraw Hill International Editions 1989
  5. **Paul A. Samuelson, William D. Nordhaus**, *Micro-Economie*, Les Édition d'Organisation, 1995
  6. **Stephen J. Bailey**, *Public Sector Economics*, Theory, Policy and Practice, MacMillan, 1995
  7. **A. Jacquemin, H. Tulkens**, *Fondements d' économie politique*, De Boeck Université, 1997
  8. **Nicolas Thirion** (coord.), *Le march è et l' État a l'heure de la mondialisation*, Éditions Larcier, Bruxelles, 2007
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# The Determination of the Production Function's Stochastic Frontier at the Industry Level

~ Drd. **Maria Stancu** (Academy of Economic Studies)

**Abstract:** For this analysis, the first step consists in estimating the stochastic frontier of the production function.

This study is designed to analyze the metallurgic industry, with the determination of the production function's stochastic frontier at the industry level.

Analyzing the results of the implementation of the above models we observe that some companies have a high efficiency on the whole range, and some companies have a low efficiency in this period.

**Keywords:** production's stochastic frontier, functions of production, industry, ranking companies.

## 1. Estimating the production function's stochastic frontier

Aigner, Lovell and Schmidt (1977) and Meeusen și van den Broeck(1977) have independently proposed the production function's stochastic frontier where an additional random error,  $v_i$ , is added to the non-negative random variable,  $u_i$ , in the following equation of the model proposed by Aigner and Chu (1968).

$\ln(y_i) = x_i\beta - u_i$ ,  $i=1...n$ , where:

$x_i$  is the line (k-1) of the vector, whose

first element is 1, the other elements are logarithms of the quantities of the input K used by i company;

$\beta = (\beta_0, \beta_1, \dots, \beta_k)$ , is the vector's (k-1) column of unknown parameters that will be estimated;

$u_i$  is a non-negative random variable, associated with technical inefficiency in production of the firms from the industry analyzed.

Considering the parameter estimation of production function's frontier starting from the formula of Codd – Douglas using



data from  $n$  companies in order to provide:

$$(y_i) = x_i\beta + v_i - u_i, i=1 \dots n$$

The random error  $v_i$ , justifies the errors measurement and other random factors such as the effects of weather, luck etc., in the value of the output variable and the combined effects of the input unspecified variable in the production function. Aigner, Lovell and Schmidt (1977) thought that  $v_i$  were independently and identically distributed to the random normal variables with zero average and constant variation,  $\sigma_v^2$ , independent of  $u_i$ , which were considered to be independently and identically exponential distributed or random half normal variables.

The model defined by this equation is called Production function's stochastic frontier because the output values are higher edged by the stochastic (random variables,  $\exp(x_i\beta + v_i)$ , random error  $v_i$  can be positive or negative and also the stochastic frontier of the outputs varies around parts that define the frontiers's model  $\exp(x_i\beta)$ .

The deterministic component of the Frontier model  $y = \exp(x\beta)$ , is extracted assuming that the result is reduced proportionally. The outputs and the inputs observed for two firms,  $y$  and  $j$  are presented in the graphic. The  $i$  firm uses the level of input  $x_i$  to produce the  $y_i$  output. The input-output amount value observed is indicated by the marked point  $x$  above the  $x_i$  value. The output value  $y_i^* = \exp(x_i\beta + v_i)$

is marked by  $x$  surrounded over the production function due to the random error,  $v_i$ , is positive. Similarly,  $j$  firm uses the input level  $x_j$  and produces  $y_j$ . However the Frontier output,  $y_j^* = \exp(x_j\beta + v_j)$  is under the production function  $v_j$  is negative. Of course, the Frontier stochastic outputs  $y_i^*$  and  $y_j^*$  are not observed because of the random error,  $v_i$  and  $v_j$  are not observable. However the Frontier stochastic model's deterministic part is observed as being between the Frontier stochastic outputs. The observed outputs can be higher than Frontier deterministic part if the random errors are bigger than the corresponding inefficiency effects ( $y_i > \exp(x_i\beta + v_i)$  if  $v_i > u_i$ ).

The stochastic frontier's model permits the estimation of standard errors and testing hypotheses using the traditional method of Maximum Probability.

## 2. Metallurgic industry. Presentation data

The application uses data from the metallurgic industry between 2005 and 2007.

As development, the metallurgical production structure between 1990 and 2007 had a great rise. Being given these values of progress, results the chart in figure 2, which represents the increase of metallurgical industry structures during the time taken as an example.

1990	1991	1992	1993	1994	1995	1996
99,2	265,9	712,5	1587	4184,6	6254,4	9649,6

1997	1998	1999	2000	2005	2006	2007
25180,7	25367,5	35270,3	72322	128119,1	152542,3	171807,2

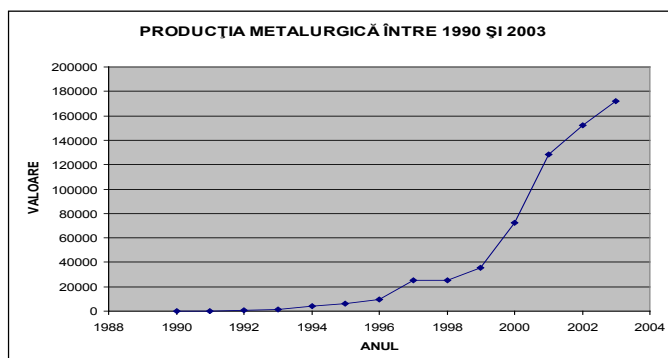


Figure 1

The application establishes the efficient and the inefficient firms in the metallurgic industry. A few examples show the best way to describe the means for using the Frontier programme. In this section we will consider the estimation of:

- 1) the Cobb-Douglas production frontier using crossed data and a half normal distribution.
- 2) the Battese and Coelli specification (1992)

We have gathered data from the activity reports concerning the following firms that are part of the metallurgic industry, covering a three year time period: 2005, 2006 and 2007. All these firms taken as an example are quotable on the Rasdaq Electronic Stock Exchange at the present moment. The source for these activity reports is the website of the Rasdaq Electronic Stock Exchange. The list of these firms is as following:

- CILINDRUL SA-CĂLAN, HUNEDOARA
- DAN STEEL GROUP SA-BISTRIȚA NĂȘĂUD
- DUCTIL SA-BUZĂU
- ELECTROCRBON SA-SLATINA
- ELSID SA-DAMBOVIȚA
- GRANTMETAL SA-BUCHAREST
- GRIVIȚA SA-BUCHAREST

- INTFOR SA-GALAȚI
- LAMINORUL SA-ROMAN
- LAROMET SA-BUCHAREST
- MATRIȚA SA-ODORHEIUL SECUIESC
- MECANICA 94 SA-DROBETA TURNU SEVERIN
- MECHEL SA-CÂMPIA TURZII
- METALURGICA SA-HARGHITA, BIHOR
- METALURGICA SA-REGHIN
- METALURGICA SA-VLAHIȚA
- MITTAL STEEL HUNEDOARA SA
- NEFERAL SA-BUCHAREST
- OȚELURI PENTRU SCULE SA-HARGHITA
- SATURN SA-ALBA
- SOMETRA SA-COPSA MICA
- TUFON SA-CRAIOVA
- TURNATORIA CENTRALĂ ORION-CÂMPINA
- TURNSEV SA-DR. TURNU SEVERIN

We used as input:

**The number of employees** - the firm's labour force in the respective year.

**Fixed assets**- goods and stock that are used for a longer time period in the activity of the patrimonial unit. These are not wasted

on the first use and the accountancy has divided them into three categories: tangible assets, intangible assets and financial assets.

**Stocks** are assets:

That are held to be sold during the proceeding of the ordinary activity

In the progress of production for a future sell; or

Such as raw material, material and other consumptible articles that are to be used in the production process or for carrying out services

We used as output:

**Operating income** which includes:

- income from selling products, commodities, executed works and carried out services
- income from the production in stock, which means the surplus or the deficit in the difference between the effective production value of the products in stock and the production in progress at the end of the period on the one hand and on the other hand the value of the initial products in stock and the production in progress, without taking into account the provisions for depreciation set up for these elements;
- income from the production of fixed assets, which means the cost of the works and the expenses undergone by the patrimonial unit for investments, which are registered as tangible or intangible assets;
- income from operating subsidies that stand for subsidies received in order to cover price differences and losses, as well as other subsidies that the patrimonial unit benefits of coming from the state or other patrimonial units;
- other current operating incomes, which include income from recovering outstanding debts and other

operating income;

- income advanced as revenues or outstanding debts for undelivered goods, works or labour conscription not carried out, which are not considered income of the accounting period, being registered in accountability in a separate account of the balance sheet..

**Turnover** is the sum of the commodities and production sale, at a selling price, excluding price reduction granted to the client and Value Added Tax. It is an indicator used for describing the size of the company and for analysing its economic-financial status. We can find the turnover in the company's profit and loss account

### 3. Study case

We used data from the annual reports of the 24 firms presented before and we followed a few examples from the file attached to the Frontier programme, examples that use the models presented above:

In order to resume the example we assume three inputs: the number of employees, fixed assets and stocks, and as outputs: operating incomes and turnover in all the cases. In the crossed examples we will have 24 firms, whereas in the examples of the data tables- 24 firms and we will use 3 time periods.

1) The Cobb-Douglas production frontier using crossed data and assuming a half normal distribution.

In the first example the Cobb-Douglas production frontier is estimated

$$\ln(Q_i) = \beta_0 + \beta_1 \ln(K_i) + \beta_2 \ln(L_i) + (V_i - U_i),$$

where  $Q_i$ ,  $K_i$  și  $L_i$  are inputs, capital and labour, and  $V_i$  and  $U_i$  are assumed to be normal and half normal distributed.

From data analysis, we conclude that some firms have a high efficiency, that is a value in the interval  $[0.8,1]$ , and some have a low efficiency somewhere between  $[0,0.3]$ .

**The table of the firms with a high efficiency**

DAN STEEL GROUP SA-BISTRITA NASAUD	0.877
INTFOR SA-GALATI	0.870
MATRITA SA-ODOwRHEIUL SECUIESC	0.843
MECHEL SA-CAMPIA TURZII	0.954
METALURGICA SA-VLAHITA,HARGHITA	0.820
MITTAL STEEL HUNEDOARA SA	0.982
SATURN SA-ALBA	0.860
TURNATORIA CENTRALA ORION-CAMPINA	0.918

**The table of the firms with a low efficiency**

CILINDRUL SA-CALAN,HUNEDOARA	0.252
GRANTMETAL SA-BUCHAREST	0.272
GRIVITA SA-BUCHAREST	0.282
LAROMET SA-BUCHAREST	0.211
MECANICA 94 SA-DROBETA TURNU SEVERIN	0.249
METALURGICA SA-HARGHITA,BIHOR	0.180
TURNSEV SA-DROBETA TURNU SEVERIN	0.146

**2) The Battese and Coelli specification (1992)**

Results obtained by processing data using the Frontier programme:

**The table of the firms with a high efficiency ( in the interval [0.8,1]):**

Firm	Year	Efficiency
MECHEL SA-CAMPIA TURZII	1	0.952
MITTAL STEEL HUNEDOARA SA	1	0.969
MECHEL SA-CAMPIA TURZII	2	0.943
MITTAL STEEL HUNEDOARA SA	2	0.904
MECHEL SA-CAMPIA TURZII	3	0.916
MITTAL STEEL HUNEDOARA SA	3	0.824

**The table of the firms with a high efficiency (in the interval [0.8,1]):**

MECANICA 94 SA-DROBETA TURNU SEVERIN	1	0.291
METALURGICA SA-HARGHITA,BIHOR	1	0.280
GRIVITA SA-BUCHAREST	2	0.294
MECANICA 94 SA-DROBETA TURNU SEVERIN	2	0.274
METALURGICA SA-HARGHITA,BIHOR	2	0.276

TURNSEV SA-DROBETA TURNU SEVERIN	2	0.263
GRIVITA SA-BUCHAREST	3	0.298
MECANICA 94 SA-DROBETA TURNU SEVERIN	3	0.275
METALURGICA SA-HARGHITA, BIHOR	3	0.278
TURNSEV SA-DROBETA TURNU SEVERIN	3	0.263

#### 4. Conclusion

Analysing data obtained by applying the above models, we can see that some firms have a high efficiency during the entire interval, whereas some firms have a low efficiency during this interval. Among the ones with a high efficiency

we can name: *Mechel SA – Câmpia Turzii* and *Mittal Steel Hunedoara SA*, and from the ones with a low efficiency the following firms: *Mecanica 94 SA – Drobeta Turnu Severin*, *Grivița Sa – Bucharesi*, *Turnsev SA – Drobeta Turnu Severin și Metalurgica SA – Harghita Bihor*

#### REFERENCES:

1. **Aigner, D. J.** and **S.F. Chu** (1968): "On estimating the industry production function." *American Economic Review* 58, 226-239.
2. **Aigner, D. J., C.A.K. Lovell** and **P. Schmidt** (1977): "Formulation and Estimation of Stochastic Frontier Production Function Models." *Journal of Econometrics* 6(1), 21- 37.
3. **Banker, R.D.**(1993): "Maximum Likelihood, consistency and data envelopment analysis: a statistical foundation." *Management Science* 39(10), 1265-1273.
4. **Dumitru Marin** and **Liliana Spircu**: "Quantitative economic analysis", Independența Economică Publishing House, 2005.
5. **Farrell, M. J.** (1957): "The measurement of productive efficiency." *Journal of the Royal Statistical Society, Series A*, 120 (III), 253-281.
6. **Farrell, M.J.** and **M. Fieldhouse** (1962): "Estimating Efficient Productions Functions under Increasing Returns to Scale." *Journal of the Royal Statistical Society* 125, 252- 267.
7. **Førsund, F.R** (1998): "The rise and fall of slacks: Comments on Quasi-Malmquist productivity indices." *Journal of Productivity Analysis* 10, 21-34.
8. **Malmquist, S.** (1953): "Index Numbers and Indifference Surfaces." *Trabajos de Estadística* 4, 209-242.
9. **Russell, R. R.** (1998): "Distance functions in consumer and producer theory," in R. Färe, S. Grosskopf, R.R. Russell (eds.), *Index Numbers: Essays in Honour of Sten Malmquist*, Boston/London/Dordrecht: Kluwer Academic Publishers, 7-90.
10. **Stancu Maria, Stancu Marilena, Mihai F.**, *Analysis of the efficiency of firms credited by BRD GROUPE SOCIETE GENERALE*, in *Studies and Research of Economic Calculus and Economic Cybernetics Magazine*, Second Issue, Bucharest, 2006, pag. 163, ISSN 0585-7511
11. [www.rasd.ro](http://www.rasd.ro)
12. [www.mfinanțe.ro](http://www.mfinanțe.ro)
13. [www.insse.ro](http://www.insse.ro)
14. [www.deazone.com](http://www.deazone.com)

# Analysis of the Comparative Economic Advantage Case Study – Romanian Economy

~ Drd. **Marilena Stancu** (*Academy of Economic Studies*)

**Abstract:** For this analysis, the first step is the understanding of the concept of foreign trade and of means through which we can determine if a country is competitive compared to another country or group of countries.

This study analyzes the commercial relations that Romania has with the European Union, thus making an “X-ray” to the Romanian foreign trade.

In the second part of this work, the model of the foreign trade multiplier is presented.

From the abovementioned work we can understand that the values of the multiplier vary quite significantly from one year to another which leads us to doubt its relevance.

**Keywords:** comparative advantage, foreign trade, E.U., foreign trade multiplier

## 1. The main European commercial partners of Romania

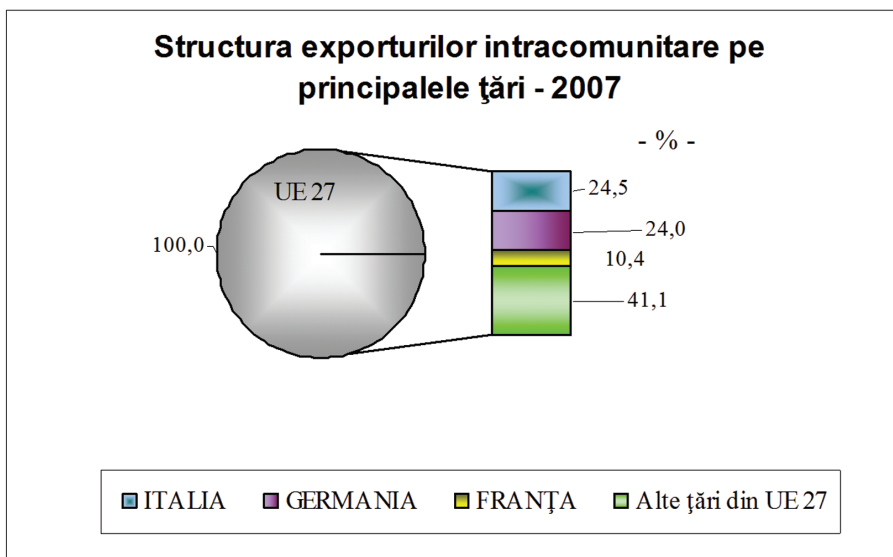
On the first three places, in a descending order of the volume of the trade with Romania, we can find: Italy, Germany and France. For a wider look at the geographical concentration degree and the place that EU-member countries occupy within the whole of the commercial partners of Romania, a

concentration graphic is used (Graphs 1 and 2), in which percentages of the total trade with the EU, of the total trade and the number of EU-member countries are shown.

The main commercial partners of Romania in terms of exporting to the EU are Italy, Germany and France.

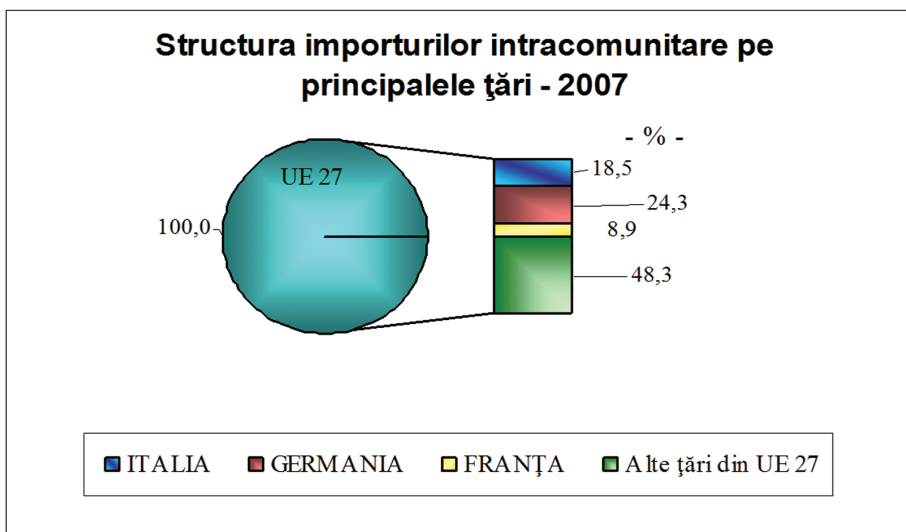
Export to these countries represent approx. 60% of the total export of Romania in 2007

**Graphs 1.** *Graph of the exports to the E.U. countries*



Source: INS, Anuarul Statistic

**Graph 2.** *Structure of the imports from EU countries*



The main commercial partners of Romania in terms of importing, in 2007, are Italy, Germany and France, the same as for the export. Import from these countries makes up more than 50% of the total import made by Romania.

We can see that the first 10% of the commercial partners of Romania make up

approx. 60% of the trade that Romania makes with the E.U. countries.

## 2. Foreign trade multiplier

Using this indicator, we will observe the relation between the Gross Income (economic growth) and the foreign trade, with



the help of static regressions. We have chosen to make such an approach, keeping in mind that we are trying to express the efficiency of the foreign trade based on statistic indicators. Of course, by calculating this indicator using simple regressions, we only initiate a study that is based on finding out corelations, without using statistic instruments form the temporal series econometry. This so because we are testing a model that has been introduced in the literature in a well-determined form and by applying it, if no satisfactory results are obtained, the problem can be solved through correction and calibration.

For calculating the foreign trade multiplier, the import marginal incline  $m$  and the consumption marginal incline  $c'$  need to be calculated first. For finding out these parametres, there are two means of calculation:

1) The „per-say” formula of the parametres, as a ratio between absolute diffrences, measured in two succesive periods of time. We have:

$$m = \frac{M_1 - M_0}{Y_1 - Y_0}$$

where:  $M_1, M_0, Y_1, Y_0$  represents the import, respectively the income at time  $t_1$  respectively  $t_0$

and the consumption marginal incline:

$$c' = \frac{C_1 - C_0}{Y_1 - Y_0}$$

where:  $C_1, C_0, Y_1, Y_0$  means the consumption, respectively the income at time  $t_1$  respectively  $t_0$ ;

2) By expressing the formulas at pt. 1) to the limit meaningly by defining the parametres as:  $m = \frac{dM}{dY}$  and  $c' = \frac{dC}{dY}$  (practical

ly, from  $\Delta$  to  $d$ ). By integration we have the following formulas:

$$M = mY + M \quad (1)$$

$$C = c'Y + C_0 \quad (2)$$

An estimation of the  $m$  and  $c'$  parametres through simple liniar regression will be done, for the years 1997 to 2007. The foreign trade multiplier is expressed using this formula:  $M_x = \frac{1}{1 - c + m}$ . It has been demon

strated supposing the presumptions of the 2nd mean of calculation are right.

We will consider that, if the parametres  $m$  and  $c'$  are stable troughout the period of the study, the regressions expressed trough the first (1) formula must be significant and shall pass all statistic tests for the verification of the probability of simple liniar relation.

The setting of the  $m$  and  $c'$  parametres reffers to their variability in a close value string. This helps us consider the indicators as significant for the entire period of the study, allowing for their further use in forecasts and embedment in complex models, that require a single value for each indicator, throughout the entire period of the study. After the testing of  $m$  and  $c'$  parametres during the considered period, we will calculate the global foreign trade indicator for the entire period and we will be able to tell if it reflects the dynamics of the foreign trade during the considered period.

By applying the first mean of calculation, we obtain the foreign trade multiplier, expressed in year  $t$  with respect to year  $t-1$ . In Table no. 1 we can see the results obtained based on data expressed in „lei” from 1997 to 2007. The calculation of this indicator is done in a chain relation so it is difficult to see a wider perspective.

The foreign trade multiplier is expressed through the formula:  $M_x = \frac{1}{1 - c + m}$

where  $c$  – is the consumption marginal incline;  
 $m$  – is the import marginal incline.

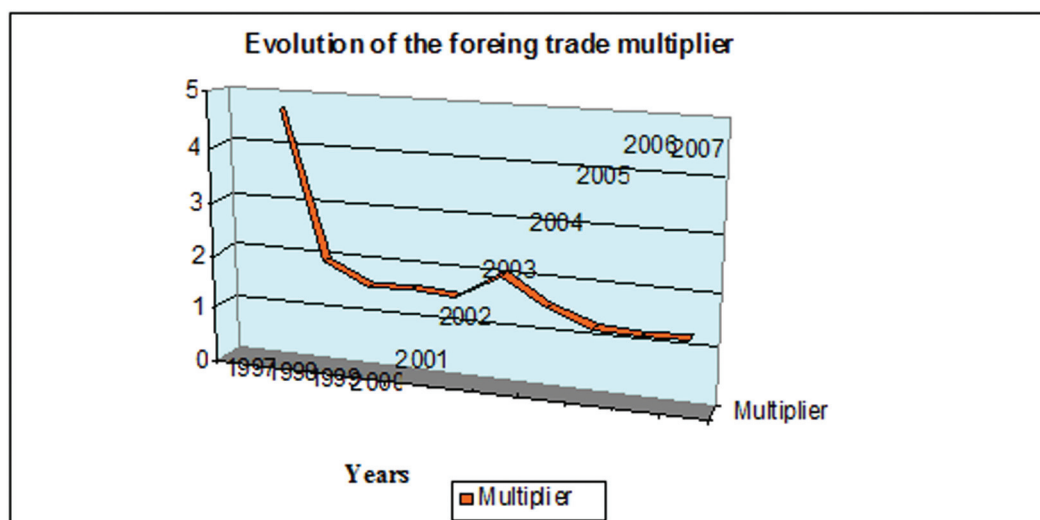
Table no. 1. Foreign trade multiplier

Foreign trade multiplier (1997-2007)								
Year	Import incline	Consumption incline	Multiplier	Import	Export	Final consumption	Available income	Gross income (PIB)
1997				7,54	6,07	21,86	25,4759	25,29
1998	0,185440021	0,97335	4,714986549	9,75	7,37	33,46	37,3935	37,11
1999	0,288503277	0,792458	2,015943483	15,2	13,1	48,43	56,2841	54,57
2000	0,44619609	0,827297	1,615772967	26,51	22,6	69,4	81,6317	80,37
2001	0,404339933	0,800428	1,655870659	41,7	32,9	99,47	119,1991	116,76
2002	0,327730985	0,708215	1,614163187	54,56	45,9	127,26	158,4386	151,47
2003	0,427557711	0,942468	2,061475789	73,6	58,52	169,23	202,9706	197,56
2004	0,460836383	0,831038	1,587809409	98,26	76,79	213,7	256,482	246,37
2005	0,389193785	0,608719	1,281271665	118,4	92,6	245,2	308,23	285,3
2006	0,621615472	0,821843	1,250355619	145,72	125,73	281,32	352,18	324,5
2007	0,735806773	0,956175	1,282657298	175,27	142,7	319,72	392,34	381,9
		Average	1,908030662					

Source: INS, Anuarul Statistic al României, Sistemul Conturilor Naționale

\* The data in the table is in billion lei.

Graph 3. Evolution of the foreign trade multiplier



Primary source: INS

From the abovementioned graph we can understand that the values of the multiplier vary quite significantly from one year to another which leads us to doubt its relevance.

**Interpreting:** With the growth by 1 unit of the export in 2007, the Gross Income has grown by 1,28 times. The multiplication effect is obvious, taking into consideration that the value of the multiplier is greater than 1.

The import marginal incline has a very important role in calculating this indicator.

If we consider the arithmetic means of parameters  $m$  and  $c'$  on the given period, the following value for the trade multiplier can be obtained: Foreign trade multiplier (1997-2007)

**Table no 2. Foreign trade multiplier**

Multiplication- parameters	m	C'	Multiplier
Average value	0,43	0,82	1,65

On average, on the given period, the national income (NI) has grown by 1,65 times. The differences between this mean of calculation and the previous one are not important. For this reason, we can consider that the linear dependencies are checked.

The reserve is due to the high and controverse fluctuations and also to the determining type of calculation. For these reasons, we can move on to the 2nd mean of calculation, meaningly the determination of the parameters through the linear regression model, based on the following relations (obtained based on relations (1) and (2) from the previous chapter, to which we add the residual variables):

$$M = mY + M_0 + \varepsilon_M \quad (1)$$

$$C = c'Y + C_0 + \varepsilon_{C'} \quad (2)$$

(where:  $\varepsilon$ , respectively  $\mu$  are the residual variables;

$C_0$  - independent income consumption;

$M_0$  - independent income import;

$Y$  - the income at a given period of time;

$c', m$  - the consumption and import marginal inclines;

The governmental investments and expenses from the consumption equations are considered as given, that's why we have omitted them, as they can be embedded in the free term, respectively in  $C_0$  and do not affect the parameters of the regressions. We would like to point out that the regressions can also be done based on the logarithmic expressions, meaningly:

$$M = mY + M_0 + \varepsilon_M \quad (1)$$

$$C = c'Y + C_0 + \varepsilon_{C'} \quad (2)$$

The logarithmic method has been proposed by G. Ghani in 2004. He used logarithmic regressions for more than 60 countries over the 1985 - 2001 period.

In this case, we will try to determine the  $m$  and  $c'$  parameters, through simple linear regression over the 1997-2007 period, for Romania.

During the phase of specifying the previous relations, we assume that the income is increasing, having a significant influence on the dependent variables, import and consumptions and we have also neglected a lot of other variables.

In the linear regression model, this is equivalent to assuming that some regression coefficients are different from zero (the coefficients of the independent variables included in the model) and others are zero (coefficients of the omitted variables).

The question that arises is if this assumption is a good one, because both hypothesis can be rendered invalid based on the real data. The income that we have assumed to

have a significant influence on the consumption and import can prove to be insignificantly influent, while another omitted variable can be a highly significant factor.

That's why statistic offers the chance of testing the significance of the regression coefficients of the considered variable and of testing the residuals in order to observe if their behavior indicat an adequate specification of the model. The significance of the regression models shall be tested using the Student test. The Student test is used for the determination of the significance of the regression equation parametres. We consider the following hypothesis:

$H_0$ : an estimation of the regression incline coefficient (in our case  $m$ , respectively  $c'$ ) does not differ significantly from the null value.

The Student test consists of calculating the  $t$  statistic, which has to be greater than the value in the table, for a number of 10 degrees of freedom, in this case, the value in the table for statistic  $t$  being 2,228. For statistic  $F$ , the value in the table is 4,96.

In fact, the two tests are interdependent, their results showing the significance of the simple regression coefficients and the fact that there is a liniar corelation between the variables.

In order to determine how an exterior variable (in our case  $Y$ ) has a significant influence the value of the internal variables (in our case  $M$  and  $C$ ), the following null hypothesis is used:

$H_0$ : the estimated value of the regression coefficient does not significantly differ from zero, in other words, the external variable does not significantly influence the internal variable.

The data obtained without logarithmation are closer, regarding the marginal inclines, to what we have obtained through determining calculation.

The statistic  $t$  variable, for all the coefficients, is great enough for passing the Student test. So, the  $H_1$  hypothesis is rejected.

The  $F$  test of the variation proves, in addition, that the external variable significantly influences the internal variable, the results of the calculated  $F$  being significantly greater than the value in the table.

The estimation of the parametres of the regression equation has been made using the SPSS program.

### 3. Conclusions

The study of the comparative advantage is of great importance because it represents an engine of the economic growth. An essential component is the analysis of the foreign trade through specific indicators.

Furniture and footwear are the main sectors that generate income in the relation with the countries of E.U.. If the product group in which a comparative advantage on the global relation is identified has a big ratio in the export and import to and from the E.U., in the total export and import, this fact is a first clue that the comparative advantage is maintained. The data also shows that in all groups (with small exceptions), Romania exports, respectively imports in quite a large ratio from and to the E.U.

The indicators of the comparative advantage have an overall increasing tendency, which is a good sign for the Romanian economy.

### REFERENCES:

1. Etner F. *Microéconomie*, Presses Universitaires de France, Paris, 2000
2. Frois G.A. *Dynamique économique*, Dalloz, Paris 2002

3. **Martin S.** *Advanced industrial economics*, Blackwell Publishers Inc., Oxford, 2002;
4. **Mas-Colel A., Whinston M.D., Green J.R.** *Microeconomic Theory*, Oxford University Press, 1995;
5. **Nguéna O.J.** *Microéconomie de l'incertaine*, Dunod, Paris, 2001
6. **Stancu S.** *Microeconomie-teorie și teste grilă*, Editura Economică, București, 2002;
7. **Stancu S.** *Microeconomie. Comportamentul agenților economici. Teorie și aplicații*, Editura Economică, București, 2006.
8. **Stancu S., Stancu M.**, *Integrarea piețelor în U.E., cazul concurenței perfecte*, in Revista Studii și Cercetări de Calcul Economic și Cibernetică Economică, nr. 2, București, 2004, pag. 105, ISSN 0585-7511
9. **Stancu Maria, Stancu Marilena, Mihai F.**, *Analiza eficienței firmelor creditate de BRD GROUPE SOCIETE GENERALE*, in Revista Studii și Cercetări de Calcul Economic și Cibernetică Economică, nr. 2, București, 2006, pag. 163, ISSN 0585-7511
10. **Stancu, S., Stancu, M.**, *Tehnici econometrice folosite în măsurarea performanțelor la nivelul industriei*, Manager, Nr. 2, 2006, pag. 39, ISSN 1453-0538

## Overproduction Crisis and Environmental Issues

~ Prof. Ph.D. **Paul Marinescu** (University of Bucharest)

**Abstract:** *The present paper aims at reviewing the economic crises that have occurred since the 19th century until the present. There have also been considered the causes that generated such crises, the way in which they manifested and the effects they generate. The state intervention represents a form of crisis management, yet not a guaranteed one.*

**Keywords:** Crisis, overproduction, environment, loans, gap, real economy, monetary economy, re-launch, monetary policy

The *overproduction* influencing crises does not represent a production exceeding the needs of the society, but rather the population's solvable demand for goods and services.

The Marxist theory explaining the crises mechanism is partially valid. This is grounded on the observation that a tendency of the companies exists of amplifying the part afferent to investments by diminishing the part corresponding to salaries and amplifying the number of the restructured persons.

Thus, pressures are created over the incomes obtained on a social level. The increase of profits and relative decrease of salaries

contributes to the decrease in the population's buying force.

The gap between the organization of production on the level of companies and the macro-social organization creates unbalanced effects on the economical level, creating overproduction. The overproduction crises prevention measures: policies for increasing outlets, measures for loans selling, economic Malthusianism (intentional damaging of goods) have limited effects and produce uncontrollable situations, because it is difficult for the moment when disequilibrium occurs to coincide with the moment when interventions are performed.

An analysis of the overproduction crises is important to be grounded on the causes generating such. Economic literature emphasizes that the first overproduction crisis occurred in 1815 and generated severe disturbances on the English market, leading to unemployment and social riots. The causes having generated the said crisis were due to the attitude of the English manufacturers, who incorrectly evaluated the fall of Napoleon's empire and produced enormous stocks destined to export, without evaluating the real absorption possibilities from the internal and continental markets.

Exaggerated loans granted to the newly opened markets in South America generated another significant crisis in 1825, followed by the bankruptcy of some banks, insolvency of some companies, with rebound effects over other countries.

The global nature of the economic processes in the context of modern production, the increased economic exchange between countries defined a worldwide overproduction crisis in 1847-1848, with major disequilibrium effects over the markets. The periodicity of such crises (1857, 1866, 1873, 1882, 1890, 1900) demonstrates that human society has never found solutions which could define a coherent and consistent path for the economic development. The transfer to the stage of free competition, towards the forms of monopoly and imperialism amplified such crises and created the conditions for the First World War to start, which had been preceded by a severe restraint of the production, prices rising, increased unemployment rates and loss of houses.

Such crises deeply affected the economy of all countries, in all its sectors (industry, agriculture, trade, transport).

In the decade between 1921 and 1930 four distinct periods existed:

- The boom following the First World War;
- The reconverting crises in the 1921-1923;
- The growth period between 1923 and 1929;
- The great world economic crises in 1929-1933.

Many times in analyzing this decade, the monetary elements (international debts and payments) are not correlated with the economic elements (protection, commercial exchanges). A number of views exist regarding the causes that led to this major crisis. The classic view places the causes in the fundamental incapacity of the capitalism of self-regulating. We refer here to the analysis of Sismondi, Warlas and Wicksell. The economic contradictions between the various powers in that period, the war distructions, the huge public debt, the high external debt created in the European countries the conditions for major disequilibrium. In the period of the First World War, the economic power of the USA increased, American foreign investments raised from USD 3.5 billion in 1913 to USD 6 billion in 1919. On the other hand, similar English investments decreased during the same time period by almost one fifth.

The British industry did not achieve high productivity indexes compared to its competitors, leading to more expensive exports, more difficult to achieve, and to more difficult to obtain economic recovery. In order to reinstate the economic situation it was necessary for the internal consumerism and for the buying force to be lowered, with unpredictable effects in terms of social conflicts.



In his remarkable paper "A Tract on Monetary Reform", John M. Keynes mentioned that the future economy would be interested in keeping business stability, prices, and using labor force.

The dogma regarding the maintaining of the pound convertibility in gold, actual until the 20s was no longer covered in the after war economic realities. The drastic reduction of exports, the increased unemployment rate, external debts of various debtors affected not only national finances, but also the international financial circuits.

In order to attenuate such disequilibria, a production and international exchanges boom would have been necessary. The American researcher C.P. Kindleberger mentioned that the international economic system had become instable due to England's inability and USA's reticence in creating a balance between three major areas of the socio-economic system:

- Maintaining a market relatively open for merchandise which had not found buyers yet;
- Supplying in a contra-cyclic manner, long term loans;
- Minimizing the depth of the crisis.

While in the period of previous economic crises England had functioned as a regulator factor, in 1929 when the connections between markets were extremely branched out, England did no longer have the power of doing so, and the USA did not want to. Every country tried to defend its own interests by ignoring the interdependencies between the world economies.

A crisis prevention solution would have been to close some external markets grounded on the sad experience in the field of agriculture, where overproduction led to the

decrease of farmers' incomes after the First World War. Another explanation also exists regarding the lack of reaction from the world's large states. The only country where the crisis was visible and became chronic was the Great Britain, while in the other countries it was mostly latent. The accumulation models specific to every capitalist countries worn themselves and the international framework became increasingly troubled with no consecrated international payments system. The situation also aggravated due to the protection measures of the important states on an economical level, leading to limitation of exchanges and expansion of the crisis.

In the 20s the USA protected itself from foreign merchandise and from the immigrants' exodus. A contradiction can be noticed in this period regarding the development level, with was a sustained one, and the one of openings, which was restricted. In the said period in the USA scientific labor organization methods were created (Taylorism), and the "conveyor" work (Fordism). The mergers in those years, specific to the American industry, promoted production rationalizing in its most important aspects, leading to mechanized, standardized, planned-programmed activity, "conveyor" work, a dozen bureaucracy and the society laid on an optimal circuit in terms of decision making efficiency and decision circulating speed, as systemic placement of various departments of technical nature, supply, financial, accountancy.

A new model can be referred to, for achieving and finalizing the value created by such with the growth of mass consumerism based on the increased incomes of a significant part of the workers, with living conditions similar to those of the middle class.

The "conveyor" work model worn out

its possibilities by the end of the third decade because the increased productivity level had reduced its trend and the labor productivity had started to decrease. Because market segments the absorption capacity of which was relied on became oversaturated, the demand decreased dramatically. The agriculture crisis also reduced the markets.

The 1929 crisis does not actually represent the self-regulating capacity of the capitalism, but it is on the contrary its very self-regulating reaction tending to eliminate redundancy from the system. Unfortunately in that period economies continued to produce more than the market demanded.

In 1932 Franklin D. Roosevelt denounced the administrative, obligation based intervention, namely the "Industrial Dictatorship", announcing a new simulative policy, the New Deal, which he designed not as a preconceived program, but little by little, with pragmatism and tenacity, defining a system of private profit and free initiative.

This program aimed at:

- Reorganizing and re-launching the fundamental activity sectors – banks, industry, power and transportation;
- Re-launching the American economy on the world market by giving up the gold etalon and progressive dollar de-valorization compared to gold and based on mutual commercial agreements;
- Achieving a new social compromise by imposing a set of reforms aimed at putting a stop to unemployment rates and diminishing such, increasing real salaries, collective labor contracts in numerous areas;
- Accepting concessions to be made by the employers associations in order

to allow for a better integration of the workers in the consumerism system by permanent cooperation between the government and the business environment;

- Reducing the government intervention in the business environment and stimulation by economic policies of the business environment.

One of the supporters of Keynes economy, the French economist H. Noyelle mentioned in "Utopie liberale, chimere socialiste, economie dirijee" that the solution for saving the economic systems was the "directed economy". Nuances, synthesis, details of this current faced other theories applicable or not in the real economy, and innovating ideas resulted which represented the pillar for neo-Keynesian, neo-liberal theories etc.

Directory theories, if analyzed superficially, could lead to the idea that it is only a step from prices, salaries, production, foreign exchange and commerce control to interventionism.

Nonetheless, a major difference exists between the two theories, because the promoters of the directory theories encourage indirect actions for influencing, attracting and stimulating, which are accepted by enterprisers ensuring some level of equilibrium in using the labor force and income.

John Maynard Keynes theory and Roosevelt's New Deal are no doubt part of the directory beliefs accepting corrective measures in reconstructing economies as catalyzes of such after the world economic crises of 1929-1933 and the Second World War (1938-1945).

It is obvious that the English economist is distancing from the classic and neo-classic theories regarding the rapport between

the achieved production and sold production. Actually, the premise is used that the activity level is not achieved grounded on available production factors, which would minimize the unemployment rate, but on the predictions and information regarding the "effective demand", both in the field of consumerism and in the field of investments.

In Keynes opinion, three tools of concrete action exist which can ease the regulation of the economic system in view of the resulted production volume, of the labor force absorption:

- A monetary policy that could allow for the re-launch of private investments by diminished loans interest;
- Incomes redistribution policy that could encourage consumerism by transfer of resources from groups which tend to make savings (in general large incomes groups) towards groups which tend to consume (in general low incomes groups); this sort of policy can be achieved by collective tax and social expenses;
- A policy for re-launching public works by budgetary deficits which could lead to increased private demand by also using the vector of public expenses.

The Second World War imposed the mobilization of resources to some direction, which subsequently led to directory measures, necessary in order to rebuild and normalize the economy of the affected countries. In his paper "Utilizarea deplina a mainii de lucru intr-o societate libera" published in 1944, Beaveridge mentioned the errors leading to three major malfunctions of the society: misery, illness, unemployment.

The American governments in the 60s (Kennedy, Johnson), supported by Keynesian counselors (P.A. Samuelson, W.A. Heller, J. Tobin etc) resized the Keynesian message, while the 70s defined a new economic reality: stagflation – generated by the coexistence of inflation and unemployment.

The current crisis is a crisis of the existent market system.

The credibility of the states' institutions has decreased, and the processes of monitoring, control and evaluation of the companies' performances have been many times poorly performed, leading to confusion and unpredictable reactions from social-economical entities. Excessive encouragement of consumerism is no longer the miraculous solution for economic growth and development.

The monetary economy has too long forged the real economy, and stock exchanges are only seldom real barometers of economic performance, becoming rather contextual tools of the political groups.

Overproduction, the cult for greed, the severe environmental problems, the lack of resources, the labor force becoming worn out, the lack of real motivation, encouragement of monopoly, the creation of exclusive and exclusivist performance and production centers and the "specialization" of a wide portion of the world into exclusive consumerism are elements demonstrating that the issue is not actually that of no solutions, but rather that of no will of implementing real solutions, which would be favorable to all. The large decision markers are favoring the international elites.

The world of the future will no survive unless the statements on economic, social, political, cultural equilibrium become realities.

## REFERENCES:

1. **Fred Goldstein**, *Colossus with Feet of Clay: Low-Wage Capitalism*, Sage Publications Publishing House, 2008.
2. **Steven Kettell**, *Circuits of Capital and Overproduction: A Marxist Analysis of the Present World Economic Crisis*, Department of Politics and International Studies, University of Warwick, Coventry, 2006.
3. **Paul Burkett, Martin Hart-Landsberg**, *Development, Crisis, and Class Struggle: Learning from Japan and East Asia*, St. Martin Press Publishing House, 2000.

# Inflation Targeting as Monetary Policy Strategy in View of Romania's Adopting Euro as National Currency

~ Ph.D. Student **Valentin Leoveanu** (University of Bucharest)

**Abstract:** *On its way towards the European Union accession, Romania had undertaken a multitude of economic transformations that made the transit from the ineffective system of central planning to an institutional framework created to facilitate the functionality of a competitive market economy. Linked to these economic developments, the monetary authority represented by the National Bank of Romania chose some models of monetary policy in order to achieve its fundamental objectives: price stability and financial stability. Nowadays the monetary policy adopted is based on inflation targeting as a main frame of decision and action to reach the objective of adopting euro as national currency in Romania. This paper attempts to focus on the rationale behind the adoption of inflation targeting, the key features, the international experience and the prerequisites on this subject. As a conclusion there are presented the advantages of choosing this type of monetary policy on the further developments towards euro adopting in Romania.*

**Keywords:** inflation, monetary policy, exchange rate, Balassa-Samuelson effect

As a set of measures and tools used by the central bank in order to ensure that the legally provided objectives are achieved (under Law no. 312/2004 on the Statute of the National Bank of Romania, the fundamental objectives of the monetary authority are to ensure price stability and financial stability), the monetary policy is a part of the set of policies by which the economic evolution

is influenced, along with the other types of policies: fiscal, budgetary and salary related.

On its way towards the European Union accession at January 1, 2007, Romania had undertaken a multitude of economic transformations that made the transit from the ineffective system of central planning to an institutional framework created to facilitate the functionality of a competitive market

economy. Under these circumstances, the monetary policy framework represents the institutional system by which monetary policy decisions are made and implemented.

According to the social and economic evolutions of that time, the monetary authority represented by the National Bank of Romania approached a series of monetary policy strategies which, by specific use of monetary policy tools (interest rate, the policy of mandatory minimum reserve funds, open market policy) would lead to the achievement of its fundamental objectives.

The last decade of the 20<sup>th</sup> century and the beginning of the 21<sup>st</sup> century have been marked in the Romanian monetary policy by targeting monetary aggregates as basic strategy implying that in order to achieve the fundamental objective of prices stability an intermediary objective should be used, namely the control of monetary aggregates, by using the monetary basis as operational objective. This modality of implementing the monetary policy was adopted following the preeminence of the monetarist model in the economic thinking of that period.

In order for this monetary basis control policy to be efficient, it is necessary for two conditions to be complied with: the monetary authority should be effectively capable to set out the limits of its own primary currency creation and the multiplier making the connection between the monetary basis and the monetary mass in a larger sense should be a constant measure

Targeting monetary aggregates was applied in Romania in parallel with a strongly administered floating regime of the leu exchange rate, as this was necessary in order to achieve concordance between the objective of decreasing the inflation and the objective of

maintaining the external deficit within sustainable limits.

In August 2005, the National Bank of Romania adopted a new monetary policy strategy – **direct inflation targeting**. An essential part in the functioning of this regime is played by anchoring inflation forecasts in the level of the inflation objective set out by the central bank and consequently by efficient communication with the population.

The rationale behind adopting this monetary policy model was a fundamental one, considering the specificity and actual stage of the Romanian economy, grounded on the following aspects: the firm commitment in supporting un-inflationist processes following European Union adhesion; the decreasing connection between the volume of monetary aggregates and the level of the inflation consequent to financial innovation and the increased gap between the real economy and the real one; the need of focusing all efforts rather on the inflation rate than on the intermediary targets and the fact that once the capital account is liberalized, the stability of the exchange rate could no longer represent a viable alternative, because the still high inflation and the Balassa-Samuelson effect could slow down the un-inflation process.

In the same time, the international experience and practice have proven the undeniable advantages of adopting this sort of strategy which, although initially undertaken by only some developed countries, has now been adopted by central banks in approximately 21 countries, and it has also proven to be an attractive alternative for emerging countries given the fact that by implementing such some important nation wide economic disequilibrium have been solved.

Regarding this answer, it is relevant to mention that the changes in the monetary policy occurring over two decades in the new member states of the European Union have been closely connected to the strategies shaped by the model named "the Washington Consensus" based on the simple principles of the market economy system: stability, privatization and liberalization. This type of policies was adopted especially in Central European countries recently coming out of communism and has been achieved by disciplined budgetary policies, commercial and fiscal liberalization, privatization of state owned companies and financial institutions, by de-regulation and monetary policies based on fixed currency exchange rates, which were favorable at that time in achieving prices stability.

Consequently, the financial crises faced worldwide – the one in Asia in 1997-1998 and the one in Russia in 1998 – proved that monetary policies based on exchange rate could not be effectively used in order to reduce inflation, as the decrease in the appreciation of the currency exchange rate led to increased current account deficits, which made it necessary for efficient monetary policy "anchors" to be searched for. Alternatives were limited to targeting monetary aggregates – as their increase could lead to the increase of inflation, to incomes targeting – which also led to the increase of inflation by nominal indexation of salaries and prices or to direct inflation targeting, objective which was actually decided upon, as it prevented both inflation increases and the danger of currency exchange rate appreciation.

In a general definition, inflation targeting represents a monetary policy framework created in order to achieve a predetermined inflation level. Inflation targeting combines

two distinctive elements of successful monetary policy: a medium term inflation target on which inflationist expectations would depend and enough freedom of action within such policy for the purpose of attenuating the shocks over financial stability.

In this respect, grounded on the fundamental monetary policy objective, namely of ensuring and maintaining price stability, the National Bank of Romania grounded the strategy of inflation targeting by emphasizing the following as its main features: using the entire set of monetary policy tools in order to achieve the inflation objective; supporting a proactive monetary strategy grounded on communicating to the public the objectives, the decisions and reasons behind such monetary decisions, as well as afferent risks; increasing the efficiency of medium term monetary policy actions.

In order to perform this undertaking, a series of premises should exist, namely: annual inflation rate is expressed as having a decimal expressed value; by its Statute adopted by law, the National Bank of Romania is fully independent on a decisional and operational level; the Romanian financial sector is characterized by stability and robustness, nonetheless the financial intermediation level should increase; excessive taxation is no longer a threat; objectives regarding the level of inflation for the next years have been mutually agreed upon with the Government; the Romanian monetary authority has improved its forecasting capacity regarding the inflation evolutions; the successes in the un-inflationist process since the year 2000 have led to increased credibility for the National Bank and for its actions.

Along with designing this strategy, the National Bank of Romania has also



established that the inflationist target will be expressed based on the consume price index (CPI) and that such should be within the limits of a fluctuation interval of  $\pm 1$  percentage point. The annual inflation targets would be established for a larger time horizon (initially 2 years). Also, a flexible interpretation would be considered of the inflation rate objective, especially in respect to its consistency with the regime of the exchange rate flotation. The Governor of the National Bank of Romania, Correspondent Member of the Romanian Academy Mugur Isarescu said in his speech at the Royal Academy for Economic and Financial Sciences of Barcelona, at February 21, 2008 that: "the central bank should adjust its monetary policy tool, so that to stabilize inflation around the central target, without generating excessive fluctuations on the level of economic activity. [...] In the formulation of Mervyn King, the "governors of central banks are not *obsessed* with inflation". The gradual approach determined by the concern for stabilizing the GDP deviance around its potential level is usually accompanied by the need of avoiding sudden evolutions of the interest rates [...], as well as of the currency exchange rates, which could endanger the stability of financial markets and external equilibriums".

Thus, regarding the currency exchange policy, the main determinants will consist in: continuing the controlled flotation regime for the currency exchange rate considering that the market will have an increasing role in determining the exchange rate; the less frequent intervention of the central monetary authority, as well as unpredictability on a short term of the currency exchange rate for the purpose of discouraging speculative capital flows consequent to the liberalization of the capital account.

A particularly important aspect in applying the inflation targeting monetary policy is represented by creating a decisional framework adequate to such strategy, including the establishment and use of inflation measures that are relevant for the monetary policy decisions. On a general level, it is accepted that the consume price index – the indicator used by most central banks as a measure of inflation – reflects the impact of some factors of transitory nature, which can send false signals, making the decisional process more difficult on the level of monetary authority. On the level of the Romanian central monetary authority six core measures of the basic inflation have been analyzed, designed as those components which express the persistent sources of the inflationist pressures in an economy (three measures obtained by the method of excluding certain components from the consume prices index basket, *optimal trimmed mean (19 percent)*, *median* and *Edgeworth index*). All those measures present a more reduced volatility compared to total inflation, however the most representative measure of inflation, according to the tests performed in this paper, has proven to be *trimmed mean 19 percent*. The inconvenience of using this measure arises from the complexity of the determination method, as such becomes inaccessible to the public. That is why, as mentioned above, the measure by which inflation will be expressed is the consume prices index (CPI).

The modality for reporting the level reached by inflation in Romania would represent the main tool of communication of the central bank with the public for the purpose of anchoring the inflationist expectations and that is why starting with August 2005 it was decided for such to be made on a trimester basis by means of a Report on inflation. The

sections of this Report refer to: the assessment of the current economic developments; motivations grounding the monetary policy decisions made during that period; provisions of the Romanian Bank of Romania on the evolutions of the inflation rate for a time horizon of eight trimesters (3 years); emphasis on the uncertainty and risk associated to such predictions; implications over the future attitude regarding monetary policy measures.


By this, communication between the monetary authority in Romania and the public would be based on: a more transparent policy; official annunciation of adopting the inflation targeting regime, along with details on the inflation fluctuation limits etc; communication with the public based on publishing

the trimester Reports on inflation and press conferences organized upon releasing such Reports; press releases regarding the meetings of the monetary policy Committee and its decisions.

The advantages of adopting the inflation targeting strategy as a strategy of monetary policy for Romania consist in: reduced contradictions on a temporal level by increased responsibility of the central bank in achieving its primordial objective – prices stability; applying a flexible and transparent policy which is operation even in case of instable relations between monetary aggregates and inflation; achieving an un-inflationist trend upon relatively minimum costs, of direct impact over inflationist expectations.

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## REFERENCES:

1. **Bernanke, B.S.**, *Inflation Targeting. Lesson from International Experience*, Princeton University Press, New Jersey, 1999
  2. **Isarescu, M.**, *Probleme ale politicii monetare intr-o tara emergenta. Cazul Romaniei*, Discurs sustinut la Academia Regala de Stiinte Economice si Financiare, Barcelona, 2008
  3. **Orlowski, L.T.**, *Monetary Policy and Inflation in the European Monetary Union – Perspectives and Lessons*, Paper to the Symposium “A New Humanism for Europe: the Role of Universities”, Rome, 2007
  4. **\*\*\***, Caiete de studii nr. 19, Modalitati de cuantificare a inflatiei de baza, Banca Nationala a Romaniei, Bucuresti, 2007
  5. **\*\*\***, Raport asupra inflatiei, Banca Nationala a Romaniei, Bucuresti, mai 2007.
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## The Principle of Prudence and the Constituency of Provisions

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**Abstract:** Provisions are constituted for the purpose of complying with the principle of prudence. These are comprised into annual expenses until they are used. Their destination is to cover the expenses that prior or actual events make them possible. Indirectly, the provisions represent the equivalent of probable debts generating loss or expenses.

**Keywords:** provisions, legal obligation, implied obligation, prior event, uncertain value

In conformity with the principle of prudence we can encounter a constituency of provisions which cumulate until the moment of their use, the volume of sums included in yearly expenses. The object of provisions is well established, though the size and date of production are not precisely known.

They are determined by the end of financial exercise, time in which at the establishing of financial status of an entity should be considered all predictable obligations and potential loss which appeared in the completed exercise or on the running of a previous exercise. The acknowledged provision value must develop a better estimation to

the time of balance sheet of the necessary costs for erasing current obligation, generated by prior events. These provisions are accounted until the moment of their use in yearly expenses, having as a destination financing risks and losses (expenses) which prior or present events make possible (litigations, granted warranty to clients, reorganization, taxes etc.).

The International Accounting Standards debate, in great detail, the problems concerning defining, constructing and using provisions. Therefore, IAS 37 "Provisions, contingent liabilities and contingent assets" define provisions as a "liability of uncertain timing or amount".

A provision for being acknowledged in accountancy must fulfil the following conditions:

- a) the entity has the legal or implied obligation, generated by a prior event;
  - the obligation is legal, if it results from an explicit or implicit contract, from legislation or as an effect of the law;
  - the obligation is implied, if it results from an entity's activity of in the case in which through establishing a previous practice, through firm politics or through specifically enough declaration indicated to partners to assume several responsibilities and as a result induced the idea they will pay their responsibilities;
- b) the probability of out-resourcing which incorporates necessary economic sacrifice for paying a precise obligation;
- c) plausible estimation of obligation value;

Provisions' projection in accounting requires completing several steps:

- establishing and supplementing provisions, as an element of expenses:
  - 6812 "Exploitation expenses concerning provisions = 151 "Provisions as a part of asset costs"
  - 21 " Immobilisation accounts = 151 "Bodily provisions" (initially estimated costs with disassemble and moving of bodily immobilisations, as well as immobilisation position site restoration)

Supplementing (modification) of provisions is effected for completion of the financial exercise, when it should analyse and adjust to reflect a better current estimation.

Thus, if, for reaching obligations, a necessity of an out-resourcing is no longer probable, the provision is annulled.

2. the annulment and decreasing of provision by re-engaging at incomes:

- 151 "Provisions" = 7821 "Incomes from provisions"

3. use of provisions is made only with the purpose for its initial recognition, pursuing the adjustment of expenses due for the constituency of a provision with this precise purpose:

- acknowledge expenses turned liable:

6xx "Expenses accounts" = %  
 (according to its nature)      3xx  
    4xx  
    5xx  
    "Used resources accounts"

- re-engaged provisions:

- 151 "Provisions" = 7821 "Incomes from provisions"

4. repayment of provisions (art. 190 from OMFP 1752/2005) takes place when a part or all expenses connected with a provision will be repaid by a third party, repayment should be acknowledged only when its receive is a certainty. Repayment should be considered with a different asset.

The acknowledged values for repayment will not exceed the value of provision.

The repayment policy IAS 37, page 1759. A store applies a policy of money return to unsatisfied buyers, return of goods, though it is not a legislative obligation. The money return policy is very well known.

The event which obligates is the selling of goods; fact that generates an implicit obligation, for running a store induced to buyers the awaiting of reimbursement.

It is probable that a part of sold goods to be returned as an effect of reimbursement.

A provision is acknowledged to the best estimation of reimbursement costs.

Accounting regulations which are in conformity with European directives – OMFP 1752/2005 modified and revised in 2008 – stipulate (art. 34) that “provisions are destined to cover debts which nature is clearly defined and which to the time of balance sheet it is a probable or certain to exist, though uncertain on what concerns the values or specific time of their appearance.”

Provisions can not be used for adjusting asset value.

Subchapter 77 (completed with elements form IAS 37) strictly defines and delimitates provisions for being acknowledged.

A provision is a debt with uncertain liability and value.

For being acknowledged, a provision must fulfil the following terms:

- an entity has a current obligation generated by a previous event;
- it is probable that an out-resourcing to be necessary to respect a specific obligation;
- can be accomplished as a plausible estimation of obligation values.

A current obligation is developed as legal or implicit (IAS 37).

Provisions stand out from other debts (commercial credits or implied though unpaid expenses) through the uncertainty factor connected with liability or value of future expenses necessary to covering debt.

Provisions are not acknowledged by future exploitation losses.

Thus, it will be acknowledged as provisions, only the obligations generated by

previous events, independent by future action of entities (e.g. manner of running activity in the future). Such obligations are: fines or negative effects eliminating costs, caused to environment, punished by law, generating out-resourcing which incorporate economic benefits, regardless to future actions of entities. Analogous, an entity acknowledges a provision for closure costs of an oil plant by terms of remedy damages already instated. Unlike this particular situation, an entity can develop the necessity or have the intention, due to commercial pressures or legal claims, to effect expenses for being able to run its activity in a certain manner (e.g. installing smoke filters in a specific factory).

As an entity can avoid future expenses in activities by, for example, modifying the procedure of manufacturing, it does not have a due obligation to that future expense, therefore will not acknowledge any provision.

Elements for provision constituency are stipulated in art. 186, such as:

- litigations, fines and penalties, compensation, damages and other uncertain debts;
- expenses for service activity in warranty period and other expenses concerning the warrantee for clients;
- reorganization actions;
- pension and other similar obligations;
- taxes;
- other provisions.

Accounting registration of provisions is accomplished in several ways, considering their nature, the purpose or object for which they have been constituted.

Reorganization provisions can meet the following constituency situations:

- selling or ending activity of a part of business;
- closing
- modifying the structure of management, for example, eliminating a level in management;
- fundamental reorganization with an important effect in the nature and purpose of entity activity.

Reorganization provisions, in the case of a legal obligation, are constituted by following general terms of acknowledgement of legal provisions and stipulations.

Default obligation appears for an entity's provision constituency for reorganization if respected the following terms:

a) has an official detailed plan for reorganization, which stipulate at least:

- activity or the respective part of activity;
- main locations affected by reorganization plan;
- approximate number of employees which will be compensated for ending activity, distribution and their position;
- default expenses; and
- start time for implementing reorganization plan.

b) caused those affected expectations for reorganization accomplishment by beginning implementation of a plan or announcing its main characteristics to affected ones.

In the case in which and entity begins a reorganization plan or announces its main characteristics to affected ones solely after balance sheet, if reorganization is important and its representation may influence economic decisions of users based upon financial situations, an informative activity is necessary.

A provision for reorganization will include only direct costs generated by reorganization, such as:

- are generated necessarily by the process of reorganization; and
- are not connected with de continuous development of entity activity.

A reorganizational provision must not include costs as those connected by:

- requalification or permanent personnel replacement ;
- marketing ;
- investment in new systems and distribution networks.

Provisions for taxes for future owed state budget overdrafts are constituted in terms in which the overdrafts do not appear as debt in relation with the state.

Provisions must be strictly linked with risks and estimated expenses. For establishing the existence of a current obligation to due time of balance sheet, all available information must be considered.

The acknowledged value as provision must build the best estimation to due time of balance sheet of necessary costs to finalize current obligation.

The best estimation of necessary cost for finalizing current obligation is the overdraft which an enterprise will pay rationally for finalizing obligations to due time balance sheet.

Gain resulted by foreseen asset yielding must not be considered in evaluation of a provision.

Provisions are evaluated before determining taxes on profit, fiscal treatment stipulated by fiscal legislation.

For exemplifying, we present several operations recorded in accounting note of VAD S.A. society.



1. Commercial society VAD S.A. constitutes a provision with the value of 7300 lei, at the end of N-1 exercise, for litigation with a client, representing delivered and un-cashed goods. In N exercise the process is finalized with the cashed overdraft of 7000 lei.

- Distinct record of client in litigation:

4118 "Uncertain clients or clients in litigation" = 4111 "Clients" 7300

- Provision constituency:

6812 "Exploitation expenses concerning provisions" = 1511 "Litigation provisions" 7300

- Closure of expenses account at the end of financial exercise, with affecting the result:

7380/21 "Profit or losses" = 6812 "Exploitation expenses concerning provisions"

- Erasing debt to client, in exercise "N", according with judicial resolution.

% = 4118 "Uncertain clients or clients in litigation" 7300

5121 "Lei Bank Accounts" 7000

654 "Losses from debts and debtors" 300

Simultaneously, provision for litigations annulment without an object:

7300 1511 "Litigation provisions" = 7812 "Incomes for litigation provisions" 7300

- Closing expenses account

300 121 "Profit or loss" = 654 "Losses from debts and debtors"

2) Commercial society VAD S.A. delivered during the financial exercise "N -1" finite products with a values of 8000 lei with a warrantee period of a year. The medium rate for expenses with improvement of goods in warrantee period established in previous exercise was of 2%.

- Provision constituency  $8000 \times 2\% = 1600$  lei

6821 "Exploitation expenses concerning provisions" 1521 "Provisions for client warrantee" 1600 lei

- Closure of expenses account at the end of "N - 1" exercise:

121 "Profit or loss" = 6812 "Exploitation expenses concerning provisions"

In warrantee period, as a consequence for received complaints from clients, it is estimated that the entity will be obligated in the financial exercise "N" to effectuate improvements of 2000 lei:

- Increasing provision in exercise "N" of 400 lei

6812 "Exploitation expenses concerning provisions" = 1512 "Provisions for client warrantee"

Buyer demanded improvements are made by a third commercial society, invoiced to producer, with a value of 2100 lei VAT 19%, in financial exercise "N":

- Invoice registration concerning expenses of improvement for the sum of 2100 lei and VAT of 19%

% = 401 "Suppliers" 2399

628 "Other expenses for third party service" 2100

4426 "Deductible VAT" 399

- Annulment of provision constituted for given warrantees of 2000 lei, without object:

1512 "Provisions for client warrantee" = 7812 "Provision incomes" 2000



- Expenses account closure in financial exercise "N"
- 121 "Profit or loss" = % 2500
- 628 "Other expenses for third party service" 2100
- 6812 "Exploitation expenses concerning provisions" 400
- Closure of income account in financial exercise "N":
- 7812 "Provision income" = 121 "Profit and loss" 400

3) VAD Commercial society decides in December exercise "N - 1" to close section no° 3. It approved a detailed plan concerning activity restraint and effecting compensatory payments of 250.000 lei to reorganization affected personnel.

6812 "Exploitation expenses concerning provisions" = 1514 "Reorganization provisions" 250.000

- Closing expenses account for "N - 1" exercise:
- 121 "Profit or loss" = 6812 "Exploitation expenses concerning provisions" 250.000
- Effecting compensatory payment in exercise "N"
- 6588 "Other exploitation expenses" = 4281 "Other duties concerning personnel" 250.000
- 4281 "Other duties concerning personnel" = 5121 "Lei bank account" 250.000
- Provision annulment at due time of expenses effecting.
- 1514 "Reorganization provisions" = 7812 "Provision incomes" 250.000
- Closing expenses account:
- 121 "Profit or loss" = 6588 "Other exploitation expenses" 250.000
- Closing income account
- 7821 "Provision incomes" = 121 "Profit or loss" 250.000

VAD society established to pay pension (benefits) at the end of service of 2% form the salary for each year of service. The salary in first year of employment is of 20.000 lei and assumes an increase of 5 % (composed) in each year. The rate of actualization is of 10 % per year.

The obligation for pension towards employee with a 5 year contract and sums constituted which will modify provisions are as following:

- Yearly salary at the end of period can be estimated at  $20.000 \times (1 + 5\%)^4 = 24.3120$  lei
- Each year of activity gives the right to an instalment of  $24.310 \times 2\% = 486$  lei on retirement due.

According to Om 237/2007 which states that "the values of pension provisions are established by field specialists".

Specialists calculated the final obligations as seen in the table below:

Year	1	2	3	4	5
<b>Final obligation</b>	332 lei	730 lei	1205 lei	1767 lei	2430 lei

Accountancy recordings:

- First year it is constituted a provision for payment final obligation of 332 lei.

6812 "Exploitation expenses concerning provisions" = 1515 "Pension provisions and similar obligations" 332

- Second year increase of provision of 398 lei (730 – 332)

6812 "Exploitation expenses concerning provisions" = 1515 "Pension provisions and similar obligations" 398

- Third year increase of provision of 475 lei (1205 – 730)

6812 "Exploitation expenses concerning provisions" = 1515 "Pension provisions and similar obligations" 475

- Fourth year increase of provision of 562 (1767 – 1205)

6812 "Exploitation expenses concerning provisions" = 1515 "Pension provisions and similar obligations" 562

- Fifth year increase of provision of 663 lei (2430 – 1767)

6812 "Exploitation expenses concerning provisions" = 1515 "Pension provisions and similar obligations" 663

- Record of payment obligations for pension

6458 "Other expenses concerning insurance and social protection" = 4281 "Other duties concerning personnel" 2430

- Payment of pension fund

4281 "Other duties concerning personnel" = 5121 "Lei bank account" 2430

- Annulment of constituted provision

1515 "Pension provisions and similar obligations" = 7812 "Provision incomes" 2430

- Closing expenses account

121 "Profit and loss" = 6588 "Other exploitation expenses 250.000

- Closing income account

7812 "Provision incomes" = 121 "Profit and loss" 250.000

Commercial society VAD constitutes in N – 1 exercise a provision of 7800 lei for probable penalties established following the un-payment in due time of several taxes which would be paid in exercise "N".

- Provision constituency in financial exercise "N – 1" of 7800 lei

6812 "Exploitation expenses concerning provisions" = 1516 "Provisions for taxes" 7800

- Closure of expenses account in financial exercise "N – 1"

121 "Profit or loss" = 6812 "Exploitation expenses concerning provisions" 7800

In exercise "N", the society acquits penalties of 7700 lei

- Penalty payment

6581 "Compensation, fines" = 5121 "Lei bank accounts" 7700

- Provision annulment

1516 "Provision for taxes" = 7812 "Provision incomes" 7800

- Closure of expenses account:

121 "Profit or loss" = 6581 "Compensation, fines" 7700

- Closure of income account

7812 "Provision incomes" = 121 "Profit or loss" 7800

Therefore, at the end of exercise could be established in balance sheet only accomplished benefits.

## REFERENCES:

1. **M. Ristea** și colab. ,*Contabilitatea financiară a întreprinderii*, Ed. Universitaria, Bucharest, 2005
2. **P. Pantea, Gh. Badea**, *Contabilitatea financiara românească conformă cu directivele europene*, Ed. Intelcredo Deva, 2007
3. **N. Feleagă, I. Ionașcu**, *Tratat de contabilitate*, vol. I, vol. II, Ed. Economică, Bucharest, 1998, 1999
4. Standardele internaționale de contabilitate (IFRS), Ed. CECCAR, Bucharest, 2007
5. Accounting Law no. 82/1991 revised in 2008
6. OMFP no. 1752/2005 for approval of accounting Regulation stipulated by European directives IV and VII, revised in 2008.

# LMS and E-learning 2.0.

## A Second Life for E-learning

~ Eng. **Cosmin Olteanu** (University Nicolae Titulescu)

**Abstract:** E-learning 2.0 is a consequence of evolving into Web 2.0. Therefore we can say that Web 2.0 : is defined as the "read-write" web which provides all the services and applications to allow individuals to co-create content, collaborate and share it with others that supports user-generated content, that is content created by "users", rather than specialist authors or publishers using a variety of affordable technologies like blogs, podcasts and wikis. E-learning 2.0 is about creating and sharing information and knowledge with others and is about using blogs, wikis, social bookmarking and social networks within an educational or training context to support a new collaborative approach to learning.

**Keywords:** Web 2.0, E-Learning 2.0, Social Learning, Blogging, LMS, Download generation

E-learning as we know it has been around for ten years or so. During that time, it has emerged from being a radical idea – the effectiveness of which was yet to be proven – to something that is widely regarded as mainstream. It's the core to numerous business plans and a service offered by most colleges and universities.

And now, e-learning is evolving with the World Wide Web from **Web 1.0** to **Web 2.0** as a whole and it's changing to a degree significant enough to warrant a new name: E-learning 2.0.

Web 1.0	Web 2.0
read-only web	read-write web
content publishing	user-generated content
	social software

Fig. 1 - **Web 1.0** versus **Web 2.0**

### Web 1.0

- is defined as the "read-only web", that is **content** produced by an expert author and **published** on the web to be read by consumers.

### Web 2.0

- is defined as the "read-write" web; it provides all the services and applications to allow individuals to co-create content, collaborate and share it with others.
- supports **user-generated content**, that is content created by "users", rather

than specialist authors or publishers using a variety of affordable technologies like blogs, podcasts and wikis.

- encourages the social aspect of the Web, e.g. through the use of **social media** like social bookmarking tools and social networks.

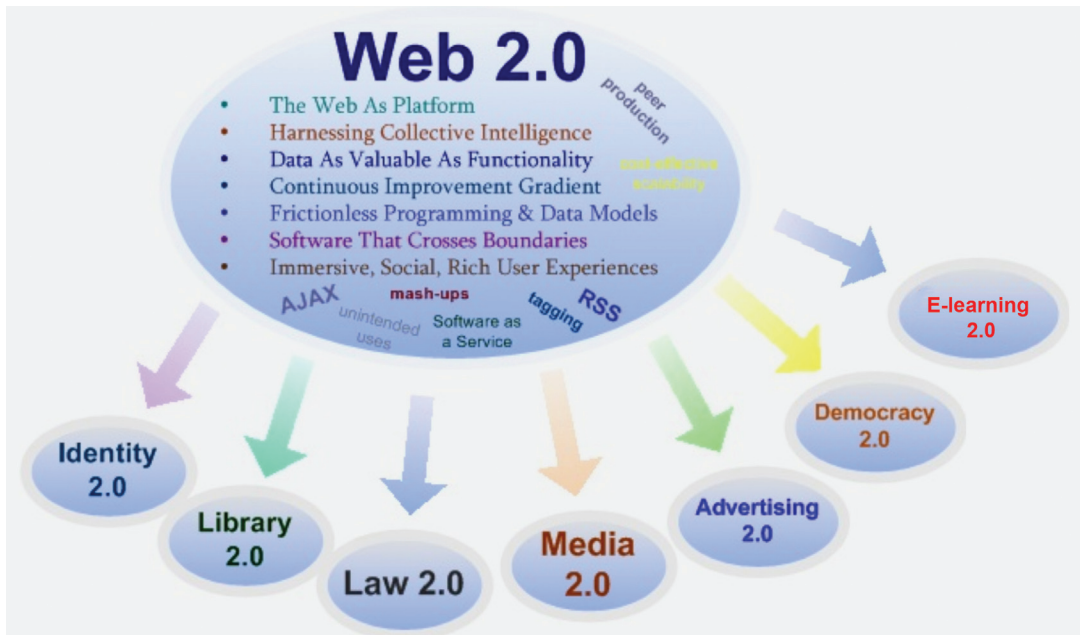


Fig. 2 - Web 2.0 Distribution

E-Learning 1.0	E-Learning 2.0
online courses	sharing information and knowledge
	collaborative learning social learning
CONTENT	PEOPLE

Fig. 3 E-Learning 1.0 versus E-Learning 2.0

### E-Learning 1.0

- was the early days of e-learning when it was all about delivering content, primarily in the form of online courses and produced by experts, i.e. teachers or subject matter experts

### E-Learning 2.0

- is about **creating and sharing information and knowledge** with others.
- is about using blogs, wikis, social bookmarking and social networks within an educational or training context to support a new **collaborative approach to learning**.

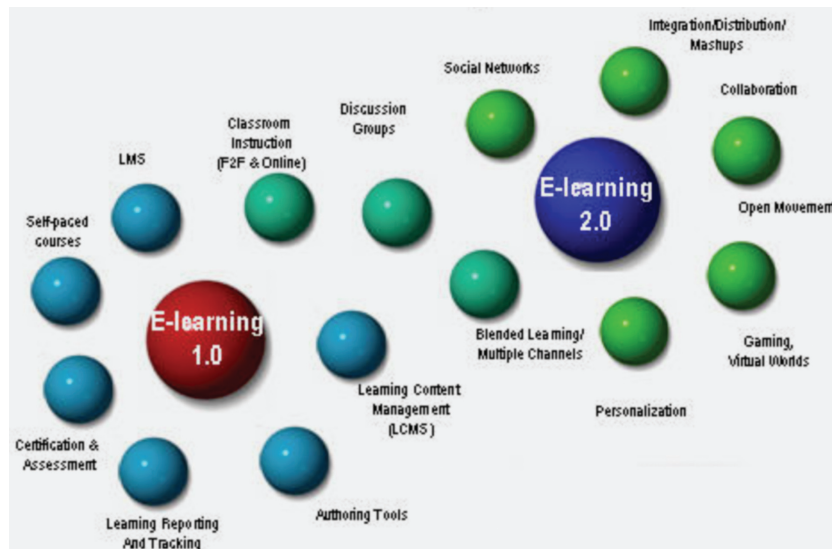


Fig. 4 - E-Learning 1.0 components versus E-Learning 2.0 components

*If you could only use one word to describe Web 1.0/E-Learning 1.0 and one to describe Web 2.0/E-Learning 2.0, they would be CONTENT and PEOPLE. This is the reasons why E-Learning 2.0 is often referred to as Social Learning.*

In the world of e-learning, the closest thing to a social network is a community

of practice, articulated and promoted by people such as Etienne Wenger in the 1990s. According to Wenger, a community of practice is characterized by “a shared domain of interest” where “members interact and learn together” and “develop a shared repertoire of resources.”

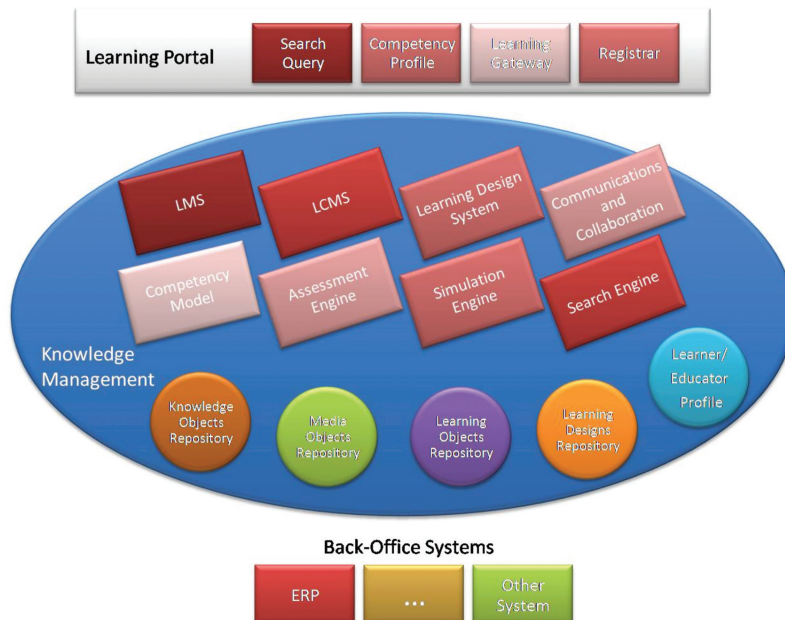


Fig. 5 - E-Learning Portal

For the most part, though, what constituted “community” in online learning were artificial and often contrived “discussions” supported by learning management systems. These communities were typically limited to a given group of learners, such as a university class, had a fixed start and end-point, and while substantially better than nothing, rarely approached Wenger’s theory.

That’s not to say no communities of practice were forming. There were some attempts to foster them, as for example MuniMall, directed toward the municipal governance sector, and PEGGasus, directed toward engineers and geophysicists. Moreover, as commentator Erin Brewer has noted, places on the Internet like Yahoo! Groups have become a locus for community learning activities. But in general, the uptake has been slow, and the support from traditional institutions almost nonexistent.

Educators began to notice something different happening when they began to use tools like wikis and blogs in the classroom a couple of years ago. All of a sudden, instead of discussing pre-assigned topics with their classmates, students found themselves discussing a wide range of topics with peers worldwide. In a very short time, blogs were used for a wide variety of purposes in education; an educational bloggers’ network formed and by this year thousands of teachers were encouraging their students to blog.

Blogging is very different from traditionally assigned learning content. It is much less formal. It is written from a personal point of view, in a personal voice. Students’ blog posts are often about something from their own range of interests, rather than on a course topic or assigned project. More importantly, what happens when students blog, and read reach others’ blogs, is that a network of interactions forms—much like a social network, and much like Wenger’s community of practice

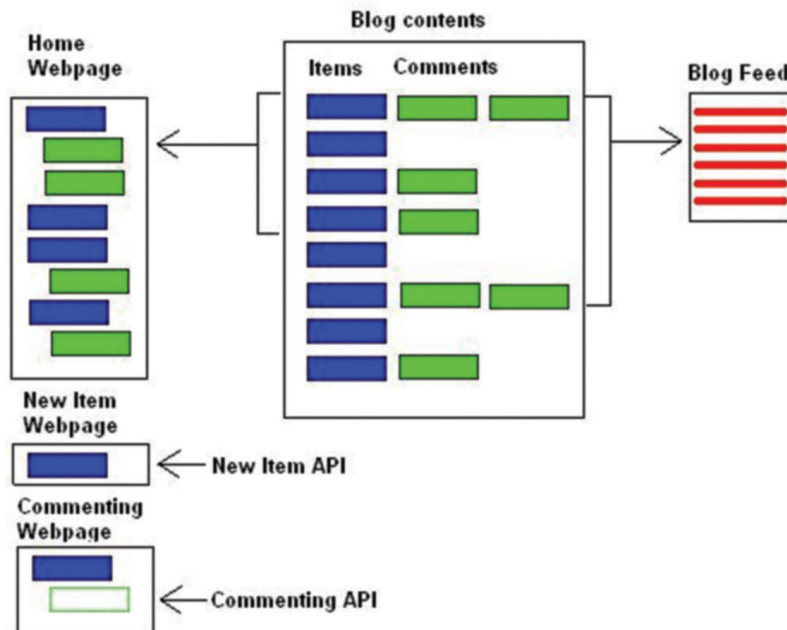


Fig. 6 - Blog components



It's not just blogging. Educators have also taken an interest in podcasting. Some have started broadcasting, such as at McMaster, where engineering professors now host an online show.

*"We're talking to the download generation,"* said Peter Smith. "Why not have the option to download information about education and careers the same way you can download music? It untethers content from the Web and lets students access us at their convenience."

What happens when online learning ceases to be like a medium, and becomes more like a platform? What happens when online learning software ceases to be a type of content-consumption tool, where learning is "delivered," and becomes more like a content-authoring tool, where learning is created? The model of e-learning as being a type of content, produced by publishers, organized and structured into courses, and consumed by students, is turned on its head. Insofar as there is content, it is used rather than read— and is, in any case, more likely to be produced by students than courseware authors. And insofar as there is structure, it is more likely to resemble a language or a conversation rather than a book or a manual.

The e-learning application, therefore, begins to look very much like a blogging tool. It represents one node in a web of content, connected to other nodes and content creation services used by other students. It becomes, not an institutional or corporate application, but a personal learning center, where content is reused and remixed according to the student's own needs and interests. It becomes, indeed, not a single application, but a

collection of interoperating applications—an environment rather than a system.

It also begins to look like a personal portfolio tool. The idea here is that students will have their own personal place to create and showcase their own work. Some e-portfolio applications, such as ELGG, have already been created. IMS Global has put together an e-portfolio specification. "The portfolio can provide an opportunity to demonstrate one's ability to collect, organize, interpret and reflect on documents and sources of information. It is also a tool for continuing professional development, encouraging individuals to take responsibility for and demonstrate the results of their own learning".

This approach to learning means that learning content is created and distributed in a very different manner. Rather than being composed, organized and packaged, e-learning content is syndicated, much like a blog post or podcast. It is aggregated by students, using their own personal RSS reader or some similar application. From there, it is remixed and repurposed with the student's own individual application in mind, the finished product being fed forward to become fodder for some other student's reading and use.

Of course, there is no reason to expect that this form of learning would be restricted to the workplace. Learning integrates into every aspect of our lives, from daily household chores to arts and culture. Learning and living, it could be said, will eventually merge.

*The challenge will not be in how to learn, but in how to use learning to create something more, to communicate..*

## REFERENCES:

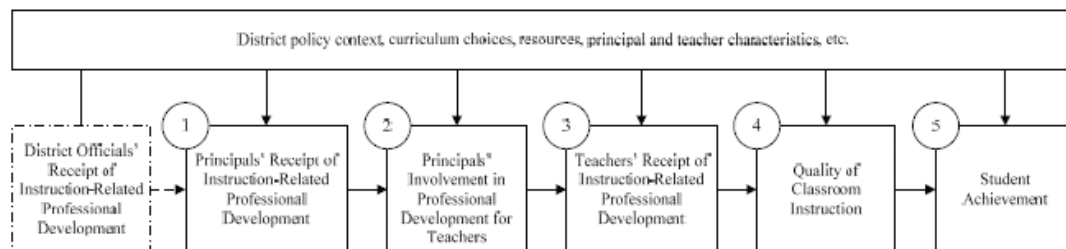
1. <http://www.cincomsmalltalk.com/BottomFeeder/doc/Tutorial/Tutorial.html>
2. <http://brandon-hall.com/janetclarey/?p=350>
3. <http://www.c4lpt.co.uk/handbook/elearning20.html>
4. [http://bp0.blogger.com/\\_0xsnUFtqD1o/R0bEDqEeIvI/AAAAAAAAAFg/aD\\_-y4jV7SM/s1600-h](http://bp0.blogger.com/_0xsnUFtqD1o/R0bEDqEeIvI/AAAAAAAAAFg/aD_-y4jV7SM/s1600-h)
5. <http://basantamoharana.wordpress.com/>
6. <http://www.elearnmag.org/subpage.cfm?section=articles&article=29-1>

## Instructional Leadership for Quality Learning

~ **Dan Dumitraşcu** (Grupul Scolar „Ion Nistor” Vicovu de Sus, Suceava)

**Abstract:** According to this study, through leadership training, school principals learn about high-quality instruction and about actions that they can take to motivate and support their teachers. Principals then organize professional learning for their teachers and otherwise help teachers improve their classroom practices. With improved instruction, the theory maintains, student achievement will also improve. The study objective of learning for district and school administrators is guided by a theory of action that is depicted in Figure 1. As the figure suggests, principals play a key role in the instructional improvement process by setting in motion a sequence of school-level behavior changes that make for improved teaching and learning. We want to definitive the method that can be used to improve learning and we named this program - Principles of Learning - this Principles are about concrete actions that professor can take to motivate and support their teachers. Principals are expected to organize professional learning for their teachers as well as to monitor teachers' classroom practices and help them incorporate new behaviors that are in accordance with the Principles of Learning into their instructional repertory. With improved instruction, the theory holds, student achievement will improve.

**Keywords:** instructional leadership, instructional supervision, pedagogical leadership, school improvement, transformational leadership



Source: Learning Research and Development Center

The association between school leadership and student achievement is well established in the research literature. Reviews of quantitative studies suggest that leadership is second only to classroom instruction among the school-related factors that contribute to student learning.<sup>1</sup> Much is known, too, about *how* effective principals lead: by setting goals, by improving the school setting, and by helping teachers develop instructional skills.<sup>2</sup> Finally, researchers have linked high-quality instruction to student achievement.<sup>3</sup>

What is less well understood is whether professional development offered to school leaders can improve low-performing schools – or the process by which such transformation can occur. A study of the chain of actions linking professional development for

principals to better teaching and increased student learning is particularly timely, given the accountability context in which school leaders now operate. Principals are under pressure to produce results, especially increased test scores and reduced achievement disparities associated with income and race. This pressure to improve achievement places a premium on defining effective leadership and producing credible findings about the connections between leaders' actions, desired instructional practice, and student achievement.

This study wants to promulgate a set of principles about the ideas and practices that lead to academic achievement for all students. These Principles are called "Principles of Learning,".

### The IFL Principles of Learning

#### **Organizing for Effort**

Sustained and directed effort, rather than aptitude, determines what and how much students learn. Everything should be organized to evoke and support this effort: Schools should set high minimum standards, teach all students a rigorous curriculum, and give students as much time and instruction as they need to meet expectations.

#### **Fair and Credible Evaluations**

To evoke sustained effort, schools should use assessments that students find fair — that are aligned with what is taught and with standards and that are graded against absolute standards rather than on a curve. Such assessments also provide parents, colleges, and employers with credible evaluations of what students know and can do.

#### **Recognition of Accomplishment**

Recognition of authentic accomplishment motivates students. Recognition can celebrate work that meets standards or that reaches intermediate benchmarks en route to the standards. Progress points should be articulated so that each student can meet real accomplishment criteria often enough to be recognized frequently.

#### **Socializing Intelligence**

Intelligence is a set of problem-solving and reasoning capabilities, along with the habits of mind that lead one to use these capabilities regularly; it also encompasses beliefs about one's right, obligation, and capacity to make sense of the world

over time. Educators should “teach” intelligence by holding students re-sponsible for using these thinking skills.

#### **Self-Management of Learning**

Students need to develop and use an array of metacognitive (self-monitoring) and self-management strategies: noticing when they don’t understand something and taking steps to remedy this, formulating questions that lead to deeper understandings, and judging progress toward a goal. Schools should model and encourage use of these strategies.

#### **Learning as Apprenticeship**

Learning environments should be organized so that teachers model complex thinking and analysis and so that students receive mentoring and coaching as they undertake extended projects.

#### **\*Accountable Talk**

Classroom talk that promotes learning must put forth knowledge that is accurate and relevant to the issue under discussion, use appropriate evidence, respond to and further develop what others in the group have said, and follow norms of good reasoning. Teachers should create the norms and skills of Accountable Talk in their classrooms.

#### **\*Academic Rigor in a Thinking Curriculum**

Problem-solving and thinking should be taught in the context of a solid foundation of knowledge of major concepts that students are expected to know deeply. Teaching should engage students in active reasoning about these concepts and promote the active use of knowledge in every subject and at every grade level.

#### **\*Clear Expectations**

Schools should define explicitly what students are expected to learn. Descriptive criteria and models of work that meets standards should be publicly displayed and used to help students analyze and evaluate their own work.

SOURCE: Adapted from descriptions of the Principles of Learning available on the IFL Web site (University of Pittsburgh, Learning Research and Development Center, Institute for Learning, 2007).

The first Principle of Learning shown in the box above – Organizing for Effort – is arguably the most fundamental. This is the belief that students’ sustained and directed effort is more important to their academic success than mere aptitude — or, as one district official put it, “Intelligent is something you get, not something you are.”

A corollary of this belief is that schools and classrooms must be organized to guide

and support student effort. The remaining Principles of Learning detail the specific ways that such guidance and support can occur. These include such practices as instituting a standards-based curriculum and assessing students’ achievement against those standards, assigning rigorous tasks, recognizing students’ accomplishments, encouraging teachers to model thinking about complex issues, and encouraging students to become

cognizant of what they do and don't know so that they can take steps to fill the gaps.

The three asterisked Principles of Learning in Box 1.1 — Accountable Talk, Academic Rigor in a Thinking Curriculum (Academic Rigor, for short), and Clear Expectations — are central to the Instructional Leadership Study. These principles represent key observable characteristics of high-quality instruction

### **Accountable Talk**

In reading and math lessons where there is strong evidence of Accountable Talk during classroom discussions, both the teacher and the students actively listen to and build on students' contributions, and students are expected to consistently back up what they say with appropriate evidence or reasoning. The idea behind this Principle of Learning is that when students are pressed to defend their positions with evidence, and to listen and respond critically to their teacher and fellow students, they are forced to think at a higher level, and this increases achievement. This type of class discussion stands in sharp contrast to lessons in which students give their answers or opinions to the teacher and the teacher's only response is to inform them whether they are wrong or right.

### **Academic Rigor**

Reading classes where there is strong evidence of Academic Rigor are those in which students are engaged with the texts they read in rich and meaningful ways. The theory is that students who are expected to analyze texts and not just answer factual questions about them will have a deeper understanding of these texts and will thereby become

insightful, critical readers. The idea behind Rigor of the Task in Math is very similar to the idea behind Academic Rigor in Reading. Students in academically rigorous math classes are expected to tackle complex mathematical problems and to be able to explain their thought processes to their teachers and peers rather than to memorize algorithms without thinking about how they work. Students who have the opportunity to think critically about mathematics will have a better understanding of mathematics, which should be reflected in their achievement.

### **Clear Expectations**

In reading and math lessons where there is strong evidence of Clear Expectations, students receive clear and detailed instructions from their teachers about what they must do and must include in their work in order for it to be considered high-quality. The idea behind this rubric is that students will have a better understanding of what they are expected to learn from the task when they know that they are expected to explain their thinking in addition to providing an answer and when they are given the tools to help them in their thinking.

It appears that at schools where teachers reported receiving more instruction-related professional development, instructional quality in reading classrooms was higher. In addition, at schools where teachers received more professional development on Accountable Talk and Clear Expectations, teachers were more likely to teach their reading classes in ways that exemplified these principles. Finally, at schools where instructional quality was higher (that is, where teachers implemented the Principles of Learning at higher

levels), larger proportions of students met state standards both in reading and in math. In particular, higher student achievement is associated with higher levels of Accountable Talk and Academic Rigor in reading lessons and with higher levels of Accountable Talk in math lessons.

The findings of this report address both practice and theory. With respect to practice, they point to key operational lessons for district administrators and principals and for those who deliver professional development. First, district administrators need to “inspect what they expect” — that is, to follow up to ensure that principals pass on what they have learned to the teachers in their schools. The fact that there is no *direct* connection between the frequency with which principals reported receiving professional development and the frequency with which teachers reported such receipt — that the connection

was mediated by the principal’s subsequent actions in making professional development available to teachers — suggests that giving principals more professional development will not, in and of itself, ensure that their teachers learn more, teach better, and have higher-achieving students. Moreover, some principals may tell technical assistance providers how much they appreciate the professional development that they have received — how well-delivered it was, how useful it appears to be, and so on. But the study does not indicate that generally valuing the instruction-related professional development that they received led principals to play a more active role in the professional development of their teachers. Administrators need to follow up with seemingly enthusiastic principals just as assiduously as they would with any others to ensure that enthusiasm gets translated into action.

## REFERENCES:

1. **Aaronson, Daniel, Lisa Barrow, and William Sander.** 2007. “Teachers and Student Achievement in the Chicago Public High Schools.” *Journal of Labor Economics* 25, 1: 95-135.
2. **Borman, Geoffrey D., and Steven M. Kimball.** 2005. “Teacher Quality and Educational Equality: Do Teachers with Higher Standards-Based Evaluation Ratings Close Student Achievement Gaps?” *Elementary School Journal* 106, 1: 3-80
3. **Matsumura, Lindsay Clare, Sharon Cadman Slater, Mikyung Kim Wolf, Amy Crosson, Allison Levinson, Maureen Peterson, Lauren Resnick, and Brian Junker.** 2006. “Using the Instructional Quality Assessment Toolkit to Investigate the Quality of Reading Comprehension Assignments and Student Work.” CSE Report 669. Los Angeles: University of California, Center for the Study of Evaluation, National Center for Research on Evaluation, Standards, and Student Testing (CRESST).



# Long-life Learning and Entrepreneurship

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~ Ph.D. Economist **Skënder Ahmeti** (Faculty of Economy, University of Prishtina.)

**Abstract:** This study attempts to give a general view of actual condition of human resources in SMEs in Kosova, possibilities and perspectives for development of entrepreneurship core from education system in Kosova. The survey of 600 SMEs in Kosova, data from Ministry of Education and Ministry of Labour were the main sources of this article. Study contains practices of long-life learning Kosova and some demographic characteristics which determine the working contingent and the need for long-life learning. The young population dominates demographic structure while there is high level of emigration as a result of unemployment. It is a characteristic that the middle class during the 90s had no working possibilities thus they had to develop their knowledge and skills in order to find a work. On the other hand, Kosovars' economy insists in developing new education system which creates the possibilities to gain knowledge and practical skills which generate economic growth, new working places, and competition with regional or wider labour force.

**Keywords:** human resources, learning, education, entrepreneurship

## Introduction

In Kosova since 1981 there was no registration of population, wealth or businesses. All valuations were given based on partially research from independent institutions, government or international organizations.

These valuations show that in Kosova live approximately 2 million inhabitants in a space of 10.887 km<sup>2</sup> (density: 183 inhabitants /km<sup>2</sup>), 300 -330 thousand families, around 500.000 inhabitants live or work temporary in western countries. Around 60.000 business entities are registered and around 60% of them



are still active. GDP per capita is around 1200 euros, which is significantly low compared to other Southeastern European countries, while the level of development goes around 40-50% among countries of Western Balkans. Human Development Index (HDI) places Kosova among places 85-90 in the list of 170 countries, near to Albania, Bosnia and Herzegovina and Macedonia. Based on the latest research from World Bank, in Kosova at the level of poverty live around 37% of population, while under extreme poverty around 15.2%. The lack of investments and maintenance as a result of occupation, robbery and destruction of assets, caused deindustrialization of economy and returned this economy into agricultural one. Industry now has 15% share on GDP (in 1988 it was 45%), trade and services 60%, while agriculture 25%.<sup>1</sup> Kosova contains some demographic features, which determine working contingent and the need for long-life learning. Young age population dominates significantly, while on the other hand there is high level of emigration of this population in order to find jobs. It is considered that 1/3 of this population are under age 16.<sup>2</sup>

Young population continuously are making economic pressure for employment. For one year period, for the first time in the labour market are entering 21.000 to 25.000 new workers. The capacity of SME performance can not face such big flow without offering them strong support. If we believe that young age people are an important factor for

economic growth, it is necessary then to provide them education that will fulfil market demands.

### Changes in economy

Reconstruction process in Kosova after the war, due to contributions from international and local community, was successful. Emergent stage of rebuilding the country was quite successful, while it was supported by international community. Now, Kosova needs economic growth and new working places.

The dynamics of changes is caused by the open economy which promotes the private incentive and entrepreneurship development. In Kosova, a very important sector was created for SME's that developed in three phases:

- First Phase, from 1990 till 1993
- Second Phase, from 1994 till 2000, and
- Third Phase, since 2001

In the period between years 1991 and 1993, we observe a rapid growth of SME number. During this period in average around 5000 new enterprises were registered. Even though Kosova begun the transition period later, it stands close to other countries regarding the average number of SMES per 1000 inhabitants<sup>3</sup>.

<sup>1</sup> In Macedonia, the share of industry in GDP is 31%, in Slovenia 36%. While the share of trade and services among these countries are similar to one in Kosova.

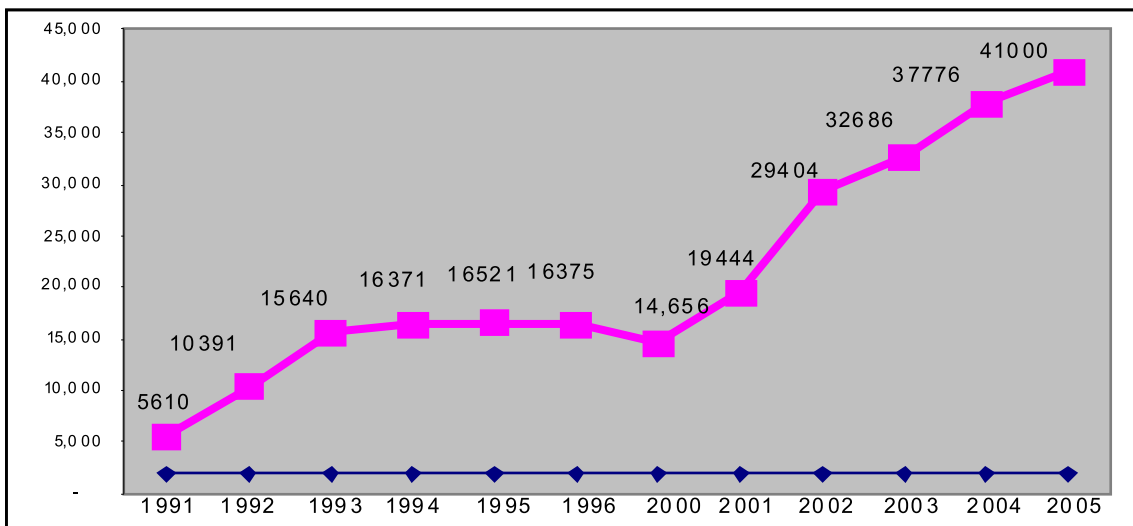
<sup>2</sup> Riinvest survey with 1252 families, 2002

<sup>3</sup> Socio economic profile of Kosova and development challenges, Riinvest 2005, p.59-60. Compared with other countries that begun transition earlier, Kosova with 16 SME's in 1000 inhabitants stands at very favorable position (twice more than Serbia and Montenegro), in front of Slovakia, Moldova, Macedonia and Croatia, while its equal with Albania

## Population structure in Kosova

Description	Number	Percentage
Inhabitants	2,150,000	100.00%
From 0-15 years	662,150	32.30%
From 16-64 years	1,291,500	63.00%
Over 65 years	96,370	4.70%
Working or labour force	1,268.50	59.00%
Active population	702,000	34.20%
Non-active population (non-labour force)	508,000	24.80%

Source: Riinvest (2002): Survey with families and labour market in Kosova



After the war economic structure of Kosova has changed a lot. We have a drop of participation of industry compared with 90's, which caused also the change of sector's participation in this economy. Currently the participation of production is around 30% with tendency of continuous fall, service and handicraft sector around 18%, while trade around 52%.<sup>1</sup> Other important changes are the fall of domestic production from 10-30%, damaged industrial capacities from the war cannot be used, major changes in labor

<sup>1</sup> Ministry of Trade and Industry: SME development report 2005

market as a result of continuous unemployment growth<sup>2</sup>, the loss of markets and the cover of export with import is around 6.3%. Then there is a low level of active population (34%), high level of population out of labor market (25%) and only ¼ of Kosovars creates incomes.

About 50% of the workers that were employed before, which relatively belong to old age groups and possess professional skills, did not respond to the requirements of SMEs

<sup>2</sup> Unemployment in Kosova is considered to be over 45%

in Kosova, since there is a need for them to renovate their knowledge and re-qualify. Those categories are still remaining unemployed since new generations are in a better position to achieve new qualification, are

more flexible in their working places and in most cases they do speak a foreign language which is in their advantage since they can exchange information and products easier with foreign and interior market.

*Characteristics of labour market in Kosova*

Age	Male	Female	Total
16-24	39.1	41.4	40.2
25-34	30.4	30.6	30.5
35-44	18.1	19.5	18.8
45-55	8	6.7	7.4
55-64	4.4	1.8	3.2

*Source: Riinvest, Labour market and unemployment in Kosova*

In these conditions, Kosovar society should invest in development of new professions- training and additional education in those generations in order to make more easy for them to find jobs, or to improve their knowledge in creating individual businesses which will generate employment for themselves and for the others as well.

All changes in economy increased the need to reform the education system which should be acceptable for labour market demand.

### **Education changes**

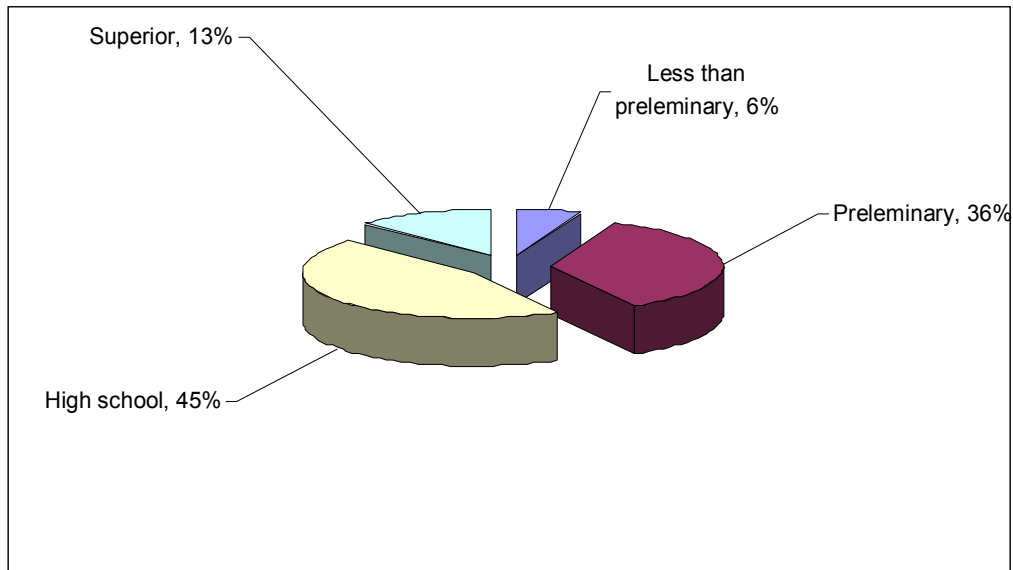
There is an attempt to increase the approach for education that was required from people that are interested in. About 97% of children of age from 6-15 are taking the obligatory education, but only 85-87.5% of them do succeed to finish the 9th year (last level of preliminary school). Meanwhile, only 75% of those who finish the preliminary school do continue in the 10th year, while the result of those who continue the high school is low and only 54% do succeed to finish 12-13 years. Finally only 12% of those who finish high school can be registered in further studies.

Universities (public and private) are on attempt to find the path that will lead to true reforms, which do follow the Bologna convent. But it doesn't necessarily mean that agreeing in the bologna convent, is all that should be done. Public and private universities should do their best to increase their capacities (invest in human capital), to establish research centres with interdisciplinary approaches which do enable compatibility with education system in region, in the aspect of getting applied knowledge. Reforming stage should ensure a continuous development, which should respond to market demand and which will enable application in the long-life learning process within different forms.

However, the path for this application in Kosova is little harder compared to other places because of accumulative problems for a long time in economy and in education system. In the actual situation, education system should regard to new changes which are following the development of private sector:

- Labour market has changed fundamentally from the previous one which was referring to the education system,

Education level in Kosova



Source: Riinvest (2002):survey with families and labour market in Kosova

- Private sector, foreign investors and entrepreneurship are new challenges to which should refer the today's and future education system in Kosova,
- There is a need to educate human resources, so it will increase their abilities for practical knowledge and self-employment;
- In 2010, in EU countries will require high level of education for about 80% of working places;
- The development of entrepreneurship requires qualitative education, creative people with flexible knowledge, able motivated and inclined to solve problems.

Making reforms did not create an environment which enables transformation of education system from the traditional one, to system that enables application of achieved knowledge in market. Private sector (SMEs) require from labour market professions, skills, and applied knowledge for their employees.

Based in that Kosovar economic environment must insist and support **long life learning**, knowledge's that will result in economic growth and new working places because "better-educated individuals have, on average, higher rates of participation in the labour force, lower unemployment and higher earnings than those with low qualifications"<sup>1</sup>. Based on this everyone should be able, motivated and actively encouraged to learn throughout life. This view of learning embraces individual and social development of all kinds and in all settings: formally, in schools, vocational, higher - and adult-education institutions; and informally, at home, at work and in the community.<sup>2</sup>

<sup>1</sup> Phillip McKenzie and Gregory Wurzburg The OECD OBSERVER No. 209 December 1997/January 1998

<sup>2</sup> Phillip McKenzie and Gregory Wurzburg The OECD OBSERVER No. 209 December 1997/January 1998

*Structure of subjects which do treat the entrepreneurship/are  
in relation with entrepreneurship*

FACULTIES	Number of subjects	
	Entrepreneurship	Related
Law		3
Economic	8	22
Construction and building		1
<b>Electrical engineering and computing</b>		4
Mechanical engineering	1	2
Medicine	0	0
Faculty of ART	0	0
Agriculture	2	3
Mining	2	3
Education faculty	0	0
<b>Total subjects</b>	<b>13</b>	<b>38</b>

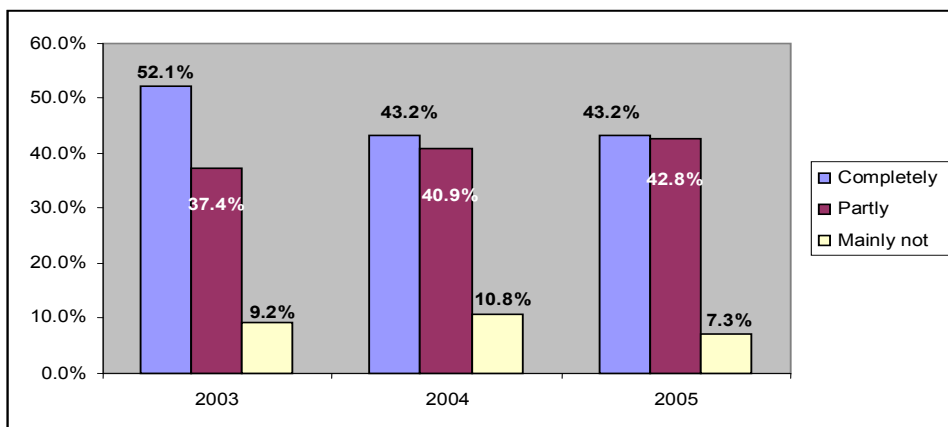
*Review of subjects' taught in University of Prishtina*

The above table reflects the number of subjects in high education related to entrepreneurship. Graduate studies in University of Prishtina; do contain only 13 subjects which directly or indirectly are related to entrepreneurship. From the table we found that the Faculty of Construction and Faculty of Engineering do not contain in their programme subjects which are related to entrepreneurship. Meanwhile it is still unknown

the practice of offering additional-special services from academic departments for the category of people which have finished formal education who will need additional knowledge beside the finished faculties.

For this reason, in surveys and research programs, owner and entrepreneurs are not satisfied with the knowledge and skills which are provided from the education system in Kosova for the labour market.

*The fulfil of required qualification and practical skills from labour market*



Source: Riinves research on SMEs

Within the last three years of research in the aspects of development and SMEs profile in Kosova, entrepreneurs do think that there is a tendency to fall the offer about the profession and qualification which are useful for their businesses. Continuously in those last three years the main problem or attention of entrepreneurs is the lack of practical skills for the qualified or employed who finished their studies.

Only 42,8% of the respondents are partially satisfied with the supply of labour market, while 43,2% of respondents feel that labour market supply fulfils their requirements.

Entrepreneurs are not satisfied with the actual education system arguing that education system does not prepare the students with the required knowledge. They argued that to those workers are found insufficiencies that results in additional costs for them, which are shown in table below:

*Dissatisfaction of entrepreneurs caused from the:*

Description	2003%	2004%	2005%
Lack of theoretical knowledge	6.5	6.1	14.7
Lack of practical knowledge	70.9	76.8	74.2
Old learning programs	16.1	16	11.1
Other	6.5	1	0
	100	100	100

Source: survey with SMEs, Riinvest

Entrepreneurs are not satisfied with the knowledge of the recruited workers from high schools because of their lack in the practical knowledge. More than 74% of owners are unsatisfied with the practical knowledge of the workers.

The attendance in renovation of knowledge within different forms of trainings, seminars and practical exercises is not satisfactory. Analysis in private sector showed that only 19.6% of their workers attended an additional course or training to improve their knowledge, while 80.4% of the workers didn't attend any kind of additional education process.

The trend of low attendance in additional education programs which will ensure higher skills for the workers is a result of:

- Unwillingness of entrepreneurs and managers to provide their workers additional trainings. The investment

on human resources is still considered as a cost, not as an investment;

- Unwillingness of entrepreneurs (72.9%) and managers to attend any programme which will give them additional knowledge. Analysis in the private sector showed that 27.1% of the entrepreneurs and managers are implied in any form or other in programs that will give them additional education.

*If the workers attended or not in any additional education programme*

	2003%	2004%	2005
Yes	14.7	14.7	19.6
No	77.9	74	80.4
N.A	7.4	11.3	0
	100	100	100

Source: SME survey, Riinvest

*Table of active registered labour market seeking for jobs*

Qualification	Number of workers registered as unemployed	% of attendance based on their qualification	Trainings according to qualification
Unqualified	191,893	60.3	15.9
Semi-qualified	13,636	4.3	1.9
Qualified	29,229	9.2	13.1
High school	83,943	26.4	63.4
Faculty	2,315	0.7	3.1
University	2,403	0.8	2.6
Total of registered jobseekers	323,419	100	100.0

Source: Ministry of work and social welfare, annual report about employment, 2004

The aim of professional trainings is to improve the level of employment of the registered unemployed workers, in the way that trained people, are ready to challenge with the everyday problems of the business life, like: generation of new ideas for business, creation of new firms and generation of employment.

### Changes from long-life learning

Enterprises and foreign investors will require human resources that are qualified and which will require less as possible additional investment to be re-trained.

The market will require additional knowledge and practical skills; therefore the categories which will need regular and additional education for entrepreneurship are: school-students, students, and people of young ages out of education system like the people who quit their studies in high school or ones that have quitted the university studies, managers, entrepreneurs, people who are looking for jobs, teachers, trainers, educators, professors, SMEs and other communities.

Education related to entrepreneurship implies the process of getting more knowledge, skills, and entrepreneurship abilities from the education system. This process starts from the preliminary school and goes up to master studies and professional education. In preliminary schools in Kosova there is a lack of relevant materials that will equip the scholars with elementary knowledge about entrepreneurship.

In preliminary and high schools students should learn some basic concepts about; ownership, career development, free market at its function, individual skills of entrepreneurs, and their motives. Those would be the outputs that will start the process of long-life learning of future entrepreneurs.

The other step that is important in the process of long-life learning for entrepreneurship is the increase of knowledge continuously. Education system should provide students with materials from business and teach them the process of starting up a new small business.

Education system should stimulate creativity in business and continuously test the abilities and ideas in conducting and creation of businesses. Starting a new business is a



dream for many people. To make the dream come true we should create some possibilities for them to get knowledge like the establishment of enterprise, business plan making, and market analysis and so on. In this stage we have to deal with people that might be relatively experienced in entrepreneurship field. Education system in Kosova should provide programs to increase professional skills in entrepreneurship; programmes that guide interested parties to establish and manage a new business. In this stage the followers must have the idea of how the business should be created, requirements to increase it (business plans, financial plans, and investments) and so on.

It is a characteristic of entrepreneurs' nature to underestimate the risk. Usually they do not ask for help until it is too late for that. Therefore, education system in Kosova should provide different programs to increase the skills of entrepreneurs and the business community related to the challenge with the problems that they can face in their path to increase their business-the risks in business; hence entrepreneurs should continuously learn and develop their knowledge through continuous learning which we are calling long-life learning. Those requirements are valid for both, managers and employees as well.

### Conclusions:]

- HR Development is the critical for economic development of Kosova,

- Transition period caused changes in economy, since the planned economy is abounded and open market economy is accepted, witch requires new knowledge and new skills for which require the introduction of new practices with new programs in education system.


- Entrepreneurs are not satisfied with the actual education system arguing that education system does not prepare the students with the required knowledge but in other side we have unwillingness of entrepreneurs and managers to provide their workers additional trainings because they consider investments on human resources as a cost, not as an investment;

- SME development requires new technology and new knowledge, for that, the aim of long- life learning is to prepare HR in management issues through professional trainings, in the way that trained people, are ready to challenge with the everyday problems of the business life, like: generation of new ideas for business, creation of new firms and generation of employment

- Young age population dominates significantly demographical structure, while on the other hand there is high level of emigration of this population in order to find jobs because the capacity of SME performance can not face such big flow (annually, for the first time in the labour market are entering 21.000 to 25.000 new workers), without offering strong support providing them education that will fulfil market demands as an important factor for economic growth.

- All those requirements will be fulfilled if Kosovas society recognizes the importance of long life learning for economic growth. For that is needed to be accepted and implemented main points predicted in strategic plan for education system up to 2017. The strategy is offering priorities and opportunity for equal learning and allows more flexible learning. Also its predicted the possibility for different stake holders such as civil society and business community, to provide and improve employment skills through education and trainings.

**REFERENCES:**

1. Education and Economic Development in Kosova, February, 2004- Riinvest Institute
  2. Towards Economic Viability of Kosova, January 2006 , Riinvest Institute
  3. SME Development Report 2003, Riinvest Institute,
  4. SME Development Report 2004, Riinvest Institute,
  5. Development Report 2005, Riinvest Institute,
  6. MTI- SME development report 2005
  7. Labour Market and Unemployment in Kosova, January 2003, reinvest Institute
  8. Phillip McKenzie and Gregory Wurzburg The OECD OBSERVER No. 209 December 1997/January 1998
  9. Data from and Ministry of Labour
  10. Data from Ministry of Education
- 

## Education in Support of Flexicurity

~ Prof. Ph.D. Cătălina Bonciu (University of Bucharest)

**Abstract:** Europe recent years, particularly through the voice of trade unions targeting Christian - social, launched a new concept. "Flexicurity" means flexibility and security on the labor market (when referring to the strict meaning of the concept), but felt the socio-political environment as a subject of great interest, which has stirred wide debate launched and among academic world and among the defenders workers. All these efforts are made, in fact, in order to attract and raise the legislature's strategy through a policy favorable to the protection granted to those who live in salary.

**Keywords:** education, Permanent Education, Formal education, Non formal education, Informal Education flexicurity

Life of a man is a school for himself throughout the duration of its existence. The rise continued the individual does not make it any higher than the absolute upper limit of learning. In this regard, the principle of education should be made permanent in direct relation to social progress and individual subject of consistent education.

Education<sup>1</sup>, an approach that applies

<sup>1</sup> Latin-educate educo reflects feed, a nurse, the increase stemmed in French education (second XVI). Educate-educated, all in Latin means to lead, a lead out. In our days are routine and acceptance, often synonymous, training, taming, indoctrination, training, training, learning.

only to men does not lead to a certain age - legally imposed or decided by each - but is extended throughout the life of an individual. Education can be understood as disciplinary activity, cultivation, domestication and moralization of human action or training for himself or others.

Factors education - family, school, church, cultural institutions, media, associative structures ... - put in evidence functions of education: axiological (value and creative cultural), cognitive (vehicular heritage of knowledge), economic (preparation and training of individuals for production material) and the selection and transmission of values from society to person.

Each of the forms of education has a significant role:

- Permanent Education - anticipation of the development and harmonization on the forms of learning;
- Formal education - influences intentional and systematic developed specialized, with the mission of the human personality;
- Non formal education - optional activities or optional, extra, less or no formalized;
- Informal Education – personal explorer, spontaneous, unorganized, not certified.

In the current interpretation, education sends think of its institutional and hierarchical structure. Formal education received in school, get face to face two categories of people. Young generations that assume the roles of pupils of several representatives of older generation, responsible, transferring, with competence, knowledge in various systematic, organized and centralized autonomy. Formal education aims specifically at training the person, by developing intellectual capacity and employment or participation of emotional-affective education. Limited in duration in years, the 15-20 or even more, formal education is an introduction to the sphere of culture and prepare for initial education, extended throughout all the individual existence.

Non formal education, extracurricular, is gain systematically, with a certain rhythmicity or intermittently, outside the school area (under the influence of cultural institutions: theaters, museums, libraries, houses of culture, etc., Non-governmental organizations, other institutions with the mission related education and / or culture) or outside the years allocated organized study in school,

through extra to acquire general knowledge or professional qualifications (of youth movements, clubs and associations). Non formal education, complementary to formal education, educational reality means a less formalized or neformalized, but always with the formative effects, often of greater speed.

Informal education is defined by its spontaneous, incidentally, contextual, intentionally or not, with or without purpose, without any formalization. Be acquired by any family member of the group of friends or acquaintances, or self, subjectively, by reading, observation, experience of life ... The process is disturbing the entire period of lucidity of a person. Under time pressure information, informal education spreads to feature on account of the many means of communication, the most common being television channels, radio, computer networks, home videos and CD / DVD audio-visual, etc.. Informal education can not be under the substance and fundamental education, but are rare situations supplementing considerable. Content informal education is not necessarily determined by the predominantly of one or other of the types of values, activities and concerns of ambient environment in which education takes its existence as his own needs, aspirations, interests. Informal education occurs as a result of forces of influence coming from the social environment for the person who wants to educate herself. Volunteering the subject of an assessment education is quite different from grids used in formal education. Meanwhile, the launch of personal explorer's studies conducted in a wide permission temporal or employer, assuming the entire management approach, strengthen the power of the impact of informal education on the individual. Certified or not certified or not, the knowledge also learned a way to supplement

educational value and those accumulated in a formal / non formal.

Permanent education is a natural continuation of any of the three forms of education, as defined by all together. Education is a continuous process, beginning at birth and lasts throughout the whole life. Particularity lies in its scope, namely at the level of each individual, but also to the society. In the process involving public / private individuals / legal facts conscious / unconscious, directed phenomena / arbitrary, intentional action / random effects direct / indirect...

Education is in support of the person educated, meet the individual needs of education, but also to society per ensemble or, if progress is to ensure, in all its forms. Therefore, the value of education is tested and recognizes the reality in practice, where it denotes the link between needs and availability, supply of educational and application of knowledge (expressed by people that time), on the one hand, and the goods and services, on the other.

In concrete terms, it is training by qualified and thereafter continue lifting the level of qualification, or retraining, multiquification, processing them ... Training is a complex and lengthy. She materializes for every individual qualification for a particular occupation of the wide range of professions in society. Qualification can be regarded as the acquisition of all scientific knowledge base, technical and specialized, and the skills needed to exercise a profession in certain economic conditions and technical and organizational. Training has two distinct components<sup>1</sup>, namely: education and professional training itself.

<sup>1</sup> V.Cornescu, I. Mihăilescu, S. Stanciu, "Management, Baze Generale", Editura Actami, București, 1998, p.97

Professional education skills make records of each person and at the same time, its orientation is done for one of those professions suitable skills. Without carrying out this process, vocational training and, most importantly, the action against the company it does not amount to the requirements imposed by contemporary technical progress.

Training is the process through which is carried out effectively, preparing people for each job chosen. The wishes become possible using the entire arsenal of methods and forms available at any given time to acquire the scientific knowledge base, technical, general and specialist, first, and skills training for employment in the secondary. The first direction is achieved through school, but also of some special training organized by companies, become general knowledge and specialized of employees, which should enable them to practice their chosen field. The second direction - skills training for work - is carried through learning practical workshops and school-enterprises, directly under the guidance of specialists.

- Continues training - continuous process of training (theoretical-application) and permanent adjustment of the person being practiced at the (advanced training and acquisition of new skills);
- Formal Training - transfer of theoretical knowledge to each worker for completing and strengthening the work habits;
- Non formal training - advanced training and uncertificated requalification
- Training informal - aspects of training through features of informal knowledge.

Continuing Training is a concern of all States of the world, therefore all companies and, obviously, all employees. It allows maintaining a high standard of professional competence, acquisition of new skills, which lead to high appreciation of the work of each and, of course, increasing the rewards obtained. Improving training - in the process of acceptance - are therefore a beneficial effect for both the company and the individual, the latter ensuring a greater stability of employment and satisfaction, within certain limits, the wage claims.

From this perspective, is the closest European social model, to flexicurity<sup>1</sup> concept promoter. For his explanation, there is no today a sense unanimous valid. Christian trade union and labor they associate the idea of a strategy of simultaneous increase flexibility and security of employment. In contrast, is much more comprehensive interpretation of the European Commission, that included measures of social protection. Literature often refers to the definition given by Wilthagen and Trosa<sup>2</sup>, that flexicurity means a policy aimed at increasing concomitant:

- flexible work;
- security of employment;
- Security income.

In the last half decade of the last century, the Netherlands used the first time,

<sup>1</sup> Flexicuritatea – mai multă siguranță printr-o flexibilitate sporită a pieței muncii”, Contribuții pentru dialog social-1, Centrul European pentru Problemele Muncitorilor, Königswinter, mai 2008

<sup>2</sup>European Foundation for the Improvement of Living and Working Conditions: Varieties of flexicurity: reflections on key elements of flexibility and security, Luxemburg, 2007a

in connection with labor<sup>3</sup> market reform, promoting:

- atypical and flexible forms of employment.

Subsequently, Denmark has launched "golden Triangle" (Madsen 2006), the European Commission was based when he explained the term flexicurity. In essence, the model supports:

- flexible forms of standard employment;
- high unemployment aid;
- active measures of employment;
- support from the state for every employer and employee, in which "flexibility" and "security" complement each other;
- new condition of work, more responsibility, to which, on the one hand, employees have the capacity to adapt, and on the other hand, employers have the availability of acceptance.

Certainly that communication on flexicurity, the European Commission identified four essential components, in order to become a pillar of the successful involvement of the concept<sup>4</sup>:

#### 1. Contractual issues:

- Flexible and Reliable conditions (from the perspective of employers and employees), guaranteed by specific legislation (mainly a code of modern work);

<sup>3</sup> M.Keune, M.Jepsen, "Flexibility and Security Act", Not balanced and hardly new: the European Commission's quest for flexicuritate. European Trade Union Institute for Research, Education and Healths and Safety (ETUI-REHS).WP 2007.01. Copenhagen

<sup>4</sup> Centrul European pentru Problemele Muncitorilor, "Flexicuritatea – mai multă siguranță printr-o flexibilitate sporită a pieței muncii", Contribuții pentru dialog social -1, Königswinter, mai 2008, p.15

- collective agreements;
- forms of work organization.

**2. Active policy measures and effective in the job market:**

- support for employment;
- encouragement of the time those in search of employment

**3. complex strategies based on lifelong learning:**

- various specialized modules oriented career
- stimulation of other guidelines in employment;
- recovery and even exploit the full potential of each individual.

**4. modern systems of social security, focusing on social contributions if appropriate:**

- unemployment
- disease;
- retirement.

What is being attempted by this bid?

- dismissal rules aim to boost the labor market by creating more jobs;
- measures for boosting those in search of job to start with some principles appropriate;
- specialized modules offered especially at companies, but also active at national level;
- protection before and during the period of unemployment.

Therefore, education protects workers, even if they do not support flexicurity, but especially when it supports the concept.

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**REFERENCES:**

1. Căprărescu, Gh., *Evaluarea, perfecționarea și promovarea personalului de conducere în Management*, Ed. Didactică și Pedagogică, Bucharest, 1992
2. Cherrington ,D.J., *Organizational Behaviour. The Management of Individual and Organizational Performance*, Allyn and Bacon, 1989.
3. Cornescu, V., Bonciu, C., *Managementul resurselor umane*, Ed. TREI, Bucharest, 1999
4. Cornescu, V., Mihăilescu I., Stanciu S., *Management* , Ed. ACTAMI, Bucharest, 1997
5. Dessler,G., *Personnel Management*, Pretince Hall, Englewood Clifffs, New Jersey, 1988.
6. Keune, M., Jepsen, M., *Flexibility and Security Act, Not balanced and hardly new: the European Commission's quest for flexicuritate*. European Trade Union Institute for Research, Education and Healts and Safety (ETUI-REHS).WP 2007.01. Copenhagen
7. Popescu, L., *Resurse Umane & Codul Muncii*, Ed. Cimeres, Bucharest, 2003
8. Centrul European pentru Problemele Muncitorilor, *Flexicuritatea – mai multă siguranță printr-o flexibilitate sporită a pieței muncii*, Contribuții pentru dalog social-1, Königswinter, may 2008
9. European Foundation for the Improvement of Living and Working Conditions: *Varietes of flexicuritate: reflections on key elements of flexibility and security*, Luxemburg, 2007
10. [www.calificativ.ro](http://www.calificativ.ro)



# Challenges of Environmental Management Accounting – Current Accounting Practices

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**Abstract:** The goal of our paper is to reduce some of the international confusion generated on such an important topic by providing a general framework and set of definitions for Environmental Management Accounting (EMA).

Environmental Management Accounting is a relatively new tool in environmental management defined as the identification, collection, estimation, analysis, internal reporting, and use of materials and energy flow information, environmental cost information, and other cost information for both conventional and environmental decision-making within an organization.

Due to their special role, accountants, since they are the ones with access to the important monetary data and information systems needed for management accounting activities, must to improve both their ability to verify the quality of such information and the skills to use that information for decision making.

**Keywords:** Environmental Management Accounting, information systems, management accounting activities, management accounting, financial accounting

## INTRODUCTION

Taking care of the environment has become one of the most important concerns of the world. Consequently, accounting for the environment and related issues are beginning to take on increasing importance. Even accountants constitute the main audience

for this document we believe it should be also of considerable interest to non-accountants. The document has as primarily target **the accountants within organizations**, who are very interested in the potential economic and other internal management benefits of Environmental Management Accounting

(EMA). Meantime **public accountants and auditors**, become more and more interested in tracking or verifying not only financial data but also environment-related information in financial and other reports.

Due to their special role, *accountants*, since they are the ones with access to the important monetary data and information systems needed for management accounting activities, they must to improve both their ability to verify the quality of such information and the skills to use that information for decision making.

Their relevant activities explain the necessity to constitute a large number of accounting associations. These associations include the Association of Chartered Certified Accountants (ACCA), the Chartered Institute of Management Accountants (CIMA), the Society of Management Accountants of Canada (CMA Canada), the Australian Society of Certified Public Accountants (CPA Australia), the European Federation of Accountants (FEE), the Institute of Chartered Accountants of New Zealand (ICANZ); the Japanese Institute of CPAs (JICPA) and the Philippine Institute of Certified Public Accountants (PICPA). We must also mention the Chamber of Financial Auditors of Romania (CFAR).

### **1. The new concept about management accounting and its environment**

In this context it makes sense that different countries and organizations would adapt general EMA concepts, language and practices to suit their own goals. A certain amount of experimentation and variation is also to be expected because EMA is still a relatively young and emerging field in comparison to conventional management accounting.

#### **1.1. The environmental issues in the past**

Not long ago, internal costs associated with environmental performance were relatively low. Just few environmental regulations or some other pressures forced organizations to a better manage in order to minimize their environmental impacts. Now every think is different. There are a lot of changes, and according to these, environment-related costs are increasing in many countries. This is in fact the response of various kinds of pressures, specific for every country. The environment-costs depend on how strong are the environmental regulatory regimes. It's time for a lot of *new regulations* who led to the internalization of a wide variety of additional environment-related costs.

In the past, many companies have simply not considered the full range of environment-related costs needed for sound investment decision making. Organizations need to consider all potentially significant environment-related costs that may influence the return on investment, such as materials flow costs, site recovery costs and any costs associated with certain or likely future regulations. Organizations also need to ensure that environmental managers, technical experts and accountants work together to provide the full picture of environmental issues and the related costs and benefits that are relevant for making an investment decision.

It is also important to distinguish between fixed and variable environment-related costs in investment decision making. Businesses with a majority of fixed costs may find it more difficult to reduce these in comparison to variable costs, some of which can be reduced more easily with no or short pay-back periods.

### 1.2. What's happened now?

From this moment, organizations see *costs of environmental compliance rise*, including costs for required pollution and control equipment, pollution monitoring and emission fees and regulatory paperwork and reporting. Pollution clean-up regulations have resulted in increasing liability costs for site remediation and liability-related insurance costs. Pressure from stakeholders, such as local communities, environmental activist groups and business partners, like customers, investors and finance providers, will add environment-related costs, because organizations need to initiate voluntary programs to respond to the interests of these groups.

Organizations, however, recognize the potential monetary rewards of improved environmental performance. They discovered that **enhancing efficiency in the use of energy, water and other raw materials brings environmental improvements** by reducing the use of these resources. The more strategic benefits of improved environmental performance was to take into consideration the ability to design environmentally sensitive products and services for increasingly "green" business and consumer markets. This is the ability to respond more quickly and cost-effectively to an ever-changing environmental regulatory framework, and better relationships with key stakeholders such as finance providers and local communities.

For any organization to manage in an effectively way the environment, taking into consideration costs and benefits mentioned above, is necessary various types of expertise, including environmental, technical,

accounting and finance, marketing and public relations, and general management.

That why, from now, the role to play for **accountants** will be very special because of their access to an organization's monetary information, their ability to improve or verify the quality of such information and their skills in using that information to help business decisions in areas such as investment appraisal, budgeting and strategic planning.

### 1.3. Why do we need to care now about environmental issues?

The whole world changed so much in its every essential aspect, so as a consequence, was affected all the business of world. That why organizations and even accountants are concern about environmental issues. At the beginning, many internal and external stakeholders are showing their increasing interest in the environmental performance of organizations<sup>1</sup>. So we can mention, like an example, the employees affected by pollution in the work environment. Much more, external stakeholders include communities affected by local pollution, environmental activist groups, government regulators, shareholders, investors, customers, suppliers and others.

No doubt that the types and intensities of environmental pressures can vary widely from country to country, from a business sectors to another.

Consequently, it is safe to say now, that environmental pressure forced many organizations to look for new, creative and cost-efficient ways in order to manage and minimize environmental impacts.

<sup>1</sup> *Information for Better Markets, Sustainability: the Role of Accountants* (London: Institute of Chartered Accountants of England and Wales, 2004).

## 2. Management accounting and financial accounting – the new perspective about accounting systems

Around the world **accounting systems**, depend on the size of organization, the type, which must be different if it is a private company or a government institution, the host country, etc. Those are only some reason who can explain a large and various types of **accounting systems**. But there are some more factors of influence, like: specific laws, a widely variety of activities, with different types, goals and levels of accounting systems. Around the world this accounting systems can be difficult to be used in any other context except those for who they was created from the beginning.

For a better understanding of this topic we can give a brief description of *some common accounting concepts and language, both for accountants in countries that may have different accounting languages and practices, as well as for any non-accountant readers who may not be familiar with accounting terminology at all.*

In order to emphasize the difference, we must admit also that there are two broad categories of accounting which typically take place within an organization: **management accounting** (MA) and **financial accounting** (FA). Generally speaking, **financial accounting** tends to refer to accounting activities and the preparation of financial statements directed to external stakeholders, *while management accounting* focuses on supplying information to organization management for internal decision making.

### 2.1. Financial Accounting

**Focuses** on several types of financial information, **Financial Accounting** is mainly designed to satisfy the information needs of external stakeholders, such as investors,

tax authorities and creditors, all of whom have a strong interest in receiving accurate, standardized information about an organization's financial performance. There are national laws and international standards, which specify how different financial items should be treated. An organization's financial statements provide **information on annual revenues and expenditures in an Income Statement. The Balance Sheet** reports assets, liabilities and equity at a specified date. In addition, the financial statements include a **Cash Flow Statement**. Thus, *Financial Accounting activities include: data collection, account balancing, auditing of the financial statements and external reporting.*

### 2.2. Management Accounting

Instead, **Management Accounting** primarily focuses on satisfying the information needs of internal management. Although there are accepted good practices for MA, these ones are generally not regulated by law. Each organization can determine which Management Accounting practices and information are best suited to its organizational goals and culture.

On its turn, **Management Accounting** focuses on both monetary and non-monetary information that inform management decisions and activities such as planning and budgeting, ensuring efficient use of resources, performance measurement and formulation of business policy and strategy. The collective goal of all this is to create, protect and increase value for an organization's stakeholders. Thus, *Management Accounting activities include: data collection as well as routine and more strategic analysis of the data via various techniques (such as capital investment evaluation) designed to address specific management needs.*

### 2.3. The point of view of IFAC about MA and FA

According to the **International Federation of Accountants (IFAC) analysis**, the leading-edge practice of MA has **shifted** beyond information provision **to focus on the reduction of waste** (*the reduction of resource loss*) **and the generation of value** (*the effective use of resources*). In other words, leading-edge MA centers on the use of resources, which are defined as “monetary and physical” resources, as well as information itself, along with the other resources an organization creates and uses, such as “*work processes and systems, trained personnel, innovative capacities, morale, flexible cultures, and even committed customers.*”

In organizations where actual MA practices have kept pace with these trends, the role of management accountants has *evolved accordingly*: from information tracking to more strategic roles in policy and planning.

There are, of course, many links between an organization’s FA and MA practices. For example, bookkeeping can be seen as a data collection process that generates information for both internal and external audiences. Total costs and earnings that may be calculated for MA purposes are related to the organization-wide revenues and expenditures collected for financial reporting purposes. Most companies, particularly small and medium-sized ones, do not have an independent MA system; they simply use data initially developed for FA purposes for internal decision making as well as for external reporting, perhaps with a few minor adjustments.

### 3. What is environmental management accounting?

**Environmental Management Accounting** has no single, universally accepted definition. According to IFAC’s *Statement Management Accounting Concepts*, EMA is: “*the management*

*of environmental and economic performance through the development and implementation of appropriate environment-related accounting systems and practices. While this may include reporting and auditing in some companies, environmental management accounting typically involves life-cycle costing, full-cost accounting, benefits assessment, and strategic planning for environmental management.*”

A complementary **definition** is given by the United Nations Expert Working Group on EMA, which more distinctively highlights both the physical and monetary sides of EMA. This definition was developed by international consensus of the group members, representing 30+ nations. **According to the UN group:**

EMA is broadly defined to be the identification, collection, analysis and use of two types of information for internal decision making:

- **physical information** on the use, flows and destinies of energy, water and materials (including wastes) and
- **monetary information** on environment-related costs, earnings and savings<sup>1</sup>.

### 3.1. Management Accounting Concepts of IFAC

These two definitions highlight the broad types of information organizations typically consider under EMA, as well as some common EMA data analysis techniques and uses. In the real world, EMA ranges from simple adjustments to existing accounting systems to more integrated EMA practices that link conventional physical and monetary information systems. But, regardless of structure and format, it is clear that both MA and EMA share many common goals. And it is to be hoped that EMA approaches eventually will support the IFAC proposals in *Management Accounting Concepts* that, in

<sup>1</sup> United Nations Division for Sustainable Development, *Environmental Management Accounting, Procedures and Principles*, 2001.



leading-edge MA, “in attention to environmental or social concerns are likely to be judged ineffective,” and that “resource use is judged effective if it optimizes value generation over the long run, with due regards to the externalities associated with an organization’s activities.”

### 3.1.1. Physical Information under EMA

To evaluate in a correct way its costs, an organization must collect not only monetary data but also nonmonetary data about: materials use, personnel hours and all other cost involved like materials-driven costs. The cost of materials and materials-driven costs are very important for many reasons, because:

a) use of energy, water and materials, as well as the generation of waste and emissions, are directly related to many of the impacts organizations have on their environments

and

b) materials purchase costs are a major cost driver in many organizations<sup>1</sup>.

Energy, water and other materials are purchase by organizations to develop their activities. In a manufacturing setting, some of the purchased material is converted into a final product that is delivered further to customers.

But there are many other situations, when in the process of *manufacturing operations* result wastage (materials that were intended to go into final product but became instead waste because of product design issues, operating inefficiencies, quality issues, etc.) Even as a result of manufacturing operations are used energy, water and materials, which are never find again into the final product, these are indispensable to manufacture the product. Of course that many of these materials eventually become waste streams that must be managed.

There are also the *non-manufacturing operations* (for example, agriculture and livestock, resource extraction sector, service sector, transport, the public sector) which use also a large amount of energy, water and other materials to help run their operations. All of these, depending on how those materials are managed, can lead to a significant generation of waste and emissions. It’s mean pollution.

Obviously these materials have a negative impact on the environment, which can really affect the health of both humans and natural ecosystems, including plants and animals. As an imminent effect: air, water or land can end up polluted or, even worse, contaminated.

But the “story” is not at all finished when the product is ready to be sold. **Now it’s about the second broad area** of materials-related environmental impact. It means the potential impact of the physical products (including by-products and packaging) produced by a manufacturer. These final products have environmental impacts when they leave the company. A classical example is when a product ends up in a landfill at the end of its useful life. There is a possibility to reduce the potential environmental impacts of products by changes in product design, such as decreasing the volume of paper used in packaging or replacing a physical product with an equivalent service, etc.

Also, in many manufacturing plants, most of the materials used become part of a final product rather than part of waste or emissions, and as a result, the potential environmental impact of products is high, so the potential environmental benefit of product improvements.

Tracking and reducing the amount of energy, water and materials used by manufacturing, service and other companies can also have indirect environmental benefits upstream, because the extraction of almost all raw materials has environmental impacts.

<sup>1</sup> M. Strobel, *Flow Cost Accounting* (Augsburg, Germany: Institute for Management and Environment, 2001).

To effectively manage and reduce the potential environmental impacts of waste and emissions, as well as of any physical products, an organization must have accurate data on the amounts and destinies of all the energy, water and materials used to support its activities. It needs to know which and how much energy, water and materials are brought in, which become physical products and which become waste and emissions. This physical accounting information does not provide all of the data needed for effectively managing all potential environmental impacts, but is essential information that the accounting function can provide.

For some organizations that own or control large amounts of property (agricultural operations, timber companies, oil companies, mining operations, etc.) is very important to do physical accounting. Materials purchase costs are a major cost driver for many organizations. The physical accounting information collected under EMA is, therefore, key to the development of many environment-related costs. The physical accounting and monetary accounting sides of EMA are integrally linked in many ways.

### 3.1.2. Monetary Information under EMA

Depending on the intended uses of the cost information, an organization's view of what is "environmental" its economic and environmental goals and other reasons, organizations define environment-related costs differently. Two of the most widely used schemes for defining and categorizing organization-level environment-related costs for EMA purposes are those of the US Environmental Protection Agency<sup>1</sup> and the

Japanese Ministry of Environment<sup>2</sup>, but there are many other examples.

Cost taxonomies developed for the purposes of financial reporting<sup>3</sup> and national reporting<sup>4</sup> are also prominent, and have influenced the kind of environment-related cost information collected and reported to external stakeholders.

## 4. Uses and benefits of EMA

EMA is particularly valuable for internal management initiatives with a specific environmental focus, such as cleaner production, supply chain management, "green" product or service design, environmentally preferable purchasing and environmental management systems. As well, EMA-type information is increasingly being used for external reporting purposes. Thus, EMA is not merely one environmental management tool among many. Rather, EMA is a broad set of principles and approaches that provides the data essential to the success of many other environmental management activities. And, since the range of decisions affected by environmental issues is increasing, EMA is

<sup>2</sup> Japanese Ministry of the Environment, *Environmental Accounting Guidelines*, 2002.

<sup>3</sup> United Nations Conference on Trade and Development, *Accounting and Financial Reporting for Environmental Costs and Liabilities*, 1999; European "Commission Recommendation of 30 May 2001 on the recognition, measurement and disclosure of environmental issues in the annual accounts and annual reports of companies."

<sup>4</sup> Eurostat, *Definitions and guidelines for measurement and reporting of company environmental protection expenditure*, 2001; European "Commission Regulation (EC) No 1670/2003 of 1 September 2003"; United Nations, *Handbook of National Accounting: Integrated Environmental and Economic Accounting*, 2003.

<sup>1</sup> *An Introduction to Environmental Accounting as a Business Management Tool: Key Concepts and Terms* (Washington: United States Environmental Protection Agency, 1995).



becoming more important, not only for environmental management decisions, but for all types of management activities.

### 5. Challenges of EMA's current accounting practices

Several limitations of conventional management accounting systems and practices can make it difficult to effectively collect and evaluate environment-related data. These limitations can lead to management

decision making being based on missing, inaccurate or misinterpreted information. As a result, managers may well misunderstand the negative financial consequences of poor environmental performance and the potential costs and benefits of improved environmental performance. Some of the culprits are limitations of general management accounting as practiced in some organizations. Other limitations are more specific to environment-related information.

### REFERENCES:

1. *Information for Better Markets, Sustainability: the Role of Accountants* (London: Institute of Chartered Accountants of England and Wales, 2004).
2. United Nations Division for Sustainable Development, *Environmental Management Accounting, Procedures and Principles*, 2001.
3. M. Strobel, *Flow Cost Accounting* (Augsburg, Germany: Institute for Management and Environment, 2001).
4. *An Introduction to Environmental Accounting as a Business Management Tool: Key Concepts and Terms* (Washington: United States Environmental Protection Agency, 1995).
5. Japanese Ministry of the Environment, *Environmental Accounting Guidelines*, 2002.
6. United Nations Conference on Trade and Development, *Accounting and Financial Reporting for Environmental Costs and Liabilities*, 1999; European "Commission Recommendation of 30 May 2001 on the recognition, measurement and disclosure of environmental issues in the annual accounts and annual reports of companies."
7. Eurostat, *Definitions and guidelines for measurement and reporting of company environmental protection expenditure*, 2001; European "Commission Regulation (EC) No 1670/2003 of 1 September 2003"; United Nations, *Handbook of National Accounting: Integrated Environmental and Economic Accounting*, 2003.
8. *Environmental Management – Environmental Management Systems – Specification* (Geneva: International Standardization Organization, 1996).
9. *Environment Steering Group, Environmental Issues in Financial Reporting* (London: Institute of Chartered Accountants in England and Wales, 1996);
10. United Nations Conference on Trade and Development, *Accounting and Financial Reporting for Environmental Costs and Liabilities*, 1999;
11. European "Commission Recommendation of 30 May 2001 on the recognition, measurement and disclosure of environmental issues in the annual accounts and annual reports of companies"; "Directive 2003/51/EC of the European Parliament and of the Council of 18 June 2003 on the annual and consolidated accounts of certain types of companies, banks and other financial institutions and insurance undertaking"
12. Global Reporting Initiative, *Sustainability Reporting Guidelines on Economic, Environmental and Social Performance* (Amsterdam, 2002).
13. *Information for Better Markets, Sustainability: the Role of Accountants*.
14. D. Lea, *Briefing Paper on the RoHS Directive* (Herndon, Virginia: Celestica, Inc., 2004).

# Organisational Culture and Performance: Empirical Investigation of Nigerian Insurance Companies

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**Abstract:** This research work examines the impact of organizational culture on performance using Nigerian insurance companies as case study. The study investigates the importance of the relationship between organizational culture and performance and stresses the necessity of a strong employee-responsive culture. Data were collected through the use of questionnaires, and the chi-square method was used to test our research hypotheses. It was discovered that there was indeed a relationship between organization culture and performance and also a strong employee-responsive culture can lead to effective performance. While carrying out the study it was also discovered that the values and beliefs of the companies were not compatible with that of few employees. It was therefore recommended that to solve this problem appropriate machinery should be put in place to drive compatibility, thereby ensuring unity of purpose.

**Keywords:** Organisational Culture, Performance, Industrial Organisation, Management, Employee Participation.

## Introduction

The study of culture, whether organizational, national, or regional continues to receive attention from scholars and management practitioners alike. The continuous growth in the global nature of business serves as one of the main catalysts for the renewed interest in the study of organizational culture which has now been realized that

culture affects the behaviour and success of individuals, teams and organizations (Shani and Lau, 2005)

According to Plakhotnik and Tonette (2005), in the 1970s, Japan's outstanding business success and the decrease in production in the United States of America (USA) prompted researchers to review their understanding of organizational management.

Pioneer researchers in the study of organizational culture Ouchi (1981), Peters and Waterman (1982), and Deal and Kennedy (1982) explored how culture contributes to business success. Quoting Plakhotnik and Tonette (2005), on the increase in the interest they stated that *"as their works turned into best-sellers, organizational culture became a frequent headline in popular business literature and a tool for businesses to increase their competitiveness in the global market"*.

Organizational culture is one factor that has received much attention in organizational behavior literatures because of the key function it plays in determining levels of employees and general organizational performance. In an effort to understand the effects of organizational culture on performance, researchers have explored how organization socialized (Harrison and Carroll, 1991).

What motivated this research work is that there appears to be a substantial body of theory and research internationally that has emphasized the importance of organisational culture and employee performance in organisations without scientific evidence of the relationship between these phenomena. This research study endeavours to determine the relationship between these two concepts.

### Statement of Research Problem

In the past twenty five years, the concept of corporate culture has gained wide acceptance a way to understand human systems. From an open system perspective, each aspect of corporate culture can be seen as an important environmental condition affecting the system and subsystem of the organization. Increased competition, globalization, alliances and major work force department

have created a greater need for organizational culture. Thus, it has become an important factor for a company's development.

Managing corporate culture is emerging as one of the key managerial challenges of the twenty first century. Most studies in corporate culture and employee performance have tended to focus on distinct elements of culture while ignoring its multi dimensions and that it is concepts that consist of several interconnected variables (Schein, 1992). Culture is the common bond that generates a sense of belongingness among the actors in an organization. Organizational culture offers a shared system of meaning which is the basis for communications and mutual understanding and if there functions are not fulfilled satisfactorily way culture may significantly reduce effectiveness of employees in organizations

The main rational for this research study is therefore to contribute to the broader research community by enhancing existing knowledge and generating new knowledge within the field of Industrial and Organisational Psychology. Furthermore, this study addresses this topic from Nigerian work context and viewpoint by focusing on employees in the insurance industry.

### Significance of the Study

People come with various views to the organization. These differences tend to direct behaviour in divergent directions; an understanding of cultural integration is important in managing employee behaviour and improving employee performance.

A review of academic literature on the subject of organizational culture and employee performance reveals that there is a

dearth of literature on it in developing countries including Nigeria. Thus, it is hoped that this study will fill the existing gaps in the literature especially in the less developed countries in general and Nigeria in particular.

This study will also provide a fresh framework for understanding the relationship between organisational culture and employee performance. In addition, the study will be of immense benefit to a number of people. These include academics who are interested in furthering their knowledge of organizational culture and employee performance as the results to be obtained are capable of adding new insight to the present state of knowledge in the field and may therefore be found useful for teaching and for developing a body of management theory. Equally important is the fact that this study will also be of great benefit to practicing managers in the field of insurance who might be willing to consider the usefulness of the study in managing and strengthening their organizations.

### Objectives of Study

The general objective of this study is to determine the impact of organizational culture on employee performance. To achieve this lofty objective, this research will focus and examine the following specific objectives.

- 1) To define organizational culture and its dimensions.
- 2) To examine the types, elements, and functions of organizational culture.
- 3) To determine the empirical relationship between organizational culture and employee performance; and
- 4) To formulate recommendations regarding organizational culture and performance.

### Conceptual Framework of Organisational Culture

The culture of an organization is brought about as a result of different factors some of which include the influences of national culture, previous events in the organization, the different personalities and the socialization individual members experienced as a result of past educational and work settings (Mahler, 1997). A company's culture which is a subset of a country's national culture also consists of subcultures and countercultures. The subcultures in organization consist of the beliefs and values of certain groups that are in support of the overarching corporate culture while the countercultures consist of beliefs and value systems of groups in the organization that represent a deviation from the general beliefs of the organization and poses a threat to it.

There are many definitions of organizational culture. Authors and scholars alike have given definitions based on their experiences and studies, some of which are analyzed below

Hofstede (2001) sees organizational culture as the "shared pattern of beliefs, assumptions and expectation of the organization's members" and "the collective programming of the mind which distinguishes one group or category of people from another."

Geert Hofstede sees organizational culture as the way of life of members of an organization and as the way of thinking common or exclusive to a particular group of people. He takes a "communal" stance on organizational culture in the sense that organizational culture results when individuals with a common purpose continually associating with one another over a period thereby developing

specific ways of doing things which are peculiar to the group.

According to McShane and Von (2005) organizational culture is defined as the basic pattern of shared assumptions, values and beliefs governing the way employees within an organization think about or act on problems and opportunity.

They see organizational culture as defining what is significant and insignificant in the company and also as a code of direction as to what employees are to do concerning situations.

Seeing organizational culture as a body of principles which are relatively stable over time, adhered to by members of a particular company, learnt by new members and passed to future generations.

Buchanan and Huczynski (2004) define it as "the collection of relatively uniform and enduring values, beliefs, customs, traditions and practices that are shared by an organization's members, learned by new recruits, transmitted from one generation of employee to the next".

Organizational culture as seen simply by some notable authors is organization's operating philosophy (Ouchi, 1981), an organization's values (Deal & Kennedy, 1982) and an organization's generally accepted system of meaning (Pettiger, 2000).

In all the definitions given above, all the authors made mention of certain elements (beliefs, assumptions, values, norms etc). They constitute the 'spine' of any company's culture.

### Types of Organizational Culture

Scholars of organizational culture based on their researches have come up with their own different views on the types of culture,

but this study will focus on the types of organizational culture given by Cook and Rousseau (1988). They affirmed that there are four types of organizational culture: the passive, cooperative, competitive and aggressive types of culture. They are discussed below:

**Competitive Culture:** This type of culture encourages employees to attain new heights of achievement, quickens competition among fellow employees and also encourages employee 'being in charge'. A company with this kind of culture rewards employees who attain or beat certain predetermined standards, encourages employee decisiveness and creates environment for high expectations. But when the drive of competitiveness in employees is in excess in the organization it leads to the incidence of 'cut throat competition which will be to the company's detriment.

**Cooperative Culture:** Organizations with this culture promote employee independence in terms of setting goals and the use of their initiatives. This type of culture values employees and distributes authority as well as power based on trust. Cooperative norms encourage behaviors such as maintaining one's personal integrity and standards, goal realization and enjoying one's work. It encourages team work.

**Aggressive Culture:** This culture is more of autocratic. Employees at the lower levels of such organizations are rarely given opportunity to make decisions based on their discretions instead they have to wait for directives from the top. This norm promotes procrastination and cause service quality to become confused with winning power and pointing out the flaws of others.

**Passive Culture:** This type of culture is more of a utopia compared to the other

types. Organizations with this type of culture are usually traditionally run (they make their decisions based on past or similar passed actions), they might be plagued with too many formalities, and members of the organizations prefer the status quo and are extremely cautious. Organizational effectiveness is abated and most especially, the event of innovation and creativity is repressed.

### Elements of Organizational Culture

Edgar Schein's model of culture is among the most widely discussed; he conceptualized it as having three levels. According to Buchanan and Huczynski (2004) he distinguished each of them by its visibility to and accessibility by individuals. The three levels are artifacts, values and basic assumptions.

The **artifacts** consist mainly of the visible and conscious organizational structures they include the physical environment, language, rites and ceremonies, stories, myths and slogans.

The **espoused values** represent the things below the surface they are found in company strategies, objectives and goals.

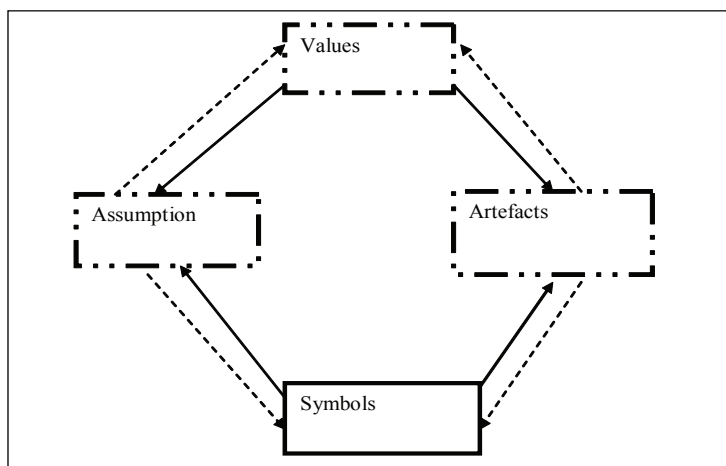
They consist of what the members of an organization hold in high esteem. According to Sweeny and McFarlin (2002) values are 'what should be' and 'what shouldn't be'.

The **basic assumptions** are the taken for granted beliefs, thoughts and assumptions which are usually unconscious and strongly held by organizational members. They are also very hard to uncover by outsiders even the members.

Hammal (2006) in his research criticized Schein's model as being too static because the processes in the model of moving up and down was not discussed, he further stated that the description of this process will help to see how the unconscious basic assumptions are formed, how they translate into the conscious and visible artifacts and the role played by the espoused values.

Hatch (1993) while considering the shortcomings of the Schein Model and complementing it, proposed the addition of symbols as an element and making the elements of culture less central so that the emphasis is laid on the relationship connecting them. The model was referred to as the model of cultural dynamics. It is represented diagrammatically below

**Figure 1:** Model of Cultural Dynamics



Source: Hatch (1993) *The Dynamics of Organisational Culture*



Gordon (2002) describes the processes of manifestation, realization, symbolization and interpretation in the following ways:

**Manifestation** refers to the process whereby employee perceptions, cognition and emotions culminate into cultural assumptions.

**Realisation** refers to the how perceptions, cognitions and emotions of employees are transformed into the visible and audible artefacts.

**Symbolisation** refers to what each specific artefact represents.

**Interpretation** refers to the process whereby members of the organization and the public determine the meaning of various symbols.

Culture according to Trice and Beyer (1993) is considered as consisting of two elements the overt signifiers and the meaning these signifiers have to members. The overt signifiers which include ceremonies, company structures and icons etc are referred to as the company's artefacts. The further interpretations of the artefacts reveal content of the culture which are the beliefs, basic assumptions, values and philosophy etc.

#### **Functions of Organizational Culture**

Culture in organizations may not be visible or physical but its impact in the everyday running of a company cannot be overemphasized according to Greenberg and Baron (2003) the role of culture in the organization are discussed below.

**Culture Defines Standards of Behaviour:** Culture clarifies what ought to be and what ought not to be in the organization. It gives stability as regards what individuals might do at different periods and what individuals might do at the same time. Culture also helps define the acceptable

interrelationships in the company (Gordon, 2002) for example a company's culture can promote egalitarianism a situation where by all employees are seen and treated as equal.

**Culture Provides a Sense of Identity for Members:** The culture of an organization is like its personality the more members can identify with that personality (its embodiment of values and beliefs) the more strongly they associate themselves with the company goals, mission and objectives and feel a vital part of it. This will to a large extent reduce the incidence of losing high performing employees to rival companies.

**Culture Generates Employees' Commitment to a Company's Mission:** Individuals are by nature selfish and already struggle to strive to ensure that their needs are met. The presence of a strong culture reduces this selfish nature and make individuals 'members' of the organization, making them feel that they are part of the well defined whole and are involved in the entire organization's work. It reminds people of what the organization is all about

Gordon (2002) noted that although culture helps establish values that persuade employees to commit to the organization's goals the effect of a wrong culture can be disastrous in the sense that it can render a company's beliefs, goals and vision useless and meaningless.

#### **The Concept of Performance**

The term performance refers to how and the manner in which a particular task is carried out usually judged by its effectiveness. Performance should be associated with factors such as increasing profitability and obtaining the best results in all organizational



endeavours. Performance reflects the extent of goal achievement by employee in an organization.

Aragon (1993) sees performance as comprising of efforts directed towards achieving the goals of the organization. **Performance** is a result of **ability** and **motivation**. He mathematically represented it as ' $P = A * M$ '. The ability variables comprises of the factors that affect it which are experience and training while motivation refers to the willingness of employees to expend their efforts to accomplish tasks. Motivation is a major factor; if it is not present performance will be adversely affected. In discussing the effect of culture on performance, effectiveness and efficiency are variables in performance.

### Organizational Culture and Employee Performance

Corporate culture is seen as the organization's DNA, invisible to the naked eyes and still a powerful unstoppable force that shapes what happens in the workplace (Davenport, 1998).

The differences in employee performance among companies in the same industry is as a result of the differences in their organizational culture. The influence of organizational culture on employee performance is critical and cannot be ignored. It is to this end that Trice and Beyer (1993) based on their research posited that most organizational scholars have recognized in their studies the very powerful and irrefutable effect an organization's culture has on employee performance and productivity. The culture of some organizations perpetuates high employee performance while the culture of the others perpetuates low employee performance.

Trice and Beyer (1993) also noted that a company's culture in the next decade will be the determining factor of the failure and success of employees. This 'prophecy' is coming to pass today as high performing companies owe their success to a strong overarching 'Employee-Friendly' corporate culture.

Initiating a positive organizational culture have been linked to increased organizational effectiveness, increased employee productivity and advanced level of employee commitment (Barney, 1986)

### Research Hypotheses

The accuracy of the research finding will be determined by testing the following hypothesis

**H<sub>0</sub>:** There is no direct relationship between organizational culture and employee performance

**H<sub>1</sub>:** There is a direct relationship between organizational culture and employee performance

**H<sub>0</sub>:** A strong employee-friendly organizational culture cannot lead to effective employee performance

**H<sub>1</sub>:** A strong employee-friendly organizational culture can lead to effective employee performance

### Research Methods

We shall briefly describe the methods and procedures employed in carrying out this research work. The research design for this study was survey research design. The population of the work was made up of executives, directors, managers and staff of insurance companies in Nigeria. Although, the entire country was expected to be covered, but due to paucity of financial resources, the study was restricted to the Southwest Geo-

Political Zone. Because of the large number of the population elements, the whole elements of the population cannot be used for this study. Therefore, representative samples were randomly selected to represent the entire population. Stratified sampling method was used in samples selection. The reason for the choice of stratified sampling method is that we want our sampled elements to represent the various strata of the entire population. In all 90 persons were eventually selected. Data were collected through well-structured questionnaire. The response structure of the questionnaire was patterned after the summated rating scale developed by Rensis Likert. Each sampled element got a copy of the questionnaire which was completed by them. The return rate of completed questionnaire was 85.6 percent as we were able to get back 77 out of 90 questionnaires given to our respondents. Our data were collected, collated, analysed by using simple percentage while our hypotheses were tested with the use of chi-square.

### Hypotheses Testing and Discussion of Result

Below are the data obtained through the questionnaire. They have been analysed and are to be used for testing our hypotheses. The chi-square formula is expressed below:

$$\chi^2 = \sum \frac{(O - E)^2}{E}$$

Where:

$\chi^2$  = Chi- square

O = Observed Frequency

E = Expected Frequency

Level of significance = 0.05%

Degree of Freedom = 4

### Hypothesis One

$H_0$ : There is no direct relationship between organizational culture and performance

$H_1$ : There is a direct relationship between organizational culture and performance

**Table 1:** Relationship Between Performance and Organizational Culture.

	Observed N	Expected N	Residual
Strongly agree	33	19.3	13.8
Agree	35	19.3	15.8
Undecided	5	19.3	-14.3
Disagree	4	19.3	-15.3
Total	77		

Source: Survey Data, 2007

**Table 2:** Test Statistics for Hypothesis One

	There is a relationship between performance and organizational culture.
Chi-Square(a)	45.338
Df	4
Asymp. Sig.	.000

Calculated value = 45.338

Therefore, at 0.05% level of significance, the statistical value of  $\chi^2 = 9.49$

Since the tabulated value is less than the calculated value, we reject the null hypothesis ( $H_0$ ) and accept our alternative hypothesis ( $H_1$ ) which says that there is a relationship between organizational culture and performance of insurance companies.

### Hypothesis Two

$H_0$ : A strong employee-friendly organizational culture cannot lead to effective employee performance.

**H<sub>1</sub>:** A strong employee-friendly organizational culture can lead to effective employee performance.

**Table 3:** *The Relationship Between Employee-Friendly Culture and Performance*

	Observed N	Expected N	Residual
strongly agree	18	15.4	2.6
Agree	43	15.4	27.6
Undecided	7	15.4	-8.4
Disagree	7	15.4	-8.4
Strongly disagree	2	15.4	-13.4
Total	77		

Source: Survey Data, 2007

**Table 4:** *Test Statistics for Hypothesis Two*

	The organizational culture that is employee-friendly can lead to effective performance
Chi-Square(a)	70.727
Df	4
Asymp. Sig.	.000

The calculated value of  $\chi^2 = 70.727$ , while at 0.05% level of significance, the tabulated value of  $\chi^2 = 9.49$

Since the tabulated value is less than the calculated value. The alternative hypothesis (H<sub>1</sub>) is accepted while the null hypothesis (H<sub>0</sub>) is rejected. It is therefore concluded that a strong employee-friendly organizational culture can lead to effective employee performance.

## Conclusion

Based on the empirical findings culture and performance have mutually reciprocating relationship. That is, there is a positive relationship between organizational culture and employee performance. An organization with a culture that encourages employee participation, commitment, team work, and gives room for employee self development and improvement will attract, retain and motivate highly skillful individuals. No doubt, this will result in a high performing organization evident in its profitability and turnover rate. If strong culture helps building high performance company, the past performance and successes shape and influence people's behaviours which with time become part of the culture. A positive organizational culture that is employee-friendly is essential for an organization to be successful. It also provides personal work satisfaction in employees, support emotional and physical well-being and generates high moral as well as a positive perception by others. Machineries should also be put in place to ensure that employees are well educated on the company's values and beliefs, mission and vision and other things the organization stands for. Through this, few employees whose views are divergent from those of organization's can be aligned with the organization without much fiasco. The work environment and atmosphere should be modified in such a way that employee feel the urgent need to achieve, thereby channeling their efforts to the attainment of the organizational goals and objectives. The environment should be conducive to ensure their total allegiance and loyalty.

## REFERENCES:

1. **Aragon, R.** (1993) *Positive Organizational Culture; A Practical Approach*, The FBI Law Enforcement Bulletin, (December)

2. **Barney, J.** (1986) *Organizational Culture*, Academy of Management Review, 11(3): 656-665
3. **Buchanan, D. and Huczynski, A.** (2004) *Organizational Behaviour: An Introductory Text*. (5<sup>th</sup> ed.). Essex: Prentice Hall Financial Times.
4. **Deal, T. E. and Kennedy, A.A.** (1982) *Corporate Cultures: The Rites and Rituals of Corporate Life*, Reading: Addison-Wesley Publishing Co.
5. **Cooke, R. A. and Rousseau, D. M.** (1988) "Behavioral Norms and Expectations: A Quantitative Approach to the Assessment of Organizational Culture," *Group & Organization Studies*, 13 (3), 245-273
6. **Davenport, J. O.** (1987) *The Integration Challenge: Managing Corporate Mergers*. Management Review, January pp 25-28
7. **Gordon, J. R.** (2002) *Organizational Behavior: A diagnostic Approach* (7<sup>th</sup> ed.) New Jersey: Pearson Prentice Hall
8. **Greenberg, J. and Baron, R. A.** (2003) *Behaviour in Organizations*, (8<sup>th</sup> ed.) New Jersey: Prentice Hall
9. **Hammal, G.** (2006) *Task Relationship Orientations of Organizational Culture in the Framework of Metaphorical Perspective*, University of Tartu, Western Estonia.
10. **Harrison, J. R. and Carroll, G. R.** (1991) *Keeping the Faith: A Model of Cultural Transmission in Formal Organizations*, Administrative Science Quarterly, Vol. 36, No. 4. pp. 552-582.
11. **Hatch, M. J.** (1993) *The Dynamics of Organizational Culture*, Academy of Management Review, 18, pp. 657-693
12. **Hofstede, G.** (2001) *Culture's Consequences: International Differences in Work Related Values*, London: Sage Publications.
13. **Mahler, J.** (1997) *Influences of Organizational Culture on Learning in Public Agencies*, Journal of Public Administration Research and Theory: J-PART, 7(4). pp. 519-540.
14. **McShane, S. L. and Von, G. M.** (2005) *Organizational Behavior: Emerging Realities for the Workplace Revolution* (3<sup>rd</sup> ed.) New York: McGraw-Hill Irwin.
15. **Ouchi, W.** (1981) *Theory Z*. Reading: Addison-Wesley.
16. **Peters, T. and Waterman, R.** (1982). *In Search of Excellence*. New York: Harper and Row.
17. **Pettinger, R.** (2000) *Mastering Organizational Behaviour*. New York: Palgrave.
18. **Plakhotnik, M. S. and Tonette, S. R.** (2005) *Organizational Culture: A Literature Review of the AHRD 1994-2005 Proceedings*, Florida International University, USA.
19. **Schein, E.** (1992) *Organizational Culture and Leadership*, (2<sup>nd</sup> ed) San Francisco: Jossey Bass
20. **Shani, A.B. and Lau, J. B.** (2005) *Behaviour in Organizations: An Experiential Approach* (8<sup>th</sup> ed.), New York: McGraw-Hill Irwin.
21. **Sweeny, P. D. and McFarlin, D. B.** (2002) *Organizational Behaviour: Solutions for Management*. New York: McGraw-Hill Irwin.
22. **Trice, H.M and Beyer, J. M.** (1993) *The Cultures of Work Organizations*. New Jersey: Prentice Hall Englewood Cliffs

## Devolution of HRM Practices: Perspectives of Two Major Japanese Electrical and Electronics Companies in Malaysia

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**Abstract: Purpose** - This study examines the devolution of HRM functions, the rationale and problems of such devolution to line management in the context of applications and processes in two major Japanese multinational companies in Malaysia.

**Design/methodology/approach** - The research used mixed methodology via case studies and questionnaire surveys. Overall 29 questionnaires from two companies were analyzed, a response rate of 58 percent. In addition, the views of the Executive Director, Head of HR, and line managers were sought regarding their role, involvement and problems of devolvment to line managers.

**Findings** - Analysis of questionnaire responses and interviews shows that devolution of HRM functions to the line managers was adopted by both organizations, though their approaches varied in terms of process. The study revealed a high degree of devolution of responsibility to line managers for recruitment and selection and training and development. The devolution of training and development functions specifically to a separate department resulted in their increased effectiveness. Extensive participation and a close working relationship on HR-related issues between HR managers and line managers jointly contributed to the effectiveness of the companies' devolution of HRM functions.

**Practical implications** - Devolution of HRM functions to line management is a growing trend internationally. However, despite the positive outcomes of devolution, the process is never unproblematic.

**Originality/value** - This study thus builds on the existing literature and also contributes to overcoming the dearth of empirical research on devolution which has been predominantly Western in context. Furthermore, no study examining devolution of the HRM functions in Malaysia.

**Keywords** Devolution of HRM functions, HR managers, Line managers, Classifications  
Case study

## Introduction

One of the central features of ongoing debate on strategic human resource management (SHRM) approaches is the importance of line managers' involvement in HRM functions (Brewster and Larsen, 2000; Budhwar, 2000; Budhwar and Khatri, 2002; Currie and Procter, 2001; Gennard and Kelly, 1997; Heraty and Morley, 1995; Khatri, 2000; Legge, 1995; Mayne and Brewster 1995). It is argued that all management should be appropriately involved in decisions and actions that affect the nature of the relationship between the organization and its human resources. Similarly, Armstrong and Long (1994) noted that one of the characteristics of organizations which adopt SHRM is line managers who 'own' the HR strategies. Interestingly, the involvement of line managers in executing human resource management functions has been reported with mixed findings in the literature (Brewster and Larsen, 2000; Cunningham and Hyman, 1997; Gratton *et al.*, 1999; Legge, 1995; Renwick, 2003; Storey, 1995; Ulrich, 1998) but only in recent years has line management been seen to play a more prominent role in HRM due to more HR work being devolved to them (Brewster and Larsen, 2000; Currie and Procter, 2001). However, as noted by MacNeill (2003), there remains a lack of clarification as to the role and relationship between HR and line management.

Line involvement in HRM in recent years is seen by Brewster and Larsen (2000) to have five main rationales: to reduce costs; to provide a more comprehensive approach to HRM; to place responsibility for HRM with the managers most concerned; to speed up decision making; and as an alternative to outsourcing HRM functions. Additionally, Cunningham and Hyman (1997) noted that

the devolution of responsibility to the line and to HR consultants promises liberation of HR professionals "from the burdensome toil of conducting routine techniques", allowing them to become more involved in strategic business decisions. At the same time, the growing relevance of e-HR, as noted by Watkins and Hugginbottom (2002, cited in Marchington and Whittaker 2003), has added a further rationale for devolution, as this should "free up line managers, so allowing them to concentrate on other less mundane areas such as training and development". Similarly, Fombrun *et al.*, (1984) convincingly argued that any attempt to redesign the role of the HRM function requires the line's participation since most of the activities of selection, appraisal, reward and development are prerogatives of the line organization. Despite these debates, past studies have shown that HR responsibility has been increasingly devolved to line management (Brewster and Larsen, 2000; Budhwar, 2000; Budhwar and Khatri, 2002; Currie and Procter, 2001; Heraty and Morley, 1995; Legge, 1995; Mayne and Brewster 1995; Storey, 1995). However, the frequency of the practice is yet to be explored.

## Why is this study important?

The Malaysian electrical and electronics industry is considered a strategically important sector which contributes significantly to the country's manufacturing output, exports and employment. Japanese foreign direct investment (FDI) remains crucial for Malaysia's industrial development (FDI Magazine, 2008). This industry has developed significant capacities in the manufacture of a wide range of semiconductor



devices, high-end consumer electronic goods and information and communication technology products. Moreover, with increased globalization and global competition, mergers and acquisitions, organizations in this sector are facing increased challenges in their constant quest to develop new capabilities and employee commitment, pursue innovation and creative initiative, and manage change. Therefore, strategic deployment of their human resources is required. In recent years the Japanese production and management system has made considerable inroads overseas and has attracted a great deal of attention. As noted by Liberman *et al.*, (1990), Japanese auto producers achieved higher productivity after they adopted better HRM methods. The Japanese system of management is known as a complete philosophy of organization which can affect every part of the enterprise. Undeniably, strategic HR involvement is more prominent among Japanese companies, given the flexibility of their organizational structure with systems, that facilitate interaction between departments, participatory decision making, devolution of HRM functions, and cross-functioning. This management system is considered one of the main factors contributing to the success of Japanese companies in improving productivity and quality of goods and services.

Despite its growing importance, most of studies to date on the concept of devolution have been conducted in the West (Budhwar 2000; Budhwar and Sparrow, 1997), with no study examining devolution of the HRM function in Malaysia. Thus more research effort is needed to address important issues regarding devolution. Against the above background, devolution has become an increasingly relevant research topic. The present research,

situated in Malaysia, presents discussion of case studies in two major Japanese multinational companies in Malaysia, examining their approaches to the devolution of HRM functions to line management. This research thus builds on the existing literature and also contributes to overcoming the dearth of empirical research on devolution which has been predominantly Western in context.

### Review of related literature

The underpinning literature review briefly addresses issues regarding the devolution of HRM responsibilities to line managers. The literature related to issues of devolution of HRM functions has produced mixed findings of either positive or negative outcomes. Budhwar (2000) reported interviewees in his study believed it was the job of line managers, being closer to reality, to take responsibility for certain HRM activities. Moreover, it has been company policy in many organizations to devolve responsibility to the line (Hutchinson and Wood, 1995; IRS, 1995, 1996a). The aim is to make the line more responsible, to gain its commitment and to give the line more control. In addition, due to the increased level of competition, it has become important to free specialists from routine activities and devolve these activities to the line. This helps in the smooth functioning of the organization. Devolution of HRM functions to line managers also improves the commitment of HR towards organizations, motivates them and helps in maintaining good industrial relations. The positive outcomes of devolvment reported by most interviewees (Budhwar, 2000; Budhwar and Sparrow, 1997; Heraty and Morley; 1995; Renwick, 2000) in past studies include more



problems being solved at a lower level, better change management, more responsible line managers, improved efficiency of employees and greater freedom for specialists to move away from routine activities.

However, the process of devolution is never unproblematic (Mohram and Lawler, 1999; Ulrich, 1998). The main negative outcomes of devolvement of HRM responsibility to line managers include increased pressure to train line managers, problems of maintaining consistency in the system, the need for strict HR auditing, and the problem of maintaining a balance of power between line and specialists (Budhwar, 2000; Budhwar and Sparrow, 1997; Heraty and Morley, 1995). Similarly, Thornhill and Saunders (1998) found that there was a failure to achieve HRM effectiveness in an organization where the specialist HR function was completely devolved to line managers. Brewster and Larsen (2000) point to the fact that though the devolution of HR functions to line management has received much attention by both academicians and practitioners in the UK and Europe over the last decade, the actual degree of involvement is not so extensive. Additionally, McConville (2006) noted that though the role of line managers in the employment relationship is a central tenet of such practices, the effect of such responsibilities on line managers is an area that is still under-researched.

### Objectives of the study

Given the review outlined above, this research examines the devolvement of HRM functions, the rationale and problems of devolvement to line management in two major Japanese multinational companies in Malaysia.

The related research questions are as follows:

1. (i) Are HRM functions being devolved to line management?  
(ii) Is it the organization's policy to devolve?
2. What are the HRM functions that are devolved to line management?
3. What are the rationales for devolving of HRM functions to line management?
4. What are the problems of devolution?

### Research methodology

#### *Research design*

A mixed methodological approach via case studies and questionnaire surveys was used for this study.

#### *Data source and sample*

The two companies studied are major Japanese electrical and electronics companies in Malaysia. For confidentiality purposes, the organizations are referred to as Company A and Company B. Each company was visited by the author on two separate occasions in March and July 2006 for the purpose of interviews. Permission to interview the respondents was gained through the respective HR directors of the parent companies in Japan. The aim of these interviews was to obtain a cross-section of views on the strategy formulation process, specifically from HR and line managers who were either directly or indirectly involved in the formulation and implementation of strategy. The interviews were tape recorded and subsequently transcribed. The 15 respondents ( $n=8$ ) from Company A and ( $n=7$ ) from Company B interviewed included senior line managers, HR managers, engineers, and executives. In addition, questionnaire surveys were also employed to

acquire statistical data in order to strengthen and substantiate the descriptive findings. A total of 50 questionnaires, 25 questionnaires for each company were sent to the Head of HR/Director of HR and Head/Director of Manufacturing/Line Managers of both companies. Of these, a total of 29 questionnaires, 15 from Company A and 14 from Company B were received and analyzed, a response rate of 58 percent. Descriptive statistics using frequency counts, percentages, and means were used for all measures with a five-point Likert scale.

#### *Instrument*

The instruments used in this study were semi-structured interview questions (see Appendix A for Semi-Structured Interview Questions and Probes). The questionnaire items were divided into five parts. The first part contained items relating to personal and organizational profile. The second part contained three items relating to whether HRM functions were devolved to line management and whether it was the organization's policy to devolve. The third part contained eight items relating to the extent of HRM functions that were devolved to line management. The fourth part contained six items relating to the rationale for devolution. The fifth part contained five items relating to the problems of devolvement of HRM functions to line management. Responses to all the items in the third, fourth and fifth parts were in the form of five-point Likert scale, requiring respondents to choose from five given responses: 1 = Little or no extent; 2 = Some extent; 3 = Moderate extent; 4 = Great extent; and 5 = Very great extent.

The questionnaire and interview items were sourced from earlier published

research (Brewster & Larsen, 1992; Budhwar, 2000; Budhwar and Khatri, 2002; Budhwar and Sparrow, 1997; Dyer and Reeves, 1995; Renwick, 2000; Sheehan, 2005). Prior to finalization of questionnaire survey and interview questions and to ensure reliability, two workshops were held in March 2005 with 11 HR practitioners and 8 line managers from different organizations in Malaysia in order to obtain a better understanding of HR practices particularly with regard to integration of HR strategy with business/corporate strategy. These discussions with key HR practitioners and line managers provided valuable opportunities and feedback to develop relevant and practical semi-structured interview questions and questionnaire survey items. The participants agreed that the questionnaire and interview items were relevant to this research and would be able to provide answers relevant to the objectives of the study.

#### *Measurement*

This research employed the theoretical definitions from Brewster and Larsen (1992), who defined devolution as 'the degree to which HRM practices involve and give responsibility to line managers rather than personnel specialists'. This definition was used as a basis to develop relevant questions relating to the devolution of HRM functions to line managers. Devolution of HRM functions to line management, the rationales and problems of devolvement were measured on the basis of the following items:

- (i) Whether HRM functions were devolved to line management
- (ii) Whether it was the organization's policy to devolve
- (iii) Whether HR and line managers worked as partners in formulating strategies

(iv) Eight items relating to the extent of HRM functions that were devolved to line management: determining personnel requirements; designing job descriptions; membership of panel of interviewers in the selection process; decision-making in the selection process; defining and analyzing training need analysis; determining training programs; designing training programs, implementation of training programs.

(v) Six items relating to the rationales to devolve HRM functions to the line managers: effective controls; line managers being able to respond quickly to problems; HR being able to concentrate on more strategic role; facilitating a closer working relationship between HR and line managers; extensive participation between HR and line managers to create mutual benefit; HR and line managers jointly contributing to solve business problems.

(vi) Five items relating to problems of devolvement: increasing the heavy workload of the line management; lack of time for line managers to do HR work well; problem of maintaining consistency in the HRM practices; problem of maintaining balance of power between HR and line management; line management not considering themselves experts in HRM matters.

These items were used to determine the dimensions of devolution of HRM functions, particularly in relation to the involvement of line managers in the execution of HRM functions, rationales for devolution to devolve and problems of devolution.

#### *Profile of case study organization*

Company A was established in Malaysia in 1973 is a subsidiary of a leading Japanese manufacturer of bipolar integrated circuits, MOS-integrated circuit and discrete

equipment for the application of telecommunications, audio, television, facsimiles, printers, DVD and other applications. Company B was principally engaged in the manufacturing of room air-conditioners. It was established in Malaysia in 1972 to specialize in the manufacture, sales and service of air-conditioners.

#### *Findings and discussions*

The findings from the questionnaire survey and case studies are detailed and illustrated below with tables supplemented by some excerpts of interviews which are reproduced verbatim from the interview records of the researcher, to give clearer views of interviewees' comments.

#### *Profile of respondents*

The majority of the respondents participating in the questionnaire survey from both companies were HR Director, Executive Director, line managers from production, engineering and managers and assistant managers from HR departments. The majority of the respondents from both companies had graduated with bachelor's degrees in various academic fields including engineering, business studies, social sciences, economics and human resource management. Thus the respondents were highly educated and qualified. This could possibly reinforce the accuracy of the study's findings. Both companies reported having a HR department and both companies had been established in Malaysia for more than 20 years.

#### *Devolution of HRM functions*

The questionnaire items on the devolution of HRM functions were designed for the purpose of examining whether HRM

functions were devolved to line management and whether it is the organization's policy to devolve. The results for devolution of HRM function as shown in Table 1 indicate that 100 percent of questionnaire respondents from Company B answered both questions on the devolution of HRM function to the line management in the affirmative. However, for Company A 66.7 percent of respondents reported that HRM functions were devolved to line management, and 73.3 percent of respondents said it was the organization's policy to devolve. Though there are slight differences in terms of the percentage score, responses from representatives of both companies indicated devolution of HRM functions. In the interviews from both companies, the HR managers and line managers believed that the organization's policy to devolve would ensure some commitment from the line managers in undertaking the extra responsibilities entailed in executing HRM functions.

Another important measure of devolution is whether HRM functions are devolved to the line management. The results in Table 2 for devolution of HRM functions to line management show that the three highest scoring items for Company A were (i) determining manpower requirements (3.93), (ii) designing job descriptions (3.87), and (iii) membership

on panel of interviewers for selection process (3.73). In contrast, for Company B, the three highest scoring items were: (i) membership on panel of interviewers for selection process (4.14), (ii) designing training programs (4.07), and (iii) decision making in selection process (4.00). The overall average mean scores for Companies A and B were 3.60 and 3.88 respectively, indicating that respondents from both companies provided an overall response above the mid-point of 'moderate extent' which reflected considerable devolution of HRM functions to line management.

Hope-Hailey *et al.*, (1997) found that responsibilities differed according to the specific area of HRM. They noted that HRM function still retained certain areas such as industrial relations, pay and benefits with most organizations having shared responsibility on key HRM functions of recruitment and selection and training and development. Generally, the results showed that both companies had extensively devolved their key HRM functions regarding recruitment and selection and training and development to line management. This indicates that the HRM function in both companies had shared responsibility with line management rather than sole responsibility for HR.

**Table 1.** Devolution of HRM functions/organization's policy to devolve

Variable		Company A (%) (N=15)		Company B (%) (N=14)	
		Yes	No	Yes	No
a.	HRM functions are devolved to the line management	66.7	33.3	100.0	0.0
b.	Organization's policy is to devolve	73.3	26.7	100.0	0.0

**Table 2.** HRM functions devolved to line management

Item		Company A (N=15)		Company B (N=14)	
		Mean	SD	Mean	SD
a.	Determining manpower requirements	3.93	0.80	3.86	0.66
b.	Designing job descriptions	3.87	0.74	3.71	0.47
c.	Membership of panel of interviewers in selection process	3.73	0.70	4.14	0.66
d.	Decision-making in the selection process	3.53	0.83	4.00	0.70
e.	Defining and analyzing training needs	3.47	0.64	3.79	0.58
f.	Determining training programs	3.47	0.74	4.00	0.55
g.	Designing training programs	3.40	0.63	4.07	0.47
h.	Implementation of training programs	3.40	0.63	3.43	0.51
<b>Average Mean Score</b>		<b>3.60</b>		<b>3.88</b>	

Notes: 1 = Little or no extent; 2 = Some extent; 3 = Moderate extent; 4 = Great extent; 5 = Very great extent

**Table 3.** Rationale to devolve HRM functions to the line management

Item		Company A (N = 15)		Company B (N=14)	
		Mean	SD	Mean	SD
a.	Effective controls	3.87	0.83	3.86	3.86
b.	Respond more quickly to problems	4.00	0.76	3.93	3.93
c.	HR can concentrate on more strategic role	3.47	0.64	3.86	3.86
d.	Closer working relationship between HR and line management	3.60	0.63	4.21	4.21
e.	Extensive participation between HR and line management	3.80	0.68	4.21	4.21
f.	HR and LM jointly contribute to solve business problems	3.93	0.70	4.07	4.07
<b>Average Mean Score</b>		<b>3.78</b>		<b>4.02</b>	

Notes: 1 = Little or no extent; 2 = Some extent; 3 = Moderate extent; 4 = Great extent; 5 = Very great extent

### Rationale for devolution

The rationale for devolution of HRM functions to line managers indicated the growing trend of such practices globally, even in non-Western organizations. Table 3 presents the responses to items about the

rationales to devolve HRM functions to line managers. The average mean item scores for Company A and Company B was 3.78 were 4.02 respectively, indicating that respondents from both companies provided an overall response above the mid-point of 'moderate extent' and 'great extent'. Items with the top



three mean scores relating to the rationales for devolving HRM functions to line management for Company A were (i) respond more quickly to problems (4.00), (ii) HR and line managers jointly contribute to solving business problems (3.93), and (iii) effective controls (3.87). Items with the top three mean scores for Company B were: (i) closer working relationship between HR and line management (4.21), (ii) extensive participation between HR and line management (4.21), and (iii) HR and line management jointly contribute to solve business problems (4.07).

Interviewees from both companies cite as rationales for devolving HRM functions to line management were: effective control as line managers are in constant contact with employees under them; line managers respond more quickly to problems; and HR can concentrate on a more strategic role. Clearly, the aim was to ensure that HR can play a more strategic role and to ensure that the organization will benefit from more focused solutions, delivered in a timely and effective way. Generally, the questionnaire indicated that respondents from both companies were aware the rationales for devolving HRM functions to line management though there were some variations in the mean scores for items. Similarly, the interview findings have provided empirical evidence relating to the increasing tendency towards decentralization and a shift in commitment towards devolvement of HR responsibilities to line managers.

#### *Interview findings: Company A*

##### *Devolution of HRM functions and rationale to devolve*

One of the key HRM functions that were fully devolved to line management was the training and development function. After restructuring of the company that occurred in 1973, the management agreed to devolve

their training and development functions to the Training Centre. Initially the Training Centre was a separate department of its own, but more recently it had been merged with the Strategic Management Innovation Department (SMI). Since then, the company's training and development functions were the responsibility of SMI, with indirect involvement of line managers from the respective departments. Nevertheless, each department carried out its own training needs analysis and provided suggestions about training through regular discussion with SMI.

Some of the comments were made about the devolution of HRM functions to the line management, by the following executives:

*On recruitment and selection, HR will do the overall manpower planning with input from other departments. The advertisement and announcement will be done by HR. The interviewing process involves representatives from other departments depending on positions. (HR Manager, Administrative Dept)*

*Indirectly, other departments are also involved in the training and development functions. They will do their own training needs analysis (TNA) and they can recommend and request specific training for their staff. (Senior Manager, Training & Development, SMI)*

*We are indirectly performing HR functions. We cannot run away on doing indirect functions of HR e.g., like manpower planning, recruitment and selection, training and development, appraisal, motivation, career development and so on. (Executive, Discrete Department)*

*On our manpower planning, my line managers will do the planning in accordance with production requirements, either on a long term or short term. These have to be done by the line instead of HR. We calculate our manpower requirement based on the number of machines. We have to check on efficiency level of our current manpower and the past to see and compare the volume*

*produced prior determining on our manpower requirements. (Executive, Discrete Department)*

*We give feedback on training to SMI Department to ensure that the staff are given the right training because of the specialized skills required for our staff. So, we have to work closely with SMI Department to work out on our training need. (Section Manager, Engineering Department)*

*Interview findings: Company B*

*Devolution of HRM functions and rationale for devolution*

After the restructuring of the company in 1972, all training and development for non-executive staff came under the responsibility of the HR Manufacturing Department. In this way, the management felt that the training and development needs for operators and technicians would be more focused on the manufacturing needs, and this system has proven to be more effective. Clearly, the devolution of training and development functions for non-executive staff came with full responsibility and decision making, without prior need to consult HR. The rationale for devolution was that the Manufacturing Department knew better the kind of training required for their staff, especially on-the-job training (OJT) which is rather technical in nature. However, the training and development of management staff remained the responsibility of Corporate HR with inputs from line managers of the respective departments.

Initially after the restructuring the demarcation as to the devolution of HRM functions between Corporate HR and Manufacturing HR was not completely clear, but interviewees indicated that it was now much better and more effective. Likewise, line management was also involved in the recruitment and selection process. Manpower planning was part of each department's

responsibility, but decision making was usually based on consensus. The interviewing process comprised a panel of interviewers from the relevant department depending on the jobs being allocated. Departments were normally represented by their general managers or managers.

Various comments were made on issues relating HRM functions being devolved to line management by the following executives:

*Policy matters are centralized but the inputs are from the line managers. In the case of HR functions, the line managers are either directly or indirectly performing HRM functions. (Assistant Manager, Recruitment & Selection, Corporate HR).*

*Looking at our current structure, it is better for training and development of non-executives to be handled by us headed by our Executive Director Manufacturing. I report directly to him on matters pertaining to training and development of our non-executive staff. His instruction becomes the direction and his directive becomes one of my training needs analyses. With this arrangement, it is easier for me to monitor our training requirements and make decisions on training and development because I only receive one directive from my Executive Director. This will help to eliminate duplications on training and development with our Corporate HR. (HR Manager, Manufacturing Department)*

Interestingly, the Executive Director further remarked:

*Prior to our restructuring, HR functions were done purely by Corporate HR. After our restructuring, the training and development function for non-executives comes directly under me. It is a unique arrangement; the rationale is to speed the staff development process to make it more efficient. Since factory human resource development comes directly under me, I will give instructions on how to develop the people. After such arrangement the development and management of people*



*becomes very effective. I want to move things fast, I can't wait, and that is why training and development is under us.*

When asked about the rationale for devolving the training and development functions of non-executives to HR Manufacturing, the Manager, Training and Development, Manufacturing Department explained:

*The rationale was to make it easier for our Executive Director to give direction for the factory to move forward. Learning from our past experience, the management felt that our Executive Director and the line managers in the manufacturing are well aware of the training and development need of their staff.*

The findings revealed quite a high degree of devolvment of responsibility for recruitment and selection and training and development to line management. The company's policy to devolve some of the HR functions to the line contributes to HR acceptance and support by line management through their direct and indirect involvement in the implementation of key HR functions of recruitment and selection and training and development. The devolution of training and development functions to SMI for Company A and to the Manufacturing Department for Company B resulted in increased effectiveness of their training and development function making it more focused. Similarly, the extensive participation and closer working relationship on HR related issues between HR managers and line managers jointly contributed to better understanding and greater the effectiveness of the company's policy on devolution of HRM functions. These imply a shift towards a more strategic role for HRM. The devolution of HRM functions to the line has also enabled HR to focus more on the strategic roles of HRM in the implementation of policy and strategy.

The findings from the cross-section of interviews were positive about the concept of devolution of HRM functions to line management. Looking at the differences in HRM practices across the two companies, there was little variation in their devolution of HR practices. In both companies, devolution of some aspects of HRM functions with responsibility and decision making authority was practiced, leading to a more effective devolution of HRM functions to the line. It was also noted that some of the HRM functions were jointly shared by line management and HR in consultation. It is clear from the analysis of the questionnaires and interview data that both companies had devolved greater assignment of HRM responsibilities to line management. The HR and line management respondents from both companies did not differ significantly in their ratings of devolution of HRM responsibilities to line managers. This result is consistent with Western concepts of HRM, in which HRM functions are typically devolved to line management rather than to personnel specialists (Brewster and Larsen, 1992; Budhwar, 2000).

#### *Problems of devolution*

Past studies have demonstrated the growing interest in and the rationales for devolving HRM functions to line management (Brewster and Larsen, 2000; Budhwar, 2000; Budhwar and Sparrow, 1997; Currie and Procter, 2001; Heraty and Morley, 1995; Legge, 1995; Mayne and Brewster 1995; Storey, 1995). However, the process of devolvment is never unproblematic. Questions were still apparent about issues of capability, commitment and balance of power relating to devolution of HRM functions to the line (Thornhill and Saunders, 1998). Similarly, these studies have identified a number of problems relating to

devolution. Table 4 shows that the problems for Company A and Company B were quite similar to those in most organizations as reported in past studies.

The top three items relating to problems of devolvement for Company A were: (i) adding to the heavy workload of line management (3.93), (ii) lack of time for line management to do HR work well (3.73), and (iii) line managers do not see themselves as experts in HR matters (3.60). The top three items for Company B were: (i) line managers do not see themselves as experts in HRM (3.64), (ii) problem of maintaining consistency in HRM practices (3.07), and (iii) adding to the heavy workload of line management (2.79). The overall average mean score for Company A and Company B were 3.57 and 2.97, respectively with Company B respondents indicating slightly lower level of problems.

Consistent with past findings, these findings indicate that problems of devolvement occurred in the two organizations irrespective of size of the organization. Devolution issues are almost universal across organizations in

Malaysian, Japanese and Western organizations. Review of the literature noted that despite the insistence on the need for line managers to take responsibility for HRM (Heraty and Morley, 1995; Jackson and Schuler, 2000; Mohram and Lawler, 1998; Ulrich, 1998), the process of devolvement is never unproblematic. The findings of Budhwar (2000) in his research on devolution of responsibility for HRM to line managers included: increase of pressure to train line managers, problems of maintaining consistency in the system, the need for strict HR auditing and the problem of maintaining a balance of power between the line and HR specialists. In the present study the interview responses from both companies also highlighted that misunderstanding regarding decision making could arise in cases where devolution was in terms of implementation of HR responsibilities only and not in terms of decision making authority. For that reason in both companies there was devolution of recruitment and selection and training and development with responsibility and authority.

**Table 4.** Problems of devolution of HRM functions to the line management

Item		Company A (N = 15)		Company B (N=14)	
		Mean	SD	Mean	SD
a.	Increasing to the heavy workload of line management (LM)	3.93	1.03	2.79	0.70
b.	Lack of time for line management to do HRM work well	3.73	0.70	2.57	0.51
c.	Problem of maintaining consistency in the HRM practices	3.27	0.59	3.07	0.47
d.	Problem of maintaining balance of power	3.33	0.62	2.79	0.70
e.	LM not considering themselves experts in HRM matters	3.60	0.83	3.64	0.50
<b>Average Mean Score</b>		<b>3.57</b>		<b>2.97</b>	

Note: 1 = Little or no extent; 2 = Some extent; 3 = Moderate extent; 4 = Great extent; 5 = Very great extent

This was unlike the practices in most Malaysian owned companies where devolution of HRM functions to the line occurred, but mostly without decision making power.

Thornhill and Saunders (1998) noted that among the problems of devolution was a lack of clear direction from top management. Cunningham and Hyman (1997) found that line management chose to concentrate more on production matters than on the HR matters assigned to them. On the other hand, Torrington and Hall (1996) noted that HR specialists considered line management might not have the required skills to take on personnel responsibilities. Over the years, the problems identified in the past studies and the findings of this study have shown that similar problems remain unresolved and continue to exist even in established organizations, although the degree of problems may vary.

*Interview findings: Company A*  
*Problems of devolution*

The following comments related to the problems of devolving HRM functions to the line management:

*I think we cannot devolve all the functions to the line management. Some of the HR functions are very much specialized e.g. legal requirement, termination, counseling and so on. We have to make it very clear to the line management when we devolve our HR functions. Often, devolve-ment leads to misunderstanding and finger pointing when problems arise. Therefore, devolvment has to be made clear of the responsibility, though it is not easy. (Senior Manager, Administrative Service Department)*

*The problems of commitment are always an issue on devolvment of HR functions. The lines have their own work commitment. Some line*

*managers might feel that HR is not their responsibility. Therefore, they might just take it lightly. However, I think the understanding of HR as part of management responsibility has improved. Primarily, it goes back to individual attitudes. (Section Manager, Engineering Department)*

*Interview findings: Company B*  
*Problems of devolution*

On the problems of devolution of HRM functions to the line management, interviewees noted the following:

*One of the issues of devolvment is how to get a standardized understanding about implementing HR role. At times there is no standardization in executing HR role. This may lead to unfairness and demoralization of staff. However, over the years we have the discussions, explanations and briefings with the line and eventually they may understand. (GM Corporate HR)*

*The devolvment of HR functions to the line management has to be made clearly with the understanding of the respective head of the department. The staff has to know that the indirect role of HR that they play is part of their duty. Otherwise, they will consider it as an additional burden and adding to their own heavy workload (Assistant GM, Factory Engineering)*

Despite the positive outcome of devolution practices in these two companies, the survey data and interview findings from both companies noted some of the problems of devolvment. Among the problems noted were adding to the heavy workload of line management, the lack of time to perform HR work and also lack of the expertise in HR matters among line managers. Interviewees asserted that if devolution of HR was to succeed. Organizations need not only to give line managers appropriate training, but also to

place greater value on the skills of their existing HR professionals. Similarly, there should be a better understanding and cooperation between HR and line management.

Positively, most of the line management personnel from both companies interviewed understood the need to be involved in some aspects of HR. They believed that the day-to-day functions and key HRM functions of recruitment and selection and training and development were part of line management responsibility. Crucially as mentioned, they believed it was important for HR and line management to work in partnership. Generally, they felt that being a professional and responsible line manager meant being involved in everything that affected the performance of the staff. Many felt that they were in fact the most appropriate people for the job. However, some noted it was difficult to fit an extra role into their already packed schedules, hence the devolution of HRM functions was burdening to them. Acceptance of HRM responsibilities by line management could be seen through their direct and indirect involvement in the implementation of company strategies through the key HRM functions of recruitment and selection and training and development.

From the overall findings, the influence could be seen of Japanese management practices which emphasized Total Quality Management, multifunctional work teams, broad job classification systems, the policy of HR directly reporting to the Managing Director through a formal reporting mechanism, earlier consultation on HR issues and policies from the outset and implementation, closer communication and relationship, team building, understanding of business operation, top-down and bottom-up communication, decentralization of training and development functions, management

support and commitment. This influence was correlated with high levels of devolvement of HR functions to the line. The effective and efficient coordination of devolution of HRM functions across departments gave strategic importance to the role played by HR.

### **Summary of key findings and implications**

On the basis of analysis of the questionnaire responses and interview comments, some of the key findings and implications regarding the devolution of HRM functions to line management are:

- HRM functions are increasingly devolved to line management either in consultation with HR or as devolution with responsibility and decision making authority.
- Structural change within both companies has taken place with the devolution of recruitment and selection and training and development functions from a functional HR office to line managers.
- Interviewees believed that HR resides effectively with line managers who are directly in control and therefore have a central role in recruitment and selection and staff development activities.
- Extensive participation, close relationships, and regular meetings between HR and line managers jointly contribute to effectiveness of the companies' policies on devolution of HRM functions.
- The process of devolvement is never unproblematic. Devolution significantly leads to increased workloads and greater responsibility for the line managers, hence increased work pressure.

- Role ambiguity in the devolution of HRM functions could give rise to problems with the devolution to line management.

#### *Limitations of study*

Although this study benefited from the mixed methodology design of qualitative and quantitative approaches, it is nevertheless vulnerable to some potential weaknesses. One of the limitations of this study is the empirical setting of the study, which was confined to two Japanese multinational companies in Malaysia. These two companies were not intended to be representative of electrical and electronics companies in Malaysia in view of the differences in the demographic factors. Hence, the results must be viewed with caution since the findings cannot be generalized to all areas of the electrical and electronics industry. Moreover, using a sample from two companies from within one industry possibly limits generalizability of the results. Future studies involving different industries would be ideal to provide a larger sample, increasing the reliability and generalizability of the findings. This was not feasible in this instance, in view of limited resources and time constraints. However, this study provides some interesting results and perhaps will open avenues for further research.

#### **Conclusion**

It is clear from the findings that the respondents believed that day-to-day HRM functions should be devolved to line management, enabling HR to focus more on strategic and change management aspects of managing human resources effectively in the strategic business partner role. Generally, the

results from questionnaire survey and the interview findings showed that devolution of HRM responsibilities to line managers had been adopted by both organizations, though the implementation might vary slightly in terms of process. It is hoped that the results of this case study empirically examining issues of the devolution of HRM functions can provide useful information to HR practitioners and the management, engendering better understanding of the implementation of HRM practices of Japanese owned organizations in Malaysia.

The findings of this study on the devolution of HRM functions to line management demonstrate the growing trend of such practices globally even in non-Western organization. There is growing interest among organizations on devolving HRM functions to line management. In fact, classical argument of Fombrun *et al.*, (1984, p.236, cited in McConville, 2006) 20 years ago, that "any attempt to redesign the role of HRM function requires the line participation since most of the activities of selection, appraisal, reward and development are prerogatives of the line organization" still applies today, and has always been a key feature of the concept of devolution. In conclusion, it is suggested that more research on the devolution of HRM functions to line management should be conducted in other industries, in which regard this study could serve as a vehicle for future comparison. This study has provided support for existing research, as well as adding further to knowledge about the extent to which devolution of HR functions to line management has occurred, in particular within two Japanese multinational companies operating in a foreign country.



## Appendix A: Semi-structured interview questions

*Devolution of HRM functions to the line management/its rationales and problems of devolution.*

### Potential probes:

- What is line manager's involvement in HR processes? Is it company policy to devolve HR works to line managers?
- What are the role and function being devolved to line managers? What is the rationale for devolvment? Do you think that some of the HR works are part of line manager's responsibilities?
- How do you see the capability and contribution of line managers in performing HR works? Are line managers trained in the areas of HRM e.g., recruitment & selection and etc?
- How does it support the business/corporate strategy? What are the positive and negative outcomes of devolvment?
- Do you think the extensive participation and cooperation between line managers and HR will create mutual benefit as both jointly contribute to solve business problems? If not, why?
- Why does line managers perceived that HR managers do not understand the real business of the organization? Like wise, why do HR specialists consider that line managers may not have the skills to take on HR responsibilities effectively?
- What are the issues and problems of devolvment?

## REFERENCES:

1. **Armstrong, M. and Long, P.** (1994), *The reality of strategic human resource management*, Short Run Press, Exeter.
2. **Brewster, C. and Larsen, H.H.** (1992), "Human resource management in Europe: evidence from ten countries", *The International Journal of Human Resource Management*, Vol. 3 No. 3, pp. 409-34.
3. **Brewster, C. and Larsen, H.H.** (2000), *Human resource management in Northern Europe: trends, dilemmas and strategy*, Blackwell, Oxford.
4. **Budhwar, P. S.** (2000), *Evaluating levels of strategic integration and devolvment of human resource management in the UK*, *Personnel Review*, Vol. 29 No. 2, pp. 141-57.
5. **Budhwar, P. S. and Khatri, N.** (2002), "A study of strategic HR issues in an Asian context", *Personnel Review*, Vol. 31 No. 2, pp. 166-88.
6. **Budhwar, P. S. and Sparrow, P.R.** (1997), Evaluating levels of strategic integration and devolvment of human resource management in India, *International Journal of Human Resource Management*, Vol.8 No. 4, pp. 476-94.
7. **Cunningham, I. and Hyman, J.** (1997), "Devolving human resource responsibilities to the line: beginning of the end or a new beginning for personnel?", *Personnel Review*, Vol.28 No. 1/2, pp.9-27.
8. **Currie, G. and Procter, S.** (2001), "Exploring the relationship between HR and middle managers", *Human Resource Management Journal*, Vol. 11 No. 1, pp. 53-69.
9. **Dyer, L. and Reeves, T.** (1995), "Human resource strategies and firm performance: what do we know and where do we need to go", *Human Resource Management Journal*, Vol. 6 No. 3, pp. 656-86.



10. **Fombrun, C.J. Tichy, N.M. and Devanna, M.A.** (1984), *Strategic human resource management*, New York:Wiley.
11. Foreign Direct Investment Magazine. (2008), *Determined Drive – Foreign Direct Investment*, Malaysia.
12. **Gennard, J. Kelly, J.** (1997), "The unimportance of labels: The diffusion of the personnel/HRM function", *Industrial Relations Journal*, Vol. 28 No.1, pp. 27-42.
13. **Gratton, L., Hope Hailey, V., Stiles, P. Truss, P.** (1999), *Strategic human resource management*, Oxford University Press, Oxford.
14. **Heraty, N. and Morley, M.** (1995), "Line managers and human resource development", *Journal of European Industrial Training*, Vol. 19 No. 10, pp.31-37.
15. **Hope-Hailey, V. Gratton, L. and McGovern, P.** (1997), "A chameleon function? HRM in the 90s", *Human Resource Management Journal*, Vol. 7. No.3, pp. 5-18.
16. **Hutchinson, S. and Wood, S.** (1995), *"The UK experience", Personnel and the Line: Developing the New Relationship*, IPD, London.
17. IRS. (1995), "Changes in Personnel", *Employment Trends*, No. 598, December, pp.5-9.
18. IRS. (1996a), "The Changing World of Personnel", *Employment Trends*, No. 604, March, pp. 5-11.
19. **Khatri, N.** (2000), "Managing human resource for competitive advantage: a study of companies in Singapore", *International Journal of Human Resource Management*, Vol. 11 No. 2, pp. 323-65.
20. **Legge, K.** (1995), "Human resource management: a critical analysis", in Storey, J. (Ed.s), *New perspectives on human resource management*, Routledge, London, pp. 19-40.
21. **Lieberman, M. Lau, L. and Williams, M.** (1990), "Firm-level productivity and management influence: a comparison of US and Japanese automobile producers", *Management Science*, Vol. 36, pp. 1193-216.
22. **Marchington, M. and Whittaker, S.** (2003), "Devolving HR responsibility to the line: threat, opportunity or partnership?", *Employee Relations*, Vol. 25 No. 3, pp. 245-61.
23. **Mayne, L. and Brewster, C.** (1995), "Human resource management: the role of the line manager, proceedings of the conference on European competitiveness: The HRM Dimension", University of Limerick, May, 1995.
24. **McConville, T.** (2006), "Devolved HRM responsibilities, middle managers and role dissonance", *Personnel Review*, Vol. 35 No. 6, pp. 637-53.
25. **MacNeill, C. M.** (2003), "Line managers: facilitators of knowledge sharing in teams", *Employee Relations*, Vol. 25 No.3, pp. 294-237.
26. **Mohram, A.A. and Lawler, E.E. II.** (1999), "The new human resource management: creating the strategic business partnership", in Schuler, R.S. and Jackson, S.E. (Eds), *Strategic Human Resource Management*, Blackwell, Oxford, pp. 443-47.
27. **Renwick, D.** (2000), "HR-line work relations: a review, pilot case and research agenda", *Employee Relations*, Vol.22 No.2, pp. 179-205.
28. **Renwick, D.** (2003), "Line manager involvement in HRM: an inside view", *Employee Relations*, Vol. 25 No.3, pp. 262-80.
29. **Sheehan, C.** (2005), "A model for HRM strategic integration", *Personnel Review*, Vol. 34 No. 2, pp. 192-209.
30. **Storey, J.** (1995), "Human resource management: still marching on or marching out?", in Storey, J. (Eds.), *Human resource management: A Critical Text*, Routledge, London, pp. 3-32.

31. **Ulrich, D.** (1998), "A new mandate for human resources", *Harvard Business Review*, January/February: 124-34.
32. **Thornhill, A.** and **Saunders, M.N.** (1998), "What if line managers don't realize they're responsible for HR?: lessons from an organization experiencing rapid change", *Personnel Review*, Vol. 27 No. 6, pp. 460-76.
33. **Watkins, J.** and **Hugginbottom, K.** (2002), "E-HR can improve staff retention", *People Management*, No. 11 July.

## FURTHER READING

1. **Becker, B.** and **Gerhart, B.** (1996), "The impact of human resource management on organizational performance", *Academy of Management Review*, Vol. 13 No. 1, pp. 116-28.
2. **Barney, J.B.** and **Wright, P.M.** (1998), "On becoming a strategic partner: the role of human resources in gaining competitive advantage", *Human Resource Management*, Vol. 37, No.1, pp. 31-46.
3. **Brewster, C.** and **Larsen, H.H.** (2000), *Human Resource Management in Northern Europe: Trends, Dilemmas and strategy*, Blackwell, Oxford.
4. **Schuler, R.** and **Jackson, S.** (1987). "Linking competitive strategies with human resource management practices", *Academy of Management Executive*, Vol.1 No.3, pp. 207-19.
5. **Walker, J. W.** (1992), *Human resource strategy*, New York, McGraw Hill.

# System of Rewards - Instrument of Fundamental Human Resource Management

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**Abstract:** Although not the only nor the most important factor of human motivation, reward remains one of the oldest visible, direct and rapid tools for behavioral targeting to work towards a convergence of individual objectives with the group and organizational. Recognized as instrumental value right from the beginning of civilization, projections of various cultures and religions - happiness and eternal life, Heaven, Nirvana - reward was to influence gift mentality, behavior and attitudes of individual plan at the company. In organizations, changes in rewards was a marked evolution of the human resources. If the initial reward was positive (money and praise) and negative (punishment and blamu), and maximum value was of material and financial subsequently reward was restricted only positive side, broadening the scope of the moral - whose spiritual values are increasingly appreciated, the more so as they have become, in fact, inexhaustible, as form, volume and ways of expression.

**Keywords:** reward, compensation, awards, bonuses, commissions

The term reward is the relatively recent practice of management in Romania. Before 1990 the term used was the nemesis as reward for work. Taken from the Anglo-Saxon literature - "compensation" - the term can be translated into context by compensation, damages, payment, reward, compensation, salary<sup>1</sup>. If the usual acceptance of the concept of compensation is to fill, to replace

something insufficient with something else, to enhance a bad through good<sup>2</sup>, the term of payment induces the sense of transaction while the reward as due reward for an effort by recognized and is considered by most authors as the most appropriate and comprehensive.

Rewards are influenced and influence, directly or indirectly, all activities that comprise Human Resources Management.

<sup>1</sup> L. Levițchi, A. Bantaș, „Dicționar Englez Român”, Editura Teora, București, 2000

<sup>2</sup> DEX, Editura Univers Enciclopedic, București, 1998

Therefore, they should be treated as an open system, in interaction with the company, but also its external environment.

Rewards system is composed of components, policies, strategies and processes through which the organization assesses its human resources and remunerative right skills, competencies and results, and the value of their labor market.

The rewards are designed and operate as part of a global strategy firm, reflecting the philosophy of management, found, explicitly or implicitly assumed the mission of the organization.

In a simplified view, the rewards can be represented by:

## I. ENTRY

1. Human resources of the firm in number and structure resulting from strategic planning, from the operational plans of recruitment and selection;

2. Rewards, classified by their nature in:

### A. Direct Financial Rewards:

- a) salary - which is the basic component of the system of rewards;
- b) increases the minimum which are granted according to the unique work Collectiv Contract :
  - *special conditions of employment, heavy, dangerous or awkward* - 10% of the basic salary;
  - *harmful working conditions* - 10% of salary minim negotiated at the unit;
  - *overtime hours worked and on days off and public holidays that were not properly compensated like hours paid off* - growth of 100% of the basic salary;

- length of service - minimum 5% for 3 years old and up 25% from an old over 20 years of the basic salary;
- for the exercise and other functions - an increase of up to 50% of the basic salary of function replaced
- c) awards, the ratio of minimum 1.5% of the fund made monthly salaries and cumulative;
- d) incentives granted especially in public institutions in order to increase motivation at work;
- e) bonuses - amounts paid for a single outstanding performance, depending on individual, group or organization as a whole;
- f) commissions - special form of remuneration given, in preference, employees in sales as a percentage of the value of all sales;
- g) profit sharing - the share of profits that are distributed to employees, and up to 10% for companies and up to 5% in the case of autonomous companies

B. **Indirect financial rewards** relate to amounts received for the quality of the worker, both for employment period and after its expiry, including:

- paid annual leave;
- paid leave for sickness;
- paid maternity leave;
- Insurance premiums: medical, life, accident, the incapacitated work;
- unemployment aid;
- pensions;
- dividends

C. **Features** referring to the facilities granted to employees during the period of employment in the organization. In this category are:

- award in service of a housing service;
- use car service;
- financial support for housing construction or purchase of durable goods;
- providing discounts on the purchase price of the company;
- phone service;
- using tickets table;
- providing legal and financial advice;
- use of rest houses and sports bases of the company;
- benefit of paid holidays and business trips.

D. **The advantages** relate to immediate direct or indirect goods and perspective that we make available to each company employee in part:

- training sessions for career development;
- team-building sites and opportunities for friends;
- career opportunities;
- circumstances for the development of skills;
- quality of professional life;
- quality of life;
- Special arrangements and facilities at work.

3. Information regarding labor law, the levels and types of pay practices, developments in supply and demand on the specific national level and now, at least at European level performance of individual and group level business, motivations and aspirations of individual employees.

## II. THE PROCESSES OF REWARD

Entries of rewards, level and their combination in a political own rewards the company into account, primarily motivational processes.

Analyzed in correlation with the types of reasoning has proved that, while direct financial rewards are factors extrinsic motivation, indirect rewards, features and advantages are factors intrinsic motivation

Combining inputs through motivational processes must take into account:

- tracked the usefulness of employee – regarding on the intrinsic motivation, satisfaction and related interest in the work, the sense of professional achievement, recognition of merit and contributions, personal development and self-esteem;
- cost sought by business
- found in extrinsic motivation, related to official recognition of the business and employee contribution.

Reward processes inside an organization are influenced by:

a) internal environmental factors:

- vision on human resources management - Mentality of top-level management of human resources is reflected directly in size and structure of rewards. Thus:
  - classical vision of "hand work" or "labor" brings on a trial rigorous economic plan: the emphasis falls on the direct rewards, more precisely, on the basic salary and certain sporuri provided by law, and their size is, as far as possible, minimized in favor of profit growth; often, important components of direct rewards (sporuri provided by law) are ignored, the awards are granted discretion, depending on the state of mind, sympathies, even the possibility of intentional omission of certain people or situations that face employees. Facilities exist

only for certain people in upper management step; benefits for ordinary employees are deleted from the start, being considered extravagant spendings. The formula "I am everything, you not only represent some pieces on a chessboard that can be replaced any time" express presumption that the entire foundation of management wisdom. The disregard to the people is manifested in ways the most obvious: from kind of attitude that petitioning and leave no room for interpretation on the person / people with power, to work program that violates the laws, and lack of attention toward some day - 1, March 8, etc. on June 1. - Or occasions of personal life. Not interested in the state of satisfaction or dissatisfaction of staff, but the obligations of-work responsibilities. The present is important, the strategies are missing, and remuneration policies include restrictions, sanctions, threats. This is very common in Romania XXI century, especially in private firms led by gerontocrați, the rich of transition, people whose enterprise is synonymous with the ability to circumvent the law.

- global vision of a "staff" is characterized by a tendency of leveling the rewards and alinierea to strict legal provisions. No efforts are being made to personalize and not interested in the contribution, effort, individual aspirations. Specific organizations and public institutions with obvious signs of outdated bureaucracy.
- vision "human resources" allows intellectual capital and human capital to be appreciated and valorize treated differentiated on the basis of competence, performance, attitude. As a result, the rewards to fulfill the role of motivational factors and how to design and implement a system of rewards is based on increased human capital through investment in organizational learning. Relations with employees are addressed in a uniform (employees and employers have common interests) and not pluralistic (the interests of employers and employees are different and contradictory).
- policy and strategy for remuneration. Remuneration policy may work in the informal way, by rules, standards group, traditions and habits, reflecting the vision of management. The strategy remuneration, to the extent that it is designed as a component of the strategy of human resources, should reflect and support the objectives and strategic choices of global strategy. Thus, a development strategy with options for entry into new markets and innovative products will determine not only a policy of recruiting staff in sales and research and design, but also a strategy to reward performance in those fields.
- working conditions. This factor is included in the bifactorial theory of Herzberg, in the category of hygiene factors, whose presence does not necessarily bring satisfaction while their lack of satisfaction causes.



b) factors external environment. In this category include:

- demographic factors. Developments of this are affecting the work career. Such a negative growth of population, although it perceives as immediate positive effect (by decreasing payments for maternity leave and increasing the child) is felt in perspective (by the aging of the population), and the plan rewards indirect share of rewards (pensions, sick leave) is increased.
- developments in the national labor market. Evolution of demand and supply in certain segments of the labor market may cause substantial variations of rewards. Example Romania last few years is clear: certain professions – IT – specialist, financial analysts, auditors, accountants experts - for which demand is greater than supply, caused not only increased direct and indirect rewards but above all, adding features and advantages, practical unknown before the '95 – '97.
- price of labor around the world. This factor is involved as a result of increasing the mobility of human resources, the effect of globalization. Salaries are subject to inevitable comparisons in the case of labor migration. Is the case of workers in construction, agriculture, the IT - specialist and doctors whose salaries in Europe are compared with those in our country. Lower rewards determines the massive exodus of these categories, so that those remaining, for stabilization, should be given at least similar rewards.

### III. EXIT

The most obvious out-put-ROMs of the rewards groups:

- professional performance. Correlation-performance rewards remains one of the central problems of management. Although it is still detected in time management Classics (F.W. Taylor shown in his writings the importance of this correlation, of course, primarily in the good employer) can not be said that she knows a perfect solution in practice, or that it would be virtually exhausted the plan. Beyond measuring results and comparisons with the standards, professional performance involves a lot of psychological issues, often ignored. Therefore, ensuring correlation professional performance - rewards should consider a number of conditions recommended in the literature.
- professional competence. The system of rewards properly designed, with effective operation stimulates and recognizes professional efforts of employees in training and professional development.
- organizational behavior. It is found in attitudes toward the organization, compared to management and, last but not least, to the work.
- The state of health of the worker. Directly affect performance, performance and satisfaction at work

The way in which it is designed, implemented, monitored system of rewards based on economic and social realities of the organization and of the region, respecting the specific objectives and principles, is crucial for obtaining business performance, but also satisfaction, career, increased human capital.

**Table no.1.** Premises of determining the correlation between performance and reward

Nr. crt.	Premise	Effects on the behavior manager	Effects on employee behavior
1.	Trusting employees to managers	Manager respected employees may decide to differentiate rewards based on performance, the manager challenged the will to standardize rewards	Employees accept the differences of the reward without protest if the manager to whom recognize the authority of the workforce; if deemed incompetent manager, differentiation will be awarded subjectivity and nonprofessionalism
2.	Freedom performance	The manager must obtain a performance boost of any employee	Employees must be convinced that there are no restrictions in obtaining performance and that, once attained, will be rewarded appropriately.
3.	Competent managers	Competent manager can properly assess the performance of employees	Employees are convinced of the usefulness and accuracy of coordination in order to obtain performance
4.	The accuracy assessment	The manager will periodically review the performance and will adapt to the periodic communication of their employees	An incorrect assessment system will create inequity, frustration and demotivation
5.	Reality of financial potential	The manager should not make promises of rewards that can not be met	Lack of financial resources and the reduction or even elimination of rewards to fall confidence and motivation of employees
6.	How to express performance	The level of performance should be clearly expressed for each job	Knowledge and understanding of performance makes it possible action in achieving their purposes
7.	Clarity and awareness of the structure of rewards	Components of rewards and conditions for obtaining these should be presented employees from the employer and, subsequently, with any amendments thereto.	Reasons for direct employees will be increased in circumstances that may act on those sides of the work they get higher rewards

**REFERENCES:**

1. **Armstrong M.**, ( 2003) – *Managementul resurselor umane*, Ed. CODECS, București
2. **Bonciu C.**, (2002) – *Introducere în managementul resurselor umane*, Ed. Credis, București
3. **Burduș E., Căprărescu G., Androniceanu, A.**, (2008) – *Managementul schimbării organizaționale*, ed. III, Ed. Economică, București
4. **Byars, L.L., Rue L.W.**, - *Human Resources Management*, IRWIN, Homewood, Illinois, Third Edition
5. **Căprărescu G.**, (2008) – *Managementul resurselor umane*, Ed. Prouniversitaria, București
6. **Căprărescu G., Chendi G.B., Militaru C.**, (2005) – *Management*, Ed. Prouniversitaria, București

## What is Six Sigma ?

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**Abstract:** Over the past decades, several business improvement methods were launched, including the one known as Six Sigma. The Six Sigma implies the application of scientific principles to business processes and allows companies to obtain better, faster and cheaper products and services. Motorola was the first company that introduced and implemented Six Sigma in its business processes in the 1980s.

**Keywords:** Six Sigma, Motorola, company, process

### Introduction

Improving business performance represents a critical responsibility for top and executive management in order to ensure the effectiveness and efficiency of their companies. Over the past decades, several business improvement methods were launched, including the one known as Six Sigma. Through the application of scientific principles to processes and products, the Six Sigma can help companies to do things better and improve their profitability. Famous companies around the world, such as General Electric, Motorola, Asea Brown Boveri, Polaroid and American

Express, have successfully implemented Six Sigma in their processes and activities.

### Defining Six Sigma

In the late 1970s after the oil crisis, the American economy was in a slump. Several American companies understood that the time for a change in the way they did businesses came. Among them Motorola proved to be a valuable example. Trying to do things in a different way, the leadership of Motorola conducted benchmarking studies, analyzed customer feedback and discovered various problems.

All started when a Japanese company took over a Motorola factory that produced Quasar television sets in the United States of America (USA) in the 1970s. The Japanese were totally unsatisfied about how the factory operated. After drastic changes under Japanese management, the factory began soon producing TV sets with only 1/20<sup>th</sup> defects compared with the previous period. It took for Motorola about a decade, until the mid-1980s, to understand what happened and to figure out how to act in the future.

Motorola discovered that customers expected better products than it provided. B. Galvin, its Chief Executive Officer (CEO) at that time, directed the company on the quality path known as Six Sigma. At a time when most American companies considered that quality implies significant expenditures, Motorola appreciated that by improving quality costs would actually be reduced. In this respect, Motorola believed that the achievement of high-quality products should cost less. This is why, from the beginning, the Six Sigma designers at Motorola concentrated their efforts on obtaining enhancements in all operations within a process and did not focus on improvements in individual operations with unrelated processes.

Designing and implementing the Six Sigma way made Motorola both a quality leader and a profit leader in the USA. In 1988 Motorola won the Malcolm Baldrige National

Quality Award. As the secret of Motorola's success became public knowledge, the Six Sigma revolution began in the USA. During the time, experts and consultants have defined Six Sigma in different ways, as follows:

- Sigma is "a statistical concept that represents the amount of variation present in a process relative to customer requirements or specifications" [4, p. 1]. High sigma values (4.5-6) mean high performance process (Table 1).
- As a results-oriented, project-focused approach to quality, Six Sigma is "a way of measuring and setting targets for reductions in product or service defects that is directly connected to customer requirements" [1, p. 23].
- Six Sigma emphasizes "the improvement of processes for the purpose of reducing variability and making general improvements" [3, p. 1119].
- Six Sigma is "a business process that allows companies to drastically improve their bottom line by designing and monitoring everyday business activities in ways that minimize waste and resources while increasing customer satisfaction" [6, p. VII].
- As a rigorous, focused and highly effective implementation of quality principles, Six Sigma aims for "virtually error free business performances" [8, p. 3].

**Table 1-** Customer requirements and sigma values

No.	Type of variation	Customer requirements	Sigma values
1.	Too much	Hard to produce output within customer requirements	Low (0-2)
2.	Moderate	Most output meets customer requirements	Middle (2-4.5)
3.	Very little	All output meets customer requirements (less than 4 defects per million)	High (4.5-6)

From the definitions above mentioned of Six Sigma two characteristics seem to be essential. Firstly, Six Sigma refers to a process viewpoint. Secondly, it clearly defines the customer requirements. It is also obvious that Six Sigma deals with quality, but not in the traditional sense as conformance to standards. Including economic value and utility both for the company and the customer, a new definition of quality might be “a state in which value entitlement is realized for the customer and provider in every aspect of the business relationship” [6, p. 6].

By identifying and eliminating waste costs, Six Sigma focuses on enhancing quality and on helping companies to make more money by improving customer value. Many companies have embraced Six Sigma because:

- It helps them to increase their market share, decrease their costs, and grow their profit margins (Box 1).
- It permits them to obtain significant savings.
- It ties quality directly to their bottom line.
- It provides them a measure of goodness and a methodology for improving performance.
- It helps them to focus on process management at all levels and to develop new processes, products, and services.
- It focuses on cycle time reduction.
- It guides them into making fewer mistakes.
- It allows them to increase customer satisfaction.
- It helps them to prevent, detect and correct their defects.
- It improves their bottom-line profitability.
- It allows them to achieve faster working capital turns.
- It directs them towards more productive research and development spending.

**Box 1- Six Sigma at General Electric [6]**

J. Welch, the former General Electric's CEO, was an enthusiastic promoter of Six Sigma within the company. He considered Six Sigma as the most important initiative ever undertaken by the company. In 1995, under Welch management, each General Electric operation worked toward achieving Six Sigma. As a result, company's operating income reached 300 million USD in 1997 and over 600 million USD in 1998.

**Table 2-** The number of parts per million (ppm) outside the specification limits, normal distribution centered [3, p. 14]

Specification limit	Percent	Defective ppm
+/- 1 sigma	68.27	317300
+/- 2 sigma	95.45	45500
+/- 3 sigma	99.73	2700
+/- 4 sigma	99.9937	63
+/- 5 sigma	99.999943	0.57
+/- 6 sigma	99.999998	.002

All companies need methods and tools of measuring what they claim to value. In order to measure companies' processes, Six Sigma uses metrics that lead to tangible, quantifiable results [2]. The higher the sigma level is, the better the process is performing. If a process operates at a six sigma value, the resulting products and services are almost defect free (Table 2).

The Six Sigma is applied within a simple performance improvement model known as Define-Measure-Analyze-Improve-Control (DMAIC) model. This model is used to incrementally improve existing processes and comprises the following elements in short [8, p. 4]:

- Define the objectives of the improvement activity.
- Measure the existing process.
- Analyze the process.
- Improve the process.
- Control the new process.

In sum, there is a close relationship between the sigma levels and the performance levels of a company. The Six Sigma implies

the application of scientific principles to businesses processes and allows companies to obtain better, faster and cheaper products and services.

### Conclusions

The Six Sigma concept has redefined the world of work and the way companies operate. According to Six Sigma approach, the performance of companies is measured by the sigma level of their business processes. Higher sigma values mean better corporate performances.

By incorporating Six Sigma in their activities, training and education programs for current and future employees, companies recreate their processes so that defects never arise in the first place. In sum, through Six Sigma implementation companies make fewer mistakes in everything they perform while increasing their customer satisfaction. The Six Sigma has proved to be a powerful business method that drives improvement in any company's performance and profitability.

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### REFERENCES:

1. **Arthur J.**, *Six Sigma Simplified*, Second Edition, QI Coloring Book, Denver, 2001
2. **Breyfogle III F. W., Cupello J. M., Meadows B.**, *Managing Six Sigma: A Practical Guide to Understanding, Assessing, and Implementing the Strategy that Yields Bottom-Line Success*, John Wiley & Sons, New York, 2001
3. **Breyfogle III F. W.**, *Implementing Six Sigma. Smarter Solutions Using Statistical Methods*, Second Edition, John Wiley & Sons, New Jersey, 2003
4. **Ginn D., Varner E.**, *The Design for Six Sigma Memory Jogger. Tools and Methods for Robust Processes and Products*, GOAL/QPC, Salem, 2004
5. **Gupta P.**, *Six Sigma Business Scorecard: Creating a Comprehensive Corporate Performance Measurement System*, Second Edition, Mc-Graw Hill, New York, 2007
6. **Harry M., Schroeder R.**, *Six Sigma. The Breakthrough Management Strategy Revolutionizing the World's Top Corporations*, Currency Book, New York, 2005
7. **Pande P., Neuman R., Cavanagh R.**, *The Six Sigma Way*, Mc-Graw Hill, New York, 2000
8. **Pyzdek Th.**, *The Six Sigma Handbook. A Complete Guide for Green Belts, Black Belts, and Managers at All Levels*, Mc-Graw Hill, New York, 2007