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Procedia - Social and Behavioral Sciences 195 (2015) 642 – 648

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**Procedia**  
Social and Behavioral Sciences

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World Conference on Technology, Innovation and Entrepreneurship

## The Role of Taxation Problems on the Development of E-Commerce

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### Abstract

Nowadays e-commerce has become a vital part of our daily lives. The effects of globalization and rapid developments are experienced in knowledge and technology raises level of e-commerce. E-commerce provides businesses to sell their goods and services with a different method around the world and admits to consumers to access goods and services easily. Taxation of e-commerce is an important issue for countries, businesses and consumers who want to be a party of e-commerce. The issues such as tax loss and tax evasion are crucial in terms of countries. Difficulties like uncertainty and double taxation make parties of e-commerce reluctant and affect development of e-commerce negatively. In this study, the role of taxation problems on the development of e-commerce will be examined. We will aim to focus on how e-commerce can be developed with proper tax regulations.

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Peer-review under responsibility of Istanbul Univeristy.

*Keywords:* E-Commerce, Taxation, Double Taxation, Taxation Problems

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### 1. Introduction

Electronic commerce is a process which enables sale or purchase of goods and services with designed methods for this purpose over computer networks. (WTO, 2013) Although orders can be made electronically, delivering of

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goods and services or payments should not be made at electronic field. E-commerce transactions can be occurred between businesses, households, individuals, governments and public or private establishments. (OECD, 2011)

E-commerce generally is made by using telephone, fax, TV, computer, internet, electronic payment, money transfer systems and electronic data interchange. (Canpolat, 2001) In this study, only electronic commerce transaction that made via internet is considered.

Electronic commerce is classified as business to business(B2B), business to consumer(B2C), business to government(B2G), consumer to business(C2G), consumer to consumer(C2C), consumer to government(C2G), government to government(G2G), government to business(G2B) and government to consumer(G2C). (OECD, 2000) B2B is all kinds of commercial transactions, that purchase and sale of raw material, wholesale and retail, which made over internet among businesses. B2C is to be sold a good or service by a business to consumer via internet. For instance: Amazon. C2C is to be sold a good or service by a consumer to another consumer via internet. For example: E-Bay. (TC Kalkınma Bakanlığı, 2013) The consumers may sell their products to businesses via websites like E-Bay. This called C2B. In some government, transactions of B2G have come up with beginning to rearranged public procurement system over internet. Technology is being used by government, for usage, receipt and transmission of information can be an example to G2C and G2B transactions. C2G transactions has become widespread with beginning of technology usage to make payment systems and tax compliance easier and to reduce their costs by government B2B and B2C are the most used and improved transactions so far. (OECD, 2000)

Electronic trade allows consumers purchasing faster, shopping 24/7, reaching more goods and services without borders and buying with no physical movements. E-commerce also provides selling faster, reaching to more customer, having less administrative costs, trading with no physical presence, starting and managing a firm easily in terms of businesses. Disadvantages of e-commerce are starting a business by anyone who good or bad, unqualified products, being cheated of consumers and security problems. (Niranjanamurthy et. al., 2013) Majority of countries try to make e-commerce more reliable and solve these problems with necessary legal regulations.

## 2. Literature Review

WITSA(2000) has pointed out the rate of regulations in field of taxation and privacy is 8% in the study which has investigated the most effective barriers that e-commerce faced. Even though 36% of businesses have argued that effects of taxation barriers are strong, 4% of businesses have claimed that taxation is not a barrier to development of e-commerce. It has deduced taxes the most negative impact on development of e-commerce are foreign taxes, local or state sales and use taxes. CRITO(2002) has found that taxation barriers have 16,5% of significance in survey among 2139 businesses chosen from production, distribution and finance sectors in ten countries Taxation barriers affect distribution sector mostly and finance sector at the least. Tigre and Dedrick(2004), in their study on Brazilian firms, have determined the concerns about taxation among e-commerce barriers have 26,8% significance. This barrier has further impact upon small and medium sized enterprises. PWC(1999) has asked the steps that are going to encourage e-commerce to small and medium sized enterprises in Asia-Pacific Economic Cooperation area. Fair taxation policies for online transactions, improving telecommunications infrastructure, building a new e-commerce strategy, educations to increase in usage of e-commerce and incentives have become prominent. Scupola(2003) has studied on e-commerce adaptation of small and medium sized enterprises in South Italy. Author has argued that tax reduction, financial incentive, informing processes rising rate of speaking English enable adaptation to e-commerce. Çımat and Değirmenci(2003), in their study where they have examined fiscal liabilities on telecommunication sector, the most biggest problems that prevented development of e-commerce are uncertainty in taxation and lack of other legal regulations. Kommerskollegium(2012) has investigated the barriers and opportunities of e-commerce over outside countries of European Union. Necessity of special payment methods and differences of tax regulations among countries have occurred extra costs and administrative problems and those were barriers to e-commerce. At interview they asked to the businesses questions such including difference utilizing of goods and services in varied countries, uncertain and unfair VAT regulations and possibility of double taxation.

### 3. Development of E-Commerce

Over past twenty years e-commerce has rapid growth since first e-commerce transaction has been done in 1995. (Laudon&Traver, 2013) Due to providing advantages to both businesses and consumers, e-commerce has been preferred increasingly. Along with the regulations made in order to eliminate barriers and disadvantages e-commerce faced, it is expected that e-commerce continues to develop.

#### 3.1. Development of E-Commerce in the World

One of the reason that affects development of e-commerce is increasing usage of internet makes possible the expectations about e-commerce.

Table 1: Internet Users in the World

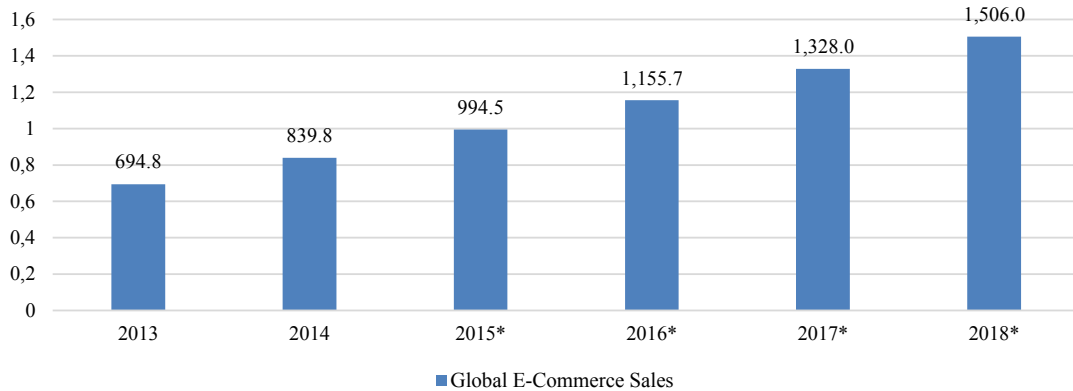
Years	% of World Population with Internet(Penetration)	Users Growth
2009	25.6	12.2%
2010	29.4	16.1%
2011	32.5	11.7%
2012	35.5	10.5%
2013	37.9	8.0%
2014*	40.4	7.9%

Source: Internet Live Stats, 2015.

\*estimate for July 1, 2014

As shown in table the rate of internet usage rapidly grows in worldwide. It is assuming that there were 2,925,249,355 internet users around the world in 2014. 40,4% of world population is internet user. Even if growth of internet users growth declines, the individuals who use internet gradually increase. In graph 1 shows that e-commerce sales has been increased by years related to usage of internet.

Graph 1: Global E-Commerce Sales (Billion \$)



Source: AT Kearney, The 2015 Global Retail E-Commerce Index.

\*Forecast

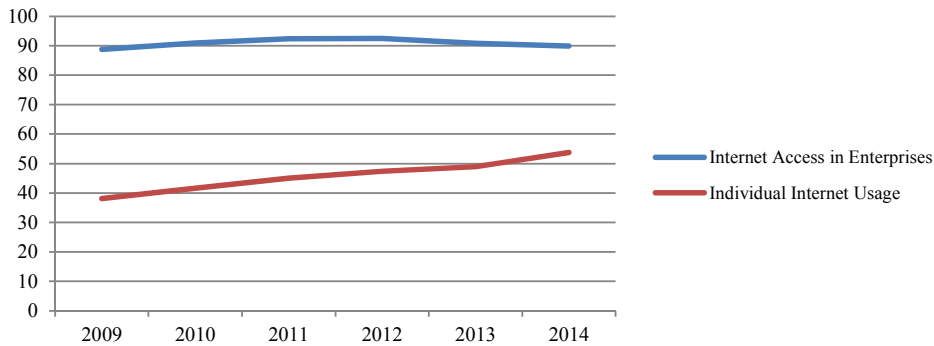
Global e-commerce sales has gradually increased. In 2014, e-commerce sales increased by 21% compared to previous year. It is expected that global e-commerce sales increased over 10% for every year and reached to \$1,506 billion in 2018.

When size of online market, consumer behaviours, growth potential and infrastructure have been considered, USA, China and United Kingdom are the top countries as size of e-commerce market. (ATKearney, 2015)

### 3.2. Development of E-Commerce in Turkey

Worldwide upward trend of both usage of internet and e-commerce has been also seen in Turkey.

Graph 2: Internet Usage of Individuals and Access in Enterprises in Turkey



Source: TurkStat

Use of internet in individuals has grown since 2009 up to today. It has existed by 53,8% in 2014. Access in enterprises has occurred over 88% as floating.

Table 2: Individuals purchased goods or services over the Internet in Turkey

Years	Individuals purchased goods or services over the Internet
2011	18,6
2012	21,8
2013	24,1
2014	30,8

Source: Turkstat

The rate of to order and purchase goods and services by individuals with purpose of personal using via internet increases consistently. This rate was 30,8% in 2014. On the other hand, according to data in 2014, 69,2% of individual internet users haven't even purchased any goods and services via internet. Although, the rate of purchase goods and services over internet in Turkey increases continuously, it is still lower than developed countries. According to a research which published in 2012, the individuals who use internet didn't purchase goods and services via internet because of old tradition for shopping, no need to buy, concerns of privacy and. (Turkstat, 2012) It is supposed that to eliminate concerns about security and privacy and increase purchase goods and services over internet by law on regulations of e-commerce that enter into force at May 1st in 2015.

Table 3. Card Payments Transactions on Internet in Turkey. (Million TL)

Years	Domestic and International Use of Domestic Card	Domestic Use of Domestic and Foreign Cards
2009	7,767.41	9,109.05
2010	11,786.77	12,880.24
2011	17,984.93	18,740.92
2012	24,787.09	25,178.32
2013	34,508.91	3,606.04
2014	40,848.68	41,883.44

Source: Bankalararası Kart Merkezi, Turkey, 2015.

The amount of usage in credit card for transactions on internet is an indicator of e-commerce level. Transactions made by using credit card over internet has perpetually grown since 2009 up to today in Turkey. The amount of domestic use of both domestic and foreign cards that used in transactions via internet has reached 41.883,44 million Turkish Liras in 2014. Compared to 2009, it is increased by nearly 360%. The amount of domestic and international use of domestic cards that used in same process has reached 40.848,68 million Turkish Liras in 2014 and increased by nearly 425% compared to 2009.

#### 4. Taxation of E-Commerce and Problems

The taxation policies of countries based on territory and jurisdiction has begun to fail after improving e-commerce. Concepts like permanent establishment, sale points, product and income classification that using in taxation process have been remained inadequate. Whereas determining location of seller and consumer at transaction on internet is difficult, tax revenue loss has been existed. Electronic commerce allows businesses to get their revenue without any physical presence. (Basu, 2008) Because of these implications of e-commerce, tax administrations reach hardly information about taxes that should be collected and thereby tax loss exists.

In Ottawa Conference where arranged to find solution to taxation problems of e-commerce underlined that conventional taxation principles should be applied to e-commerce and collaboration between countries has been required. Fair and neutral taxation should be generated for conventional commerce and e-commerce. An efficient taxation system should be provided to reduce compliance costs to businesses, administrative costs. Tax rules should be clear and certain. Tax payers should know how and in which situations they are taxed. Effectiveness and fairness should be ensured on taxation process. Tax systems should be flexible adapting to technological and commercial development. Taxation place for consume tax should be where the consumption happens. Otherwise, double taxation and non-taxation problems may be occurred. (OECD, 2001)

Another problem for taxation of e-commerce arises from being made by a permanent establishment that is not required. To apply tax and to identify one who has taxation power, it is necessary to pointed out physical presence and permanent establishment. According to OECD, website is not a permanent establishment and if business purchase or hire server and activities on server are not only being made a preparatory or auxiliary. (OECD, 2005)

To be made e-commerce around the world without any borders and different applications about taxation on e-commerce lead to double taxation risk. Countries figure this issue out with double taxation avoidance agreements. (Kommerskollegium, 2012) But the risk still exists for business where operated in countries that have not got agreements.

It is also another problem to be subjected different rate and policies of tax on goods and services in the field of taxation on e-commerce among countries or states. Both EU and USA, taxation is made on final sales to type and value of goods. While this tax is collected by EU as value added tax, it is collected by localities and states in USA as consumption and use taxes. Each state, county and municipality in USA have their own tax policies and tax rates. It becomes a problem for taxation. For instance; while cheese can be taxable in one state as a snack food, in another state it can not be taxable. (Laudon and Traver) The uncertainties on VAT regulations, who has taxation power for collecting VAT and requirements of registering pose a problem. The countries divided by states and each state applies different tax regulation cause extra costs and difficulties in term of electronic sellers. Varied tax regulations between states particularly affect businesses that sell via internet and accept returns in stores. (Kommerskollegium, 2012)

## 5. Conclusion

There are many researches that investigating e-commerce barriers and taxation problems of e-commerce. However, there are less researches which examining how taxation problems of e-commerce affect to development of e-commerce. In this study, development of e-commerce and factors that influence e-commerce growth was primarily examined. Taxation problems of e-commerce have importance for governments, businesses and consumers. Making purchase and sale over the internet without any borders brings with taxation problems. The difficulties in determining about which country or state have taxation power, nontaxation because of physical presence is not necessary, evaluating goods and services variously by countries, applying varied tax policies and tax rates, double taxation risk are some of the taxation problems. To block undesirable facts like tax loss and tax evasion, countries haven't found any certain solution yet. Cooperations for solving problems also fail.

It is thought that level of e-commerce has been negatively influenced by taxation of e-commerce that increasing since first transaction made up to today. It is possible to made businesses, consumers and even governments that seek for e-commerce reluctance and this is an undesired situation for development of e-commerce. If an agreement or cooperation has been made by countries which seek for solutions to overcome taxation problems –and they success on it- more business and consumer are willing to enter market of e-commerce. So the development of e-commerce will be affected positively and both businesses and consumers benefit from advantages of e-commerce mostly. Then countries will not obliged to endure tax revenue loss owing to untaxable e-commerce transactions.

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