

## The Functioning of the Fiscal and Social Security Systems in a Digital Economy

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*The recent developments in the ICT sector have opened the way to transforming the industrial economy into a digital - based one. The present paper offers a perspective on the impact of the new informational technologies on the society in general and on the organization and functioning of the fiscal and social security systems in Romania in particular.*

**Keywords:** Fiscal System, Digital Economy, New Economy, Tax payers, Fiscal institutions

### **1 The emergence of the “new economy” and its impact on our society**

The concept of “new economy” defines the evolution of developed countries from an industrial / manufacturing-based wealth producing economy into a service sector asset based economy. Some analysts claimed that this change in the economic structure had created a state of permanent steady growth, low unemployment, and immunity to boom and bust macroeconomic cycles. Some pundits continue to use the term New Economy to describe contemporary developments in business and the economy. Already in 1995, Newsweek coined the phrase 'New Economy' to refer to this happy state. According to many commentators in the late 1990s, investment in Information technology (ICT) had eliminated economic fluctuations and ushered in a golden age of economic prosperity. The economist Robert J. Gordon referred to it as the Goldilocks Economy. To explain these changes, economists largely pointed to the ripening benefits of the computer age, being realized after a delay much like that associated to the delayed benefits of electricity shortly after the turn of the twentieth century. The general idea is that a business should focus on those areas of its operation which are critical to its success and where it has a competitive advantage. Other areas of its operation should be outsourced, typically using technology as the facilitator. In a developed economy, the critical success factors to a leading business are likely to be intellectual things such as brands, products specifications and technical capabilities. Many routine business functions

(such as manufacturing and customer service desks) may be outsourced. There is a belief among some economic theorists that the “new economy” is a current Kondratieff Cycle which will end after a 50-year period in 2040's. Its innovative basis includes Internet, nanotechnologies, telematics and bionics.

This paper embraces the existing perspective on the “new economy”. Furthermore, taking into consideration the new developments in the economic literature, I will also refer to the “new economy” as the “digital economy”. As mentioned in the body of economic literature, the “digital economy” is based on IT developments that affect the nature of economic activities and shift the nature and focus of economic activities. Information changes today the way markets function and facilitate the restructuring of enterprises.

The dissemination of modern informational technologies corroborated with a decreasing consumption of material resources and a superior exploitation of information are the prerequisites of sustainable development and paramount to an information – based society. The strategy aimed at making the EU “the most dynamic and competitive knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion, and respect for the environment by 2010”, known as Lisbon Strategy, was set out by the European Council in Lisbon in March 2000. Between April and November 2004, Wim Kok headed up a review of the program and presented a report on the Lisbon strategy suggesting how to give new impetus to the

process. One of the main conclusions of the Kok report was that "the promotion of growth and employment in Europe is the next great European project". The European Commission used this report as a basis for its proposal in February 2005 to refocus the Lisbon Agenda on actions that promote growth and jobs in a manner that is fully consistent with the objective of sustainable development. The Commission's report stated that "making growth and jobs the immediate target goes hand in hand with promoting social or environmental objectives." In its resolution on the mid-term review of the Lisbon strategy in March 2005, the European Parliament expressed its belief that "sustainable growth and employment are Europe's most pressing goals and underpin social and environmental progress" and "that well-designed social and environmental policies are themselves key elements in strengthening Europe's economic performance

At the heart of Lisbon strategy lies the superior usage of information and knowledge, which assumes a shift in emphasis from physical to human capital investment. Modern informational society integrates the objectives of sustainable development based on an environmental friendly economic growth with social considerations such as social justice, equality of chances, nondiscrimination and cultural diversity.

Major changes have impacted our society lately. In particular I mention the exponential increase of IT communications and of Internet users. These developments, corroborated with the restructuring undergoing in the business industry have made the IT sector one of the prime contributors to economic growth and employment. The accelerated development of e – commerce underpins the transition process from an industrial toward a post-industrial society. The new digital technologies facilitate the storage, access and dissemination of information. Digital information can subsequently be transformed in new products and services of superior value. Under these circumstances the information is the main resource, the most important production factor, crux for the emergent of a new economy

coined the "digital economy". The report of European Commission on the "Digital Economy" shows that ICT sectors is responsible for 50 % of the EU's economic growth. Public and private investments in the sector have been producing their expected results contributing to objectives defines by Lisbon strategy. ICT sector spurs an increase in productivity and innovation, positively impacting the functioning of the markets and consumers' behavior on the EU's road to a knowledge – based economy.

## **2. Cisco Unified Wireless Network Overview**

The recent developments in ICT sector have impacted the functioning of our society. Applications of the ICT sector are common place today in business, education, and administration or any other sector of our economy. There is a stringent need today for modern communications techniques. Instant messaging, voice services, access to information networks while traveling, e-conferences and so on are more and more common especially in the private business environment, where the quality and opportunity of the information support the decisional process and ultimately contribute to the economic performance of the firm. Today's organizations are developing local networks (LAN), including wireless (WLAN) in order to boost labor productivity, customer service and efficiency. Cisco Systems is leader on this market, offering solutions for WLAN networks. Cisco Network Systems are the foundation for the services and applications a business need to realize its potential. Cisco switches, routers, and software together, create an inherently intelligent integrated network to adapt for current and future business needs by:

- Providing secure, but unconstrained connectivity between employees, customers and information;
- Delivering quality, real-time applications, such as voice and video, on a converged network platform;
- Ensuring access to information and resources from anywhere;
- Automating a manageable and self-

defending network

- Reducing operating expenses
- Instant connectivity

Consequently Cisco places a great emphasis on a constructive partnership which translates either into a common infrastructure shared by CISCO with its customers or into an increased inter-operability among partners. In order to fully benefit from such an integrated communication network, it is necessary to attain a harmonization not only of technological standards in place but also of administrative procedures and long term logistics and customer support processes. More on Cisco Systems' solutions one can find at the following http address: [http://www.cisco.com/en/US/prod/collateral/wireless/ps5678/ps430/prod\\_brochure09186a0080184925\\_ps6366\\_Product\\_Solution\\_Overview.html](http://www.cisco.com/en/US/prod/collateral/wireless/ps5678/ps430/prod_brochure09186a0080184925_ps6366_Product_Solution_Overview.html)

### 3. Fiscal system in Romania

A KPMG international classification of countries on the attractiveness of fiscal systems Romania outclasses only Greece. Best classified countries were Cyprus, Ireland and Switzerland while at the other end of classification were Czech Republic, Romania and Greece. The classification was based on a questionnaire distributed to more than 400 KPMG's employees working in its subsidiaries across EU countries. An overall score of attractiveness was computed by taking into accounts all relevant aspects. The best classified countries are characterized by time consistency in interpretation of fiscal legislation, fiscal stability and a relatively low level of fiscal burden. At the opposite end, countries like Romania do have a complex fiscal legislation which is frequently modified. Romania's score was only 21% compared to Cyprus' 90% overall fiscal attractiveness.

In what follows our analysis will focus on fiscal system in Romania.

Institutions with attributions in fiscal matters do satisfy two objectives. First they provide the institutional framework necessary to collect taxes and other fiscal obligations. Second they provide social protection for different cases of employees and other

citizens. In sum fiscal institutions operate with information and money. In order to ensure an efficient management of money they need an efficient management of information. Subsequently they operate complex databases with information collected periodically on each tax paying person in Romania. Based on this information they are able to collect the payments and to manage the social protection policy i.e. social security benefits in the form of unemployment benefits, maternity leaves, health care contributions or pensions. Main fiscal institutions with attributions in fiscal matters are:

- Fiscal administration
- State Treasury
- National Labor Agencies
- Health Insurance Agency, in charge with medical insurance and hazard funds
- National agency for employment, in charge with employment issues
- National agency for pensions and other social benefits, in charge mainly with pensions' system
- Other state or private institutions with attributions related to social security

Each of these institutions has created its own informational system, design to meets its own objectives, without any informational cooperation among them. Although the organizational autonomy is in theory beneficial for their functioning, I stress that lack of informational cooperation has a major disadvantage. I refer to the operational costs, inefficiency and ineffectiveness incurred due to excessive bureaucracy. Such costs ultimately are paid by tax payers. Besides higher prices, tax payers have to fill out several declarations, as required by the Romanian fiscal laws. Since each fiscal institution has its own informational system, a fiscal declaration has to be filled out for each one and deposited to the local appropriate institution. Each declaration has to be submitted both electronically and paper – based. Only few fiscal institutions have implemented informational systems enabling electronic submission. Even in those cases, e-submission has to be supplemented by paper based one. One can easily discern the

disadvantages of the existing submission procedure:

- Separate submission of fiscal documentation for each accredited institution (4-5 institutions with independent informational systems);
- Lack of coordination and unitary vision on the fiscal system generate redundancy and thereby inefficiency;
- The submission is further impeded by the waiting lines at submission points due to poor management of local agencies and lack of adequate resources;
- Submission process is not automatic. Human and material resources have to be allocated for registering submissions;

Consider the following relevant example. One of the fiscal obligations of firms is related to periodical submission of relevant documents to National Labor Agency. Both electronic and paper – based declarations have to be submitted. On-line submission does not eliminate the requirement for a paper – based submission. Thus each month the local headquarter of the agency is confronted with the administrative problems related to manually registering a large number of submissions. More than 100 specialized personnel has been allocated for this job in the newly created building of the agency in Bucharest. Even so the average time spent for submission is some times above one hour. The overall conclusion is inefficiency due to large consumption of material al human resources. All these costs could be eliminated provided that the submission process is automated. One server could replace the work of one hundred specialized personnel and save important resources.

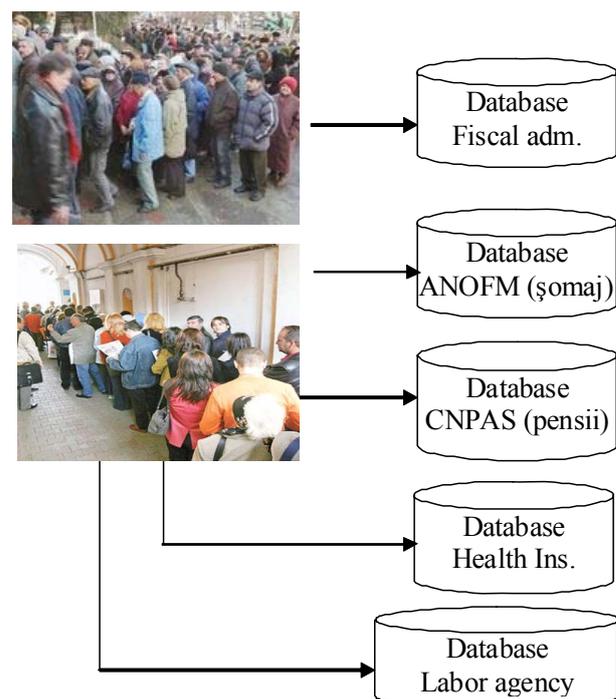
#### 4. Fiscal system in the “digital economy”

After briefly presenting the role of the “digital economy” in our society, the working solutions on the market and the situation of Romanian Informational Systems of Fiscal institutions, I will now address how modern informational technologies could serve to increase the efficiency of Romanian fiscal system.

As mentioned before the inefficiency of Romanian Fiscal system relies on the lack of informational coordination among relevant fiscal institutions. The solution is thereby a common coordinating effort of relevant fiscal institutions aimed at an adequate informational management. Once such informational coordination is agreed, the next logical step to be addressed is to enable the premises necessary for a centralized management of papers’ circuit, reducing the bureaucracy, redundancy, and logistics, human and material costs at all levels.

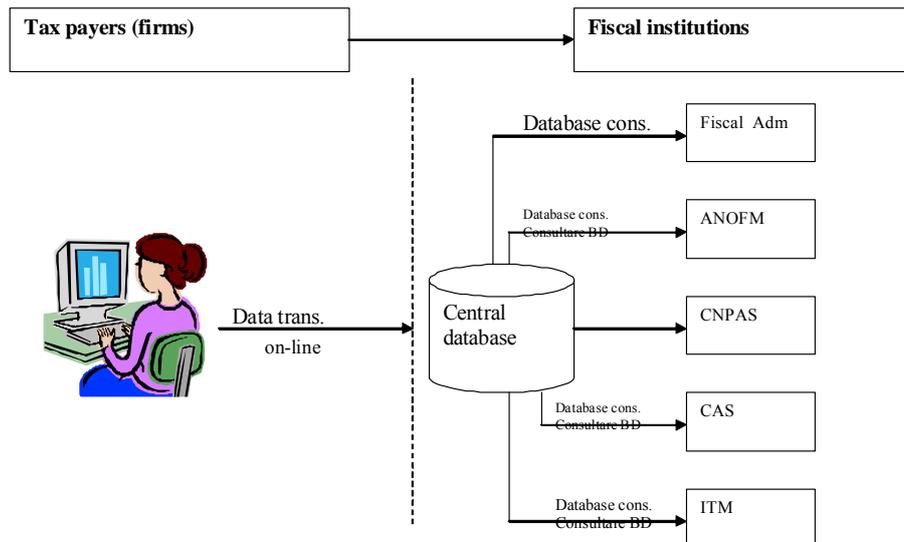
The complexity of the system in place today is better observed from tax payer’s perspective. Figure 1 shows that each tax payer has to use different software for same information, depending on the requirements of each fiscal institution.

#### Tax payers (firms)



**Fig.1.** Complexity of informational systems in Romanian Fiscal System

Using one informational system offering information to all fiscal institutions, submission of fiscal information will be much simplified, as shown in Figure 2.



**Fig.2** Transferring fiscal data from tax payers to accredited fiscal institutions

This system allows a much simplified submission formula, where the taxpayer will submit relevant fiscal documents electronically only once on a monthly basis. Each fiscal institution interested in the data will consult the central database, eliminating the redundancy and inefficiency characterizing the present system. The main advantages of the proposed centralized system are presented below:

- Reduced bureaucracy;
- Reduced operational costs;
- Reduced material and human costs both for the system and for taxpayers;
- Solving the problem of waiting lines;
- Eliminating the necessity of physical submission of paper – based documents;
- A better control of fiscal information by sharing relevant information among accredited fiscal institutions;

## 5. Conclusions

Using a unitary system to collect and manage fiscal data is the next logical step necessary to improve the efficiency of Romanian Fiscal System. Such a centralized system will afford

significant costs improvements and efficiency gains both for the system of fiscal institutions and for the tax paying firms. The proposed centralized system will solve the problem of bureaucracy and waiting lines, will reduce operational costs, save important time for taxpayers and contribute to a superior fiscal control by sharing information among relevant institutions. In sum it will be a great contribution toward the much desired efficiency of Romanian Fiscal System.

Solutions for implementing such a system are already available both in theory and in business practice. All that seems to miss is a good strategy, a coordinating national plan able to bring the consensus among all relevant institutions involved in the process.

## References

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