International Economic Relations and Information Communication Technologies (ICT) Use: Economic Globalization via Economic Digitalization

Athanasios I. Bozinis
Department of Marketing and Operations Management, University of Macedonia
156 Egnatia Street, 540 06, Thessaloniki, Greece

Abstract: The definition of globalization refers to the unification of the countries international economies, as an even system distinctive for its intense mutual reliant association. Globalization does not demand natural presence of the countries in order to conduct product exportation or importation, since all economical procedures may be achieved through the propagation of information and financial capitals. The scope of this research was to analyze the relation between economic globalization and the use of Information and Communication Technologies (ICT). This article argues that the countries that absorb modern information and communication technologies may be developed and function as active parts of the international economical system and part of the economic globalization process.

Key words: Globalization, International Economic Activities, Information and Communication Technologies (ICT)

INTRODUCTION

The use of new technological achievements in the field of economy resulted mainly in the transfer from a seigniorial society to the society of the trade capitalism during the 16th, 17th and 18th century, which was later, proved to be the industrial capitalism[1]. The invention and wide use of steam brought about the onset of the Industrial Revolution in the end of the 18th century and incurred great changes, regarding the methods of financial transactions, social affairs and policies amongst countries. A very distinctive example is Great Britain, whose boost of industrial production created and established Pax Britannica that collapsed after the end of World War II[2].

The invention of steam engines and other industrial innovations created new economical and social theories about ways of producing, delivering and consuming goods, which later on affected global political stage and countries' affairs, the spread of production factors and the market's function, based on the two economical theories appointed by Marxism and Capitalism[3]. After the end of WW2 the adoption of these economical theories by great countries resulted the beginning of Cold War, that lasted almost fifty years and divided the international system into two parts – the capitalist and the socialist.

By the end of the Cold War the prevalence of liberalism to the international economical affairs and global trade, was fully escorted by the procedure of globalization in a sense that defined the increased procedure of unification of international economies[4].

In English, the term with its current significance appeared for the first time at Webster dictionary (1960), whereas in the bibliography of social sciences the first to mention the term “globalization” in the beginning of the 70s' were the sociologists, who connected the term with the meaning of “global system” of Wallerstein[5]. It is not an offspring as a meaning, since it appears for the first time in the work of many thinkers during the 19th and 20th century by economists, such as Karl Marx, by sociologists like Saint – Simon and by geopolitical scientists like Mac Kinder, who investigated the way in which the modern way of life unifies the world[6].

The inspirator of the term was the American economist Theodore Levitt in 1983, who used it to describe the congruity of the markets in a global scale[7], while the ultimate use of the term was mostly adopted during the second half of the 80s' when the huge wave of the instant foreign investments was observed on behalf of the multi – national enterprises[8].

Theoretical background: Definitions and problems of globalization: The word globalization is initially interpreted and analyzed as the central part of the theory that describes the global politics while at the
same time is an objective that holds constant academic analysis. The meaning does not hold a unique or unconventional definition[9].

At Penguin Dictionary of Economics the term globalization is analyzed as “a geographical meaning with intense economical procedure throughout international and cross – national level. Globalization does not demand natural presence of the countries in order to conduct product exportation or importation, since all economical procedures may be achieved through the propagation of information and financial capitals”[10]. Joseph Nye interprets the term of globalization as: “The result of both the technological progress and the governments' policies that have limited the obstacles in international transactions”[11]. Globalization for Pascal Boniface “Is the ban of distances grateful to modern technologies, either we talk about communications or transportations. Not only does it concern the economical atmosphere, but it approaches people in their everyday life, as well”[12]. Thomas Friedman claims that “Globalization means the expansion of capitalism and the free market all over the countries, it has its own rules and it is based on the privatization of economy”[13]

Today globalization (and its numerous patterns) remains a process to be revolutionized, however, the issues regarding the effective use of the definition and its meanings still remain unsolved (Table 1). Even though the international academic and investigative community has dealt with the issue of globalization in depth, it has not come up with an acceptable definition or a historical flashback that will be accepted by the whole scientific community[14]. A fundamental problem of globalization is the use of the its own definition: most countries of the southern hemisphere (Africa, Latin America and the developing countries that belong to the third world) are away from the globalization process, thus the definition is not effective. Instead off globalization many academic teams resort to the use of internationalization.

Another significant problem of globalization is the fact that it cannot be efficiently absorbed in its total through indicators due to its multiple patterns. A way to measure globalization was given by the Global Policy Forum, which mentions that it is impossible to evaluate and use indicators so as to depict a demographic change, the economic integration, the use of technology, the digital divide and finally the cultural change[13].

| Table 1: Current problems of globalization |
|-------------------------------------------|
| * There is not a unique and acceptable definition appointed by the academic community |
| * There is not a specific and acceptable historical background in order to manifest the globalization process |
| * It cannot be efficiently measured with multiple indicators |
| * Its various mutual reliant patterns impede the effort to analyze and control the process so as to benefit both countries and citizens. |

According to Joseph Nye there are these patterns of globalization, listed below:
* Environmental mutual reliant association
* Military globalization
* Social globalization, which he describes as the expansion of people, ideas and civilization.
* Religious globalization
* The political globalization that is apparent with the expansion of constitutional laws and with the incorporation of the international legislations and rules of the countries.
* Finally, the economic globalization[16].

**Economic globalization via economic digitalization:**
The economic side of globalization and its consequences possess the leading role not only within academic discussions, but within the whole international people's community. The definition of economic globalization refers to the unification of the countries’ international economies, as an even system distinctive for its intense mutual reliant association that holds the most significant feature; the theory of the economic domino. According to Jeffrey Sachs, Professor of International Political Economy at Harvard University, “International economies are constantly and gradually being fulfilled through four basic ways: through trade, financial flows, production and a certain web of conditions and institutions”[17]. The two most powerful forces that forward the economical globalization “process” and at the same time being forwarded by it are the liberal economy and the use of ICT[18].

As Tim Berners Lee claims “The Internet is undoubtly breaking down barriers to which we used to rely on for centuries regarding our self – assessment and self – protection, still it may raise new ones”[19]. The use of ICT to international economies results in the digitization of financial operations, especially those in the stock markets, as well as the 24 hour connection and operation of the international stock markets. The so – called electronic flock by Thomas Friedman is an example of the global capital with an electronic pattern: “Nowadays, the global market is an electronic flock that consists of anonymous share investors, securities and exchanges that are connected via screens and networks.
They consist of exchange traders, immense mutual and pensioning funds, insurance companies, exchange banks and civilian investors[20]. For Paul Kennedy, the fulfillment of global economy and the globalization process are closely connected with another two facts: “The turning off that occurred to the international stock markets and the revolution to international communications as a result of the new technologies. Without the increase of the enforcement applied by the electronic computer systems, software, satellites, optical fibers and high speed electronic transmitter, international markets would not be able to function as a whole unit[21].

According to Joseph E. Stiglitz, the unification of international economies “Occurred by the immense reduction of transportation and communication expenditure and by the collapse of technical barriers that were an obstacle to the flow of the goods, services, capitals, knowledge and at a lower degree of people through borders[22].” Samuel P. Huntington claims that “State governments have lost their ability in a major level to control cash flow in and out of their country, therefore difficulties grow bigger and they become unable to control the flow of ideas, technologies, product goods and people. In other words, state borders have become penetrable[23].

As James E. Dougherty and L. Pfaltzgraff mention “No logical observer can deny the fact that the world is gradually being fulfilled as we cover the 20th century as a result of economical and technological evolutions, which connect all parts in a global system”.[24]

International economies were very closed during the 50s’, as Anthony Giddens remarks and consequently he concludes that “The revolution and the spread of technology and information are closely connected with the globalization process. This is also apparent to the economic track. Stock markets operate 24hours a day and they depend on the congruity of satellite technology and thus affecting many society sectors”.[25] Robert Gilpin also quotes that: “The daily turnover of monetary transactions was increased by 15 billion dated in 1973 to 1.2 trillion in 1995, capital and security markets were developed and grew stronger and global. The ability to transfer billions of dollars from one economy to another with the push of a button transformed the international financial affairs and enforced their impact on international and domestic countries”[26]. In the beginning of 2000, John T. Wahl president of NASDAQ International claimed that “Within 10 years 70% of the transactions that take place in stock markets will be conducted via the Internet by people sitting in front of their computer[27].

CONCLUSION

The use of ICT is the key to access the international economic progress and procedures. The countries that absorb modern communication technologies may be developed and function as active parts of the international economical system. Its procedure gains weight and importance with the use of digitization of financial exchanges. The reduction of access, process and transmission cost of economical information, the function of global stock markets in Real time on a 24 – hour basis is the most fundamental element for the economical unification of the term and the potential to expand and fulfill the globalization process. The enduringly increasing use of ICT within the Information Society will digitalize the international financial and economic transactions and ordinary commercial operations. In this way, the economical unification of the world and international economies will be empowered.

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International economic relations play an important role in the growth of economies across the world. For economic relations between nations to be successful, a number of conditions need to be fulfilled. Unrestricted movement of goods and services, flow of capital, mobility of workforce, and reduction of regulatory obstacles need to be ensured for successful economic relations. The success of economic relations is often dependant on information. Globalization has led to reduction in cultural barriers which has proved to be conductive for economic co-operations among nations. Movement of capital between countries due to globalization has also played an important role in international economic relations.