





For an effective taxation of electronic commerce in Madagascar

Fitahiana Zoniaina Rakotomalala, Madagascar

Abstract

This research paper focuses on the taxation of electronic commerce (or e-commerce) in Madagascar. The objectives of this project are to offer insight and help the fiscal administration for future governmental programmes focusing on the taxation of e-commerce in Madagascar.

This study is drawn from an in-depth analysis of international tax research papers and policies of different countries and organisations including the European Union (EU), United States of America, Australia, Organisation for Economic Co-operation and Development (OECD), International Telecommunication Union (ITU), and World Trade Organization (WTO).

Additionally, case study analyses of e-commerce in selected developing countries were undertaken, along with consultations and interviews conducted with different national and international key players involved in the area

Throughout this research, it was found that there is much that needs to be done in the domain of e-commerce; a major example is the adoption of a legal framework. Second, it is strongly recommended that e-commerce activities should be taxed in the same way as any other conventional kind of trade. Moreover, no new taxes or exceptional preferences should be introduced for e-commerce as it will lead to a distortion in the market.

Key words: Information and communication technology (ICT); e-commerce; taxation; Madagascar

Introduction

Information and Communication Technologies (ICTs) and the Internet revolution amplified by the globalisation process have brought about considerable changes in our lives, including the way we communicate, make decisions, and do businesses. In the last two decades, electronic commerce (or e-commerce) has been a popular topic, as it has not only created opportunities but also challenged consumers and governments in different ways. Some of the main issues discussed include cybersecurity, consumer rights, digital signature, privacy, and taxation.

View from the perspective of the Organisation for Economic Co-operation & Development (OECD) (1998), e-commerce has the potential to spur growth and employment in industrialised, emerging, and developing countries. In realising this potential, revenue authorities' objectives are to provide a fiscal environment within which

e-commerce can flourish while also ensuring that e-commerce does not undermine the ability of the government to raise the revenues required to sustain governmental activities. In this regard, the Malagasy fiscal administration has a critical role to play in the development of this domain.

Madagascar is an island situated in the Indian Ocean with a population of 20 million. The mobile phone subscription base has increased multi-fold in recent years. The latest statistics in the ICT sector (OMERT, 2011) indicated that in 2009, the Malagasy mobile market grew to 6.3 million subscribers from only 350 000 in 1999, resulting in a penetration rate of 31.4%. In 2010, an International Telecommunications Union (ITU) report (2011) indicated that Madagascar had around 110 000 Internet users, equating to 0.56% of the population.

¹ Due to strong presence of multi pre-paid SIM holders, the effective penetration is much lower.

Necessary steps have been taken in developing Madagascar's information technology (IT) infrastructure, with a view to developing Madagascar as an IT-driven nation. Madagascar now has its national backbone and is connected to two international submarine optical fibres, which are the Eastern Africa Submarine Cable System (EASSy) and the Lower Indian Ocean Network (LION).

E-commerce is developing rapidly in spite of the fact there is currently no specific legislation to regulate this activity. For example, it was only in 2010 that Malagasy legislation recognised telecom operators working in the provision of electronic money transfer and mobile payment services as financial intermediaries.

For the fiscal administration, e-commerce is a new domain where many electronic transactions remain untraceable and may represent a huge loss for the state revenue if no measures are taken in the years ahead. Until now, the general code of taxes does not have directive on the taxation of online commerce activities.

In this regard, it appears both timely and appropriate to conduct a study of the taxation of e-commerce in Madagascar with its envisaged objectives being primarily aligned with offering insight and assistance to the Madagascar fiscal administration. The first section of this paper will be devoted to a literature review of existing concepts, studies, reports and international initiatives that have shaped the history of e-commerce.

Research question

How to effectively tax e-commerce in Madagascar?

Hypothesis

The existence of a clear policy and taxation mechanism system of the e-commerce will foster economic growth in Madagascar.

Literature review

Taxation has become a top priority for governments and many international organisations all over the world. In analysing international issues of e-commerce, the OECD (2001a) outlined that taxation 'has become a priority area for many international organisations and governments as it increases nations ability to raise the revenues required to finance public services for their citizens'. Apparently, each country or regional organisation adopts their own taxation mechanisms with the goals to preserve their economic interests and increase their influences.

In early 1996, the taxation in the electronic world captured the attention of developed countries like the United States of America, European countries, Canada, and Australia, to name a few. At that time, the domain of e-commerce was still in its early development. Thus, discussions were focused around the definition and characterisation of e-commerce, differences between goods and services, territorial concepts, taxation approaches, mechanisms, and legislation.

In 1996, during the Clinton administration, the US Department of the Treasury suggested a moratorium on new taxes for e-commerce that should be introduced across the world. Noting that this call had not received the expected positive global reaction, US Congress introduced a new moratorium, the Internet Taxes Freedom Act (ITFA). This US advocacy of a free market solution was welcomed by Canada's Minister of National Revenue. The ITFA was then adopted by the US Congress on 21 October 1998, which was extended for three years in 2004. In October 2007, the act was extended until 2014. On one hand, this moratorium is benefiting commercial industries as a result of their lobbying activities. On the other hand, this has created disequilibrium between brick-and-mortar stores and online merchandisers; online vendors are exempted from paying the sales tax. In criticising the ITFA, Basu (2007) stated that 'proposals to make the Internet a consumption tax-free zone would have potential devastating economic, tax and social consequences like widening the gap of digital divide and social iniquities.' One limitation of this moratorium is that it was only adopted with the vision to allow

the development of e-commerce in America in spite of the loss of revenue it would engender.

In analysing the taxation issue in an electronic world, Lymer (2005) argued:

'If a business engages in electronically mediated activity in generating profits, this will potentially be liable to taxation in the same way as non-electronic-based activity. In the same way, indirect taxation will be levied on consumption of products and services whether these are provided electronically or physically'.

In 1996, another debate had emerged in Europe investigating the possibility of taxing the flow of information passing over the Internet - the socalled Bit Tax. The notion of such a tax was proposed for the first time by Arthur Cordell and Thomas Ide in 1994. Unsurprisingly, the project was quickly rejected and removed from the agenda of the European Commission High Level Expert Group and was later heavily criticised during OECD's 1998 Ottawa ministerial meeting. The idea of a new tax of this kind raised contestations amongst the press, policy makers, and individual Internet users. Technical experts predicted that 'bits are or will soon be an irrelevant measure of transmission intensity; bits are difficult if not impossible to monitor.' (Soete and Kamp, 1996). In addition to this, Basu (2007) in his analysis of the bit tax pointed out that 'it would be counterproductive in that it burdens e-commerce and its productivity.' A possible consequence of such a system is that software companies would preferably ship their products by physical transportation rather than sending them over Internet networks to avoid high taxation.

In 1998, OECD countries organised the Ottawa conference on e-commerce. It was considered to be the main framework for any international policies that will guide e-commerce activities. The focus of this conference emphasised the potential benefits that new technology offered, such as simplification of tax systems and enhancement of taxpayer services, and identified conditions, principles, and a framework that should guide the taxation activity. Moreover, it was also agreed that the e-commerce taxation should be guided by the same principles that guide governments in relation to taxation of conventional

commercial activity. These are: efficiency, neutrality, certainty, simplicity, effectiveness, fairness, and flexibility. In other words, no new forms of taxation would be needed for e-commerce. Instead, the existing international agreements (such as double tax treaties) would need to be reviewed and clarified in light of future developments. In joining this declaration, Global European Information Networks Ministerial Conference (1997), Australian Tax Office (1997), and International Conference of Tax Administration (2001) pointed out that neutrality was also critical to a successful adjustment of a national tax system to deal with e-commerce.

E-commerce offers many advantages for consumers. In this view, economists have theorised that e-commerce ought to lead to an intensified price competition, as it increases consumers' ability to gather information about products and prices (Wikipedia, 2010). However, for the fiscal authorities, it has brought a set of challenges such as the manipulation of the source of income so as to avoid source taxation or even the possibilities for fiscal evasion and fraud. Additionally, Li and See (2007) presented a more comprehensive inventory of challenges that fiscal administrations may encounter, such as the ability to locate and access records that are kept in electronic formats, the capacity to encrypt electronic records with encryption key technology, as well as the lack of authenticity, integrity, and reliability of an electronic record. Doernberg is also reported to have remarked that the challenge is determining where profits were created between the residence and source countries, and whether leakages to tax havens take place (cited in Basu, 2007). In a research article Lymer (2005) uncovered the practical problems that exist when attempting to relate the virtual activity that occurs in the electronic world to the real entities behind those activities. Use of electronic money and barter-based means of exchange could develop into international currencies that escape national taxation systems. In tackling this issue, tax practitioners are reported to have found that in order to address tax avoidance concerns, the residence country should be granted primary authority to tax e-commerce business profits (Basu, 2007). From another perspective, a study by the World Trade Organization (WTO, 1998) and Li and See (2007) proposed an

approach which argued for an increased responsibility for banks and/or credit card companies to collect taxes through debiting customer accounts and transferring revenue periodically to the tax authorities. Though it is interesting, such a strategy could face strong limitations in its applicability to tax havens due to the banking secrecy laws and the void in bilateral tax treaties.

In tackling the issue of fiscal fraud by e-commerce businesses, fiscal legislation in France introduced supplementary articles which extended the condition of applicability of the law of communication of the agents of the fiscal administration in regard to Internet Service Providers (ISPs). ISPs are liable to communicate with fiscal administrations the identity of people selling goods or services on online brokerage sites, the list of sales or sold services, the nature of goods or sold services, and the amount of these sales. In this context, Lymer (2005) pointed out, 'developing effective solutions will require the combination of skills offered by economists, lawyers, and accountants, as well as the technical skills and understanding of computer professionals.' Some limitations of the French approach are that not only would this be technically very difficult to implement, but also the ISPs would be reluctant to divulge the personal information of their clients.

For several years, the divergence of opinion between the EU and the USA fuelled the debate on international commerce on the concept of goods versus services and VAT collection. On their part, the USA and OECD asserted that the mode of delivery should not affect the definition of goods or services. Opposingly, the EU argued that electronically-supplied products should fall into the realm of service provision and not of goods. In this regard, the EU adopted specific directives on VAT regime applicable to electronically supplied services. The location of taxation illustrates another diplomatic issue that remains unresolved between the EU and US. In fact, the Ottawa principles introduced a 'destination' instead of 'origin' principle of taxation. Kurbalija (2010) explained 'the US government has a strong interest in having taxation remain at the origin of transactions, since most e-commerce companies are based in the US. In contrast, the EU's interest in "destination taxation"

is largely inspired by the fact that the EU has more e-commerce consumers than sellers.' Basu (2007), in reviewing advantages and disadvantages of destination-based and origin-based taxation, acknowledged that destination-based taxation is much more likely to distort the location of economic activity than origin-based taxation. For origin-based taxation, Basu stated that it would also maximise the collected revenue. Nevertheless, it would be disadvantageous to domestic producers in their export sales.

Methodology

This study was executed with a view to investigating and soliciting the attitudes of Malagasy fiscal authorities towards the taxation of e-commerce. In conducting this research, a historical analysis of existing international policies and legislations, as well as reports and studies produced by various researchers and international organisations was conducted. This included a thorough review of the papers and studies pertaining to online commerce published by the EU, USA, OECD, WTO, and ITU.

Several interviews and consultations were conducted with the view to capture realities, problems, and perspectives in the domain of e-commerce in developing countries. The sample consisted of resource persons issued from various backgrounds, working in the private sector and public administration, including: persons in high-responsibility positions at the Ministry of ICTs and Ministry of Finances and Budget in charge of tax revenue; local and international experts; lawyers; tax practitioners; and the Association of Telecom Operators in Madagascar. The interview consisted of six questions asking about the respondent's view of, the obstacles towards, and what major conditions influences e-commerce and its taxation. At the end of the interview, interviewees were prompted to propose recommendations to the Malagasy government or the fiscal administration.

In addition to this, case study analyses of countries in Africa, like Botswana and Senegal, as well as in France, Bangladesh, Pakistan, and Australia were also carried out in order to doc-

ument and highlight key lessons learned and international best practices that could be applicable for the Malagasy fiscal authorities.

Results and findings

E-commerce development stage

In an e-mail interview with Naveed-ul-Haq (March 2011), Assistant Director (ICT) of the Pakistan Telecommunication Authority, stated that 'Electronic Commerce generally is at the stage of infancy in developing countries.' A case study of Botswana (Uzoka and Seleka, 2006) on Business to Consumer (B2C) unveiled an interesting classification about the development stage of a given country regarding e-commerce. According to this study, e-commerce development stages are: readiness, intensity, and impact. Based on this categorisation, it can be drawn that Madagascar is on the transition step passing from the readiness to intensity level.

Major e-commerce obstacles: legal and cultural

The lack of legislation on e-commerce and cultural barriers were amongst the most cited obstacles that hinder the development of e-commerce in Madagascar. In our survey, 75% of the respondents confirmed this statement. In referring to this, attorney Ramangaharison, during an interview on 10 March 2011, clearly mentioned that the non-existence of laws on e-commerce, protection of personal data, and cybercrime pose a problem, not only for private sectors but also

for the consumers as this engendered a matter of confidence. Additionally, the adoption of online attitudes to the buying and selling of goods is not obvious to the majority of Malagasy. In illustrating this fact, Mr Rakotobe stated, 'making a purchase without touching the product is not yet adopted by Malagasy population'.

E-commerce should be taxed in Madagascar

One hundred percent (100 %) of the sample interviewees agreed with the assumption that e-commerce should be taxed similarly to that of 'traditional' or 'conventional' trade. Otherwise, 'exemption for e-commerce combined with the current taxation system should lead to significant distortions that would put conventional retailer at great disadvantage. (Basu, 2007). In an email interview, Naveed-ul-Haq (March 2011) suggested that 'VAT could well be the most appropriate taxation model for developing countries'.

Malagasy current taxation system of e-commerce

Interviews made with tax inspectors at the revenue department revealed that the taxation of e-commerce is a new domain for the Malagasy tax administration. Presently, the current taxation law does not distinguish between the concepts of goods from services in the determination of the amount of taxes to be paid. Both are liable to VAT. Regarding consumption taxes, Malagasy fiscal authorities adopted the destination-based tax instead of origin-based tax. From the year 2010 onwards,

Table 1. E-commerce development stage (Uzoka and Seleka, 2006).

Stage	Description	Influencing factors
Readiness	Deals with the readiness of people, businesses, infrastructure, and the economy as a whole for e-commerce activities.	Consumer mistrust of local internetEconomic conditions service and productsICT infrastructure
Intensity	Deals with the intensity with which information and communications technologies are utilised within a country, and the extent to which electronic commerce activities are undertaken.	Government policiesLow credit card penetrationInternet marketing factorOrganisational constraints
Impact	This is the last stage of e-commerce development, at which time e-commerce begins to make impact on national economy and business activities in the country.	Security and legal concernsInternet development abilitiesInternet logistic and access issues

Table 2. *VAT rate in Madagascar (Direction Générale des Impôts, 2010).*

	Goods	Services
Imports	20%	20%
Exports	0%	0 %

VAT rate has been set at 20%. However, all export activities are exempted from VAT.

Taxation principles which should apply to the taxation e-commerce

According to OECD (2001b), 'The taxation principles that guide governments in relation to conventional commerce should also guide them in relation to electronic commerce.' Those principles are: neutrality, efficiency, certainty and simplicity, effectiveness and fairness, and flexibility.

It is worth briefly recapping the broad taxation principles that should apply to e-commerce, according to the views of various researchers and international organisations.

Government and fiscal authorities' role

Ramangaharison explained that first, the government's role is to provide a favorable legal and fiscal environment for the development of economic activities. A fair, non-discriminatory regulatory setup not only supports investment and

innovation but also helps in consumer choices. The government should play a neutral role, yet it should still be a rigid facilitator in carrying along all players of the e-commerce eco-system.

In addition, promoting e-commerce is not the sole responsibility of the tax administration or the Ministry of Justice but it should engage financial institutions, such as private ones and the Central Bank. Naveed-ul-Haq (March 2011) explained that, by large role of a State Banks and Tax Authorities plays the most crucial role in availability and proliferation of electronic commerce infrastructure and services.

Conclusion and recommendations

In this study we examined possible approaches, methods, and conditions with the objective of providing a framework to effectively tax e-commerce so as to not only increase fiscal revenue but also to foster economic growth in seizing opportunities offered by ICTs. Seeing the trend in the Malagasy society in terms of the adoption of technology use, a rapid growth in the use of online commerce is expected in the next five years. Therefore, the government should adopt all necessary actions if Madagascar does not want to fall behind the ongoing development process. In responding to these challenges, the following actions are recommended to Malagasy Authorities:

Box 1. Taxation principles which should apply to the taxation of e-commerce

Fairness

- (i) There should not be double taxation, neither should taxation be avoided (Kobrin, 2000).
- (ii) Taxation should produce the right amount of tax at the right time (OECD, 1998).

Neutrality

(iii) Taxation should treat all commerce equally. It should not favor nor penalise local producers and distributors. All business income, whether arising out of e-commerce transactions or through more traditional means, should be taxed in a similar manner (Basu, 2007). Taxation should not discriminate in favor or against e-commerce between types of products (McLure and Charles, 1999).

Effectiveness

(*iv*) Countries should ensure that appropriate systems are in place to control and collect taxes. The potential for tax evasion and avoidance should be minimised while keeping counter-acting measures proportionate to the risks involved (OECD, 2001b).

Flexibility

(*v*) The taxation system should be flexible and dynamic enough to ensure that they keep in pace with technological and commercial developments (OECD, 1998).

- Set up a multisectoral committee in charge of the promotion of e-commerce. Membership would comprise representatives of the Presidency, Ministry of Finances, Ministry of Commerce, Ministry of Justice, Ministry of Telecommunications, the private sector, academics, IT professionals, consumers, and other key members of civil society (e.g. faith-based organisations, non-governmental organisations). This committee will be in charge of discussing related issues surrounding e-commerce. It is proposed that it will be divided in subgroups which will be assigned to work on specific themes, such as technology and infrastructure, taxation, legislation, and consumer rights protection, among others.
- Make an official proposition to the parliament regarding a legislative project on e-commerce. This step is of vital importance as the lack of legal framework constitutes an obstacle to the development of the economy. This legislation should deal with various aspects and related issues of e-commerce, such as digital signatures, Intellectual Property Rights (IPR), activity location, source of income, protection of personal data, security jurisdiction, consumer rights, etc.
- Organise a national campaign of sensitisation and information on technology use and precautions to be taken to reduce the vulnerability of users. This could be done in joint partnership of the Ministry of Education, Ministry of Population, and the Ministry of ICTs
- Establish a board to oversee authentication of digital signatures and the creation of an office for the protection of consumer rights.

Author's comments

In conducting this research, the lack of information particularly regarding e-business in Madagascar was a major obstacle. Moreover, statistical data or reports that evaluate the volume of online transactions (formal or informal) as a percentage of total GDP or the number of enterprises working in this area is non-existent. Also, this paper does not deal with the economic impact of e-commerce. In this regard,

we would like to request international organisations such as the ITU, Southern African Development Community (SADC), WTO, and the African Union (AU) to conduct investigations in the domain of e-commerce in Madagascar. Moreover, Malagasy researchers, scholars, and government departments are encouraged to undertake further research, as we noticed that no official documents or statistical data or reports have been published.

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Appendices

Appendix 1: List of persons interviewed/consulted

	Name	Function	Organisation
1	Gerard Ramangaharivony	 Special advisor at the Ministry of ICTs Responsible for and in charge of e-commerce at Association of ICT Operator of Madagascar (GOTICOM) 	GOTICOM, Ministry of Telecommunications
2	Naveed-ul-Haq	Assistant Director (ICT)	Pakistan Telecommunication Authority
3	Mahefa Rakotobe	IT specialist	Individual consultant
4	Felana RAJOHARISON	Tax inspector	Direction of Survey and Fiscal Legislation/Ministry of Finances
5	Marc RAMAMONJISOA	Head of Unit	Unit of Training / Direction Générale des Impôts/Ministry of Finances
6	Lydia RANIVOARISOAMAMPIANINA	Tax inspector	Department of Fiscal Legislation/ Direction/Générale des Impôts

Appendix 2: Interview list questions

1.	Do you think that electronic commerce should be taxed in Madagascar?		
2.	What are the major obstacles hindering the development or the taxation of e-commerce in Madagascar?		
3.	What system or model of taxation is favorable for the promotion of electronic commerce in developing country?		
4.	What are conditions that you consider having a large impact on the development of e-commerce?		
5.	What should be role of the government/fiscal authorities' role towards e-commerce?		
6.	What proposition do you recommend to the Malagasy administration/fiscal authority?		

Appendix 3: E-commerce environment in Madagascar

	Strengths	Weaknesses	Opportunities	Threats
Policy	- Existence of National Policy on ICTs - The process demateri- alisation of the admin- istration and e-gov- ernance are under- way and are being implemented at dif- ferent ministers	Lack political will from the government side to address issue of e-commerce in the near future Lack of awareness of the issue of internet governance for the public administration Lack of financial resources	Assistance of international of organisations (UNDP, ITU, WTO, WB) and countries (India, Mauritius) in the process of <i>e-governance</i>	- Political instability will have an impact on previous project initiated by former government
Economy	IT industry is playing an important role in the Malagasy economy Promotion of Foreign Direct Investment by the government Liberalisation of telecommunication market	Chronicle deficit of the commercial balance Insufficiency of fiscal revenue	- Globalisation of the economy, access of Malagasy product to the international market - Development of Business Process Outsourcing (BPO) in developing countries - Possibility to increase volume of exportation - Diminution and better control on the cost of production - The development of e-commerce will lead to an economical growth	The delay of the adoption of the law on the electronic commerce will lead to an enormous losses of fiscal revenues for Madagascar
Social	- Malagasy people are aware of the importance of ICT in their lives: educa- tion, communication, business - Malagasy manpower of quality and competi- tive on the international market	- Digital and knowledge divide between urban and rural areas - Lack of awareness of citizen on different usage of the technology - Reticence of some groups of people to practice e-commerce due to security and privacy issues - Vulnerability of the population	The ICT offers many educational and job opportunities Satisfaction of customers' needs Integration of Madagascar in the Information society (IS)	Piracy and swindling on the internet
Technology and infrastructure	Existence of national backbone Madagascar is connected to two international submarine optical fibers (Eassy and Lion)	- Insufficiency of IT skilled professional	Affordability and decrease in the price technology devices in the international market Decrease in the cost of communication	Depravation of Malagasy cultures due to the impact the internationalisation
Legal and institutional	- Existence of a law on institutional reform of Telecommunication sector (Law of 2005-23 du 17 October 2005) - Existence of law on foreign investment - Existence of bodies regulation such as the National Authority of Regulation of Telecommunications and the Banking and Financial Supervision Commission.	- Insufficiency of the legal tools that dealt with Internet issues	Availability of good model laws and convention by many interna- tional organisations (OECD, WTO, UN, CNUDCI)	Many e-commerce activities continue to operate in an illegal condition