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ABSTRACT

This paper describes the areas in which globalization as a process encompassed the globe, the pace of change and its multidimensional effect.

The paper also highlights many examples of positive effects, benefits from the process of globalization in many areas, especially in the economic aspect of the international community.

Globalization as a process, of course, has also met with anti-globalists, who are skeptical about the benefits of this process, but at the same time concerned. This point is elaborated in detail in the paper, starting from their point of view on globalization as a determinant of creating inequality of strata, then which countries, regions or cultures are endangered by this process in a multidimensional context, but also radical forms of opposition on their part.

Key words: globalization, international community, international relations, international organizations.



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1. Introduction

This paper is concerned with significiance and effects of globalization. In addition, this paper describes the areas in which globalization as a process encompassed the globe, the pace of change and its multidimensional effect.

Some definitions are emphasized from the point of view of various scholars on globalization, especially in the economic, political, cultural context etc, among other things, the author's conclusion on globalization as a process is given. Further elaborated the first attempts of globalization in the international community by establishing regional and international organizations. It then emphasizes the emergence of globalization as a phenomenon in international relations, as well as what are the three main events that prompted things at the local, regional level to evolve in the global spectrum. The reason for the emergence of these organizations is analyzed, as well as their impact on the global level, in the economic and political context.

Then was elaborated the impact of globalization as a process on the creation of a new international order, as well as the impossibility of avoiding this process. The paper also highlights many examples of positive effects, benefits from the process of globalization in many areas, especially in the economic aspect of the international community.

Globalization as a process, of course, has also met with anti-globalists, who are skeptical about the benefits of this process, but at the same time concerned. This point is elaborated in detail in the paper, starting from their point of view on globalization as a determinant of creating inequality of strata, then which countries, regions or cultures are endangered by this process in a multidimensional context, but also radical forms of opposition on their part.

2. Definition of globalization

Today, the world reflects the overview, the trend of economic and social development, political and cultural, fast and mass communications, migration, transport and many other segments around the world. This

trend of change and development has been achieved as a result of the transformation of things from the local, regional to the global level.

Continuous globalization is accompanied by the pace of development and change, with an impact on various spheres of life. In the context of globalization, this is made possible by the exchange of different attitudes, products, ideas and cultures of different nations. So “globalization is not a single, unified phenomenon, but a syndrome of processes and activities”. (Mittelman, 2000, p.4). Globalization, therefore, as a process proves that we are facing a phenomenon that is reflected in its framework in several dimensions and which is all connected in a complex way.

In international relations, many definitions and different meanings of globalization are given, which differ according to the tendency of scientists. “There are probably two or three hundred different definitions of globalization to be found among these 101 million cites identified by Google”. (Boudreaux J, 2008, p.1). From an economic point of view, some believe that globalization highlights the risk of capital accumulation in multinational companies and the disappearance of small businesses, the other side recalls the positive aspects of market opening and removing barriers to work, while the third congratulates the countries isolated on their freedom and strong movement towards the world and progress.

Economic “globalization” is a historical process that result of human innovation and technological process. It refers to the increasing integration of economies around the world, particularly through trade and financial flows. The term sometimes also refers to the movement of people (labor) and knowledge (technology) across international borders. There are also broader cultural, political and environmental dimensions of globalizations that are not covered here (IMF 2006).

By globalization we refer to a more advanced stage of this process of development’. Langhorne (2001:2), meanwhile, accents the proliferation of technology: ‘Globalization is the latest stage in a long accumulation of technological advance which has given human beings the ability to conduct their affairs across the world without reference to nationality, government authority, time of day or physical environment”. (Chamsley & Patrick, 2006, p.13).

“Globalization has problematized national spaces profoundly. States can no longer make grand claims to be custodians of a national economic

project – all states are now subjected to powerful interventions and discipline from external agencies. Furthermore, the liberalization of international economic activity has led to new forms of economic integration, not based in national markets or national plans, but perhaps regions, sub-regions, industrial enclaves, Export Processing Zones (EPZs), strategic resources, tourist coastlines, and clusters of technological innovation”. (Harryson, 2005, p.5).

According to some scholars, globalization as a process has an impact in the political context, according to “Kofi Annan, secretary-general of the United Nations, even went as far as to call for redefining sovereignty because of the forces of globalization “. (Nassar R, 2005, p.6).

Very often different scholars often explain globalization in these critical terms. Martin Khor, for example, in an address to the International Forum on Globalization in New York City, proclaimed, “Globalization is what we in the Third World have for several centuries called colonization.” (Nassar R, 2005, p.7)

According to these scholars, globalization as a process intervenes in redefining the sovereignty of nation states, namely the sovereignty of the nation state, in an effective context, goes through its relative contraction, narrowing the room for maneuver of nation governments.

“As a concept globalization is difficult to understand, more difficult to interpret and perhaps most difficult of all to appraise. Globalization marks the end of geography and the rise of conflicts and clashes both actual and potential between developed and developing countries. Its effects however, are often more misunderstood than understood”. (Ghosh, Guven, 2006).

Referring to the numerous definitions given about globalization, we can come to the conclusion that: Globalization is a representative term for a complex set of economic, social, cultural, technological and local political changes, regional in global phenomena, which are observed in interdependence, integration, increasing interaction between peoples in different parts of the world. Also, globalization cannot be treated as a phenomenon that has an exact time period of beginning, given the dynamics of strength or speed of these changes, nor an exact end date towards full globalization.

3. Significance of globalization

A new trend in the international community in the context of interdependence appeared in the second half of the 18th century and beyond. This change is accompanied by a large movement of goods, money, people's circulation, development of information and technology, which has resulted in the creation of many organizations, which focus on mutual security, economic, political, cultural cooperation, social, etc. "The intensification of global interdependencies and the consolidation of the global as a social horizon—both captured in the now popular term globalization—have provided fertile ground for the creation of new organizations and the expansion of existing ones". (Drori & Meyer at all, 2006, p.1).

The political significance of globalization was reflected in the creation of international organizations, in coordination between the United States and Russia, brought about the establishment of the Arbitration Court in 1899, based in The Hague. This period marks the creation of several other organizations, such as the International Labor Organization, founded in 1864, the International Committee of the Red Cross (ICRC), established in 1863 to protect soldiers wounded in the war.

This era, for the first time in world history, marks the creation of an unprecedented political apparatus. The continuation of efforts towards globalization in the political field has been the creation of an international organization, such as the Causa League of Nations, but unfortunately as a result of the failure to prevent wars through collective security and disarmament, and the settlement of international disputes through negotiations and arbitration led to World War II.

In the sense and direction of creating a new international order, especially the one related to the aspect of global security, after the end of the Second World War, on June 26 in San Francisco, with the signing of the United Nations Charter, the United Nations was created.

1. To maintain international peace and security, and to tht end: to take effective collective msures for the prevention and removal of threats to the peace, and for the suppression of acts of aggression or other breaches of the peace, and to bring about by peaceful means, and in conformity with the principles of justice and interntionl law, adjustment or settlement of international disputes or situations which might lead to a breach of the

peace. (UN Charter). Several organizations have been formed at the regional and interregional level, like Europe Union, Organization for Security and Co-operation in Europe, Organisation for Security and Cooperaton in Europe, North Atlantic Treaty Organisation, and African Union etc.

The creation of these mechanisms has, in fact, been reflected in the creation of a more peaceful climate in terms of security through conflict prevention, resolution and peace-building at the national, regional and global levels. In economic terms, globalization is manifested by the creation of the International Monetary Fund (IMF) in 1945, the World Bank for Reconstruction and Development, based in Washington.

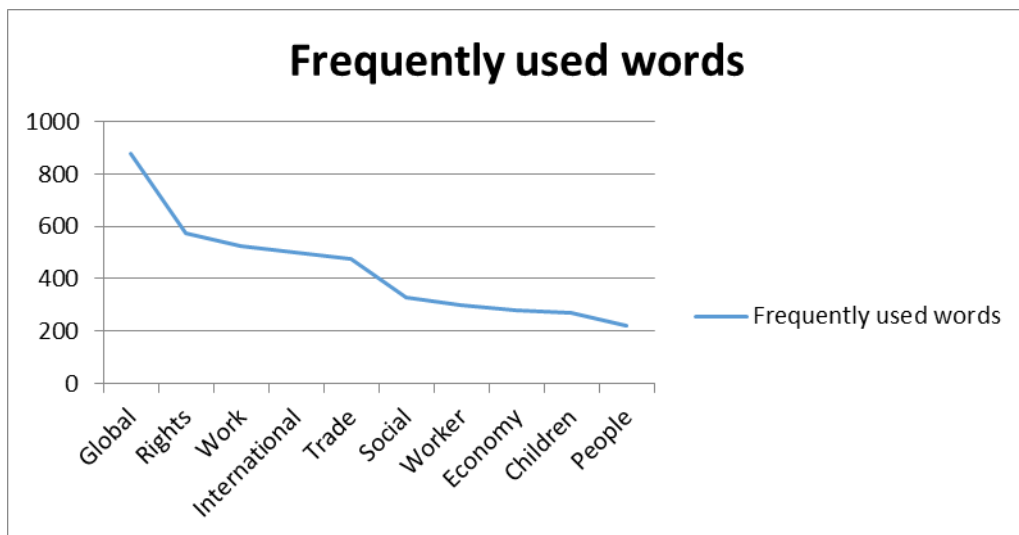
The primary purpose of establishing IMFs was to create global monetary cooperation between countries, promote stability, promote high employment, sustainable economic growth, and reduce world poverty. Since its inception, the IMF has 190 member countries and is spread around the world (IMF).

Globalization as a phenomenon dates back to the eighties and then to the twentieth century. The end of the Cold War, the establishment of the World Trade Organization (hereinafter: WTO) and the great revolution in technological development in the field of electronic communications and information transfer were the three main political and economic developments that followed in this period. At the economic level, globalization is manifested by the opening of borders, free trade that has had an impact on increasing capital flows, including foreign direct investment, increased exports and imports. The conclusion of many international agreements has led to the creation of organizations such as the WTO, the Organization of the Petroleum Exporting Countries, as well as the growing role of organizations such as the IMF and the World Intellectual Property Organization (WIPO). In economic terms, the establishment of the WTO was the culmination of the ideology of free trade and market economy that covered the world east and west, and it is also the only global organization that deals with the rules of trade between nations.

In globalization, it is not only economic exchanges and political agreements that manifest themselves as processes that connect nations and society, but globalization is increasingly appearing on a cultural level. The basis of this phenomenon is related to the media through which the

cultures and traditions of different peoples and countries are united. In the present tense “we argue, globalization provides cultural ideologies and legitimization, demanding and facilitating the organizational reconstruction of much social life”. (Drori & Meyer at all, 2006, p.12). Thanks to cultural globalization, mass media and communication, this process is accompanied by increasing international cultural exchange, with the aim of spreading multiculturalism and better individual acceptance of cultural diversity. The term globalization today is used more and more, thanks to cultural globalization, mass media and communication, this process is accompanied by increasing international cultural exchange, with the aim of spreading multiculturalism and better individual acceptance of cultural diversity. A study conducted by the authors Steger B and Erin Wilson K, on the use of the term global, included 45 organizations at three levels, local, national and regional, from the analysis of this study it was found that the term "global" is the word most commonly used by these organizations.

Figure 1: Most frequent words counts across all 45 organizations



Source: Manfred B. Steger, Eric K. Wilson

Globalization continuously produces important transformations around the world, through political, economic and cultural union, on the one hand,

but also dependence on the other, with imposition and effect directly or indirectly on our everyday life. Globalization is also proving to be a process and phenomenon, in terms of dynamic pace, inevitable in all economic, social, political, technological developments, interconnected universally, implying that the future will be a "world without borders" in all segments of life.

4. Globalization as a new process

After World War II, the United States took the initiative to establish a new liberal world order and globalization. Liberalization began with trade between high-income countries, through the free movement of goods and services, and gradually spread through the flow of capital, while in other developed countries this approach was approved two or three decades later.

With the recent movements of international community toward unification of rules in different fields, but specially the international market, the globalization process is taking increasingly larger size strengthening and creation of a system dependent on which independent states are obliged to act and behave. It is a process that no state can avoid. Globalization is regarded by many as a force that redefines state functions and even decreases state power (Ariely, 2012).

However, in the international community we have different opinions about globalization as a process; some consider it dangerous for the economic system, while others see it in terms of the progress of the world economy.

If we compare the gross world product (hereinafter: GWP) which is traded on the international market immediately after the fifties to the sixties, today it corresponds to about two and a half times higher. Annual GWP is the market value of all final goods and services produced in the world during a year (Boudreax J, 2008, p.4).

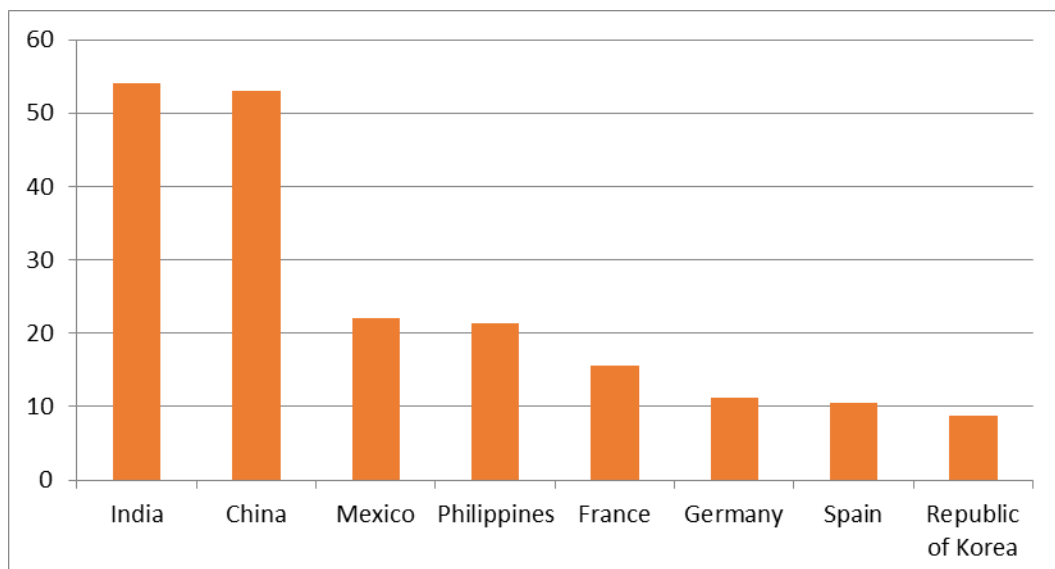
But what were the reasons, the causens that the states pushed or found interest in by participating in international trade. In fact, there are three reasons why different countries are encouraged to accept this process:

- different conditions of production between different countries and regions
- the reduction of costs of production
- differences in taste

(RIINVEST-Institute for development research, 2007, page 37)

It is valuable and important to point out that the post-war system was a program, both economically and politically, because the spread of liberal democracy was perceived as an international gain. Migration and science played a significant role in the global process of integration. Three percent of the world's population- more than 213 million people – now live in countries in which they were not born. Migration is on the rise, especially from poor economies to rich economies. In many high-income economies, the population is aging and growing slowly, while in many developing countries the population is young and growing rapidly. Labor integration brings an exchange of values, knowledge, perspectives, at the same time being accepted as a need and assistance in meeting the requirements for the economy of the receiving country, on the one hand, but this process has the opposite effect. Migration is often accompanied by a flow of remittances-transfers of gifts and wages and salaries earned abroad-from migrants to their countries of origin (Atlas of global development 2013).

Figure 2: Remittances for selected economies, 2010



Source: Atlas of Global Development, 2013; World Bank.

Figure 4 shows the level of remittances in developing economies and some high-income economies. The top remittance receiving developing economies in 2010 were India (\$54.0 billion), China (\$53.0 billion), and among high income economies France (\$15.6 billion), and Germany (\$11.3 billion).

5. Positive effects of globalization

Many globalization scholars give numerous examples of a multidimensional effect in the positive context of globalization. According to them, globalization has benefits that cover many different areas including developed economies all over the world, free trade, large movement of goods, money, increase in exports and imports, financial exchanges between companies, foreign direct investments, migration, increased cultural exchanges and changing the paradigm of work.

In all this process, as a result of migration, many people are nowadays citizens of the world. The origin of goods became secondary and geographic distance is no longer a barrier for many services to happen.

As a result of the free movement of people and migration, in different countries this has resulted in over population. Example causa comparing the Hong Kong's population density with United States (0.85 persons per square mile), or to that Argentina (38 persons per square mile) or to that Laos (71 per square mile) or to that of Africa's densely populated country.

If we consider the geographical area of Hong Kong a mere 5 percent, or 21 square miles, of this tiny country's land is arable.

But despite these apparent handicaps, Hong Kong are one of the wealthiest places on the globe.

Its people enjoy a standard of living similar to that of most western European countries. Hong Kong's per capita annual income of \$32,900 compares well, for example, to that of Belgium (\$31,400) Switzerland (\$32,300) France (\$29,800). There is no doubt that the standard of living enjoyed by the people of Hong Kong today ranks among the world's highest (Boudreaux J, 2008, p.15&16).

Undoubtedly, this high standard of living would not have been achieved if there were obstacles to free trade in Hong Kong, but on the contrary, this process has been accepted by two actors in the country.

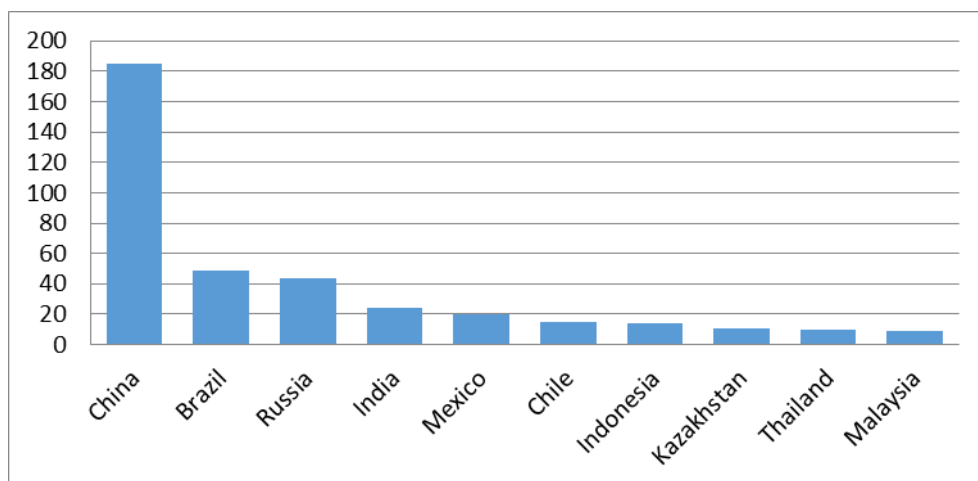
It turned out that export and import of goods in the national economies of states in certain periods of time, was an important factor in the Gross Domestic Product (hereinafter: GDP) of nation states. Example causa, products produced in U.S. mines, farms, and factories accounted for about four percent in the 1950s. While today, the value of USA, merchandise exports are about eight percent of GDP, while of merchandise imports is about eleven percent (Boudreaux J, 2008 , p.7).

If we take into account the growth of exports and imports in this time period, as well as its direct impact on GDP, we conclude that this is an extremely important parameter in a country's economy.

Foreign direct investment is a key element of international economic integration, at the same time an important source of foreign capital for different countries, but it has had a particularly positive effect in developed countries.

“Since the 1980s, foreign direct investment (FDI) has expanded greatly and is currently the largest source of foreign capital in developing countries“. (Glen, 2010).

Figure 3: Developing countries that attracted the largest FDI net inflows, 2010



Source: Atlas of Global Development, 2013; World Bank.

This positive effect in attracting foreign investment, where mainly developed countries have an advantage, is reflected in the World Bank's 2013 Global Development Atlas. According to this source, China received over 80 percent of FDI inflows to East Asia and the Pacific in 2010.

Together with economic and financial globalization, there has obviously also been cultural globalization. Thanks to information technology, communication, music art, globalization has already increased the similarities among people everywhere. We have now global languages, English, French, Spanish Chinese, in essence, global as hundreds of million of people speak at least one of them. (Nassar R, 2005, p.4).

Viewed from a positive prism, knowledge of a foreign language produces a multidimensional effect, introduction to a new culture, use of advanced literature related to the development of the individual and society in the field of education, development of society in all areas, including cultural and economic.

Thanks to the development of information technology, the power of the Internet, books, music and film is available for use and certainly contributes to the development of cultural events and globalization. In fact, cultural globalization is accompanied by the unification of norms, principles and values of modern society.

6. Negative effects of globalization

The growth of trade, the opening of borders, the inflow of capital, the transfer of technology between countries, the spread and influence of new cultures through migration, tourism, the power of the Internet in the world, are viewed with skepticism against globalists.

According to them, globalization will have a multidimensional negative effect on key segments of their lives, namely economic growth will affect greater income inequality, violation of living standards, creating differences between rich and poor, but also violation of the existence of the population. Inter alia, what worries most to them, is the fear of global

hegemony.”The most prominent and, to many, most disturbing aspect of hegemonization has been in the area of global homogenization”. (Nassar R, 2005, p.4).

Economic growth will create dependence and a kind of imposition of poor countries in relation to developing countries, as a result of liberal economic reform and programs of key financial institutions in the world, such as the IMF, WTO, etc. This has actually diverted attention from the threat of privatization in relation to public welfare as well as the security of the poor, and has created a kind of concern (Nassar, 2005, p.4).

As a result of globalization, economic growth, but not equivalent, can also create income inequality.

An article published in 2001 by economists David Dollar & Aart Kraai analyzed income and income growth in 80 countries by 40 places. “The average income of the poorest fifth of a country’s citizens is higher by about the same percentage as that country’s per-capita income is higher. For example, if South Africa’s per-capita income is 10 percent higher than the per-capita income of the Philippines, the average income of the poorest fifth of South Africa’s population will be about 10 percent higher than the average income of the poorest fifth of the Philippines population”.(Boudreau, 2008, p.29&30). Globalization as a process has also increased the feeling of creating a high degree of disproportion between the strata, which has in fact resulted in practice in some countries.

Example causa ‘In Egypt, for example, the infitah, or liberalization, has led to a sizable rise in poverty along with a rise in the wealth of the few. The middle class is being squeezed out of existence”.(Nassar,2005,p.13).

Although many see globalization as a necessity, namely the alpha and omega of solving economic problems, anti-globalists see and perceive this process as a permanent threat to the poor, because privatization will affect two key segments of their lives, the public. Welfare as well as fragmentation of security infrastructure, another issue that globalization will face is the fear of cultural hegemony.

Against Western globalization, Western modernism reflects Islamic social movements, describing the ties of religion, family, and tribe and the will for individual autonomy. (Ghosh N, p.37).

The reaction, namely the resistance to cultural modernism, comes from the fear of losing cultural identity, loss of principles, values of traditional society towards merging with modern society.

Resistance to globalization is expressed and manifested in various forms of opposition in the world. In certain cases, this was accompanied by dissatisfaction, expressed protests and acts of violence.

At frequent meetings held by the WTO, the IMF and the World Bank, as a sign of dissatisfaction with this trend, demonstrations erupt in various countries around the world, and in some cases pass with the use of violence by demonstrators.

Acts of violence are directed at corporate leaders by their abduction, and attacks on their property by guerrilla attacks are not uncommon (Nassar R, p. 13)

.Anti-globalization as a process, namely anti-globalization feelings are evident in developed countries, respectively in rich wine countries.

In a survey conducted by the World Economic Forum on Global Public Opinion on Globalization, conducted by the Canadian research firm Environmentic International, which surveyed twenty-five thousand citizens in urban areas, in twenty-five countries, and which was presented at the annual meeting of the World economic forum in New York at the beginning of the year, and it turned out the opposite.

“In fact, anti-globalization sentiments are more prevalent in the rich countries of the North, while pluralities of policy makers and the public in the poor countries of the South see globalization instead as a positive force “. (Bhagwati, 2004, p.8).

From what has been presented so far, we conclude that anti-globalization like a process, is not only expressed in poor countries due to the creation of an economic monopoly in trade, deepening the gap between rich and poor, fear of loss and cultural identity, etc., but is also present in rich countries.

Conclusion

Today, the world reflects the trend of great changes in all segments of life. This change comes as a result of transformation, development and major economic, social, political, cultural and technological changes from the local and regional to the global level.

This process of transformation is made possible by the great movement of goods, money, the circulation of people, migration, the development of information and technology. Efforts, initiatives of various countries for international integration in the economic and political context, date back to the 19th century, with the creation of the first international organizations, such as the International Red Cross, the Arbitration Court, the League of Nations, etc. The end of the Second World War, the creation of the United Nations, the IMF, the World Bank, and especially the end of the Cold War, the establishment of the WTO and the great revolution of technological development in the field of electronic communications and information transfer were the three main political and economic developments towards globalization.

Globalization as a process in the international community has been accompanied by the unification of rules in various fields, including political, especially economic. In the political, but also in the economic context, this process has influenced the increase of the level of security, circulation of money, capital, investments, labor migration.

It turned out that globalization is a process and phenomenon, in terms of dynamic pace, inevitable in all economic, social, political, cultural, technological developments, interconnected universally, implying that the future will be "world without borders" segments of life.

Among other things, globalization has the vice-versa effect, because in international relations it has resulted in the creation of a dependent system in which independent states are obliged to act and behave.

Today, the world is divided into two poles, pro-globalist and anti-globalist, about the effects of globalization.

Those who are pro-globalization justify and argue this with advantages in a positive context, and the multidimensional one.

The cause of the increase in exports and imports, from the growth of foreign direct investment, the effect on the growth of the national economy, the development of the world economy, as a result of migration, many people today are citizens of the world, and geographical distance is no longer an obstacle to services.

Although many perceive globalization as a necessity, namely the alpha and omega of solving economic problems, anti-globalists see and perceive this process as a permanent threat to the poor, income inequality, difference between layers etc. The spread and influence of new cultures is also reflected in the fear of losing cultural identity, losing the principles and values of traditional society towards fusion into modern society, namely towards global cultural hegemony.

In addition to the loss of cultural identity, globalization will affect two key segments of their lives, the life of public welfare and the fragmentation of security infrastructure. Forms of dissatisfaction, resistance to globalization are different in the world, including violence in certain cases.

But this type of opposition is not really present only in this category of poor countries and regions; on the contrary in poor countries, most policy makers and the public see globalization as a positive force, while anti-globalization relations are more prevalent in rich countries.

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SYSTEMATIC REVIEW OF BIG DATA, DIGITAL TRANSFORMATION AREAS AND INDUSTRY 4.0 TRENDS IN 2021

Aybeyan Selim, page 27-41

ABSTRACT

Industrial development has been going on for several hundred years. In the XX century, three great industrial revolutions occurred in human life. Today we can discuss the fourth industrial revolution, called Industry 4.0. Industry 4.0 takes overproduction with robots that can communicate, detect the environment with sensors and realize the needs by analyzing data. This industry aims to produce better quality, cheaper, faster, and less wasteful. In addition, Industry 4.0 allows objects to communicate with each other and with people by monitoring cyber-physical systems and physical processes in modular smart factories, enabling decentralized collaborative decisions. Applying Industry 4.0 to protect and sustain their existence is inevitable in a competitive environment for businesses and organizations. It is necessary to know the industry 4.0 concept and its fundamental paradigms. Therefore, in this paper, we explained Industry 4.0 and studied his applications areas in 2021. Our study shows that Industry 4.0 is not present, and the technologies are much less current in industrial production in North Macedonia. The key term of the Fourth Industrial Revolution is poorly understood; the presence of Industry 4.0 in the media is deficient.

Keywords: Industry 4.0, automation, robotics, manufacturing, and interconnection.



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Introduction

The first manufacturers began to form from the pre-industrial era. Pre-industrialization was important not only because of production but also because it strengthened many economic, social, and demographic relations that provided a reasonable basis for production progress. In terms of the economy, the concept of supply and demand advanced, and people had to go to cities to sell or buy resources, which strengthened the trade network. In social terms, many people went to the cities, thus establishing work discipline. Demographic, economic, and social outlook have stimulated population growth due to a simple calculation says more people can produce more products and result in higher earnings (Gelderblom & Trivellato, 2019).

The industrial revolution is a process that started with the introduction of new technologies and sources in the second half of the 18th century to increase production speed and reduce the cost of the finished product. Emphasis was placed on transferring manual labor to an industrial model with designing the new machines. The first industrial revolution begins with the invention of the steam engine. The second was the discovery of electricity and oil, and the third was the invention of transistors and the discovery of atomic energy. The fourth industrial revolution or Industry 4.0 refers to the emergence of robotics, the application of digital transformation, and the creation of the so-called intelligent factories.

Industry 4.0 is the name of a project proposed by the German government that promoted the digitalization of production (Skender and Ali, 2019). Germany raised the digital transformation of production, and this project gained significant interest and interest in Europe. Germany wanted to become a leading country that would put new production ideas on the market and find their advanced solutions, not planning that this project would stimulate thinking about a fourth industrial revolution. All leading countries of the European Union have accepted the assignment, adopted its concepts, and encouraged EU members to adopt the project in the mid-10s of the 21st century (Zervoudi, 2020).

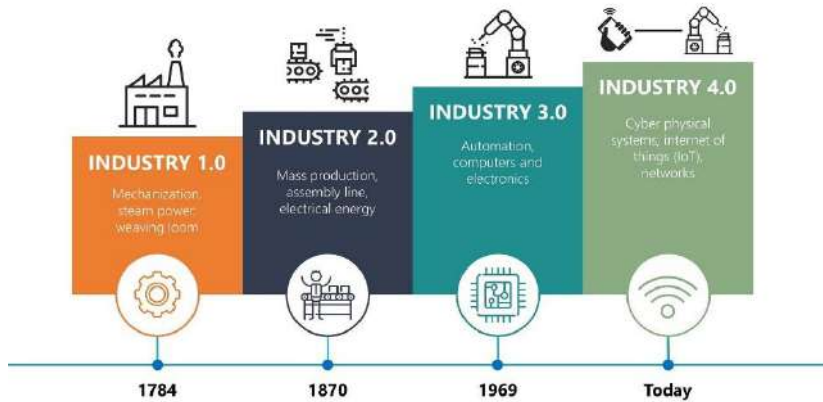


Figure 1. Historical development of Industry (Source:

<https://www.presentationpoint.com/blog/data-signals-triggers-industry-4-0/>)

Production processes based on the latest technology and covered by devices for mutual autonomous communication best describe what Industry 4.0 is. "Smart" production has become an inevitable norm in a world where machines controlled by artificial intelligence that can independently exchange information are used. The production goal did not change during all the industrial revolutions (Ortiz et al., 2020). The purpose of Industry 4.0 is to increase productivity by as much as 50% more than it is now and to reduce the resources needed for production (financial and physical). The main features of Industry 4.0, according to (European Parliament, 2016), are:

- **Interoperability and interconnection:** Interoperability connects cybernetic and physical production systems that consist of work surfaces, assembly sites, and production itself. They allow people and smart factories to connect and communicate with each other.
- **Information transparency and virtualization:** A virtual copy of a smart factory was created by connecting sensory data with a virtual factory model and simulation models.
- **Decentralization and autonomous decision:** This feature involves the ability of the cyber-physical system to make independent decisions and for local production, thanks to technologies such as 3D modeling and printing.

- **Real-time capabilities:** This involves collecting and analyzing data and simultaneously gaining insight into the process.
- **Technical assistance and service orientation:** Services that are enabled by automated propulsion and reach users efficiently.
- **Modularity:** Includes flexible adaptation of smart factories to demanding changes through expansion or replacement of individual modules.

The future provided by Industry 4.0 is getting closer. Namely, the opportunities provided by Industry 4.0 by improving production processes and introducing robotics in the processes prompted us to think about how all this will affect the situation outside the smart factories themselves. Industry 4.0 has ten major global trends, most of which are existing but improved in terms of the features it has introduced the same (Efthymiou & Ponis, 2021).

With the development of technology and improved production processes, a new terminology has emerged to describe it much better Industry 4.0. In Figure 2 are some of the introduced new terms that make it easier for the community to understand things around it.



Figure 2. Terms Related to Industry 4.0 (Source:

https://industry40marketresearch.com/blog/industry_4-0_technologies/)

Digital Transformation

Adaptation refers to the rapid shift of all areas to technological channels and the continuation of activities in the digital field. The digital transformation uses information technologies in many occupations due to quick access to information to save excess cost and time. Many works done in the physical environment are now completed in seconds on the digital environment. It is possible to see this in many daily activities, especially in the business world (<https://www.oracle.com>).

Technology, period and human (employed) are three essential elements for businesses experiencing a digital transformation (Mergel et al., 2019). Transformation does not belong to a specific period; it requires continuity. According to (Yang & Gu, 2021), an interdisciplinary approach is also essential to Industry 4.0 development. It will be in the best interest to constantly take forward-looking action by following technological developments and integrating them into business. When all the features participate in the change process, a much more productive result emerges. Digital transformation provides excellent benefits both in individual and social areas, especially in education and business (Selimi et al., 2020). The benefits of digital transformation we can list as:

Time: The contribution of digital transformation to the business world is undeniable. Many corporate businesses must use different evaluation systems. A prepared file prepared can be sent to more than one other department. Each department compiles the information of its personnel and transmits it to the human resources department. This data flow is only possible with technological systems in an enterprise with many personnel. Preparing all these data on paper and getting feedback causes a significant loss of time. The flow provided with the crafted Excel file or the existing software allows you to complete the work process in a much shorter time.

Productivity: With the technological tools required by digital transformation, the workflow is completed much shorter, and productivity increases. The use of electronic channels leads to an uninterrupted business process. Productivity makes topping the to-do list much more accessible (Velkoska et al., 2018c). Continuous flow in the business process increases productivity.

Reduction of expenses: Operational costs can be reduced with high efficiency, resulting from digital automation (Velkoska

et al. 2018d). Digital transformation brings advantages that will increase operational profitability, thanks to the "more work needs less workforce" situation.

Reduction of errors caused by employed personnel: With the software and robotic automation brought by the digital transformation process, the programmed works can be completed without human touch and error-free. Thus, the possibility of human-induced problems is eliminated.

Sustainability: The integration of robotic automation systems and advanced software support to businesses brings the opportunity to work uninterruptedly. The mechanical automation systems ensure the business process's continuity by preventing interruptions that may arise from personnel.

Consistency: Software-assisted business models always deliver a more consistent business process. Minimal exposure to any errors, problems, or interruptions that may arise ensures a constant business process.

Automation: It provides advantages with reporting, reminders, and business process management, which are provided to perform more productive work by putting their effort into it.

Instant analysis: Thanks to digitalization, you can quickly get information about your business processes and analyze your business.

Effective management process: Effective management relies on measurable, tangible data. You can easily access the data and evaluate it periodically, thanks to digital tools.

Business intelligence powered by artificial intelligence: Thanks to AI (Artificial Intelligence), you can apply data analysis techniques to make predictions and decide on the new business case if you have enough data.

Application of digital transformation in business: The business's applications for its operations are a tangible indicator of digital transformation. It is much faster and easier to process the data you provide in the digital environment. Ensure that the applications and software you use while transferring them to the digital medium are reliable. By choosing secure software, you will not risk your corporate information.

Top 10 Industry 4.0 Trends in 2021

Cyber Security, Transparency and Privacy

As production practices become more personal and adaptable, in-store data management practices will significantly affect a company's attractiveness. The flow of information due to connectivity in Industry 4.0

raises concerns about security, transparency, and privacy. The transmission and processing of sensitive industrial data should be done securely to avoid cyber-attacks on critical industrial facilities (<https://www.startus-insights.com>). Digital ethics and privacy, privacy enhancement technologies, self-adaptive security, zero-trust security, end-to-end security, DevSecOps, and blockchain are new developments. They should balance the focus of cyber security with transparency and privacy (Saračević et al., 2018).

Edge, Fog & Cloud Computing

The extensive data generated by the Industrial Internet of Things (IIoT) encourages the adoption of the capabilities for computing work, fog, and cloud in Industry 4.0. Custom hardware and software solutions, such as cloud connectivity, cloud distribution, distributed computing and storage, hybrid computing, low-code development platforms, microservices, mobile computing, and multi-computing, are increasingly shaping this trend in Industry 4.0. The new overview of IIoT applications and their enabling technologies is given in the work (Basir et al., 2019).

Artificial Intelligence

AI and machine learning are driven by innovation across industries and functional areas. Factories are beginning to integrate artificial intelligence into their production systems and processes. Artificial intelligence-specific hardware and new algorithms are being developed to optimize existing systems and address the unique challenges facing manufacturing (Haefner et al., 2019). Advanced Artificial Intelligence enables predictable maintenance, cognitive computing, swarm intelligence, context-aware computing, intelligent machines, hardware accelerators, and generative design. All these technologies move the production capacities towards complete production without lights.

Human Enlargement and Augmented Reality (XR)

People's physical and cognitive growth is another major trend in Industry 4.0. Limitations on people are being increased with the help of technologies such as carrying devices and exoskeletons. Furthermore, industrial mobile devices, natural and intuitive interfaces, and portable machine control screens improve the ease of use of such technology. XR technologies such as mixed reality (MR), augmented reality (AR), and virtual reality (VR) is already used in Industry 4.0 from research and development (R&D) to complete production and post-production processes (Lacks & Choi, 2020). The nature of human-machine

interaction is increasingly aligned with machine workers. This paradigm with more experience changes the way industrial production systems function.

Networking and Connectivity

Networking and connectivity are among the main driving forces for enabling Industry 4.0. Networking and connectivity have a wide range of technological advances. Cloud-to-cloud, gigabit Ethernet time-sensitive networks, low-power wide-area networks (LPWAN), 5G, machine-to-machine communication (M2M), real-time deterministic Ethernet, time-sensitive Networking (TSN), ubiquitous radio access are some of the advances. Also, a unified IoT (Internet of Things) framework and zero-touch networks encourage factories to implement IIoT to transform into Industry 4.0 capability. These technologies are constantly improving machine-machine and human-machine communication and data transmission (Saračević et al., 2019). The innovations in this area increase speed, improve security and efficiency, and reduce network connectivity costs.

Advanced Robotics

Advances in robotics make Industry 4.0 faster, more efficient, and more secure. Robots offer greater precision and agility while improving the ability to develop adaptive robots quickly. Robots also free up time for the workforce of humans to focus on non-repetitive or high-value tasks. The most prominent robotic technologies that affect production include autonomous robots, collaborative autonomous mobile robots, humanoid, mobile robots, collaborative robots (cobots), cloud robotics, APIs, selection and placement robots, and swarm robots. For collaborator robot works, readers can find examples in the research (Schranz et al., 2020).

Internet of Everything

The machine-to-machine, man-to-machine, and real-time human-machine connections make up the Internet of Things in production. Includes IIoT, Internet of Things, Internet Services, Internet Systems, and IoT Store. The Internet combines real-time data, machine intelligence, and human skills, resulting in faster, more efficient, and cost-effective production processes. Interoperability and a unified framework for the Internet of Things are critical to the smooth implementation of capacity in Industry 4.0. The security and vulnerability in the Internet of Things are given in the work (Shancang, 2017).

Digital Twin

Digital twin technology creates virtual models of industrial assets by combining dynamic sensor data and real-time visualization. Future digital

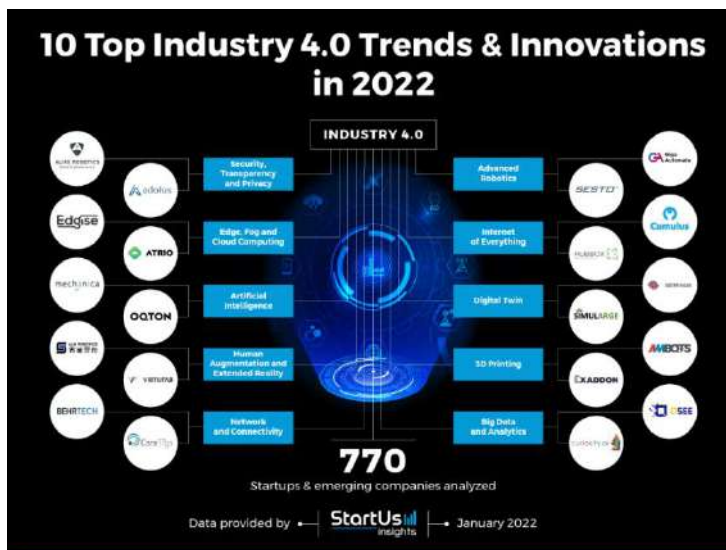
twins' future uses include model-driven design, virtual prototypes, virtual system validation, bandwidth optimization, and evolutionary design.

Additive Manufacturing

Advances in material science and techniques such as stereolithography and metal 3D printing make complex structures and components easier. Manufacturers constantly look the new technologies to cover all aspects of growing market demand (Velkoska et al., 2018b). The production of additives, which began as a prototype technique, revolutionized and decentralized production. Hybrid production aims to integrate both displays with additives and production with subtraction. The output of additives makes highly adaptable and sustainable cloud-based production a reality.

Big Data and Analytics

Big data is complex and valuable only when captured, stored, and analyzed quickly and economically (<https://hexaingenieros.com>). Advances in utilizing data to gain valuable insights into production systems and the availability of immediate and real-time data open up opportunities for proper, predictable, and enhanced analytics at various levels of a company's production capacity. The industrial data collection scale eventually allows factories to transition to industrial facilities 4.0.



Source: <https://www.startus-insights.com/innovators-guide/top-10-industry-4-0-trends-innovations-in-2021/#trend-five>

Discussion

Big data and data analysis caused significant changes in many areas of industry 4.0, such as transportation, electricity, health, aviation, agriculture, finance, and retail. Today, companies, banks, and public institutions can efficiently process many data from various sources: finance, mobile, health, transaction, customer research, and social media data in databases. The developments in information and cloud technologies and the instant access to online data sources have led to a new generation of powerful tools (Legriell and Maler, 2011). Combining this power with analytical tools has given academics, and business operators access to and use large previously inaccessible datasets. Businesses and governments can make better and faster decisions using text analysis, machine learning, predictive analysis, data mining, statistics, natural language processing, and visualization. Then, available information about the commonly used visualization techniques explains the importance of visualization for organizations.

Data visualization is a new and promising field in computer science (Selimi and Saracevic, 2018). It uses computer graphics effects to reveal patterns, trends, and relationships in datasets. Thanks to today's developing technology, it has easily analyzed large and complex data sets. However, the sampling method was considered natural when information was scarce and high-capacity digital technologies were not widespread. The new generation programs developed today have allowed us to use all the data and see many details that we could not see before with a limited amount of data. This way also helped us see a clearer view of the sub-categories and infrastructures that the sample could not reach. Big data continues to create significant opportunities, especially for developing countries, thanks to the technological transformations it pioneers. As can be seen in its applications in many sectors today, big data, when interpreted correctly, creates new opportunities for institutions and societies. Big data has had a facilitating effect on social life in many areas such as transportation, health, and marketing by determining the underlying causes of climate change, disease surveillance, and natural disasters.

Despite advances in technology today, the age of big data is still in its infancy. Therefore, extensive data processing methods evolve to solve big data problems, and new solutions are constantly being developed. On the other hand, the benefits of big data to society are often limited in terms of

data privacy and security. Today, scientists develop multidisciplinary methods and techniques to understand big data better, its complex structures, and the connections between them.

As a result, it will be possible to train managers who can test different scenarios in a short time, ask the right questions, quickly change direction if necessary, and integrate actions in the data mass into the company's performance. Such a development will cause a severe change in business culture both in the academic and business world. Today, when companies and CEOs are looked at from a professional perspective, it is seen that most top managers (including young people) still maintain the management approach and culture of 20 years ago. The exciting thing is that although they are well educated, this observation shows that it is difficult to move away from the conventional understanding. The solution lies in the awareness of being able to manage the information society. This new culture will become an essential competitive advantage in the long run. Organizations that do not have the necessary skills, competent and open-minded managers will lose their chances of survival and success. On the other hand, it is another fact that data scientists will have more options to manage through graduate and similar training in business and finance compared to those coming from other disciplines (Velkoska et al. 2018a).

CONCLUSION

Today we live in times that are subject to change that is happening faster than ever before in the segment of social and economic frameworks.

They can be attributed to the processes of globalization, from which they indeed arose, but also to technological development, which, based on new scientific knowledge, experienced a real revolution, the fourth in a row. Unfortunately, only the third industrial revolution is still in full swing in our region.

In the last years, the development of IT (Information Technology) technologies has further emphasized the digital transformation of industrial production as a direction that must take. The Internet has created a pervasive network and possibilities of mutual communication to the extent that everything that surrounds it will connect people or little left that is not in the global communication chain. Terms like Cloud Computing, the Internet of Things, 3D printing, Big Data, and the like have become the foundation of today's modern and industrial world. New value chains, innovative products, the interaction of product customers

with the production process, networking of all factors of production, and data as a fundamental value are all concepts related to Industry 4.0. Due to this, we see increasing investment in research and development, protection of intellectual property, protection of information from cybercriminals, gaining new values, optimizing costs, and gaining the advantage of market concurrence.

Advancement through technology and progress through investment in new academic disciplines is something that the developed world recognizes as a natural path to a new industrial paradigm new social values. When discussing social matters, we discuss contemporary views on evaluating expertise, knowledge, experience, a new attitude towards employees, and satisfaction with the job, income, and conditions.

This research showed that Industry 4.0 is not widespread in our country, much less present in industrial production. Although it was difficult for citizens to assess whether Industry 4.0 is a threat or an opportunity, they recognize it as the future, even for our industrial production, with caution regarding its application in neighboring countries.

Future or present - depends on the position from which it views. If viewed from the part of leading economies, it is a present that is already in a profound transition towards a complete fourth industrial revolution. Still, it views with a certain distrust and misunderstanding. We hope that the development and increase of the works in Industry 4.0 will change citizens' thinking and opinions about the future, which has potential.

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HUMAN RIGHTS PROTECTION FROM THE PERSPECTIVE OF THE 1991 CONSTITUTION OF MACEDONIA

Azam Korbajram, Elif Hoca, page 43-53

ABSTRACT

Human rights have been a topic of conversation since ancient times, and for many years there has been a struggle for their guarantee. Almost all states have led to fierce battles for their realization. After the process of constitutionality and constitutional movements began, the universality of human rights and freedoms came to the fore. Namely, it is from the time of Bill of Rights in 1215 until today. In a modern sense human rights are becoming universal which are already guaranteed by the UN Charter and the European Convention on Human Rights. Especially Macedonia, as a candidate country for membership in the European Union, is fulfilling even new additions. Humanity and the Rights of the Child were created on the basis of the French Revolution, which was founded on August 26, 1789, for the purpose of demonstrating the cause of democracy and freedom. 1789 - Declaration of Human and Citizen Rights are published by the French Revolution. Accepted by the French National Assembly on August 26, 1789 Adopted by the French Mankind and Advocates in 1789, Adopted by the French Constitution in 1791. Humanity and Human Rights Consciousness is a human being and is made of 17 articles. Bunlar; Human rights are based on different rules and principles. Freedom of expression, property, security and the right to freedom of expression should not be expressed in the words of the citizens. 1789 Declaration of Human and Citizen Rights, The statement of the 16th article of the article on the existence of freedom, the meaning of the rights of the right and the right of the righteous, is expressed in a comprehensive way. In accordance with the idea of a nation-state that emerged from this, the Macedonian state started to make a new constitution in 1991 after declaring its independence and aimed to guarantee both the spirit of the Declaration and the universal nature of human rights with the constitution.

Keywords: 1991 Constitution Republic of North Macedonia, UN Charter, European Convention on Human Rights, Constitutional Guarantee of Human Rights, 1789 Declaration of Human and Citizen Rights.



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INTRODUCTION

Although the constitutional recognition and guarantee of human rights has become widespread especially in the 20th century, the historical development process goes back to ancient times. If we take the Magna Carta Libertatum as a basis in England, we see that human rights have been guaranteed and taken part in the constitutional order since the 13th century. In 1791, the document known as the Bill of Rights was constitutionalized in the United States. In this sense, the guaranteed rights have been expanded, adding the right to freedom of expression, assembly, press, religion, inviolability of home, fair trial, and not to be sentenced to excessive and extraordinary punishments. In the process that followed, there were also developments in the rights and freedoms of equal voting in the period from 1787 to 1964. Finally, the developments in France The 1789 Declaration of Human, Human and Citizen Rights is an important document on human rights, and these principles have been taken into account in the constitutions of many countries on the way to becoming a democratic state.¹

Although the 1789 Declaration of Human and Citizen Rights is very important in terms of guaranteeing human rights against the state and the theory of separation of powers, especially article 16 is a cornerstone for our subject: „*A society in which rights are not guaranteed and separation of powers is not determined has no constitution*“ (Article 16).² The case of seeing human rights as a domestic legal issue gained a universal dimension with the adoption and publication of the 1948 Universal Declaration of Human Rights, and accordingly, it was transferred to regional documents. This document was established on the basis of the founding Treaty of the United Nations in 1945 and undoubtedly, the UN prioritizes respect for the natural rights of human beings due to being human. The 1948 Declaration included social and economic rights (positive rights) as well as classical, negative rights, and

¹ Erdoğan, M, *Anayasal Demokrasi*, Siyasal Kitapevi Press, 2017, p.207-208. This information has been written on the basis of the information contained in this work.

² In terms of the issue and the universal nature of the declaration, please refer to the following source. Civelek, J . (2011). 1789 Fransız Bildirisi Ve 1948 Evrensel İnsan Hakları Bildirisi . *Milletlerarası Hukuk Ve Milletlerarası Özel Hukuk Bülteni* , 9 (1) , 1-9 .

thus aimed to reconcile classical views with socialist views.³ On the subject of economic, social and cultural rights, some lawyers have criticized on the basis that this situation varies from country to country and that the economic situations are different. Therefore, they argue that the rights in this status will be far from universal and will not be subject to judicial guarantee.⁴

In this sense, it would be appropriate to divide the ways of protecting fundamental rights and freedoms into two. It would be correct to express it as the protection of human rights by domestic law and the judiciary and international European Human Rights protection in terms of being under constitutional guarantee.⁵

HUMAN RIGHTS AND THEIR PLACE IN THE 1991 CONSTITUTION OF THE REPUBLIC OF NORTH MACEDONIA

First of all, in the regulation in which the subjects guaranteed in the 8th article of the 1991 Constitution were included, it was stated in the 1st paragraph under the heading „the fundamental values of the constitutional order of the Republic of Macedonia are“ says: the basic freedoms and rights of the individual and citizen, recognized in international law and set down in the Constitution. Therefore, starting from Article 8, human and citizen's rights have been dealt with on a broad scale up to Article 49, and how these rights are guaranteed is regulated under the 3rd heading of this 2nd Chapter.

Firstly, civil and political freedoms and rights was arranged as the first heading. Citizens of the Republic of Macedonia are equal in their freedoms and rights, regardless of sex, race, colour of skin, national and social origin, political and religious beliefs, property and social status. All citizens are equal before the Constitution and law (Article 9).

³ Ibid.

⁴ Deskoska R., Ristovska M., Hristovska T. J., *Ustavno Pravo*, Prosvetno Delo Press, 2021, p. 193-196.

⁵ Gözler K., *Anayasa Hukukunun Genel Esasları*, Ekin Press, 2016, p. 428-436.

CIVIL AND POLITICAL FREEDOMS AND RIGHTS

In articles 10 and 11 says,⁶ the human right to life is irrevocable. The death penalty shall not be imposed on any grounds whatsoever in the Republic of Macedonia and the human right to physical and moral dignity is irrevocable. The death penalty has been in place since the time of King Hammurabi in the 5th century. Abortion and the term euthanasia are also widely discussed and debated today.⁷ Any form of torture, or inhuman or humiliating conduct or punishment, is prohibited. Forced labour is prohibited. Subsequently, the human right to freedom is irrevocable. No person's freedom can be restricted except by a court decision or in cases and procedures determined by law. Persons summoned, apprehended or detained shall immediately be informed of the reasons for the summons, apprehension or detention and on their rights. They shall not be forced to make a statement. A person has a right to an attorney in police and court procedure. Persons detained shall be brought before a court as soon as possible, within a maximum period of 24 hours from the moment of detention, and the legality of their detention shall there be decided upon without delay. Detention may last, by court decision, for a maximum period of 90 days from the day of detention. Persons detained may, under the conditions determined by law, be released from custody to conduct their defence.⁸

Article 13 regulates the principle of presumption of innocence, which is considered a fundamental principle of law, and states as follows

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Article 13 – „A person indicted for an offence shall be considered innocent until his/her guilt is established by a legally valid court verdict. A person unlawfully detained, apprehended or convicted has a right to legal redress and other rights determined by law.,,

⁶ Skarikj S., *Naucno Tolkuvanje-Utav na Republika Makedonija*, Kultura Press, 2014, p. 161-163 For a scientific interpretation of the constitution see

⁷ For more details see. Deskoska R., Ristovska M., Hristovska T. J., *Ustavno Pravo*, Prosvetno Delo Press, 2021, p. 201-202.

⁸ Artical 12, Constitution of 1991 of the RNM.

Further in article 14 it is stated that, No person may be punished for an offence which had not been declared an offence punishable by law, or by other acts, prior to its being committed, and for which no punishment had been prescribed. No person may be tried in a court of law for an offence for which he/she has already been tried and for which a legally valid court verdict has already been brought. Also, the right of the individual to appeal is guaranteed, namely, the right to appeal against individual legal acts issued in a first instance proceedings by a court, administrative body, organization or other institution carrying out public mandates is guaranteed.

By the way, with article 16, the freedom of personal conviction, conscience, thought and public expression of thought is guaranteed. The freedom of speech, public address, public information and the establishment of institutions for public information is guaranteed. Free access to information and the freedom of reception and transmission of information are guaranteed. The right of reply via the mass media is guaranteed. The right to a correction in the mass media is guaranteed. The right to protect a source of information in the mass media is guaranteed. Censorship is prohibited.

The freedom and confidentiality of correspondence and other forms of communication is guaranteed. Only a court decision may authorize non-application of the principle of the inviolability of the confidentiality of correspondence and other forms of communication, in cases where it is indispensable to a criminal investigation or required in the interests of the defence of the Republic. The security and confidentiality of personal information are guaranteed. Citizens are guaranteed protection from any violation of their personal integrity deriving from the registration of personal information through data processing. The freedom of religious confession is guaranteed. The right to express one's faith freely and publicly, individually or with others is guaranteed. The Macedonian Orthodox Church and other religious communities and groups are separate from the state and equal before the law. The Macedonian Orthodox Church and other religious communities and groups are free to establish schools and other social and charitable institutions, by way of a procedure regulated by law (article 17, 18,19).

Regarding the classical rights and basic principles of law, the constitution continues until Article 29, which guarantees the following:

Citizens are guaranteed freedom of association to exercise and protect their political, economic, social, cultural and other rights and convictions. Citizens may freely establish associations of citizens and political parties, join them or resign from them. The programmes and activities of political parties and other associations of citizens may not be directed at the violent destruction of the constitutional order of the Republic, or at encouragement or incitement to military aggression or ethnic, racial or religious hatred or intolerance. Military or paramilitary associations which do not belong to the Armed Forces of the Republic of Macedonia are prohibited.⁹ Citizens have the right to assemble peacefully and to express public protest without prior announcement or a special license. The exercise of this right may be restricted only during a state of emergency or war. Every citizen on reaching 18 years of age acquires the right to vote. The right to vote is equal, universal and direct, and is exercised at free elections by secret ballot. Persons deprived of the right to practice their profession by a court verdict do not have the right to vote. Every citizen has the right to take part in the performance of public office.¹⁰

Also constitution continued by articles 24, 25 and 26 which says; every citizen has a right to petition state and other public bodies, as well as to receive an answer. A citizen cannot be called to account or suffer adverse consequences for attitudes expressed in petitions, unless they entail the committing of a criminal offence. Each citizen is guaranteed the respect and protection of the privacy of his/her personal and family life and of his/her dignity and repute. The inviolability of the home is guaranteed. The right to the inviolability of the home may be restricted only by a court decision in cases of the detection or prevention of criminal offences or the protection of people's health.

In article 27 and 28; Every citizen of the Republic of Macedonia has the right of free movement on the territory of the Republic and freely to choose his/her place of residence. Every citizen has the right to leave the territory of the Republic and to return to the Republic. The exercise of these rights may be restricted by law only in cases where it is necessary for the protection of the security of the Republic, criminal investigation or

⁹ Article 20, 1991 Constitution.

¹⁰ Article 21, 22, 23.

protection of people's health. The defence of the Republic of Macedonia is the right and duty of every citizen. The exercise of this right and duty of citizen is regulated by law.

Foreign subjects enjoy freedoms and rights guaranteed by the Constitution in the Republic of Macedonia, under conditions regulated by law and international agreements. The Republic guarantees the right of asylum to foreign subjects and stateless persons expelled because of democratic political convictions and activities. Extradition of a foreign subject can be carried out only on the basis of a ratified international agreement and on the principle of reciprocity. A foreign subject cannot be extradited for political criminal offences. Acts of terrorism are not regarded as political criminal offences (article 29 1991 Constitution).

ECONOMIC, SOCIAL AND CULTURAL RIGHTS

On the other hand, having regard to the international documents and agreements accepted by the EU and the International Community, in Chapter 2 the third chapter regulates economic, social and cultural rights with Articles 30 to Article 49.

So, article 30 -The right to ownership of property and the right of inheritance are guaranteed. Ownership of property creates rights and duties and should serve the wellbeing of both the individual and the community. No person may be deprived of his/her property or of the rights deriving from it, except in cases concerning the public interest determined by law. If property is expropriated or restricted, rightful compensation not lower than its market value is guaranteed. The right to property is one of the basic human rights. The right of ownership means the right of the citizen to use a certain movable or immovable property and to dispose of it in a way that suits him.¹¹ The Constitution provides for the possibility of deprivation and restriction of property rights due to the public interest. But the compensation should be at the level of the market price of the value. This is called expropriation and is regulated by law.¹²

Everyone has the right to work, to free choice of employment, protection at work and material assistance during temporary unemployment. Every job is open to all under equal conditions. Every

¹¹ Skarikj S., *Naucno Tolkuvanje*, p. 228-235.

¹² *Ibid.*

employee has a right to appropriate remuneration. Every employee has the right to paid daily, weekly and annual leave. Employees cannot waive this right. The exercise of the rights of employees and their position are regulated by law and collective agreements.¹³

However, the constitution restricts the work of minors. Namely, The Republic particularly protects mothers, children and minors. A person under 15 years of age cannot be employed. Minors and mothers have the right to particular protection at work. Minors may not be employed in work which is detrimental to their health or morality (Article 42)

Everyone is obliged to pay tax and other public contributions, as well as to share in the discharge of public expenditure in a manner determined by law. Citizens have a right to social security and social insurance, determined by law and collective agreement. The Republic guarantees particular social security rights to veterans of the Anti-Fascist War and of all Macedonian national liberation wars, to war invalids, to those expelled and imprisoned for the ideas of the separate identity of the Macedonian people and of Macedonian statehood, as well as to members of their families without means of material and social subsistence. The particular rights are regulated by law.¹⁴ Also, in order to exercise their economic and social rights, citizens have the right to establish trade unions. Trade unions can constitute confederations and become members of international trade union organizations. The law may restrict the conditions for the exercise of the right to trade union organization in the armed forces, the police and administrative bodies.¹⁵

In Macedonia, the constitution guarantees its citizens the right to strike, social and health care and a dignified life. The right to strike is guaranteed. The law may restrict the conditions for the exercise of the right to strike in the armed forces, the police and administrative bodies. Every citizen is guaranteed the right to health care. Citizens have the right and duty to protect and promote their own health and the health of others. The Republic provides particular care and protection for the family. The legal relations in marriage, the family and cohabitation are regulated by law.

¹³ Article 32.

¹⁴ Klimovski S., *Ustavno Pravo i Politicki Sistem*, Prosvetno Delo Press, 2012, 271-282.

¹⁵ Article 37

Parents have the right and duty to provide for the nurturing and education of their children. Children are responsible for the care of their old and infirm parents. The Republic provides particular protection for parentless children and children without parental care.

It is a human right freely to decide on the procreation of children. The Republic conducts a humane population policy in order to provide balanced economic and social development. Everyone has the right to a healthy environment to live in. Everyone is obliged to promote and protect the environment. The Republic provides conditions for the exercise of the right of citizens to a healthy environment.¹⁶

The Republic cares for the status and rights of those persons belonging to the Macedonian people in neighbouring countries, as well as Macedonian expatriates, assists their cultural development and promotes links with them. The Republic cares for the cultural, economic and social rights of the citizens of the Republic abroad.

GUARANTEES OF BASIC FREEDOMS AND RIGHTS

Every citizen may invoke the protection of freedoms and rights determined by the Constitution before the regular courts, as well as before the Constitutional Court of Macedonia, through a procedure based upon the principles of priority and urgency. Judicial protection of the legality of individual acts of state administration, as well as of other institutions carrying out public mandates, is guaranteed. A citizen has the right to be informed on human rights and basic freedoms as well as actively to contribute, individually or jointly with others, to their promotion and protection.

The freedoms and rights of the individual and citizen can be restricted only in cases determined by the Constitution. The freedoms and rights of the individual and citizen can be restricted during states of war or emergency, in accordance with the provisions of the Constitution. The restriction of freedoms and rights cannot discriminate on grounds of sex, race, colour of skin, language, religion, national or social origin, property or social status. The restriction of freedoms and rights cannot be applied to the right to life, the interdiction of torture, inhuman and humiliating

¹⁶ Article 41-43

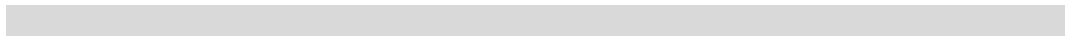
conduct and punishment, the legal determination of punishable offences and sentences, as well as to the freedom of personal conviction, conscience, thought and religious confession (Article 54).

CONCLUSION

With the development of the concept of constitutional movements, constitutions become a basic act of states and peoples. From the philosophy of the constitution and the making of a constitution, between the division of power the basic element is the constitutional guarantee of human rights. In the course of the development of human rights, it finds its place in the internal legal and constitutional order from an international platform. Namely, from the UN conventions and the European human rights treaties and the decisions of the International Court of Human Rights are applied in the constitution and the constitutional-legal order of the Republic of Macedonia. Progress in the field of money as a basic human right should be emphasized. Namely, Article 10 states that human life is inviolable and that in the Republic of Macedonia no death penalty can be imposed on any grounds. On the other hand, the right to equality, the prohibition of torture and ill-treatment, legal certainty and a fair trial, the right to liberty, the right to privacy, freedom of religion, freedom of expression, freedom of association, freedom of peaceful assembly, freedom of residence and movement, suffrage, property right as basic human rights, on the other hand, economic-social, cultural rights (right to work, right to trade union, right to strike, right to social security, health care) are covered and regulated with the 1991 constitution. With the signing of the peace agreement in 2001, constitutional amendments covered and redefined the rights of minorities, ie communities that are not a majority. It is a good indicator that according to the guarantee of human rights, the Macedonian Constitution aspires to the European Union and Western democratic civilization, which results through international conventions and legal-democratic principles. All these rights should be openly and explicitly stated in the Rules of Procedure of the Constitutional Court in relation to a constitutional complaint and to obtain complete judicial protection in relation to the human rights provided by the Constitution.

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TERRORISM AS A FORM OF ORGANIZED CRIME

Aleksandar Nacev, Dragana Kostevska, page 55-68

ABSTRACT

Terrorism is not a 21st century phenomenon and has its roots in early resistance and political movements. It is important to mention that for terrorism there is no universally agreed definition which makes it a difficult object to quantify. Its effects are the unlawful use of violence and intimidation, especially against civilians, in the pursuit of political aims. In other words it is represented by danger, helplessness and sadness. Terrorism represents illegal use of force or violence against people or property, in order to infuse fear and panic and to achieve a specific goal.

This scientific paper, explains conjunction between organized crime and terrorism. With their practical actions, for easily achieving their goals, these two types of serious crimes use methods from other types of crime. When their interests coincide, they can connect to each other, to cross operate. The unsolved question is whether terrorism is in function of organized crime or is organized crime functioning for the terrorism.

Terrorism is characterized by: organizing, training, equipping, brutality and inhumanity. It is present in all systems of human life. Until now, no society was able to protect completely itself from terrorist attacks. Today's concept of organized crime is heterogeneous and contradictory when we take into account the entire range of pertinent statements in the criminal-policy debate.

Having in mind that for these two phenomena there is no universal and comprehensive definition we should not be surprised with the fact that there are different opinions and views on the next thought: whether terrorism is a form of organized crime, or are they two separate types and does organized crime support and encourage terrorism.

Key Words: Organized crime, Terrorism, Criminal organization, Financial goals, Money laundering.



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INTRODUCTION

Throughout history, terrorism as a form of political struggle occurs most often in the form of killings and liquidation of government representatives. It is not a phenomenon that is a product of modern times; on the contrary it occurs in the first century AD. A notable example is the sect of Zealots or Sikario, which contributed to the uprising against the Roman occupation. Also, Islamic Assassins sect (Chaliand , Blin, 2009), appear in Islam around 1000 years and those over two centuries exercised political killings by stabbing. It is present in all systems of human life, but up to date none of the social orders was able to move away from the preparation and execution of terrorist attacks. It adapts its form with the current political and other interests. No system in the world is not in itself sufficient to protect society from this type of crime. *“Despite the fact that various terrorist acts committed in different geographical areas and on indefinite time difference, it does not represent an obstacle that between terrorists are represented almost all ideologies and religions, all social classes and spheres, which in turn depended on the nature of terrorist attacks and the presence of certain political goals and interests”* (Boshkovic, 1998).

On the other hand, Organized crime is generally focused mainly on economic profit, acquiring material benefits and obtaining as much of an illegal market share as possible, by the use of serious crimes such as drug trafficking, fraud, violence etc.

DEFINING TERRORISM

The word terrorism comes from the latin word terror. In other words, this concept is apprehended by danger, helplessness and sadness. Terrorism represents illegal use of force or violence against people or property, in order to infuse fear and panic and to achieve a specific goal. It is important to have a multidisciplinary approach for studying and understanding this particularly complex issue. Many authors and experts agree on one thing: there is no universally accepted definition. *“The difficulty that arises in defining terrorism is that the actions undertaken by certain countries, with another name, may fall under the definition of international terrorism in its essence, yet they receive political support*

from individual governments, which are considered as a means of state policy or as a legitimate method“.

Some authors (such as Lemkin) define terrorism: *“As deliberate use of any means in order to create a general (transnational) danger, which endangers the interests of several countries, pointing out that terrorism in the broadest sense consists of intimidation of people, with committed violent acts“* (Konstantinovic-Vilic, Nikolic-Ristanovic, Kostic, 2009).

Even more important is that terrorism also could be seen as: *“Any organized and individual unlawful use of force expressed using weapons (biological, chemical, radiological, nuclear) or threats to use force against people or property due to coercion or intimidation as a means to achieve political, ethical, religious or ideological goal”* (Dimovski, Ilievski, 2011). Furthermore Nikolovski explains *“Terrorism as direct, organized and dosed application of violence from individuals and groups, and even countries that has been ready also for physical attacks (bombings, kidnappings and murders), to impose their will on the state and society and to use psychological terror against the masses, creating fear, panic, uncertainty and distrust among citizens in the institutions”* (Nikolovski, 2008).

DEFINING ORGANIZED CRIME

There is no generally accepted definition of organized crime yet, due mostly to the quick development and changing of the forms in which organized crime appears. Since high professionalism, organization and nearly unlimited financial means are characteristic for organized crime, the situation in this field is constantly aggravating. Therefore, several authors and their views on the definition of the concept of organized crime will be cited in addition.

Kambovski defined organized crime as: *“The commission of offenses by a criminal association for profit or achieve power through violence or using a special position in society, reducing the risk of engaging in legal, economic, political and other activities, as well as pre-made system protection from prosecution“* (Kambovski, 1996). Secondly, but not less important, is the definition by Labović, who adds that *„in addition to the use of violence, force or pressure, through corruption, participation in legitimate economic and political activities and influence*

on politics, business, media and the judiciary, due to accomplish profit, power and protection from criminal prosecution” (Labovic, Nikolovski, 2010).

According to the UN Convention against Transnational Organized Crime (Palermo, 2000) *“organized criminal group consisting of three or more persons, existing for a certain period of time and acting in order to carry out one or more serious offenses under the Convention, for the realization of direct or indirect financial benefit or other material benefit“ (Labovic, Nikolovski, 2010).*

TERRORISM AS A FORM OF ORGANIZED CRIME

Terrorism finds new form in which it appears, and even that there is no country in the world which is immune and untouchable. Due to constant update and develop, terrorism becomes more and more dangerous for people and material goods. That is why this combat needs an international cooperation. On the other hand, the same thing is happening with war against organized crime. Makarenko and Thamm, interpret the similarities between terrorism and organized crime in a peculiarly simplified manner, emphasizing the fact these two groups have one common “enemy”: the State (Prokic, 2017). There are some opinions that modern terrorism is more and more treated as a form of organized crime. The connection between members of organized criminal groups and authorities from economic interests, while at terrorist organizations, a common interest may be present in the case, when terrorist activity is planned and implemented against another country.

Specificity of terrorism as a form of organized crime is that it achieves a certain connection with certain countries and appropriate organs, but not to perform terrorist attacks on the territory of that country, but on the territory of another state, with the possible gaining of political goals. Some authors believe that terrorism is one of the forms of organized crime. Boshkovic argue that *“Terrorism as a form of organized crime may have economic, legal or other interest, or any act of terrorism is a political painted, which implies certain political interests” (Boshkovic, 1998).*

Even though, organized crime sometimes could be protected by legal political parties or authorities, mainly this organization cannot survive if they do not maintain relations with a foreign country. The same thing happens with terrorism. In fact, this conjunction represents a crucial

moment for the execution of a specific terrorist attack in another country. Nikolovski gives next explanation: *“Terrorism as a form of organized crime means the existence of a good management of criminal organizations, which is funded by the state, with whom to establish certain connections. Organizer of terrorist activities, the state provides significant asset to meet the condition as to the existence of a specific form of organized crime. For there to terrorism as a form of organized crime, there should be links between the state and its institutions, with undertaking of terrorist activities, especially on the territory of another country. The operation of terrorist groups is under the protection of legal political parties in the country”* (Nikolovski, 2008).

Terrorism is increasing especially in the phase of capitalism and the bourgeois state, as a method of political struggle or liquidation of representative class. *“It is indisputable that terrorism has undergone a very specific transformation and increasingly appears as a form of organized crime, contributing to the development and achievements of technical and natural sciences. Notorious fact is that organized crime is closely linked to modern terrorism, when in point of fact has the same origins as well as organized crime, which is increasingly common in organized forms, often linked to the international scene. Modern terrorism, striving for the realization of certain political, financial and other goals, the kidnapping of airplanes, diplomatic representatives and people from high politics, police, judicial structures, keeping the publisher, but to turn the considerable well-prepared to terrorist groups in the territory of the countries where it should to achieve the planned objectives. In addition to the above, are retained and some classical forms such as: assassination, burning, but there are cases like kidnapping ships and armed attacks upon police station”* (Boshkovic, 1998).

The characteristic of such attacks is unilateral violence, with the goal that when a terrorist attack, it will leave the impression that, in fact, state or state organs do not have the capacity of protection, and in that way they are driven by mistrust in the momentary security capacity of the state. In this way, they create distrust of the social system. Constant improvement of their technique and skills helps terrorists to achieve their goals more easily and expeditiously.

Organized crime implies links between states and its organs, and in certain situations and with a particular political party. From this point of view, the authorities of a state governed by a democratic state cannot maintain links

with criminal terrorist organizations, also cannot provide protection, in order to carry out terrorist attacks in the same area, and at the same time endanger the state security system, sovereignty and territorial integrity. “*When it comes to the operation of other criminal organizations, with the aim of committing serious crimes outside the area of political crime, and if this connection is made in relation to the state, its organs and other organs and institutions, this relationship is based on a common interest, everything economically, while in terrorist organizations, a common interest can be present in the case when the plan of terrorist activities has its realization in another state*” (Boshkovic, 1998).

Mr. Boshkovic, conjecture that link between terrorism with a foreign country and its authorities with the purpose to commit certain terrorist activities in another country, takes certain counter-intelligence and other measures of its co-existence. Then, the spatial action of criminal terrorist actions does not correspond with the territory of the state that is related to the criminal terrorist organization, but this relationship enables the realization of terrorist attacks on the territory of another state, depending on the objectives and common areas of interest (Boshkovic, 1998). Hence we could highlight that terrorism, where it is funded by a certain country, provides significant material benefits for terrorists, and thus creates the necessary elements for the existence of a specific form of organized crime.

CONNECTION AND DIFFERENCES BETWEEN TERRORISM AND ORGANIZED CRIME

The U.S. library outlines three basic types of *links* between terrorism and transnational organized crime in Europe. Those are (Nikolovski, 2008):

- Alliance for benefit, in which terrorists, in agreement with a transnational organized criminal group, provide funds for themselves, thereby avoiding direct participation in criminal activities;
- Direct involvement of terrorist groups in organized crime;
- Moving from ideological to profitable goals as the main motive for work.

Louise I. Shelley, Director of the Transnational Crime and Corruption Center, gives a *link* between these two phenomena (Nikolovski, 2008):

- Terrorists involve themselves in organized criminal activities to financially support themselves;
- Organized criminal groups and terrorists often work in a network structure that helps hide terrorists in transnational criminal organizations;
- Both organized crime groups and terrorist groups operate in areas with poor government control, poor enforcement of laws and open borders;
- Both organizations are corrupting local and state authorities to achieve their goals;
- They often use the same methods of communication, using modern technology;
- They "operate" their money using the same methods and money-changers.

Also one element more that reflects the relation between organized crime and terrorism is financing of terrorist organizations, with finances from drug trafficking. Terrorist organizations work in drug regions or they are involved in it. Conclusion of cooperation, we see precisely in the financial assistance of terrorist organizations and the physical protection of organized criminal groups. Supplying weapons, training, and even more so for the performance of terrorist attacks themselves, provides a major line of participation of terrorist organizations in illegal weapon trafficking.

Terrorism is constantly transforming and more and more appears as a form of organized crime. The fact that it is linked to organized crime is that in essence modern terrorism has the same sources as organized crime, often the appearance in organized forms, mostly connected internationally. However, there is also a fact about the numerous differences between these two phenomena, namely: the goal and methods and way of work.

There are indications of the connection between terrorism and organized crime, drug terrorism in 1980, when drug trafficking was used for promotion and to improve political goals for some governments and terrorist organizations. Terrorists are responsible whenever they say their actions; they can call it "political", while on the other hand, people who work with drug trafficking; only the profit from that pure crime is important. Young criminal groups set up coalitions with terrorists in order to increase profits, but on the other hand they become all dangerous, terrifying, and even more powerful for political decisions. Organized crime profits become a steady inflow of terrorist organizations, so efforts

to eliminate drug trafficking and reduce use are critical strategies in the global fight against terrorism. It is getting harder and harder to notice those differences between terrorist groups and the unity of organized crime, because their tactics are becoming more and more connected.

Although there are indications that the connection is getting bigger and bigger, this question requires more argumentation. A. Schmitt in the UN Program on Crime Prevention and Criminal Justice, emphasizes that there may be a link between terrorism and organized crime, in terms of associations, unions, co-operation or symbiosis. Other analysts (Williams and Savona, 1995; Williams and Godson, 2002; Schweitzer and Dorsch, 2002), point to a theoretical possibility that in individual cases, terrorism can undergo transformation into organized crime, or vice versa. The specificity of terrorism, as a form of organized crime, is to achieve certain links with individual states, but not to commit terrorist attacks on the territory of the same country, but on the territory of the other, with which the realization is achieved, to achieve certain goals, primarily political, and terrorism gets an international character.

Terrorism as a form may have an economic, legal or other interest, but any terrorism is politically colored, which also implies certain political interests. Organized crime and terrorism, we cannot put ourselves out of politics and the totality of social and political ties that burden modern society. Terrorism, as the most destructive solution to social and political conflicts, and extreme cruelty and inhumanity, finds its supporters and supporters, in the part of a political extreme population, which even chooses violence to achieve certain political goals.

Another point that represents difference between organized crime and terrorism is that they are two different types of crime. The focus of organized crime is economic profit and the establishment on an illegal market, while for terrorism there is an opinion that the basic motivation is derived from ideological goals and the desire for political change.

The characteristics of modern terrorism are: large organization, comparativeness, extreme inhumanity, cruelty, globalism, the use of technology and technological achievements, as well as the abuse of religious feelings and religious affiliations, enormous financial power. As touch points, there may be a greater number of these characteristics, which are also characterized by organized crime. First of all, international terrorist and criminal organizations, involved in the smuggling of weapons, drugs, human organs, human trafficking, money laundering,

blackmail, murder, etc. The close connection of these serious criminal acts, with works of political character, as terrorism, for example, creates this criminal mosaic more dangerous.

In addition to all of the above, it is becoming more and more difficult to mark this distinct differentiation between terrorist groups and the organized crime unit, because their tactics are linked. The world is witnessing the birth of a new hybrid of “organized crime - terrorist organizations” and it is now imperative to delineate the connection between crime, drugs and terrorism.

Despite the touch points, the connection and the interdependence between organized crime and terrorism, however, for a close connection with valid evidence, a lot of fuss is needed and arguments. Certain political names, striving to exaggerate the link between organized crime and terrorism as a serious danger, which in fact is counterproductive in combating the same incriminated campaign (Nikolovski, 2008).

According to the document SECI Center Anti-Terrorism Task Force Based on the Anti-Smuggling and Organized Crime Department (COM) of the Turkish National Police (TNP), 08 March 2004, the Bucharest Correction is as follows: *There are differences between criminal organizations and terrorist groups, due to the motives for committing crime.* Unlike drug traffickers and organized crime groups, where the primary goal is financial gain. On the other hand, terrorists have no financial goal. They tend to: publicity, dissemination of ideology, destruction of the social regime, the spread of terror and intimidation. But it is clear that it is getting harder and harder to separate the criminal from terrorist motives.

The reason for this is that, in most cases, terrorists are driven to profit in favor of their ideological motives. Typical examples are: the Balkans and Colombia. There is no doubt that the financial dimension of organized crime has a different goal compared to terrorism. Financials related to terrorist actions are often much lower and remain below the thresholds of control mechanisms in financial institutions, in comparison to such a large profit from organized crime. Aggregate size, global money laundering is between 2% and 5% of world GDP (Bovenkerk, Chakra, 2005).

DANGER OF ORGANIZED CRIME AND TERRORISM

Transnational organized crime will be one of the major problems of the 21st century, despite terrorism. These two phenomena, besides what cause the death of innocent people, cause emotional and moral losses and lead society in death and misery. National security will be endangered, the continuous trade in nuclear materials. Smuggling weapons in an ever-increasing size will increase regional conflicts. The human trafficking victims in increasing dimensions and illegal smuggling will be evident in large numbers from the source and country of destination.

The proliferation of international prostitution and pornography will cause serious health and social problems. The massive profit of various transnational criminal groups engaged in organized crime, which operate their money in international markets, undermine the security of the world's financial system. The industrial competitiveness of legitimate businesses will be compromised by the participation of organized crime in industrial and technological spying. There are estimates that annually from drug trafficking, the profit from it is \$ 500 trillion in the world. Organized criminal groups, the next century, will have control over an even larger part of the world economy, because the illegal share of the world economy is in constant expansion.

International organized crime groups are completely different from legitimate multinational corporations. A large number of countries do not have economic alternatives, so criminal groups have dominant economic and political influence. Offshore Banking Centers, withdrawing money from powerful criminal groups and are eager to evade taxes. The lack of harmonized legislation and the lack of common legal assistance make it impossible for foreign forces to act effectively against criminal groups.

IS THE ORGANIZED CRIME IN FUNCTION OF TERRORISM OR IS THE TERRORISM IN FUNCTION OF THE ORGANIZED CRIME

Problems with the definition of terrorism itself are mainly related to the fact that certain people, groups or actions in certain situations have the characteristic of being terrorists, or there are situations in which people themselves, groups that characterize themselves as

freedom fighters, fighters of certain rights and freedoms. Expert on Terrorism, Aleks P. Schmid, in his research, analyzing 109 definitions of terrorism and concluded that the 22 components are repeated, the most common are: the use of force and violence (83.5), political character (65%), fear and horror (51%) and threat 47%). More information you can find on the following link:

<https://scholarlycommons.law.case.edu/cgi/viewcontent.cgi?article=1400&context=jil>).

After the collapse of the USSR, there were huge changes in the international community. Certain groups and organizations lost their major financiers and were forced to find other alternatives to finance. As an alternative, for quick and easy financing, terrorists are starting to cooperate rapidly with criminal organizations dealing with drug trafficking, because in the regions where they work, narcotics are produced or these countries are transiting country for the same purpose. Moreover, the United States played a dominant role with the "war on terrorism", through the suppression of the finances of terrorism, including the defection and blockade of the financial account. Similarities and links between organized crime groups and terrorist groups:

- Works secretly and usually with networks of "underworld";
- The pressure and use of violence against civilians is being carried out;
- Similar techniques in their activities;
- Group control;
- Front organization - used as legitimate business sectors;
- Most in countries with poor government control;
- Similar technical means for carrying out communication with each other;
- Money - as a very important motive for the realization of the goal;
- Huge capital;
- Network structure;
- Attack against the state, the international community and the world order;

A Canadian study identifies five types of cooperation between terrorist organizations and organized criminal groups dealing with drug trafficking, such as: operational, logistic, financial, political, and ideological. More information at the following link (https://www.loc.gov/rr/frd/pdf-files/AsianOrgCrime_Canada.pdf)

Differences between terrorist organizations and organized criminal groups are:

- | | |
|---|-------------------------------|
| 1) Terrorist organizations: | 2) Organized criminal groups: |
| - With ideological or political motives | - Financial benefits |
| - Competition about legitimacy | - They do not need legitimacy |
| - Media attention | - Anonymity |
| - Responsibility | - Silence |

It is also important to note certain differences in relation to the methods and ways in which the partition of the terrorist organization is divided. The very terrorist organizations themselves do not recognize the legal order and the rules of conduct, and as their target point the legitimacy of a particular government. Terrorism also has a greater psychological dimension than organized crime.

CONCLUSION

The relationship between terrorism and organized crime is reflected in several elements. The first element is the hierarchy that prevails in organized crime groups and terrorist groups in which members with the lowest level do not know members of the higher classes. Typically for such an arrangement is that they only have contact with one member of higher structures, use pseudonyms and usually do not know "bosses". Both groups work in regions that do not have government controls. They use the same communication technology.

Despite certain differences in methodology and primary goals, terrorism is a type of organized crime due to organization, financing, the same communication technology, activities in areas with poor government control, and so forth. The perception of organized crime and terrorism is that they are two different types of crime. Organized crime is mainly focused on economic profit and the establishment of an illegal distribution market, while terrorism is largely motivated by ideological goals and the desire for political change, what constitutes a fundamental difference between these two phenomena. Terrorist organizations often want to compete with governments about legitimacy, while organized groups do not do that. In addition, in performing the work, the terrorist organization wants the media to deal with them; they like to be on the front pages of the newspaper, to be featured in the titles, all the web portals to hear about them, that they exist and that if the authorities fail to meet their demands, they can cause even more damage.

There is a fact that in every terrorist act, usually terrorist groups themselves assume responsibility for a terrorist act, there are even cases where certain terrorist groups assume responsibility for actions that are not theirs, in order to promote organization and to make the public aware that they exist and that they are ready for everything to fulfill their demands and goals. On the other hand, organized criminal organizations want to remain as anonymous in their work as much as possible and not to attract public attention.

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SUSTAINABLE QUALITY – A CHALLENGE FOR GAINING NEW KNOWLEDGE FOR ACHIEVING A CLIMATE-RESILIENT FUTURE IN THE COMING YEARS

Cvetanka Velkoska , page 69-89

ABSTRACT

This paper presents the identified conditions, strategies and public policies expected to stimulate the development of scientific and practical findings with a view of improving the global eco-system by smartly shifting towards long-lasting solutions and success, through integrated and joint efforts by researchers, practitioners, decision-makers, regulatory bodies, and civil societies. With the growth of knowledge-based society, we should strengthen our climate capabilities, institutions, knowledge, skills, and learning about all facets of the sustainability, with a view of providing a climate-resilient future. The need of sustainable products viewed through the environmental, economic, and social prism, should stimulate the development of new values, attitudes, and behavior in society which will proactively mitigate and eliminate the consequences arising from pollution and global warming, ozone depletion, energy intensity, toxicity, etc. It is inevitable to devise a road map of actions along the science-policy-society axis, as well as new metrics to overcome the momentum coming in the following decades, especially because of the pressure of the intensive digitalization on the demand and the exploitation of rare metals which will open the topics of technical and technological procedures for their recycling and disposal. The science of sustainability must strengthen.

Keywords: sustainable quality, Industry 4.0, sustainability, climate-resilient, rare metals.



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INTRODUCTION

Understanding of quality

Historically and meritoriously quality, as an attribute and an essential feature of the existence of entities (products, activities, processes, systems, etc.) is subject to constant and intensive observations and articulations. The understandings and dependencies of the components participating in the building of the understanding of quality, expectedly vary with time and can become more or less significant or even disappear, while others appear and develop. This justifies the existence of different definitions of quality since they apply to different conditions and environments (Reeves and Bednar 1994).

Figure 1. provides the definitions and the understanding of quality by renown theoreticians in the area of quality, representing the existing and proven accumulated knowledge for the development of future trends in the understanding of quality (Martin, Elg, and Gremyr 2020).

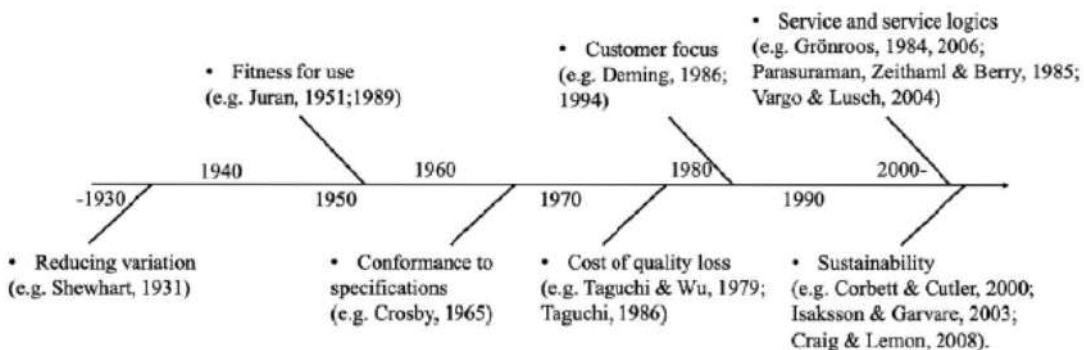


Figure 1. Timeline of key perspectives and meanings and definitions of quality

The concept of quality, by definition is not a constant concept. The new trends of the 21st century and the incorporated contemporary understandings of quality, at this momentum affect the not only the survival of companies, but impact the other stakeholders as well mostly the societal community which faces the globally imposed obligation and responsibility to deal with the consequences generated by the lack of quality of a product (the loss of quality) throughout the life of the project,

in particular the development (engineering) phase, the production phase, the utilization and the end of the life-cycle of product (Schoggl, Baumgartner, and Hofer 2017).

The appearance of the contemporary paradigm of quality – a concept of sustainable quality, mobilizing scientific and practical knowledge and experience with a view to minimizing the adverse effects of loss of quality on the overall life of present and future generations, focuses on and emphasizes the impact of the protected product quality on the quality of the overall work and life of the community (Watson 2015).

This contributes to the inclusion in the quality concept, of the three dimensions of the sustainability phenomenon, i.e., the environmental, the economic and the social dimension. These dimensions contribute, in an integrated fashion, considered in all phases of the product life, to effective and efficient utilization of the human and natural resources of the planet (Schoggl, Baumgartner, and Hofer 2017). A key factor in acquiring sustainable quality is the application of contemporary knowledge, human creativity, innovation genius, and humanity in solving the contemporary issues related to the reduction of material waste and pollution (Watson 2015).

Sustainability criteria are not only an imperative, but also an obligation in the product design process – internationalization of the long-term sustainability when the product designers, since the very beginning, must assess the future negative impacts of the designed product throughout its life-cycle. Sustainable products, usually labeled as “design for the environment,” “eco-design,” “design for sustainability,” “life cycle design,” can be developed by reengineering of the industrial process, promotion of the understanding of the sustainability phenomenon and a systematic application of the design for sustainability (DFS) tools to the products. However, this begs the question whether it is possible to secure all of the relevant data about the product design from the point of view of sustainability, in the early stage and with the required accuracy and timeliness (Schoggl, Baumgartner, and Hofer 2017).

Global warming and the formation of the hole in the ozone layer, the negative impacts of greenhouse gasses and waste initiated, as a consequence, the appearance of the so called “green products”, defined in 2001 by the Commission of the European Communities Green Paper on Integrated Product Policy, as products that “use less resources, have lower impacts and risks for the environment and for which the prevention of

waste creation is still in the design stage”. Environmentally friendly products “strive to protect the natural environment by conserving energy and resources, reducing or completely eliminating the use of toxic substances, pollution and waste”. Through this prism, the users can be viewed as “regular users” and “green users.” “Green users” feature a higher awareness of the environment and a stronger commitment and willingness to pay for the nurturing and the preservation of the quality of the environment. This suggests that the properties of traditional notion of quality, such as power, safety, material consistency, and convenience are complemented by the properties of quality such as energy efficiency, toxicity, and recycling (Zhang et al., 2017).

Elements of the structure of the understanding of sustainable quality

The challenges that managements face in the 21st century like dynamic markets, technological competition and cost benefits impose the need to develop new outlooks, approaches, philosophies, paradigms with a view of building enhanced frameworks and models for quality management (Beaujean, Kristes, and Schmitt 2008), which will contain complex social and material aspects from the supply side (vendors), the demand side (users) and the side of all other stakeholders, such as the community, with a view of increased efficiency and effectiveness in integrating sustainability in the work of the companies. Management is familiar with the initiative-taking approach of the Total Quality Environmental Management (TQEM) which by definition represents an “economically led, systemic and integral approach to reducing and eliminating all the losses related to designing, production, use and disposal of the products and materials.” (Curkovic and Sroufe 2007).

The analysis of the literature identified and presented several building blocks of the structure of the understanding of sustainable quality. The first element relates to the basic principle of quality which suggests that quality is not controlled, but rather it is incorporated (figure 2), which implies that the planned, designed, and incorporated quality enables the control of the process, rather than the control of the results. The second element relates to the framework for understanding sustainable quality (figure 3), viewed through the prism of the design and the compliance quality on one hand and the three dimensions of the sustainability phenomenon – economic, environmental, social, on the other hand.

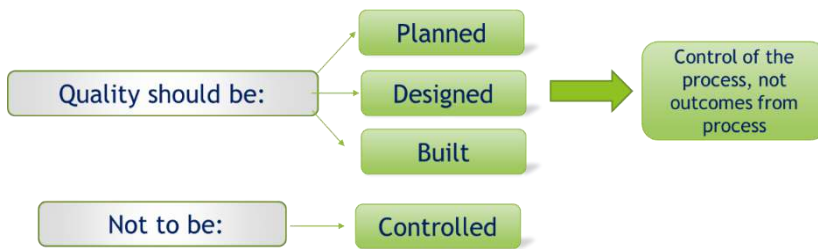


Figure 2. Basic principle of quality

The third element relates to the understanding of optimal quality. Namely, Ishikawa’s definition of optimal quality, which represents the intersection between designed, achieved quality, quality requested by the customers and quality requested by the society (Allur et al. 2018), can be expanded with the conclusion that the product quality should be seen through the prism of all phases of its life, i.e., the engineering phase, the production phase, the use phase and in the end-of- life phase of the product (figure 4). This suggests that quality goes beyond the boundaries of the product and no longer relates only to the product, but also to how this product will be integrated in the “sustainable system”, in other words the focus is on maximizing the results of the incorporated quality, which is possible only when observing quality throughout the life-cycle of the product, especially in the phase of product recycling and disposal (Kambanou and Lindahl 2016).

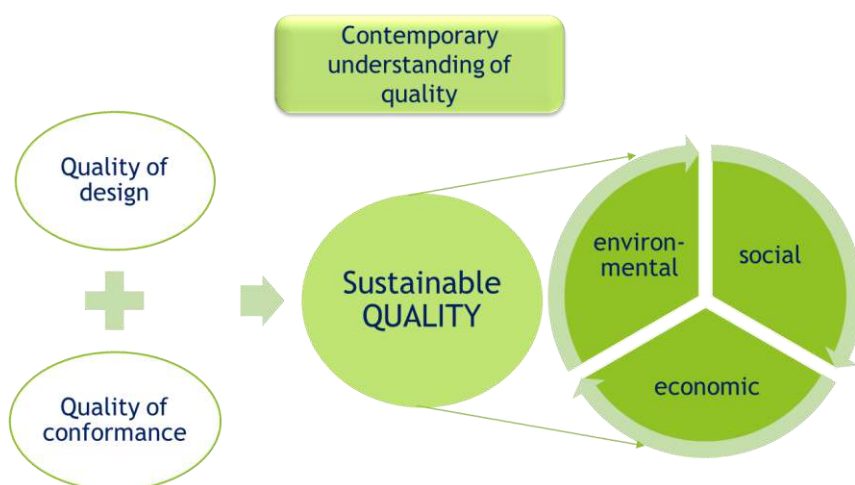


Figure 3. A Framework of contemporary understanding of quality



Figure 4. Economic, social and environmental quality in the whole life cycle of the product (Allur et al., 2018)

Industrial development strategies

National economies have always been supported by industrial developments, production systems and production technologies. According to the study of Phuyal, D. Bista, and R. Bista, (2020) the continuous industrial development features the four known industrial revolutions (figure 5). The contemporary Smart Manufacturing System, represents a product of the fourth industrial revolution, featuring interconnectivity through IoT, machine learning, artificial intelligence, automated robots, flexible manufacturing automation systems, additive manufacturing, the processing of real-time data to make intelligent decision for on-demand manufacturing, product customization and maintain the demand and supply ecosystem more efficient.

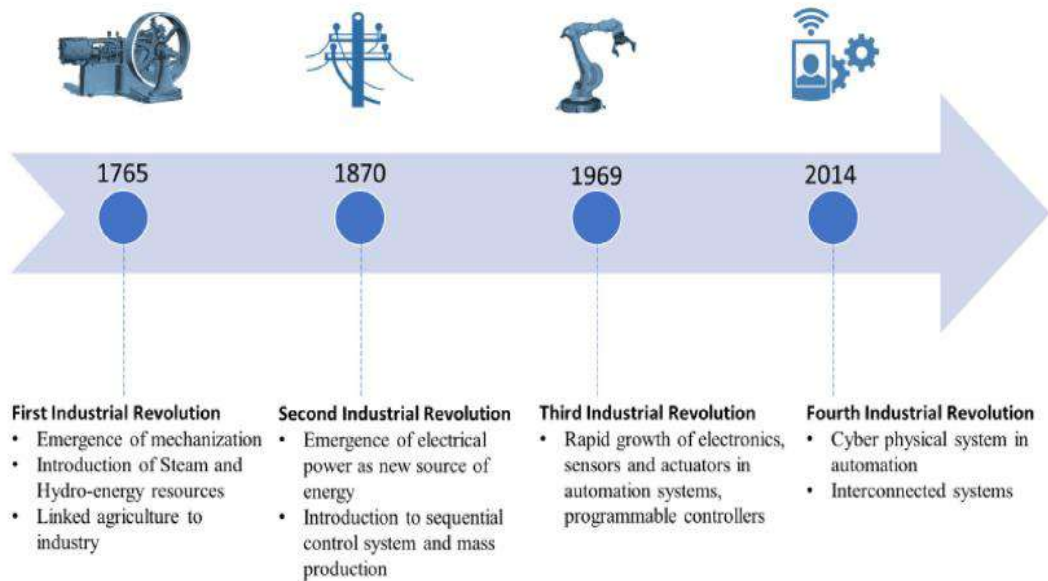


Figure 5. Evolution of the industrial development

The leading world economies, as global drivers of development, have established their emerging strategies, technologically based on the Internet and the interconnected devices and process control through fewer human interventions (figure 6). On the other hand, all these strategies are unified by the focus on the human, material, methodological and cultural resources, as well as the focus on data management which represents an important resource (raw material) in contemporary industries. The sustainability paradigm urges companies to identify, collect, analyze, archive product data and information, as well as to enrich their organizational knowledge with data and knowledge related to the product sustainability throughout its life, which should be accurate, relevant, and easily accessible (Aschehoug and Boks 2013).

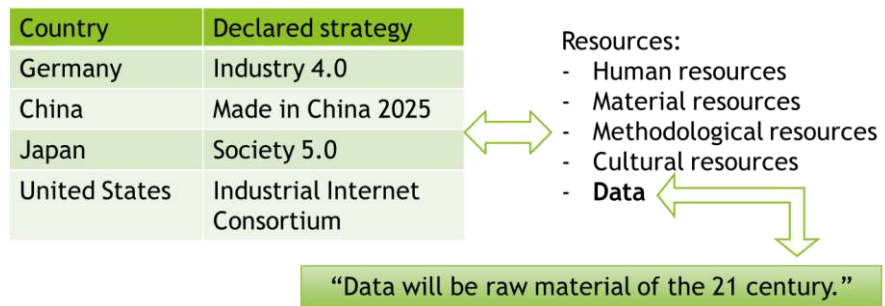


Figure 6. Strategies by different countries for the next industrial development

Industry 4.0 known as smart manufacturing has the potential of becoming the global language of production has a great long-term global strategic impact, because its integrates manufacturing processes at both intra- and inter-organizational levels and relies on smart devices. Despite advancements in the field of the industry 4.0 some key challenges including the technical aspects of technology, security and privacy, and standardization are still in the focus of the attention (Xu, E. L. Xu, and Li 2018).

The New Industrial Strategy for Europe from March 2020, presented its ambitions to support industry to shift towards climate neutrality and to build a more circular economy. The strategy was updated in May 2021 to ensure that its industrial ambition takes full account of the new circumstances following the COVID-19 crisis and helps to drive the transformation to a more sustainable, digital, resilient and globally competitive economy. A new Circular Economy Action Plan introduces measures along the entire life cycle of products, with the aim of ensuring that the resources used are kept in the EU economy for as long as possible (Sustainable development in the European Union, Monitoring report on progress towards the SDGs in an EU context, 2021).

Sustainability challenges and actions in public policies

The issues, possibilities, alternatives, and problems related to the environment have always related to two opposing states, i.e., the state of a “polluter” and the state of “polluted.” This seems like a question that needs to be answered through a new system of values, a new way of thinking about the organization and the analysis of the understanding of

sustainable quality. The section below provides a brief description of the current developments in the world related to sustainability.

1. There is a well-known and established need of embedding sustainability concerns into the quality assurance of the performance of the activities and processes (Ramanathan 2020).

2. The UN General Assembly adopted the 2030 Agenda for Sustainable Development (UN, 2015), to shift humanity towards a sustainable and resilient path (Transforming our world: The 2030 Agenda for sustainable development).

3. Globally, in the last two decades the world is challenged and committed to satisfying the energy needs and to reducing energy intensity by exploiting and using renewable energy sources. The facts suggest that within the last decade the use of solar energy has increased sevenfold and wind energy use has increased 44 times

<https://www.newscientist.com/article/mg24933190-400-why-using-rare-metals-to-clean-up-the-planet-is-no-cheap-fix/#ixzz6llhewYB>.

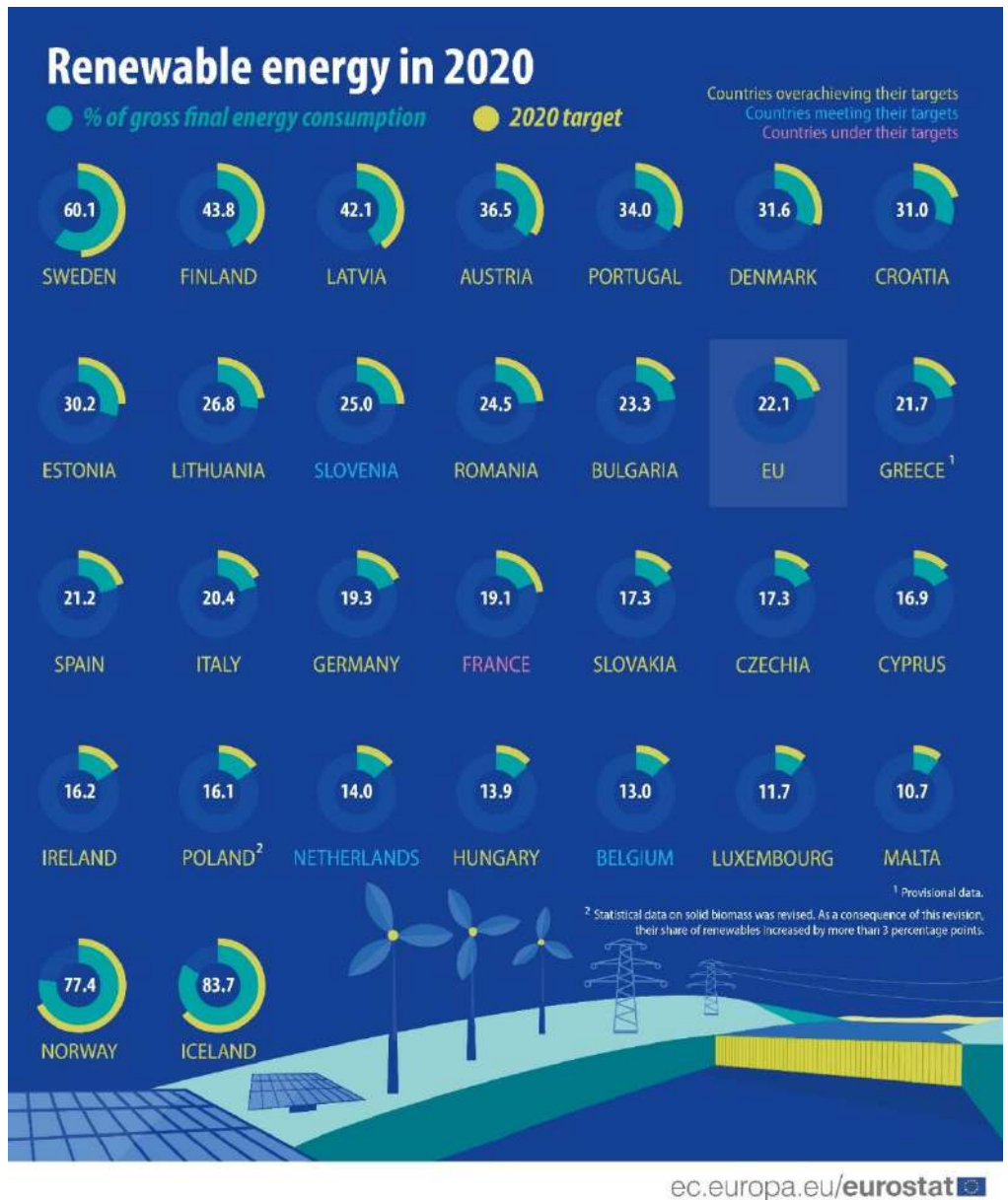


Figure 7. Renewable energy in 2020

At European level, the share of gross final energy consumption from renewable resources reached 22% in 2020. This is 2 percentage points above the target level for 2020, as included in Directive 2009/28/EC on the promotion of the use of energy from renewable sources. This is a major achievement and an important milestone in the EU’s path towards climate neutrality by 2050 (figure 7)

<https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-20220119-1>).

4. The intensity of the construction of wind and solar power plants with the necessary plant equipment implies an increased materials and rare metal raw materials. Rare metals have been called “vitamins of industry” and their importance in industry has been recognized for some time. However, recently, the industry has become highly dependant on products that can not be made without using rare metals so that they are becoming “the lifeline of industry”. As well as, rare earth elements are used in a wide range of consumer products, from iPhones to high-tech devices and electric car motors, as well as military jet engines, satellites and lasers. The exploitation of rare metals, as well as all metals in the periodic system of chemical elements, has enormously increased (Rare Metals – National Institute of advanced Industrial Science and Technology AIST).

The example of China, the world’s largest rare-earth producing country, who works its way to global domination on the global economic and digital stage by controlling 95% of the rare market metals, making between 80% and 90% of the electric vehicles batteries and satisfying more than half of the demand for wind turbine and electrical engine magnets, paid a price of having heavy metal pollution of 10% of the tillable land, 80% of the underground waters and an increased annual death rate. (<https://www.newscientist.com/article/mg24933190-400-why-using-rare-metals-to-clean-up-the-planet-is-no-cheap-fix/#ixzz6llhnewYB>).

The example involving lithium exploitation in Bolivia which together with Chile and Argentina form South America, represent the so called “lithium triangle,” will be the next story from which the world will learn about challenges. The U.S. Geological Survey estimates that Bolivia has 9 million tons of identified lithium resources (of the white metal key to electric vehicle batteries), which in itself causes interest having in mind the defined strategic plans of the different countries in the world, especially in the automobile industry

(<https://www.reuters.com/article/us-bolivia-lithium-exclusive-idUSKBN1ZE2DW>)

5. The ranking of countries according to the Human development Index for 2020, brought Norway to the first place

(<https://hdr.undp.org/en/content/latest-human-development-index-ranking>).

Norway is working closer to meeting its national goal of transitioning to an entirely zero-emission fleet of new cars by 2025 — an initiative the government backs with lucrative tax incentives (Sæle and Petersen, 2018). At the same time, the country has 1,681 hydropower plants, which, at the beginning of 2021, provided 88 % of electricity supply, wind power currently accounts for 10 % of the production capacity, and thermal power plants accounted for about 2 % of total production capacity. Norway has the highest share of electricity produced from renewable sources in Europe, and the lowest emissions from the power sector (<https://energifaktanorge.no/en/norsk-energiforsyning/kraftproduksjon/>).

4. Despite of the Industry 4.0 technologies and their applications are still in their infancy, challenges about dimensions of the sustainability have to be immediately involved in the future researches (Xu, E. L. Xu, and Li 2018), especially for the degradation of natural resources and their disappearance, electrical intensity, toxicity, recyclability and disposal opportunities.

The number of concerning topics continuously following the global socioeconomic order has increased mainly due to the increasing digitalization of the different industries. This digitalization is also related to proper and timely exploitation and utilization of rare earth metals on one hand and the caused adverse climate changes on the other.

Earth Overshoot

During the last five decades the world has continuously faced a massive degradation of its natural resources and the destruction of ecosystems and the biodiversity of the Earth. Since the 1970s, the annual demand for resources has exceeded the biocapacity of the Earth. Today, humanity uses 1.7 Earths to provide for the resources that we use and to absorb the waste of the planet. Humanity is in a global environmental overload (figure 8). Because we use more natural resources than nature can regenerate, this means that the Earth now needs a year and eight months to regenerate what we used in just one year

(<https://www.overshootday.org/newsroom/past-earth-overshoot-days/>).

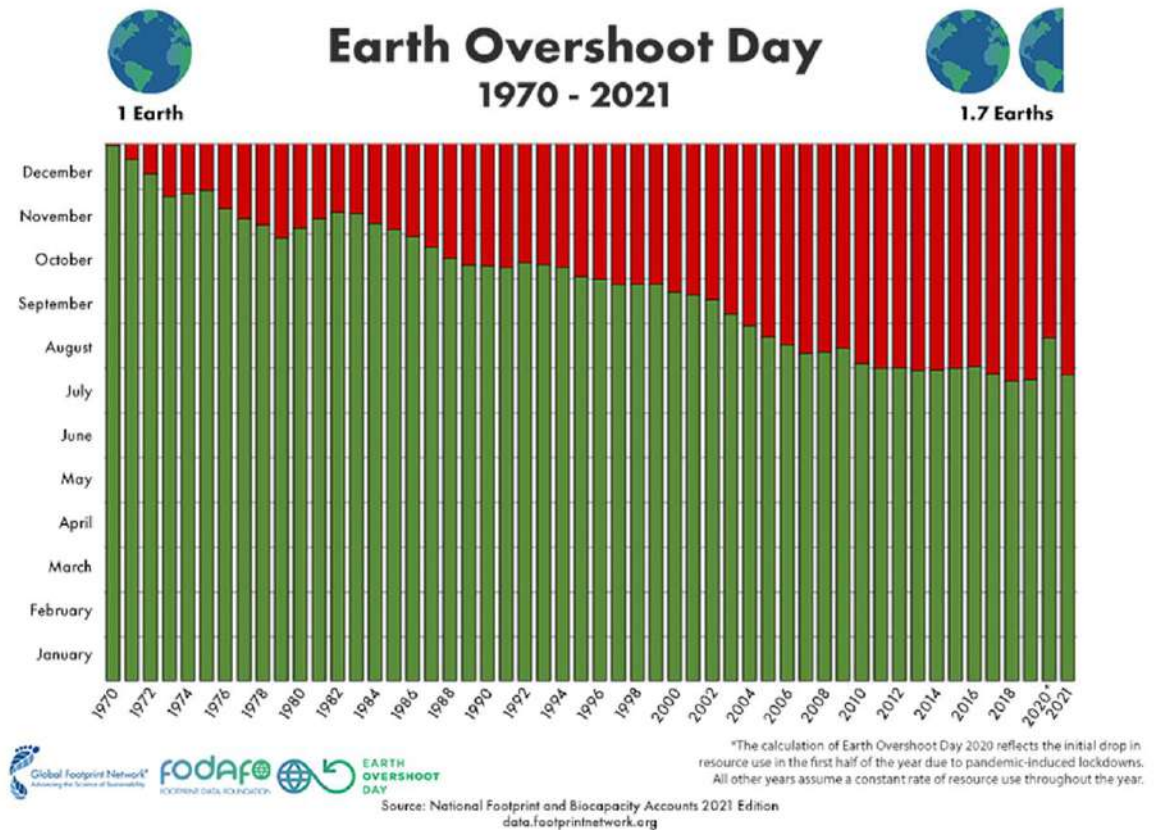


Figure 8. Earth overshoot day

Assessment of Sustainable development

According to Global Footprint Network, sustainable development can be assessed with two indicators. “The first indicator is the United Nations' Human Development Index (HDI), which measures how well a country's citizens live by tracking the country's achievements in longevity, access to education, and income. An HDI higher than 0.7 is high human development. The second indicator is the Ecological Footprint, which measures whether humanity lives within the means of nature. An Ecological Footprint of less than 1.6 global hectares per person makes the resource demand globally replicable”. For comparison are given figure 9 (Our Next Revolution – Rethinking improvement, productivity and value) and figure 10

(<https://data.footprintnetwork.org/#/sustainableDevelopment?cn=all&yr=2017&type=BCpc,EFCpc>).

The Ecological Footprint can be measured in "Number of Earths" (figure 11), which represents how many Earths would be required to support humanity of everyone had that Footprint

(<https://data.footprintnetwork.org/#/countryTrends?cn=5001&type=earth>).

Finite resources

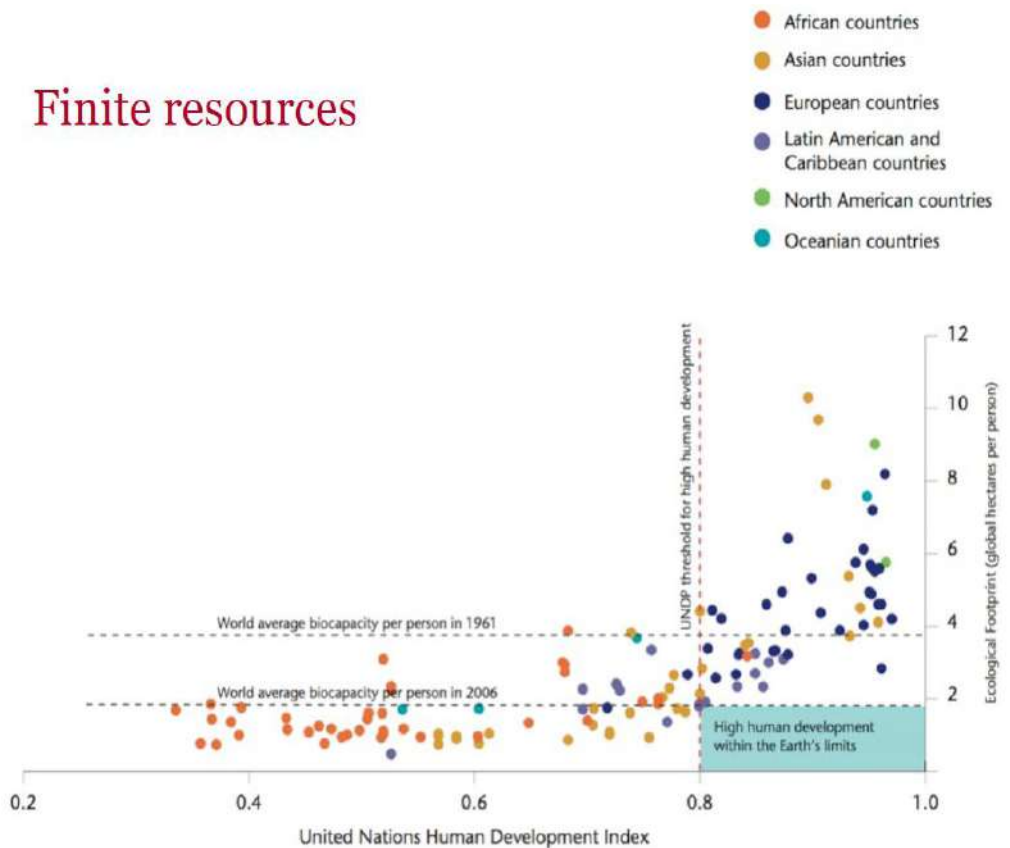


Figure 9. United Nations Human Development Index and ecological footprint

Human Development Index and Ecological Footprint (2017)

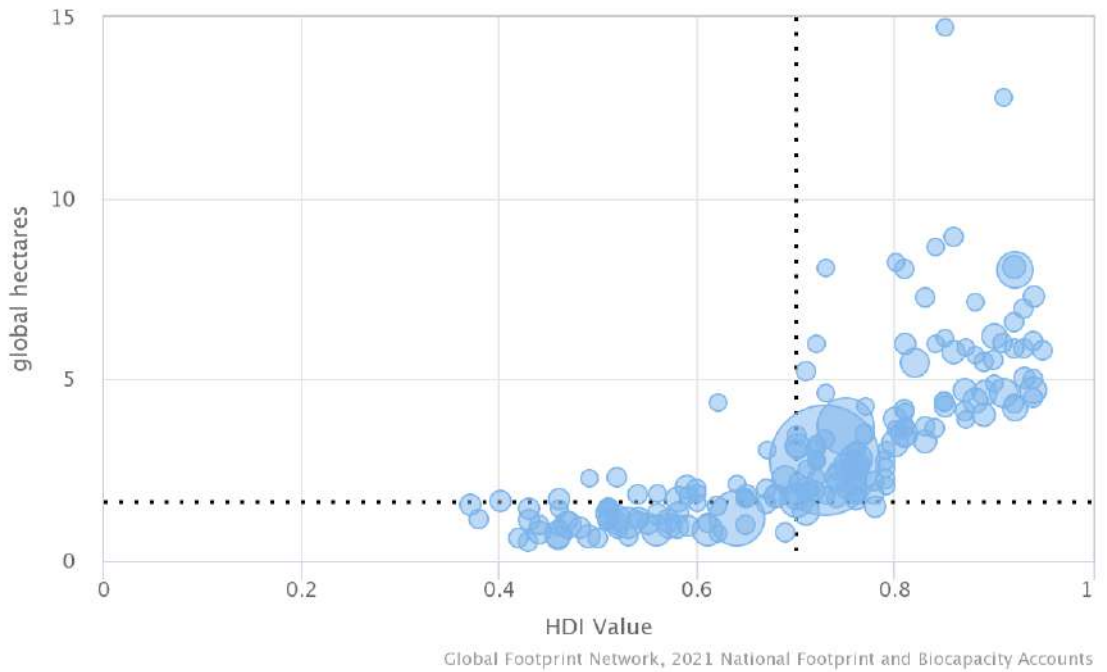


Figure 10. United Nations Human Development Index and ecological footprint for 2017

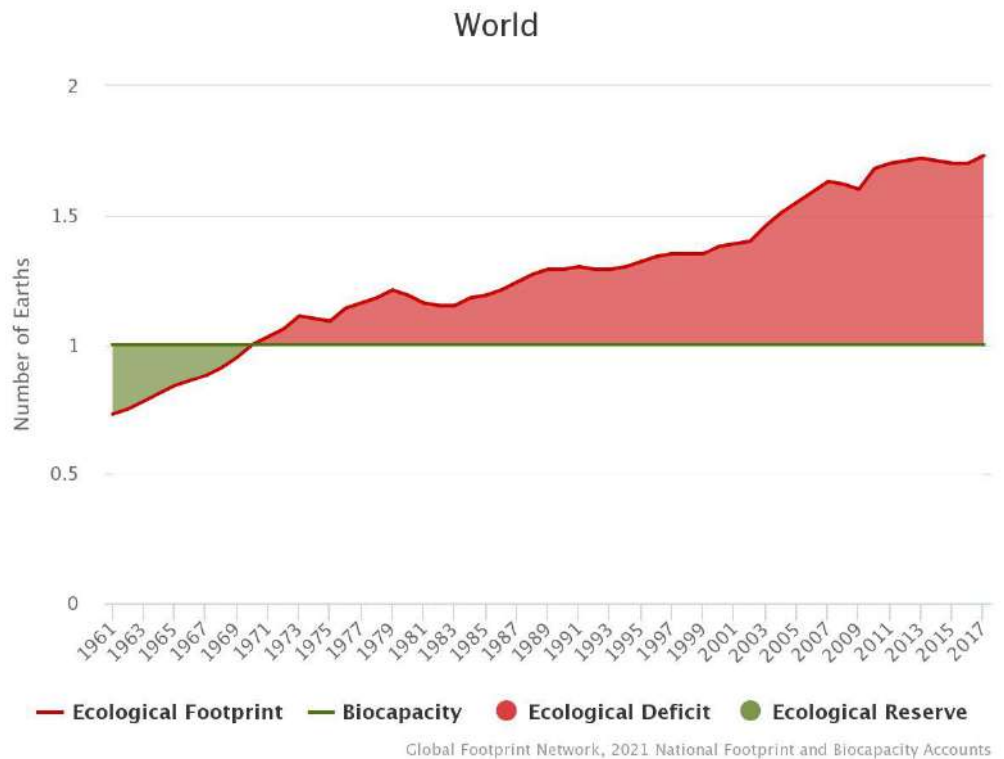


Figure 11. United Nations Human Development Index and numbers of earths for 2017

The UN’s Sustainable development Goals (SDGs) are the most significant global effort for global sustainable development. To evaluate the consistency of the SDGs with sustainable development outcome, countries’ rankings on the SDG index are marked in a diagram (figure 12) that plots countries according to their development achievements, using the UN’s human development index and Global Footprint Network’s Ecological Footprint. Ecological Footprint per person and HDI by country indicate how close each country is to basic global sustainable development criteria (high human development, within resource requirements that are globally replicable). The SDG index rankings mimics the conventional development that links higher development achievements with higher Footprints, rather than approaching the global sustainable development quadrant (Wackernagel, Hanscom and Lin 2017).

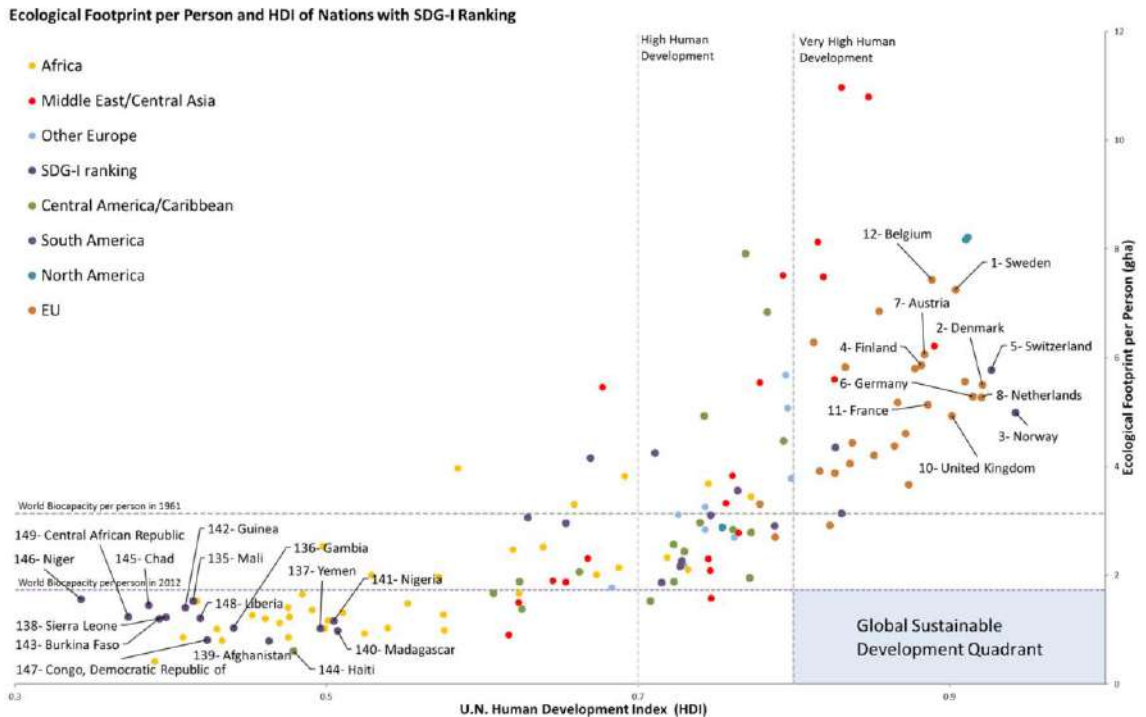


Figure 12. Ecological Footprint and Human Development Index with SDG Ranking for 2017

A climate-resilient future

The world must develop a long-term vision for delivering a climate-resilient future for current and future generations. To achieve it, climate-resilient development pathways by 2030 and deliver net-zero emissions by 2050 to ensure our societies and ecosystems should implies to climate-resilient people living in just, inclusive, happy and poverty-free societies, climate-resilient economies that are net-zero and prosperous, with vibrant and sustainable growth within ecological limits, and climate-resilient landscapes and ecosystems. (LDC 2050 Vision: Towards a Climate resilient future).

CONCLUSION

This paper contributed by presenting an overview of the identified conditions and public policies and documents which should stimulate the development of scientific and practical findings with a view of improving the global eco-system with smart movement towards long-lasting solutions and success, through programs and joint efforts of researchers, practitioners, decision-makers, regulatory bodies, and civil societies. With the growth of the knowledge-based society, we should strengthen our climate capabilities, institutions, knowledge, skills and learning about all facets of the sustainability, with a view of ensuring a climate-resilient future.

From a practical standpoint, undoubtedly, the world abounds with public national and global policies collated in available documents which reflect the policies of the relevant decision-makers. Maybe we need a new road map of actions for the science-policy-society axis which should help cope with the new momentum coming in the next decades, especially considering the pressure Industry 4.0 and the accompanying intensive digitalization exerts on the demand and the exploitation of rare metals, which will in run deepen the thinking about the technical and technological procedures involved in the exploitation, recycling, and disposal of these precious resources.

At the same time, this requires continuous development of varying and rigorous metrics that will track the outcomes of the undertaken actions in order to ensure zero gas emissions.

The conclusion of this research begs several questions that we need to answer in some future research. What kind of knowledge does the world need in order to nurture and improve the three dimensions of sustainability in the 21st century? Does the world continuously face other, new social challenges? How to cope with the fast and dynamic development of the current socioeconomic models driven by the rapid development of digitalization?

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FREEDOM TO PROVIDE SERVICES, AS ONE OF THE FOUR FREEDOMS OF THE EUROPEAN UNION'S SINGLE MARKET AND ITS DEVELOPMENT IMPLICATIONS FOR BOTH MEMBER STATES AND NATIONAL ECONOMIES OUTSIDE THE EU

Zoran Jolevski, page 91-100

ABSTRACT

The service sector plays a dominant role in the national economies of the EU member-states where over 2/3 of GDP is generated in this sector. International trade in services is different from trade in goods and therefore special measures are needed to ensure the free movement of services within the Single Market. The studies of the European Commission show that as a result of the implementation of the regulations related to the freedom of movement of services, the GNP of the EU member-states is growing and new jobs are being created. Proper implementation of this freedom also contributes to improving the competitiveness of the European economy on the world market. In order to ensure the free export of services, it is necessary to adopt a regulation that provides freedom in the incorporation (establishment of companies) in the territory of the EU member-states in which the services are consumed, recognition of diplomas and professional certificates of service providers, as well as rules that allows free consumption and provision of services in the territory of another member-state.

Key words: European Union, regional integration, Services, Single Market



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Introduction

The Single Market of the European Union (Single Market) is one of the most significant achievements in European economic integration and a symbol of European integration. The Single Market is the core of European integration. Its beginnings are contained in the founding acts of the European Economic Community in 1957. It was a process of gradual and continuous deepening of economic integration that led to the creation of the Single Market in 1993. In order to achieve its full functionality, it was necessary many legal acts and measures to be adopted in a number of different areas. Some member states lacked of legal basis for the adaption, while others needed to harmonize a number of laws, bylaws, and standards. Yet some EU member states needed to eliminate certain administrative barriers. A Single Market that ensures the free movement of goods, services, money and people is not an easily achievable goal.

Today, the Single Market consists of the markets of 27 member countries with over 450 million consumers. The Single Market has opened up new opportunities for companies and citizens of the European Union and contributed to the creation of growth, new jobs, greater competition. The aim of the Single Market is to remove all barriers and simplify or harmonize regulations and standards in all 27 Member States, allowing everyone in the EU (individuals, consumers or companies) to exploit the benefits of it. The Single Market enables EU business entities to conduct business activities within the EU much easier and cheaper. Increased competition leads to lower prices of goods and services, expands the range of available goods and services. It also puts pressure on businesses to be more efficient in producing the goods and services they offer to European consumers. This also contributes to their greater competitiveness in world markets. The significant element of the Single Market is providing regulation for consumer protection.

Estimates show that upon the establishment of the Single Market in 1993, expectations were that GDP would increase between 4 and 6 percent (Veld, 2019). Surveys from 2018 and 2019 indicate that „the macroeconomic benefits of the Single Market in goods and services by the reductions in bilateral trade and GDP in such a counterfactual scenario and find output effects of around 9% on average for the EU but with a strong degree of heterogeneity across EU countries“ (Veld, 2019). So the

benefits of the Single Market have a positive effect on the gross domestic product of the EU member states, although they are not proportionally distributed among all members. In the absence of the Single Market according to the counterfactual scenarios Veld concludes that „the overall GDP is about 6% lower in Germany and Spain, 5% lower in France and 4½% lower in Italy. The effects are larger in some smaller and more open Member States, with a more than 13% decline in the Netherlands and over 15% in Belgium.” (Veld, 2019).

A similar conclusion was reached (Mion and Ponattu, 2019) according to which: “First, the Single Market provides higher welfare, higher productivity and lower markups to all its members.... Second, per capita percentage welfare gains for members vary from 2.07% in Iceland up to 4.35% in Belgium while total aggregate welfare gains (computed as per capita gains times population) for members of the SM program amount to 461 billion euros.”

The Single Market today

According to the EU (European Commission, 2018) “25 years on, the Single Market still has significant untapped potential... Its benefits are also clear for citizens... They benefit from greater choice and lower prices as well as high standards of environmental, social and consumer protection.”

Full liberalization of trade in goods has been achieved, i.e. the last remaining non-tariff barriers have been abolished by adopting the principle of mutual recognition of national standards and certificates, which enables without any restrictions products produced and sold in one member-state to be sold on the markets of all other member-states. A high degree of liberalization has been achieved in the service sector. There are some restrictions on the freedom of movement of people, although steps have been taken (such as the mutual recognition of diplomas and qualifications obtained in one EU country being recognized in all other Member States). Regarding the freedom of movement of capital, a number of restrictions remain and further efforts for liberalization are needed.

The project for the creation of the EU Single Market is not fully completed. Additional reforms and legislation are needed to achieve its full functionality. Its completion will create conditions for the increasing

GDP growth rates that the European economy, and will also contribute to increasing the competitiveness of European companies on the global market. The study of EU (European Commission, 2018) recommends that in order member-states to overcome the challenge of low growth and international competition, strengthening of the the Single Market should be high priority and to remain central goal in order the European Union economy to become more resilient, more innovative, more productive, fairer and more inclusive.

The rapid transformation of the world economy, the industrial revolution 4.0, in which artificial intelligence will be the dominant condition for the competitiveness of economic entities, requires the European Union and its members to take measures that will ensure the deepening of the Single Market. Only in this way will the Single Market be able to continue to improve the competitiveness of the Union's economy and the well-being of its citizens.

Free movement of services

In the modern economy, the service sector has a dominant role in contributing to the GDP. In the member-states of the EU, more than two-thirds of the GDP is generated in the service sector, employing more than two-thirds of workers. That is why the freedom to provide and consume services is especially important for the Single Market, as well as for the development of the european economy.

Due to the specifics, the free movement of services differs from the from the other three basic freedoms. The addition, the freedom of movement of services is often linked to the other three freedoms: goods, capital, and people. Trade in services is different from trade in goods and therefore the measures to achieve free cross-border free movement of services are different from those necessary to ensure free cross-border movement of goods. Namely, the goods physically cross the border, while the services have four models through which the international trade with them takes place. Cross-border movement of services can take the following form:

1. *Cross-border*: services from the territory of one Member are provided to the consumer on the the territory of another Member, where there is no need for either the user or the service provider to cross the border;
2. *Consumption of services abroad*: consumers cross the border to consume the services in the other country
3. *Commercial presence*: Provider of the services moves to the country where the services are provided
2. *Presence of natural persons*: in order to provide services, natural persons (providers of the services) from one country temporary is crossing to another, in order to provide services

TABLE (Jolevski, Z. 2021)
MODES OF SUPPLY OF SERVICES

Modes of supply	Presence of services provider	Other	Example
<i>Cross-border</i>	Provider of the service is not present in the territory where service is consumed	Service is produced on the territory of one member-state and consumed on the territory of another member-state	Buying life insurance online in a foreign insurance company, on-line study where provider and consumer are in different member-states
<i>Consumption abroad</i>	The consumer of the service is present in the country where service is provided	The consumer of the service travels outside of his country od residence to consume the service	Tourist travel abroad, medical services abroad, treatment abroad, study abroad
<i>Commercial presence</i>	The service provider is incorporated in the territory of the member-stated where the service is provided	The service is provided on the territory of the member-state through the commercial presence of the service provider	Establishment of a new or acquiring the an existing bank, insurance company, etc.

<i>Presence of natural persons</i>	Short-term presence of the natural person who is providing the service	The service is provided on the territory of the member-state through the presence of the service provider as a natural person	A foreign surgeon performs operations in the country for a period of 2 weeks
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If we analyze the above four modes of cross-border supply of services, it can be concluded that in order for the European Union to provide free movement of services, it is particularly important:

(i) provide the freedom of establishment (incorporate) business entities (companies) wholly or partly owned by the parent company (Mode 3 - Commercial Presence) or the residence of individuals providing services in another Member State (Mode 4) on the permanent basis; and

(ii) the freedom to consume cross-border services of a person wishing to use a particular service in another Member State (mode 2) or the provision of the freedom to consume and provide a service without the user and the provider crossing the border, such as and use of services over the Internet, without cross-border movement of the provider and consumer of the services (mode 1).

Although the freedom movement of service has its origins in the 1958 Treaty of Rome, in the early years, the liberalization of this segment of foreign trade lagged behind the trade in goods. In order to ensure the free export of services, it is necessary to adopt a regulation that provides freedom in the incorporation (establishment of companies) in the territory of a Member State in which the services are consumed, recognition of diplomas and professional certificates of service providers, as well as rules that allows free consumption and provision of services in the territory of another Member State. For example, if a company is not allowed to establish its own company in the country where it plans to provide a service, in practice it will constitute a prohibition on providing a service. Also, if the diploma of a doctor or an architect from one member-state is not recognized in another, then that person will not be able to provide professional services.

Providers/exporters of services have often faced various regulatory obstacles that have prevented them from exporting their services to other EU member states. The European Commission realized that these restrictions did impede complete freedom of market for services. The European commission conducted a study aimed at defining all barriers in trade with services in 2002. Based on this study, appropriate legal acts were prepared and adopted with goal to create conditions for overcoming the identified obstacles, ie which aimed to provide greater freedom in the service market. The study highlighted the following areas that hinder the freedom of the services market in the Union:

a) *Horizontal barriers*, i.e. barriers that did not refer only to one type of services, but are general (such as various requirements for licenses to establish companies), administrative procedures that were barriers to entry for foreign service providers and were in form of unnecessary requirements and conditions for establishing foreign companies, including unnecessarily long and complex procedures, various discretionary powers of central and local authorities, etc.

b) Restrictions as a result of *non-recognition compliance* with the regulations in the of the foreign firm that was issued in the home country. Namely, in order to be able to provide services, the companies meet certain conditions in the Member State in which they established, but often opened a subsidiary, ie a company in another member of the Union, were required to prove again that they meet the conditions. This led to additional costs and barriers. They also encounter obstacles when their experts travel in another member-state to provide services. Some EU member states required owners or managers of companies in certain industries to have to residency or even to have their nationality. This limited the import of services from foreign companies and such regulations implicitly represented a non-tariff barrier for foreign service providers.

c) *Barriers to establishment*. In some sectors such as commercial medical laboratories, some members limited the presence to the providers from other member-states to have only one facility.

d) *Restrictions on operations*, ie in several Member States in certain sectors services could only be provided by local companies.

e) *Restrictions on the use of foreign services*, namely some member-states had regulations that was prohibiting its nationals to consume foreign services.

f) Other barriers, which occur in various hidden forms (for example as a result of contract law, insurance or financial guarantees, etc.).

As a result of the findings that indicated the negative effects restrictions on the freedom of services market on economic growth, the Services Directive (Directive 2006/123 / EC) was adopted in 2006. This Directive introduced greater discipline in the freedom of services in the Single Market, and was supposed to be implemented by the end of 2009, but the process in some countries did not proceed at the expected pace.

The purpose of this Directive was to ensure freedom of export, ie import of services in all modes of supply and consumption and thus to contribute to the strengthening of the freedom to operate in the Single Market of services. The implementation of this Directive had aim to ensure improved quality services provided, as well as opening the market that will result in reasonable pricing of the provided services. According the EU (European Commission (EC), 2010 p.19) “The full implementation of the Services Directive could increase trade in commercial services by 45% and Foreign Direct investment by 25%, bringing an increase of between 0.5% and 1.5% increase in GDP”. The purpose of the Directive is to strengthen the freedom to provide and consume services in the single european market, by simplifying administrative procedures and a higher degree of harmonization of member-states' regulations in this area. In order to achieve these goals, it is necessary to be undertaken activities that will eliminate the regulations at national, regional and local level, which are obstacles for cross-border provision and consumption of services.

In order to ensure freedom in the services market, national legislation has to be changed in in order to guarantee:

- the freedom of establishment of companies in the service sectors of legal and natural persons originating from another member-states;

- the freedom of movement of the persons providing the services, including the recognition of qualifications obtained in other member-states.

National legislative in the member states should guarantee freedom of movement professionals employed by service providers to the territory of other member-stated. All restrictions to free movement of the professionals within the EU member-states should be guaranteed.

In addition, the Directive requires each country to designate Contact Point within its administration which will be responsible for providing regulatory information for each service sector. Namely, the company or the individual who wants to provide services in another member state can contact this body and get information from him which services he should fulfill.

According to the latest study of the European Commission (Pelkmans, J., 2019 p. 62) the benefits from the impact of the Services Directive amount to 284 billion euros or 1.67% of the EU GDP for 2018 Successful implementation of this Directive requires political commitment, both nationally and locally in the EU Member States.

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CLINICAL ASSESSMENT OF PATIENT WITH EXCESSIVE DAYTIME SLEEPINESS (EDS)

Nita Beluli Luma, page 101-112

ABSTRACT

Excessive daytime sleepiness (EDS) is the primary concern for many patients presenting with sleep disorder and a significant public health problem. The International Classification of Sleep Disorders (ICSD-2) includes EDS as an essential feature for three diagnostic categories: narcolepsy, hypersomnia and behaviourally induced insufficient sleep syndrome. Most frequently, insufficient sleep duration is responsible for this symptom. This review will give an overview of some of the most common causes of EDS encountered in clinical practice and identify important risk factors for excessive sleepiness.

Daytime sleepiness is common but often unrecognized. As with most medical conditions, diagnosis of EDS begins with a precise history. The patient may present complaints of 'tiredness' or 'fatigue' rather than more specific symptoms of 'sleepiness' or 'drowsiness'.

Therefore in this literature research paper we have summarized the various tools that have been developed along the years to assess sleepiness more objectively and with their help to explore the different aspects and causes of the excessive sleepiness. Always having in consideration that investigators must recognize the limitations of the available methods and select them according to the clinical problem being addressed.

The purpose of this research paper, just like any kind of scientific writing, is to get the researchers, psychology students, readers, etc., up to date about the clinical assessment of patient with excessive daytime sleepiness. Especially this paper will be in much use for those who tend to assess or evaluate a patient suffering from EDS.

Having in consideration the difficulties researchers face whenever they try to approach to patients complaining about excessive daytime sleepiness, especially in our country, North Macedonia, where this sleep disorder hasn't yet been studied much due to the lack of cases complaining with the symptoms regarding the problem, we thought that a definition paper which describes facts, provides information and objective approaches how to determine whether the person is suffering from EDS, will be in much use of clinical practitioners.

In this research paper is completed a literature review where we have given an outline of the empirical activities by high-ranked psychology researchers around the world, who have contributed in better understanding and broadening our knowledge for the topic discussed in this paper.

Key words: *excessive daytime sleepiness, sleep disorders, psychiatric conditions, clinical assessment, treatment.*



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INTRODUCTION

–**Excessive daytime sleepiness (EDS)** is characterized by persistent sleepiness and often a general lack of energy, even during the day after apparently adequate or even prolonged nighttime sleep. EDS can be considered as a broad condition encompassing several sleep disorders where increased sleep is a symptom, or as a symptom of another underlying disorder like narcolepsy, hypersomnia, sleep apnea or circadian rhythm sleep disorder.

Excessive sleepiness is the leading complaint of patients who visit sleep clinics. People who have excessive sleepiness feel drowsy and sluggish most days, and these symptoms often interfere with work, school, activities, or relationships. Although patients with this condition often complain of "fatigue," excessive sleepiness is different from fatigue, which is characterized by low energy and the need to rest (not necessarily sleep).

It is not a disorder in itself—it is a serious symptom that can have many different causes.

Patients with excessive daytime sleepiness (EDS) have impaired function due to difficulty maintaining wakefulness or alertness at appropriate times during the day. Complaints of EDS, or related terms such as tiredness, fatigue, and lack of energy, constitute some of the most common issues presented to clinicians. EDS is important to recognize because it can signal an undiagnosed sleep disorder or other treatable conditions. In addition, EDS can have a negative impact on a broad range of activities and raise safety risks while driving or operating other machinery.

Underdiagnosis and undertreatment of sleep disorders are common in community psychiatric practices because clinicians may not be aware of the different causes and consequences of excessive sleepiness. It is essential to recognize and treat the underlying cause of this disorder. In cases where sleep disorders are suspected, a comprehensive treatment program might include nonpharmacologic approaches, pharmacologic approaches, or both may need to be initiated to encompass the complexity of sleep disorder treatments.

Careful monitoring and follow-up of patients with excessive daytime sleepiness, including counseling and long-term support, are essential to ensure treatment compliance and to maintain improvements over time.

The evaluation of excessive sleepiness should begin with a detailed history, including assessment of nighttime complaints and daytime problems with maintaining wakefulness and concentration. Direct questioning of the patient and a bed partner (if available) about sleep habits may differentiate nonspecific complaints, such as fatigue, inattentiveness, and stress, which are not related directly to somnolence, from true excessive sleepiness. It is important to remember that individuals have a moderate ability to predict performance impairment resulting from sleepiness. In addition, many people may be reluctant to admit having cognitive or functional difficulties at work or while driving. Any relevant comorbid medical conditions and medication use, as well as the use of legal substances (e.g., alcohol, caffeine, tobacco products), are important factors that should be identified.

PURPOSE OF RESEARCH - Having in consideration the difficulties researchers face whenever they try to approach to patients complaining about excessive daytime sleepiness, especially in our country, North Macedonia, where this sleep disorder hasn't yet been studied much due to the lack of cases complaining with the symptoms regarding the problem, we thought that a definition paper which describes facts, provides information and objective approaches how to determine whether the person is suffering from EDS, will be in much use of clinical practitioners.

In this research we have gathered the mostly used diagnostic instruments in the world, including surveys or questionnaires or clinical approaches, to confirm rather the person is suffering from excessive daytime sleepiness.

CLINICAL ASSESSMENT OF PATIENTS WITH EXCESSIVE DAYTIME SLEEPINESS

SELF REPORT - See Figure 1. for the general approach to clinical ma. The first step is identifying EDS. The individual identifies EDS when it is creating a problem in their life such as falling asleep in inappropriate settings such as driving. The situation is even more concerning when

colleagues, friends, or family have identified concerns, as subjective reporting may lead some individuals to deny the problem. Sleepiness can be hard to quantify as the subjective experience varies between individuals. In general, observable behaviors and objective measures are better used wherever possible. A physician may first identify sleepiness by seeing patients asleep in the waiting room.

Patients and clinicians often use these terms interchangeably, but despite some overlap, excessive sleepiness and fatigue have different features. A patient with excessive sleepiness may be unable to remain awake while reading, resting, or watching television, whereas an individual with fatigue may express feelings of apathy or listlessness rather than sleepiness.

The International Classification of Sleep Disorders-2, which classifies more than 80 sleep disorders under eight categories based on symptomatic, pathophysiologic, and body system criteria, describes excessive sleepiness as a state, subjectively reported by the patient, in which he or she experiences difficulty maintaining alertness and wakefulness, followed by rapid entrance into sleep when sedentary. The severity of the abnormal somnolence is based on the frequency and level of daytime impairment and dysfunction.

The evaluation of excessive sleepiness should begin with a detailed history, including assessment of nighttime complaints and daytime problems with maintaining wakefulness and concentration. Direct questioning of the patient and a bed partner (if available) about sleep habits may differentiate nonspecific complaints, such as fatigue, inattentiveness, and stress, which are not related directly to somnolence, from true excessive sleepiness. It is important to remember that individuals have a moderate ability to predict performance impairment resulting from sleepiness. In addition, many people may be reluctant to admit having cognitive or functional difficulties at work or while driving. Any relevant comorbid medical conditions and medication use, as well as the use of legal substances (e.g., alcohol, caffeine, tobacco products), are important factors that should be identified.

On the other hand as second approach we may use the diagnostic testing. Validated self-administered questionnaires have been used in

research studies and in the clinical setting to determine sleep habits and assess the effects of sleep-inducing and wake-promoting medications. Such questionnaires may be incorporated into clinical practice settings to supplement the clinical interview.

Diagnostic tests are used to determine sleep disorders in which excessive daytime sleepiness is the primary complaint.

THE EPWORTH SCALE - The most commonly used questionnaire to assess excessive sleepiness is the Epworth Sleepiness Scale (ESS). The ESS is a self-administered questionnaire with 8 questions. Respondents are asked to rate, on a 4-point scale (0-3), their usual chances of dozing off or falling asleep while engaged in eight different activities. Most people engage in those activities at least occasionally, although not necessarily every day. The ESS score (the sum of 8 item scores, 0-3) can range from 0 to 24. The higher the ESS score, the higher that person's average sleep propensity in daily life (ASP), or their 'daytime sleepiness'. The questionnaire takes no more than 2 or 3 minutes to answer. It is available in many different languages.

The disadvantages of ESS is that it does not ask about the person's subjective feelings of alertness/drowsiness at some particular time, as measured by the Karolinska Sleepiness Scale. Nor does it measure how often, or for how long, the respondent sleeps during the day. The ESS is not a check-list for identifying those situations in which the respondent most frequently dozes during the day. Nor can it measure a person's level of alertness/drowsiness continuously, as Optalert technology does.

The ESS specifically distinguishes reports of dozing behavior (and estimates of SSPs) from feelings of fatigue and drowsiness/sleepiness, in the sense of 'weariness from exertion'. Fatigue and drowsiness/sleepiness are related concepts that are often confused.

THE MULTIPLE SLEEP LATENCY TEST (MSLT) - Shortly after having a PSG, patients come in during the daytime for their sleep test during which they are given 5 scheduled naps each 20 minutes long and separated by 2 hours apart. The purpose of the tests are to determine how likely and quickly a patient falls asleep during the day in a relaxed and quiet environment. During these nap periods, patients are in a dark, quiet,

comfortable atmosphere devoid of any distractions, stimulations, or environmental factors that may prevent them from sleeping.

Patients are hooked up to the same monitoring equipment during their nap times as they are during an overnight PSG. The equipment is composed of electrodes and monitors that collect a variety of data.

The idea behind the multiple sleep latency test is that sleepy people are more likely fall asleep faster than others, especially when a sleep disorder is the root cause of the problem.

The main function of the test is to determine sleep latency (the time it takes to transition from wakefulness to sleep) and sleep onset REM periods (how quickly the patient enters REM sleep).

Based on the findings of the sleep test, a sleep specialist or the patient's primary care provider can determine the best course of treatment for the sleep disorder.

POLYSOMNOGRAM TEST - PSG is both a research tool used for studying sleep, and a diagnostic tool used to determine sleep disorders. Polysomnograms are used to monitor a patient's sleep stages and cycles to determine the presence of disturbances that can be attributed to sleep disorders. PSGs use a variety of equipment that monitors brain activity, muscle activity, breathing activity, and more to get a comprehensive interpretation of what disorder (if any) the patient is suffering from.

STANFORD SLEEPINESS SCALE (SS) - The Stanford Sleepiness Scale (SSS), developed by Dement and colleagues in 1972, is a one-item self-report questionnaire measuring levels of sleepiness throughout the day. The scale, which can be administered in 1–2 minutes, is generally used to track overall alertness at each hour of the day. The scale has been validated for adult populations aged 18 and older.

The SSS is a momentary assessment scale and can detect sleepiness as it waxes and wanes over the course of a day. Advantages include its brevity, its ease of administration, and its ability to be administered repeatedly. Experimentally induced sleep deprivation increases SSS scores; however, normative data do not exist, making it difficult to use for clinical decision making or comparisons between persons.

MAINTAINANCE OF WAKEFULNESS TEST (MWT) - A maintenance of wakefulness test is administered over the course of a day at a sleep laboratory and is used to measure how alert a patient is during the day and if they are capable of staying awake for a period of time in a quiet, relaxing, stimulation free environment.

It assesses an individual's ability to remain awake while resisting the pressure to fall asleep during soporific circumstances, a process to which we will refer to as 'wake tendency'. It is used clinically in disorders associated with excessive sleepiness or somnolence such as narcolepsy and sleep apnea syndrome.

During the test, patients are given 4-5 trials of 40 minutes of relaxing in a quiet, dimly lit bedroom during which time they are asked to simply sit still while looking forward, and not do anything stimulating that could intentionally keep them awake (no talking aloud, singing, reading, pinching themselves, etc.).

The rooms are meant to isolate external factors such as noise, temperature, light, and activity. Basically anything that can keep a person awake through some sort of stimulation or discomfort is removed.

Patients that are not experiencing excessive daytime sleepiness (EDT) should not have any trouble staying awake during each 40 minute trial. The trials end either after 40 minutes have passed and patients have remained awake the entire time, or when patients fall asleep and enter at least stage 1 of non-REM sleep (although any stage of sleep reached ends the trial) for 90 seconds. If patients fall asleep at any time in the 40 minute trial, the trial is ended early.

After the 4 or five trials a sleep technologist will look over the results and send them to a sleep specialist to be reviewed. Results of the test will help determine your level of sleepiness during the day.

SLEEP –WAKE SLEEPINESS INVENTORY (SWAI) - Consisting of 59 items, the SWAI was designed to screen for excessive daytime sleepiness in a clinical setting. Specifically, the scale evaluates six domains: **excessive daytime sleepiness, distress, social desirability, energy level, ability to relax, and nighttime sleep.** In contrast with laboratory measures like the Multiple Sleep Latency Test (MSLT), the SWAI offers a quick, inexpensive method for assessing excessive daytime sleepiness.

KAROLINSKA SLEEPINESS SCALE (KSS) - This scale measures the subjective level of sleepiness at a particular time during the day. On this scale subjects indicate which level best reflects the psycho-physical state experienced in the last 10 min. The KSS is a measure of situational sleepiness. It is sensitive to fluctuations.

This is self-report measure. It takes 5 min to complete. Reliability and Validity In a study conducted by Kaida et al , the authors investigated the validity of the KSS and found that it was highly correlated to EEG and behavioral variables. The results show that KSS has a high validity. However, because the scores of the KSS vary according to earlier sleep, time of day, and other parameters, it is difficult to deduce its test–retest reliability.

CONCLUSION

Daytime sleepiness is common, but, in some individuals, it can be excessive and lead to distress and impairment. For many of these individuals, excessive daytime sleepiness is simply caused by poor sleep habits or self-imposed sleep times that are not sufficient to maintain alertness throughout the day. For others, daytime sleepiness may be related to a more serious disorder or condition such as narcolepsy, idiopathic hypersomnia, or obstructive sleep apnea. Clinicians must be familiar with the disorders associated with excessive daytime sleepiness and the assessment methods used to diagnose these disorders in order to identify patients who need treatment.

The causes of EDS are numerous and include broad categories: insufficient sleep, sleep disorders, medical, psychiatric conditions and medications.

An accurate diagnosis starts with a detailed interview with the patient about possible factors that may contribute to the abnormal sleepiness. The evaluation process may require a sleep study.

The most important tool in the evaluation of a patient with EDS is the history, including a detailed sleep history, looking for clues to an underlying sleep disorder or explanation for insufficient sleep. The Epworth Sleepiness Scale (ESS) is a standardized measure of subjective

sleepiness that is not diagnostic but can be useful in clinical practice. Additional objective testing in the sleep laboratory can also be helpful.

The disadvantages of ESS is that it does not ask about the person's subjective feelings of alertness/drowsiness at some particular time, as measured by the Karolinska Sleepiness Scale. Nor does it measure how often, or for how long, the respondent sleeps during the day. The ESS is not a check-list for identifying those situations in which the respondent most frequently dozes during the day. Nor can it measure a person's level of alertness/drowsiness continuously, as Optalert technology does.

The Stanford Sleepiness Scale on the other hand, is a momentary assessment scale and can detect sleepiness as it waxes and wanes over the course of a day. Advantages include its brevity, its ease of administration, and its ability to be administered repeatedly. Experimentally induced sleep deprivation increases SSS scores; however, normative data do not exist, making it difficult to use for clinical decision making or comparisons between persons.

The Sleep Wake Sleepiness Inventory has been compared to the [multiple sleep latency test](#) (MSLT), which is an objective measure that is considered the gold standard of sleepiness assessment; it measures [sleep onset latency](#) during several daytime opportunities. The SWAI-EDS has been found to correlate moderately to highly with average MSLT scores. Other sleepiness scales, including the [Stanford sleepiness scale](#) and the [Epworth sleepiness scale](#) (ESS), exist. However, the ESS does not correlate as highly with the MSLT as the SWAI. The ESS is currently the most prevalent measure of excessive sleepiness.

As for Karolinska Sleepness scale it is frequently used to study sleepiness in various contexts. However, it exists in two versions, one with labels on every other step (version A), and one with labels on every step (version B) on the 9-point scale. The two versions have been compared in a 24hr wakefulness study of 12 adults. Results indicated that the two versions are highly correlated, do not have different response distributions on labeled and unlabeled steps, and that the distributions across all steps have a high level of correspondence ($\kappa = 0.73$). It was concluded that the two versions are quite similar.

Multiple Sleep Latency Test (MSLT) is a facility based study that is used to measure levels of daytime sleepiness. The results of the study are primarily used to confirm the suspected diagnosis. On the other hand in comparison to MSLT, Maintenance of Wakefulness Test (MWT) is a facility based study that is used to measure the ability to stay awake and alert. The procedure protocol is similar to that of the MSLT, with the exception that an individual is given four nap trials, each trial consisting of a forty minute session in which the an individual attempts to fall asleep. The test is routinely performed the day after a nocturnal PSG and evaluates the ability to stay awake for a defined period of time. Results may be used to determine the efficacy of therapy for sleep disturbance disorders (such as narcolepsy) or to determine if the inability to stay awake is a public or personal safety concern.

Regardless of which treatments are used, physicians should monitor their patients regularly and provide counseling and long-term support to help patients adjust to the chronic nature of their condition and ensure treatment adherence over time.

Excessive daytime sleepiness and impaired alertness are often difficult to identify and assess. However, because of the heavy social and economic burden on society, clinicians should evaluate and treat excessive sleepiness as part of a comprehensive treatment regimen.

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THE CONCEPT OF “WHITE - COLLAR” CRIME

Vasko Stamevski, Gjorgji Slamkov, Elizabeta Stamevska, page 113-124

ABSTRACT

The term “white-collar” crime is synonymous with the full range of frauds committed by business and government professionals. These crimes are characterized by deceit, concealment, or violation of trust and are not dependent on the application or threat of physical force or violence.

Within the “white-collar” crime included all forms of economic and financial crime, such as bribery, tax evasion, falsification of tax books, fake bankruptcies, etc, that is, a group of crimes that can be committed by privileged perpetrators by exploiting their own position, reputation, power, and influence.

The motives behind the commission of “white-collar” crimes primarily are the wish for control in society, fear and anxiety of dwindling from the social status, lack of social consciousness and integrity, weak and ineffective internal controls of organizations and departments, greed and hunger of wealth, monetary and financial gains and ineffective and ineffectual corporate culture in economy.

Keywords: crime, white-collar crime, criminal activities, organizations, corporations.



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INTRODUCTION

Many writers have defined crime as anti-social, immoral or sinful behavior. However, according to the legal definition crime is any form of conduct which is declared to be socially harmful in a state and as such forbidden by law under pain of some punishment. The crime can be defined as an act or omission, which is unlawful, illegal or infringes provisions of law and which is punishable by law.

“White-collar” crime is a nonviolent crime committed for financial gain. These crimes are characterized by deceit, concealment, or violation of trust. The motivation for these crimes is “to obtain or avoid losing money, property, or services or to secure a personal or business advantage.”¹ Examples of white-collar crimes include securities fraud, embezzlement, corporate fraud, and money laundering.

“White-collar” crime is not victimless crime. A single scam can destroy a company, devastate families by wiping out their life savings, or cost investors billions of dollars (or even all three). Today’s fraud schemes are more sophisticated than ever.

Lack of accountability, opportunity to commit crime, peer support, greed, and loopholes in legal structures, lack of reporting and staying in competition are some of the factors with which most of the experts agreed to be the causes of “white-collar” crimes. White-collar crimes are generally detected through internal monitoring, audits, or reporting systems. Informants in corporate and international companies report internal irregularities via e-mail and telephone and initiate an internal investigation process.

The work against “white-collar” crime integrates the analysis of intelligence with its investigations of criminal activities such as public corruption, money laundering, corporate fraud, securities and commodities fraud, mortgage fraud, financial institution fraud, bank fraud and embezzlement, fraud against the government, election law violations, mass marketing fraud, and health care fraud. That generally focuses on complex investigations, often with a nexus to organized crime activities, that are international, national, or regional in scope, where can bring to

¹ <https://www.fbi.gov/investigate/white-collar-crime>

bear unique expertise or capabilities that increase the likelihood of successful investigations.

1. “White-collar” crime

In 1934 Morris drew attention to the necessity of a change in emphasis regarding crime. He asserted that anti-social activities of persons of high status committed in course of their profession must be brought within the category of crime and should be made punishable.

Concept of “white-collar” crime was first introduced in the social sciences by American criminologist Edwin Sutherland in a 1939 presidential address to the American Sociological Association. Sutherland later published a book titled “White Collar Crime”, which concentrated almost exclusively on corporate crime. In his landmark definition of “white collar” crime he offered these categories of crime: (O’Grady: 2011)

- Misrepresentation in financial statements of corporations;
- Manipulation in the stock market;
- Commercial bribery;
- Bribery of public officials directly or indirectly;
- Misrepresentation in advertisement and salesmanship;
- Embezzlement and misappropriation of funds;
- Misapplication of funds in receiverships and bankruptcies.

According Sutherland, “white-collar” crime is a crime committed by a person of respectability and high social status in the course of his occupation. Focusing on the powerful as well as the downcast, such a concept represented a radical reorientation in theoretical views of the nature of criminality. His penetrating work in this area focused the attention of criminologists on its demoralizing effects on the total crime picture.

Sutherland pointed out that besides the traditional crimes such as assault, robbery, murder, rape, kidnapping, and other acts involving violence, there are certain anti-social activities which the persons of upper strata carry on in course of their occupation of business. He emphasized that these “upper world” crimes which are committed by persons of upper

socio-economic groups in course of their occupation violating the trust should be termed as “white-collar” crimes so as to be distinguished from traditional crimes which he called “blue-collar” crimes.

While “crime in the streets” captured the newspaper headlines, “crime in the suites” continued unnoticed (Sutherland:1949). “White-collar” crime was far more costly than street crime and most cases were not even covered under criminal law but were treated as civil or administrative violations.

Herbert Edelhertz has given another definition of white-collar crime. His definition of “white-collar” crime was as “an illegal act or series of illegal acts committed by non-physical means and by concealment or astuteness, to obtain money or property, to avoid the payment or loss of money or property, or to obtain business or personal advantage” (Herbert:1970).

Despite Sutherland’s pioneering study, little attention was focused on the “white-collar” variety until the first large-scale, comprehensive investigation of corporate crime, by American criminologists Marshall Clinard and Peter Yeager, titled *Illegal Corporate Behavior* (1979).

Many of the same patterns that were discovered by Sutherland still exist. In the decades since, the range of “white-collar” crimes has vastly expanded as new technology and new financial products and arrangements have inspired a host of new offenses, facilitated by the internet today.

“White-collar” crime is commonly subdivided into two broad, general sub-categories:

- 1) Individual crimes and
- 2) Corporate crimes.

1.1. Corporate crime - a sub-category of “white-collar crime”

Corporate criminality is a global and relatively new phenomenon in the world which leaves deep impact on the lives of the individuals and the society at large. This necessitates the dissection of this concept to come with findings to deal with corporate crimes. It poses potential

challenge to the criminal justice system in many ways. Corporate crime is crimes committed by or for corporations or businesses which act to further their interests and have a serious physical or economic impact on employees, consumers and the general public.

The corporate crime has grown rapidly the last thirty years, with an increasing number of corporations participating in economic and public life. Particularly came to the notion that corporations within their core business can act against the law, causing damage to the country, but also to society as a whole.

Corporate powers are not confined within a particular territory; multinational corporations function in different countries and thus spread crimes worldwide. But corporate crimes, being different from the ordinary crimes, are not easily detectable. Hence, punishment of the corporate criminals appears to be a big challenge for the government, especially of the developing countries which are the most vulnerable to, and affected by, the corporate crimes.

The problem of how to hold a company criminally accountable for the harm produced in the course of its business activity continues to vex the judiciary. In criminology, corporate crime refers to crimes committed either by a corporation (i.e., a business entity having a separate legal personality from the natural persons that manage its activities), or by individuals acting on behalf of a corporation or other business entity (see vicarious liability and corporate liability). For the worst corporate crimes, corporations may face judicial dissolution, sometimes called the "corporate death penalty", which is a legal procedure in which a corporation is forced to dissolve or cease to exist.

Corporate crime overlaps with:

- "white-collar" crime, because the majority of individuals who may act as or represent the interests of the corporation are white-collar professionals;
- organized crime, because criminals may set up corporations either for the purposes of crime or as vehicles for laundering the proceeds of crime. The world's gross criminal product has been estimated at 20 percent of world trade. (de Brie 2000); and

- state-corporate crime because, in many contexts, the opportunity to commit crime emerges from the relationship between the corporation and the state.

Often have a lack of differentiation of these criminal phenomena, which affect the study of corporate crime. Although by doing some of their activities the corporation performs specific criminal offenses, criminal liability of legal persons for a long time has no provisions for that under national law, especially the European countries from which corporation is coming. Therefore, many countries have joined the facelift for the criminal law, and to provide accountability and punishment of legal persons for criminal offenses (either directly, or indirectly to). Bearing in mind the European directive and other international standards, it is expected that this issue will be aligned in the European countries in a way that will make the offenses responsible corporation, which will cause the development of corporate criminal law (Šikman: 2013).

2. Classification and types of “white-collar” crimes

Theoretically, various “white-collar” crimes may broadly be classified into four major categories as follows:

- 1) Ad hoc crimes: they are also known as personal crimes because in this category of “white-collar” crimes, the offender pursues his own individual objective having no face to face contact with the victim.
- 2) “White-collar” crimes involving a breach of trust or breach of faith bestowed by an individual or institution on the perpetrator.
- 3) Individuals occupying high positions or status who commit crime incidental to, and in furtherance of their organizational operations constitute this category of “white-collar” crimes. People occupying high position commit such crime, not because it is their central purpose, but because they individually find an opportunity in the course of their employment to earn quick money or gain undue advantages by using their power or influence.
- 4) “White-collar” crimes may also be committed as a part of the business itself. Violation of trademarks or copyrights, patent law

or competition law, etc. the violation of domain name and other corporate crimes are also “white-collar” crimes of this type.

“White-collar” crime encompasses a wide range of offenses, including the following:

- Fraud - a broad term that encompasses several different schemes used to defraud people of their money.
- Insider trading - trading done with the benefit of the trader possessing material, non-public information that gives him or her an advantage in the financial markets.
- Ponzi scheme - named after Charles Ponzi, the original perpetrator of such a scheme, is an investment scam that offers investors extremely high returns. It pays such returns to the initial investors with the newly deposited funds of new investors. When the scammer is no longer able to attract a sufficient number of new clients to pay off the old ones, the scheme collapses like a house of cards, leaving many investors with huge losses.
- Identity theft and other cybercrimes - identity theft and computer system “hacking” are two of the most widespread computer crimes.
- Embezzlement - a crime of theft, or larceny, that can range from an employee taking a few dollars out of a cash drawer to a complex scheme to transfer millions from a company’s accounts to the embezzler’s accounts.
- Counterfeiting - the money has become more colorful and expanded in detail because it had to in order to combat counterfeiting. With today’s computers and advanced laser printers, the old currency was just too easy to copy.
- Money laundering - a service essential to the needs of criminals who deal with large amounts of cash. It involves funneling the cash through several accounts and eventually into legitimate businesses, where it becomes intermingled with the genuine revenues of the legitimate business and is no longer identifiable as having originally come from the commission of a crime.

3. World famous “white-collar” crimes

Here are the most famous “white-collar” crimes that shocked the world.

- **Bernie Madoff - Ponzi Scheme**

Bernie Madoff is famous for committing one of the most famous “white-collar” crimes this century. It’s certainly one of the largest in terms of monetary value. Bernie ran a Ponzi scheme from around 1991 until he was finally arrested in December 2008 after a lengthy investigation. During this time it’s estimated he scammed around \$65 billion from thousands of investors.

A Ponzi scheme is essentially a form of fraud whereby the person creating the scheme lures investors to hand over money on the promise of receiving high returns. They are able to pay money out to investors that complain or want their money back early on using the funds from other investors. In the long run, however, they do not invest the money and end up in a position where they can’t pay everyone back. It’s a fairly common white-collar crime. What was unusual in Berne’s case was how long he’d been running his scheme, and how much he’d conned. Bernie Madoff received the maximum sentence of 150-years in federal prison to reflect the severity of his crimes.

- **WorldCom - Accounting Fraud**

In the 1990s WorldCom was the fastest growing telecom company in the United States. They bought more than sixty other telecom businesses and was handling more than 50% of internet traffic worldwide. Towards the end of the 90s, revenue growth started to slow. As a result, WorldCom’s stock price started to fall. Their expenses to profit ratio also started to fall, and the company started to unwind financially.

To counter this drop in share price, the CEO at WorldCom decided to reduce the amount of money held on reserve. He also started to classify operating expenses as long-term capital investment. These are fraudulent accounting practices that effectively turned WorldCom’s losses into profits.

The Securities and Exchange Commission (SEC), which is a U.S. government agency responsible for regulating the securities markets and protecting investors became suspicious and performed an audit on WorldCom. They found the accounting errors and WorldCom was forced to file for bankruptcy. The CEO and the CFO at WorldCom at the time, were both given prison sentences.

- Tyco International - Fraud

Tyco International Ltd was one of the world's largest makers of electronic components; fire protection systems, undersea telecommunications systems, and some other products. The "white-collar" crimes taking place behind the scenes at this multi-million dollar corporation has been labeled as stock fraud, securities fraud, and unauthorized bonus.

In essence, three of the company's directors were found to have unlawfully given themselves more than \$600 million. Their fraud traces back to 1995. The company directors set up very deliberate and careful systems to spend millions of the company's money on personal expenses. It wasn't until 2002 that they were finally charged.

- Enron - Accounting Fraud

Enron was a Texas-based energy-trading company. Things started out great for Enron as they were named "America's Most Innovative Company" for several years and growing at a rapid pace. Despite claiming revenues of almost \$101 billion during 2000, by the end of 2001 Enron had filed for bankruptcy. It wasn't the usual bankruptcy a company goes through as a result of economic downturn, loss of business, or any of the other common reasons though.

The reason Enron went bankrupt was due to internal accounting malpractices. Enron lied about how much profit they were making. They hid large debts and took part in numerous other shady dealings spanning decades. They were involved in so much corruption, that some of the illegal things Enron did are still not fully understood to this day. More than 4,500 people lost their jobs. In addition, when Enron filed for bankruptcy with estimated losses of \$74 billion it was the largest in American history at the time.

- Wells Fargo - Account Fraud

Wells Fargo is the fourth-largest bank in the U.S. They are currently going through a number of civil and criminal lawsuits relating to fraudulent sales practices. Under pressure to sell products and meet sales targets, staff at multiple branches created millions of fake savings and checking accounts. Not only did they set up fictitious accounts, they used real customer data to open more accounts.

This started to unravel as customers noticed transactions and new accounts attached to their names and the complaints started coming in. It's estimated this account fraud started in 2011. By 2016, regulatory agencies started investigating due to the volume of customer complaints. The fallout has put an estimated 20,000 employees jobs at risk. Wells Fargo has also been ordered to pay \$3 billion in settlements, and the future looks bleak as its reputation is irreversibly damaged.

CONCLUSION

Control of crimes is a crucial problem for criminal justice administration in each country. It is more important than ever for organizations to develop and implement effective internal controls and process to ensure compliance with often complex legal and regulatory requirements in respect of crime. This is particularly true for businesses operating in a global marketplace and interacting with many different stakeholders.

Compliance programmes that have been aligned to the organisation's goals not only help to instil good working practices, but can also provide critical protection to legal risks if and when things do go wrong. Some of the remedial measures for combating "white-collar" criminality may be stated as follows:

- creating public awareness against these crimes through the media of press, platform, and other audio-visual aids. Intensive legal literacy programs may perhaps help in reducing the incidence of white-collar criminality to a considerable extent.

- special tribunals should be constituted with power to award sentence of imprisonment;
- stringent regulatory laws and drastic punishment for “white-collar” criminals;
- a separate chapter on “white-collar” crimes and socio-economic crimes should be incorporated in the penal code;
- “white-collar” offenders should be dealt with sternly by prescribing stiffer punishments kipping in view the gravity of injury caused to society because of these crimes.

It is necessary for the institutions of the system to find a continuous way to deal with any attempt t to carry out illegal activities by individuals or organized groups aiming at gaining criminal profits and legalizing them by launching them into legal economic and financial activities in one country. In legal states in which justice will be an ultima ratio, all socially responsible actors in the state must find mechanisms to deal with the “white-collar” crime.

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