

## Study on the Impact of E-Commerce on Tax and Accounting Activities

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**Abstract:** The continuous expansion of electronic commerce in the last years and the fact that the Internet has become an indispensable tool in everyday life, building a quick and easy connection for business, prompted us to investigate the implications of e-commerce. This paper aims to study the impact of tax and e-commerce accounting operations in the context of faster development of Internet transactions. The need for this study is determined by the current context, where social networks are used increasingly successful as platforms for electronic business promotion. The paper also aims to highlight the need for establishing an international taxation system of income / profits since currently it does not exist. To support this approach we presented two scenarios of trade in electronic and traditional conditions where opportunities of e-commerce are highlighted and it is shown the great problem of determining the source of income.

**Key words:** Electronic commerce • Tax globalization • Taxation • Accounting

### INTRODUCTION

Recent years have been marked by the economic crisis that led to a more accentuated preoccupation towards the online business. This can be underlined by the fact that electronic businesses have a higher efficiency in the sense of reducing costs and marketing, in terms of improving customer - client relationships. Electronic commerce is the process of buying, selling or exchanging products, services or information via computer networks. Electronic trading of goods and services is an extension of the existing commerce [1]. Electronic commerce through its forms "business to business" (B2B) and "business to consumers" (B2C), has known a continuous development without precedence (Figure 1) [2]. It is a system that includes transactions that focus on the purchase and sale of goods and services but also transactions 'underlying' income generation, such as creating demand for those goods and services and facilitating communication between business partners. The expansion of e-commerce has generated a series of problems and risks regarding taxation and accounting of such operations [3]. The problem areas include: server and billing system location, the location of the company that owns the e-commerce system, the location where the goods are actually delivered to

consumers. Considering these problems and the need to develop an appropriate accounting and fiscal treatment, in this paper we conducted a study regarding the impact of tax and e-commerce accounting operations in the context of faster development of Internet transactions.

**Literature Review:** The impact of electronic commerce on the social and economic environment is treated in a number of research papers and studies, but very few deal with the fiscal and accounting issues and risks of transactions on the economies of various countries. In a study on the impact of e-commerce on SMEs in developing countries Nejadirani *et al.*, (2011) underlined the importance of e-commerce development in the SME's and the factors that ensure the success of this approach [4]. This study shows the dynamics and potential of e-commerce development in most countries. Another study by Sajjad *et al.*, (2011) analyzed the potential development of e-commerce examining the influence of product type on consumer behaviour in Internet shopping [5]. According to Inc. Magazine (2010) [6] although the U.S. and Canada are leaders in terms of commerce, other countries are starting to gain ground, so that in 2014 it is expected that the percentage of purchases via e-commerce to grow by more than 90%; an important part of this percentage is being represented by its development in

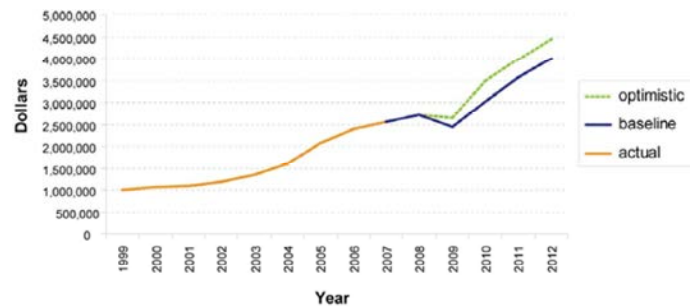


Fig. 1: Evolution and forecast of e-commerce [2]

Table 1: Sales projected in billion of dollars in Western Europe in terms of B2C Ecommerce<sup>1</sup>

	2010	2011	2012	2013	2014	2015	CAGR
UK	\$91.5	\$102.0	\$113.0	\$123.4	\$134.1	\$143.6	9.4%
Germany	\$33.7	\$37.7	\$42.0	\$46.3	\$49.9	\$53.5	9.7%
France	\$24.4	\$28.5	\$32.0	\$35.5	\$38.7	\$41.8	10.5%
Spain	\$12.3	\$15.0	\$17.8	\$20.7	\$23.6	\$26.4	16.5%
Italy	\$9.4	\$12.4	\$15.5	\$19.0	\$22.9	\$26.7	23.3%
Others	\$33.6	\$39.7	\$44.1	\$46.7	\$49.0	\$51.6	7.1%
Western Europe	\$208.8	\$235.2	\$264.4	\$291.6	\$318.1	\$343.5	10.5%

Note: Include transport, digital downloads, tickets for events, excluding online games

Latin America, where it is speculated there would be a doubling of the percentage. Therefore, purchases expected annually in billions of dollars for 2014 will be: North America - \$202.8, Western Europe - \$166.5, Asia-Pacific \$93.2 Latin America - \$27.1, Eastern Europe and Russia - \$27, Australia \$4.9, Africa and Middle East \$3 [6].

According to Roland Paris (2003), electronic commerce defies the assumptions upon which state tax systems are based, including the assumption that transactions must be physically located [7]. Its continuous growth will lead to the need for a global system of taxation since the state will not allow much time for these transactions to avoid default taxation. Also, will require close cooperation between countries in order to be able to complete a system efficient enough for the taxation of e-commerce activities. These fiscal pressures will alter relations between modern states without suggesting that we face a fiscal crisis and that it would require the creation of a supranational authority to tax, but rather an emphasis that is needed a change of perspective solely stately like, towards an international and institutional one, since electronic commerce exceeded much over the internal borders (obviously, based on the assumption that the development and growth of e-commerce is inevitable, Table 1).

## MATERIALS AND METHODS

**Research Problem:** In this study two main issues are approached:

- How does electronic commerce affect the national system of taxation?
- What is the impact of e-commerce operations within the international accounting framework?

**Research Design:** The research is exploratory and based on documentary study. We discussed the main issues regarding the implementation of electronic commerce and its fiscal impact, accounting impact and economic benefits.

**Research Data:** Our documentary study and analysis was based on data from IFRS (International Financial Reporting Standards) [8], European directives [9] and the Romanian accounting and fiscal system (also available internationally) [10], [11]. The Romanian accounting system is aligned to the European Directives and IFRS. Considering this, we believe that focusing on these laws and regulations, our study has a significant impact on most countries that use IFRS [12].

## RESULTS

**Fiscal Impact of Electronic Commerce:** Regarding the first problem that is “How does electronic commerce affect the national system of taxation?” it has been treated in literature and empirical research by several authors in the field of taxation, accounting and politics [7, 3, 13]. Based on the specifications of the Romanian fiscal code (regulations also available internationally), to conduct trade activities, it is necessary to have a physical place, a permanent establishment, in order to apply taxation over the work performed according to the methodology for the

<sup>1</sup>www.eMarketer.com – Internet Market Research, July 2011.

state where the event takes place. Therefore, the challenge that e-commerce launches is that it can not determine a fixed location, because transactions are being carried out through websites hosted on servers in various locations (other than the business owners). There are some regulations under Law no. 571/2003 regarding the Tax Code and the application methodology: *"The server on which the Web site is stored and through which it is accessible, it's a device that has a physical location"; "the physical location can be a fixed place of business of the company that operates the server. If the company which activates in a website has the server at it's disposal, owns or leases the server where the website it is stored and used and also operates on it, then the location of the server is considered a permanent office of the society"* [11] thus taxation of profit can be achieved and fees can be applied. Because the contract by electronic means does not require the simultaneous presence of the two parts involved - the trader and the consumer - electronic contract is regarded as a distance contract. For a better illustration of the provisions relating to internet sales to other countries, it is assumed that the company that buys the merchandise will pick it from the Post Office or received it by courier. In such situations, the problems raised most often are based on trying to identify the VAT, the obligations of the society in question and the nature of these sales. Council Directive 2010/45/EU of 13 July 2010 amending Directive 2006/112/EC on the common system of value added tax in terms of the rules on invoicing provides: *"the equal treatment of paper and electronic invoices. Electronic invoices are defined as invoices issued or received electronically. The principle applicable to both electronically bills and on paper, it is that authenticity of the source, content integrity and legibility of the invoice to be provided from the moment the bill is issued until the end of its archiving period."* [9].

**Impact of E-Commerce Accounting Operations:** Given the e-commerce process in most of the cases are found these specific types of income and expenses: Revenue from sale of goods; Mailing services revenues; Incomes from bank interests; Expenses for the procurement of Information Systems; Expenses for creating a website presentation; Expenditure on goods; Expenditure on packaging; Post expenses; Advertising expenses; Bank commission expense; Expenses for electronic payment protocol; Expenses for obtaining electronic signatures. The main problem with the accounting is to record revenue from

the sale of goods and the collection of value added tax (if the trader is registered for VAT purposes). Revenues from current activities involving gross inflows of economic benefits which results from ordinary activities of an enterprise, are considered "incomes" if those entries will result in an increase of the equity instruments, other than increases related to contributions from owners or other equity participants. Revenues from current activities refers to gross (income) and do not include amounts collected on behalf of third parties. According to IAS 18, revenues from sale of goods are recognized only if the following conditions are fulfilled [8]: the seller transferred to the buyer the risks and benefits of using goods; seller is no longer managing the goods sold at levels that would have been made if they would have still been in his property; the seller, no longer, has control over the goods; sales revenue and transaction costs can be measured reliably; it is likely that after this operation the benefits associated to be transferred to the entity. Often in sales, transfer of risks and rewards are concomitant with the transfer of legal title on goods. There are cases where this action is not respected, so we must apply the principle of substance over form. Thus, if the above conditions are not met, even if the transfer of legal title takes place, revenues can not be recognized.

#### **Scenarios of Electronic Commerce and Traditional Commerce:**

The owner of a business, that makes clothing trade, is in Country A. The owner has a web site, which is a virtual store for his business, hosted on a server in Country B. Sales Department is located in Country C and the storage where the entire clothing line is held is in Country E. Therefore, a customer from a Country D comes and places the command on the website. From the site, the data is loaded in the sales department database from where a command is given to the deposit manager that performs a delivery order with goods to the customer, who will later make a payment to the owner. Although this example may seem a complicated one, compared to other electronic transactions it is not far from the truth. Customers can download different software applications on their laptops by connecting to the Internet network from different locations (for example when they are in the waiting room of an international airport). So the question arising from this scenario is: *Where is the revenue source?* Is it in Country A, where the company has its headquarters, in Country B, where the company's website is hosted, in Country C, where order processing takes place through the sales department or in the country

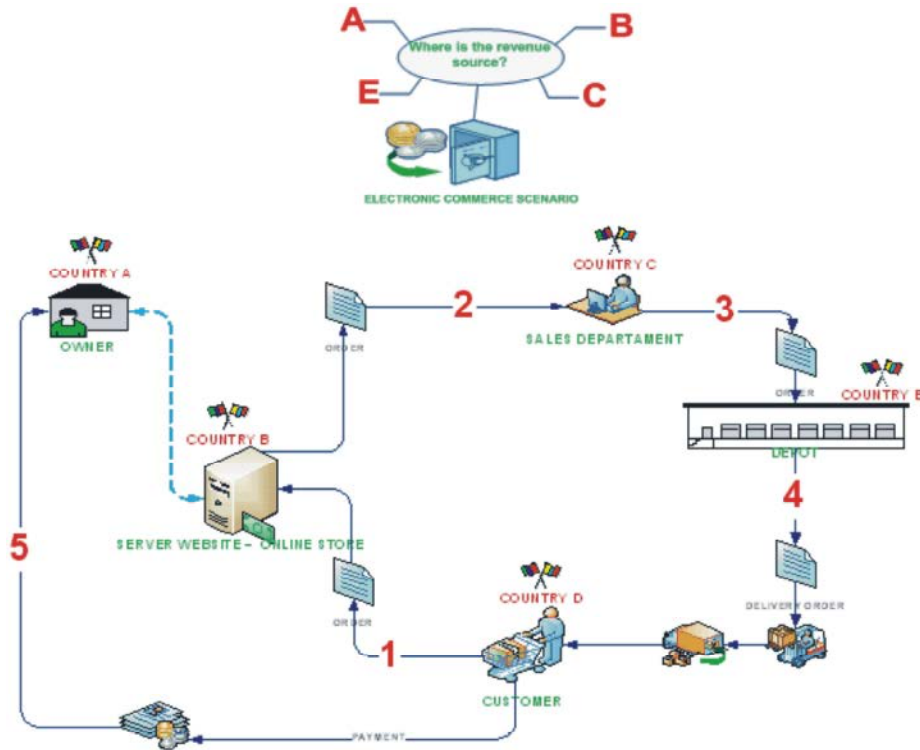


Fig. 2: Electronic commerce scenario [7]

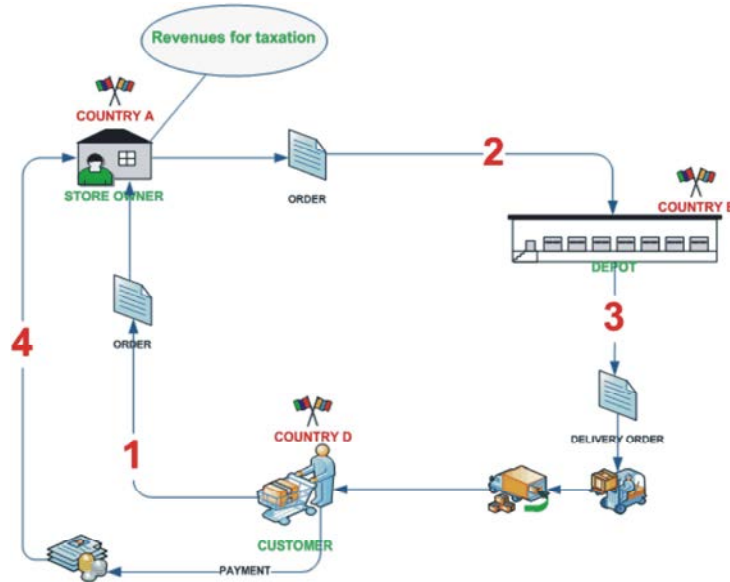


Fig. 3: Traditional commerce scenario [own development]

where the delivery will take place (if the location can be determined)? In current circumstances, the answer to this question depends on the definition of “permanent establishment” of a company, which is where income should be subject to taxation (Figure 2).

In the case of traditional commerce (Figure 3), we also assume a more complicated than usual example, with the goods depot located in another country. The client sends the command to the owner, who later launches this command to the depot manager; the goods will be

shipped to the customer, who will later make a payment to the owner. So there is no question about the place of taxation; this will be in the country where the company's physical location and permanent establishment is. Why would we choose to realize e-commerce if traditional commerce would not normally complicate our existence? *Answer:* because it involves much lower costs than a traditional shop and for as long as the legislation does not find a solution on e-commerce taxation system, it represents a paradise for small and large businesses.

### DISCUSSION

The research results achieved by this study can be summarized as follows:

#### Fiscal Impact:

- The need to standardize the tax systems in view of the possible implications of electronic transactions, especially since the states are at loss because they are not able to determine a viable method of taxation and tax revenues from e-commerce [14, 7, 13, 15].
- They tried to create an equal fiscal framework for EU and outside the EU suppliers in case of electronically supplied services and also in case of television and radio. Thus, two important rules were stipulated:
- When these services are provided by legal entities established in the EU for non-EU customers, they are exempt from VAT payment.
- When these services are provided by legal entities established outside the EU for EU buyers, they must include VAT and non-EU suppliers can make just a single point of contact for VAT.

#### Accounting Impact:

- Solving the recognition of revenue from e-commerce by the conditions imposed by IAS 18 related to fiscal impact, because for the recognition of revenue is needed to clarify a law concerning the definition of permanent establishment in e-commerce, on which this law is based.
- Economic benefits divided into three categories: *operationality, prices and productivity*, are helping the exchange to be faster, cheaper and easier. Finding suitable suppliers, negotiating prices, developing marketing strategies, development of transport and

other trade related operations are facilitated through the use of electronic communication path, eliminating the cost of face-to-face meetings. In the struggle to remain competitive, companies have tried to develop as many relationships with suppliers as they can, to try to eliminate the actual trade issues. Current technologies make this easier, eliminating the cost of traditional trade relations. Regarding the price of the goods sold via the Internet, there are different opinions (depending on the industry, type of products sold) concerning if it is lower or higher than the goods sold by traditional way.

### CONCLUSIONS

Unlike most researches that treat the impact of e-commerce on international trade relationship [2, 3, 7, 15] our research results highlight the fact that e-commerce as it is carried now has a significant impact on taxation and accounting transactions.

In conclusion, it is necessary to harmonize the global taxation system, as the rapid development of electronic commerce defies national tax systems. The inability of a country to participate in such agreement for the applicability of an unilateral tax system would turn it into a paradise of electronic transactions, therefore any business owner wanting to carry all activity there (fact supported by the main quality of electronic trade: easy deployment anywhere in the world). However, even if a Standard that could easily identify the physical location of economic transactions would be adopted (the impediment on which taxation and charge of income/profit depends), establishing the perfect system to meet various state jurisdictions over flowing action of e-commerce is still a challenge for economic researchers worldwide. In the context of these developments and in conjunction with the development of social networks, new forms of electronic business lead to the need for new approaches in terms of accounting and tax.

As future research directions we propose the development of e-commerce models based on fiscal and accounting integration so as to minimize the risk of tax evasion, fraud and errors in the financial statements. We also plan to study how the representation of financial information standards (e.g. XBRL - eXtensible Business Reporting Language) can be adapted so as to ensure better transparency and fiscal and accounting integration of e-commerce transactions.

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