

Introduction

New information and communication technologies are drastically transforming our daily lives. At the heart of this structural change is the Internet, refining the way we experience our social, economic, cultural and political world. The Internet is viewed as the primary driver for the changes that we are undergoing in the information economy. While the potential of the Internet has been recognized in various ways, it is the capability of conducting economic transactions via its seamless network that draws most attention. This potential has been recognized for its significant economic implications for business, and for welfare benefits to consumers by providing more convenience and choice. At the same time, as a transformation of modern communication systems is signaled by the emergence of electronic commerce (e-commerce) as a platform for commercial transactions and the delivery of goods and services, policy makers and legislators in the new policy environment also face daunting challenges.

In popular usage, e-commerce refers to any type of commerce conducted by business via advanced information and communication networks, and it has existed for a long time in the form of Electronic Data Interchange (EDI), which exists between firms over private or value-added networks that were leased from telephone lines. Moreover, the Internet is not the sole vehicle for e-commerce. While there are other media for e-commerce such as fax, television and CD-Rom catalogue sales, it is the Internet that has lifted e-commerce to the recent frenzy among businesses, policy makers, academics and even consumers. This medium of transmission is being used today to buy abroad many back-office services such as electronic publishing, website design and management, customer call centers, medical records management, hotel reservations, credit card authorizations, remote secretarial services, technical on-line support, research and technical writing. It has also being a medium for electronic transmission of many products that were traditionally traded in the form of goods. Thus, books, CDs, movies and computer programs can now be transmitted internationally in digital form.

Cyberspace makes trading easier and more efficient than ever. E-commerce has the potential of transforming existing trade networks and of reducing the handicap of geographical isolation. Firms around the world can now experience with new ways to contest global markets and countries can further benefit from international specialization. Moreover, in the case of services and digitized goods, e-commerce allows bypassing conventional distribution channels, fostering international market integration. Needless to say, these opportunities can only be realized if certain minimum requirements with respect to access to infrastructure (connectivity) and basic skills (digital literacy) are met.

As e-commerce provides a qualitatively new way of conducting economic activities and has broad social and economic ramifications for various stakeholders in society, national policy makers have been confronted by the issue of how this new form of economic interaction should be governed. As a result, there has been increasing demand for a framework to deal with this new form of economic activity at the national level. A difficult reality for national policy makers in handling this problem is, however, that this issue has a global dimension, because its technology presents challenges to the principle of territoriality and national sovereignty. E-commerce is born-global. This new form of economic interactions over advanced communication networks is urgently demanding a commonly agreed governing framework. The unique nature of e-commerce makes the establishment of the framework complicated and also makes country-specific solution problematic. The global issue needs global solutions.

In this thesis, I attempt to present a clear and comprehensive picture of international instruments dealing with e-commerce in several selected fields within WTO framework. The historical development of e-commerce in the WTO regime is also briefly reviewed. Among many e-commerce related legal issues, fourteen issues were selected and grouped into four categories as follows: (1) fundamental knowledge and general principles (definitions, classifications, GATS models, technological neutrality and the question of likeness); (2) access (access to infrastructure, access to networks and access to internet services); (3) ground rules (taxation, intellectual property rights and competition); (4) trust (privacy, security and consumer protection). A brief discussion about the future and what could we do in these key areas is offered. However, the pure international private legal issues such as jurisdiction, choice of law and contract law, tort law which regulated without special articles in the environment of the civil law on e-commerce issues, and other criminal issues, for example computer crime, would not be covered by this thesis.

The thesis consists of seven chapters. It will begin with the Chapter One, explaining the research topics, definition and classification of e-commerce and a debate of internet regulation. The second section of this chapter turns to the regulation of e-commerce under the WTO framework. Then it goes to the Chapter Two, which contains the necessary fundamental knowledge and general principles for this legal research, such as technology neutrality principle, questions of likeness, MFN, NT. These issues may help us to understand the topic of e-commerce under WTO from a macro angle of view. Following Chapter Three will focus on one of specific legal issues called market access, which is the premise of the liberalization of e-commerce. The next Chapter Four aims to examine the intellectual property rights issues of e-commerce, involving the TRIPS documents analysis, the safeguard existing, its problems and solutions. Focusing on the revenue and tariff aspects, Chapter Five will analysis the main problems relating to taxation of e-commerce, study the variety of views on e-commerce government from the U.S., the European Union, the Organization for Economic Co-operation and Development (OECD), developing

countries and also the WTO policy. Then I further point out the legal practice and new problems coming with the Internet. Chapter Six will provide regulations, analyze problems, conflicts and also give solutions about competition, privacy, consumer protection, and the safeguard against fraud issues regulated in the WTO framework. Chapter Seven will provide some suggestions and analyzes for the current situation of China. Finally, it goes to the conclusion of the whole thesis, which summarizes research findings in relation to research questions and discussing them within the context of the theoretical framework that guided the study.