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Model for Economic Security Assessment

Yuri Tsenkov

PhD, University of National and World Economy, Sofia, Bulgaria, Department "National and Regional Security"

Abstract

The problem of measuring the economic security of a country is a complex topic with an ongoing research since there are a number of factors with different characteristics that should be taken into account. The goal of the research is to suggest a model for economic security assessment based on public available data from official sources like EUROSTAT or national databases. The main assumption is that economic security is directly proportional to the economic development. Based on this assumption the economic security could be assessed using measurements for economic development such as GDP, GDP per capita, inflation, unemployment, budget deficit, government debt, net export, etc. A model is provided giving 7 indicators of economic growth and referencing values that if achieved and sustained for a longer period of time should provide a higher level of economic security. Based on the referencing values and comparison with other countries the model could be used for assessing the current level of economic security of a country.

Keywords: Economic security, GDP, Inflation, Unemployment, Deficit, Debt, Growth.

Introduction

An important element of a country's national security is its economic security. In the aftermath of the Cold War, the security focus has increasingly shifted from military power to economic power. However, the two should not be regarded as independent concepts as military power provides a security product that creates conditions for the development of the economic power of the state, but on the other hand economic power determines the resources available for the development of the defense and security sector. The economic power depends on the state of education, health, transport, infrastructure, science, culture, social policy and internal security, which determine the welfare of a country.

Economic security is often associated with financial security - the availability of resources and sustainable revenues, both financial and non-financial, in order to maintain a particular way of developing the country in the long run. Free market competition has emerged as a model for organizing the economy of most countries, where companies have a leading role and everyone is free to own private property and grow their own (private) business according to their capabilities and development prospects. Despite this model, the state must have a strong planning and regulatory function, and through the three authorities - legislative, executive and judicial - establish and control the conditions and rules for the functioning of public spheres, including the business environment, and at the same time play a leading role in planning and socially equitable provision of public goods.

From what has been said here, it can be concluded that economic security is the maintenance of the ability to overcome the negative factors of the environment and use the positive ones so as to ensure the economic development of the state.

Basically the research assumes that economic security is directly proportional to the economic development. The goal is to suggest a model for assessing economic security based on available official statistics that can be accessed on public databases like EUROSTAT or national databases.

1. Measuring Economic Development

In order to provide a better basis for the justification of decisions in each activity, indicators for current phenomena, actions taken and results achieved are sought. The economy is a field that has a wide range of such indicators - gross domestic product, gross national product, unemployment, inflation, government debt, consumer price index, interest rate and more. Each meter has its own advantages as well as a number of disadvantages, which are the reason to look for better and better ones. Appropriate examples in this regard are the UN Human Development Index, the Nordhouse and Tobin Measure of Economic Welfare, the World Bank's Genuine Savings Indicator, and the GPI - Genuine Progress Indicator) and more. Since economic development is the consequence of pursuing the right policy, it must be based on appropriate measures that will allow the right objectives to be set and the results achieved to be taken into account. The use of incorrect or inaccurate meters can lead to the wrong direction of economic development policy and have undesirable consequences. According to John Galbright and his book The Great Crash 1929, the lack of reliable benchmarks, combined with misguided theoretical knowledge, led to deterioration rather than an improvement in the aftermath of the 1929 US crisis. The same phenomenon repeats itself almost a century later when inaccurate valuations of securities backing up mortgage loans in the US lead to the 2008 economic crisis. Wrong metrics and misjudgments can lead to a false sense of security, which is a prerequisite for a wrong policy and negative consequences (Jacobs, Slaus, 2010) . Measuring economic security remains a problem for further research.

2. GDP and Economic Security

Economic security is linked to the economic growth of a country. It cannot be stated that a country is economicly secure in the presence of high inflation, high unemployment, low population incomes, high government debt, low GDP, lack of a state budget to cover the state's obligations to sectors such as healthcare, education, social activities, public transport, etc. Economic growth is a prerequisite for enhancing the security and well-being of each country, but it can also be a prerequisite for a crisis in the long run.

GDP is used as a measure of a country's economic power. GDP per capita is often used as a measure of the standard of living in an economy, although it hides uneven distribution of income among the population. From what has been said, it can be argued that high GDP and its growth are prerequisites for economic security. But excessively high GDP growth is a prerequisite for an economic crisis. It is essential to monitor the rate of GDP growth. Excessive growth will lead to rapid depletion of production resources, as well as increased inflation and negative effects on the economy. Very often, GDP growth is associated with the accumulation of debt and the excessive consumption of a country's natural resources. Expenditure on restoring the ecological balance distorted by industrialization increases GDP; in the case of natural disasters, the costs of the services involved in overcoming the consequences are increased; the increase in crime increases the cost of investing in law enforcement agencies; epidemics increase health care costs. All these expenditures are classified as government purchases and increase the amount of GDP therefore GDP does not differentiate the factors that lead to progress from those that impede it.

Weak growth or negative growth is not good for economic security, but faster growth too. The question arises: "What kind of economic growth is good?" Following the example of US economic development, it is assumed that sustainable GDP growth is between 2.5% and 3.0%. The federal government perceives such a growth rate as sufficient to stimulate economic activity without unduly increasing inflation. Whether this is a sustainable growth rate for the US is a controversial issue, but certainly the stated interval between 2.5% and 3% may not be the right target for any economy. What is more important is to seek a growth rate that stimulates economic development but does not increase inflation too much. According to (Iliev, 2005), this percentage is between 2% and 2.5%, according to (the Journal for basic terms used within the educational process, UNWE, 2013) is between 3% and 4% and according to (Samuelson, Nordhaus, 1989) it is 3,5 %.

Potential GDP or natural GDP is the value of GDP that can be sustained over a long period of time and does not lead to a significant increase in inflation. Potential GDP is achieved through full utilization of available production resources. Full load should not be understood as 100% since there are always natural, regulatory or other limits.

GDP growth beyond its potential leads to the so-called "overheating" of the economy and the depletion of natural resources, at a faster rate than their recovery. Growing below the level of potential GDP means that not all production factors are used in the best possible way. Each economy for some reason is growing below the potential GDP. Since economic security depends on economic growth and GDP growth is taken as a measure of economic growth, it follows that in order to maintain its economic security a country should strive for GDP growth as close as possible to potential GDP.

3. Unemployment and Economic Security

Labor resources with their quantitative and qualitative characteristics and their use are a factor that can develop an economy or slow it down in the long run. An important indicator of a country's economic development is the unemployment rate. Employment is closely linked to economic growth because maintaining high unemployment for a prolonged period of time disqualifies labor resources and impedes future economic development. It is a prerequisite for impoverishment of the population and deterioration of political, economic, social and cultural values, and hence instability in the country.

In addition to employment, expressed in terms of number of employees only, the income earned by employees is essential. This indicator can be directly linked to the government's income policy. The aim is to provide sufficient income for the employed so that they do not fall below or near the poverty line and have the opportunity to maintain their qualifications, restore their ability to work, access to healthcare, education, culture, etc., which affects the motivation and quality of the workforce. For developed countries, apart from changes in family and cultural values, low incomes on the one hand and high standards of living on the other are some of the main causes of population decline, which is a prerequisite for exacerbating the problem of labor shortages. Exemplary instruments through which the state can influence the wage are the determination of the minimum wage threshold and the determination of minimum wages by major economic activities and qualification groups of occupations, while taking into account the purchasing power of money when forming these thresholds.

There is a perceived minimum threshold for natural unemployment, which has a positive effect on the economy. It is provisionally assumed that natural unemployment is around 5-6% (Iliev, 2005))and is within frictional and structural unemployment (Friedman, 1968) and maintains stable inflation rates. Further job creation to reduce unemployment below its natural threshold will increase inflation. Raising wages puts a strain on businesses, reduces the competitiveness of the economy and raises inflation. In the absence of a depreciation of the national currency, or in the absence of such and maintaining minimum levels of inflation, a reduction in wages is a mechanism through which the state can increase its competitiveness and increase its solvency, but this should not be at the expense of excessive impoverishment of the population. The aim of a sustainable policy is to maintain a level of unemployment and income that will maintain price stability and create conditions for economic development.

4. Economic Security and Employees' Income

In addition to employment, expressed in terms of number of employees, the income earned by employees is essential. This indicator can be directly linked to the government's income policy. The aim is to provide sufficient income for the employed so that they do not fall below or near the poverty line and have the opportunity to maintain their qualifications, restore their ability to work, access to healthcare, education, culture, etc., which affects the motivation and quality of the workforce. For developed countries, apart from changes in family and cultural values, low incomes on the one hand and high standards of living on the other are some of the main causes of population decline, which is a prerequisite for exacerbating the problem of labor shortages. Exemplary instruments through which the state can influence wages are the determination of the minimum wage threshold and the determination of minimum wages by major economic activities and qualification groups of occupations. A corresoonding indicator could be the average sellary in a coutry and how far it is from the poverty threshold but there is a major problem with judging based on such an indicator. A high average salary in a country does not mean that the income is well distributed among the people and some could aern a lot while others could earn very little. A better indicator could be the number of people living with income on or below the poverty threshold.

5. Inflation and Economic Security

Inflation is a key factor in the economic security of any economy and largely determines its functioning. High inflation leads to a depreciation of money, which means that one consumer will be able to buy less goods and services with his money than in previous periods. As a result, savings are depreciated and consumers impoverished and consumption shrinks.

High inflation has a strong deterrent effect on investors, whether individual, institutional investors or businesses. Price volatility and the fear of depreciation withdraw investors from investments in financial and production assets and direct them to investments in gold, gems, real estate and other commodities that are considered to be retaining their value over time. The outflow of large amounts of capital from manufacturing and the financial sector significantly limits economic development.

For banks as lenders, inflation leads to a depreciation of their assets - loans and has a positive effect on borrowers. In reality, a long-term hyperinflationary loan can be repaid within a few months' wages, making the bank insolvent. This effect is further compounded by the outflow of savings into financial assets - massive termination of deposits and other savings, which results in withdrawal of money from the banking system.

Deflation, although associated with price reductions, also has a negative effect on the economy. With deflation, the price of money rises and one consumer can buy more goods and services with their money than in the previous period. This leads to a holding back of consumption as everyone prefers to postpone the purchase for a while so they can buy cheaper. For the same reasons, businesses can delay their investments, thus holding back economic development. With the rise in value of money, borrowers in the face of business are beginning to pay more and more expensive loans in shrinking markets and declining cash flows, and with a longer fall in prices and limited sales, they run the risk of insolvency.

As inflation rises, output produced in a given country becomes more expensive, reducing its competitiveness in international markets. On the other hand, as inflation decreases, competitiveness increases, but so does sovereign debt as a percentage of GDP, as the overall level of market prices declines and, consequently, GDP decreases. The contradiction between competitiveness and sovereign debt is a problem facing a number of EU countries, as increased competitiveness is a prerequisite for getting out of the crisis faster, but reduced debt provides resilience in times of economic crisis.

How much should inflation or deflation be? Inflation is a sign that the economy is growing, but too much growth is not having a positive effect. In some situations, low inflation or even deflation can be as dangerous as high inflation. The lack of inflation may mean that the economy is weakening. In order to avoid economic stagnation and avoid delaying investment, the European Central Bank assumes that price stability is achieved by annual inflation of around 2% (European Central Bank, 2001). The reason is that this is considered to be a level sufficient to stimulate consumption and business activity.

6. Budget Deficit and Economic Security

General government deficit is defined as the balance of income and expenditure of government, including capital income and capital expenditures. "Net lending" means that government has a surplus, and is providing financial resources to other sectors, while "net borrowing" means that government has a deficit, and requires financial resources from other sectors. This indicator is measured as a percentage of GDP.

In cases where a budget deficit is identified, current expenses exceed the amount of income received through standard operations. A nation wishing to correct its budget deficit may need to cut back on certain expenditures, increase revenue-generating activities, or employ a combination of the two. One of the primary dangers of a budget deficit is inflation, which is the continuous increase of price levels. Budget deficit can cause the state through the central bank or corresponding institution to release more money into the economy, which in turn feeds inflation.

Budget deficit may occur as a result of unforeseen situation like crisis response, war etc. or it could be caused by a certain state policy to increase government spending in order to support some economic activities or sectors. For example the government may deicde to generate deficit and use it for increasing the defense spending or supporting the agriculture, thus boosting the economic activity of all related sectors.

In other words the deficit could be used for boosting the economy, but such a decision should take in to account the negative effects of inflation if the deficit increases too much and deteriorating the business environment in a country by making certain economic activities a lot more favorable than others. If a certain industry suddenly becomes more profitable private entrepreneurs will divest capital from other businesses and move them to the supported industry. If such a tendency is kept for a long time the economy may loose competitiveness in key industries and then they will need support, which in turn will increase the deficit further and further and will create additional imbalance in the economy.

A certain amount of deficit may be necessary for each economy but how much depends on the geopolitical and economic environment of the country. If the deficit ratio stays below a critical level, then there are two steady states where capital, output, and public debt grow at the same constant rate. An increase in the deficit ratio reduces the growth rate (Brauninger, 2005). To set up a referencing value this research will use the Euro convergence criterion – government deficit cannot be higher than 3% of GDP.

7. Government Debt and Economic Security

Government debt contrasts to the annual government budget deficit, which is a flow variable that equals the difference between government receipts and spending in a single year. The debt is measured at a specific point in time, and it is the accumulation of all prior deficits. Government debt can be categorized as internal debt that is owed to lenders within the country and external debt that is owed to foreign lenders. Another common division of government debt is by duration until repayment is due and it is divided in long-term or short-term. Government debt-to-GDP ratio measures the gross debt of the government as a percentage of GDP. It is a key indicator for the sustainability of government finance.

Good utilization of government debt results economic development. It also allows the government to support certain policies and achive certain goals. Debt becomes a problem if debt-servicing capacity does not keep up with growth of debt. This may also be expressed as debt exceeding sustainable levels. Unsustainable levels of debt have repercussions for an economy in the form of re-allocation of resources from valuable social and economic sectors towards debt servicing at a certain time when debt is due. There is a non-linear impact of debt on growth with a turning point – beyond which the government debt-to-GDP ratio has a negative impact on long-term growth – at about 90–100% of GDP. Confidence intervals for the debt turning point suggest that the negative growth effect of high debt may start already from levels of around 70 to 80% of GDP (Checherita – Westphal, Rother, 2012).

Just like deficit, a certain amount of debt may be necessary but as stated above this amount should be monitored prudently. Since the different countries may plan differently according to their geopolitical and economic environment to set up a referencing value this research will use the Euro convergence criterion – government debt cannot be higher than 60% of GDP.

8. International Economic Relations and Economic Security

Due to the processes of globalization and the increasingly open and dependent economies of individual countries, economic security is linked to the dependence of the country's economic growth on international relations. A country's participation in certain unions may be a prerequisite for closing traditional markets for its goods and services. This is especially true for the military industry and trade in dual-use items. On the other hand, this may be a favorable opportunity to enter new markets.

Economic security requires ensuring the competitiveness of the national economy in the global economic space by developing competitive advantages in priority sectors. An indicator could be the country's net export. When it is positive, it means that the state earns more from export than it spends on import and therefore its goods and services are competitive on the international market.

An important part of international relations and their relationship with economic security is the dependence on import of resources. Although there is no fully independent economy in terms of resource availability, it is essential for economic security that this dependency is not on a single provider and as low as possible. Since such an indicator could not be assessed by using data from publicly available official sources and databases it should not be included within the current model for economic security assessment.

9. A Model for Economic Security Assessment

Considering the above stated the following model could be derived:

Table 1. Model for Economic Security Assessment

№	Indicator	Reference value
1	GDP Growth	2,5% – 3,5 %.
2	Inflation	1% – 2%.
3	Unemployment	5% – 6%
4	Employees income	0% population with income at or below the poverty threshold
5	Budget Deficit	Less than 3% of GDP
6	Government Debt	Less than 60 % of GDP
7	Net Export	Positive

Conclusion

The 7 derived indicators for assessing economic security are based on the assumption that economic security is directly proportional to economic growth. The study does not include indicators such as the United Nations Human Development Index, the Nordhouse and Tobin Measure of Economic Welfare, the World Bank's Genuine Savings Indicator, and the GPI - genuine progress indicator), Human Happiness Index and others, as the purpose is to use the most widely accepted indicators of economic development and available data in public databases.

Reaching the reference values of all 7 indicators together and maintaining them for a long period of time is difficult, but the model sets a goal to guide the economy in order to maximize economic security of the country. To apply this model to a separate country will give certain results and recommendations. To really assess the economic security of a country through this model it would be better to compare the results of the targeted country with the results of other countries. For example to assess the economic security of an EU member country it would be better to apply the model for all countries within the EU and then compare. All the necessary data is available in the EUROSTAT database but the limitations of each indicator should be taken into account when interpreting the results. For example a country may have a positive net export but may be highly dependable on import of strategic resources or the deficit and the government debt could be within the reference values but this might be as a result of slow development.

References

[1] Brauninger, M., The Budget Deficit, Public Debt, and Endogenous Growth, Journal of Public Economic Theory, Vol. 7, Issue 5, 2005, pages 827-840

[2] CristinaChecherita-Westphal, C., Rother, P., The impact of high government debt on economic growth and its channels: An empirical investigation for the euro area, European Economic Review, Volume 56, Issue 7, 2012, Pages 1392-1405

[3] Friedman, M. The role of Monetary Policy, American Economic Review, 1968 – http://www.aeaweb.org/aer/top20/58.1.1-17.pdf

[4] Iliev, I., Macroeconomics, II part, Sofia, 2005

[5] Jacobs, G., I. Slaus, Indicators of Economics Progress-The Power of Measurement and Human Welfare, Promoting leadership in though that leads to action, Volume 1, No1, Cadmus journal, 2010

[6] Samuelson, A., Nordhaus, W., Macroeconomics, McGraw-Hill, NY, 1998

[7] Price stability: Why is it important for you?, European Central Bank, 2001 – http://www.ecb.europa.eu/pub/html/index.en.html

[8] Basic terms used within the teaching process, Vol. I, Economics, UNWE, Sofia, 2013

Islamic Microfinance Model and the Hypothesis of Poverty Alleviation

Said Edaich

PhD.Opole Polytechnic University, Faculty of Economy and Management

Roman Śmietanski

PhD, Opole Polytechnic University, Faculty of Economy and Management

Abstract

Efforts to alleviate poverty in the world have the most perilous impact in human history. Contrary to the prevailing paradigms in public and private policies, the erosion of poverty remains very shocking. The Islamic finance model tried to present its alternative vision and to participate in international efforts to at least help the poor in Muslim countries. This paper is an essay among others that analyzes the effectiveness of this system based on official data.

Keywords: poverty, impact, Islamic microfinance, alternative, effectiveness

Introduction

Muslim societies have long been, and still are, suffering problems of intractable solutions to escape the iron fist of underdevelopment and poverty that are growing in a geometric succession. Such sustainable curse and inconvenience has destroyed the hopes and souls of Muslims and fortifies them dependency in all aspects of contemporary time. The increasing specter of poverty and unemployment *systematically threatens the stability and peace of Muslim nation depriving them of a dignified life.* Counter-attack policies, either from local initiatives or those developed within the framework of international cooperation between governments and specialized international bodies have failed. Despite the mediocre results, majority of Muslim economists and specialists are confident and show a certitude that Islamic economic theory provided believers a practical and effective solutions to achieve development and a decent life. In this paper, we will approach this insolvent problem that has disturbed the past and threatens the present and the future of the Muslim population. It focuses on the myth of Islamic microfinance and its effectiveness fighting poverty improving the living conditions of the individual and the community. Through a simple extrapolation of the characteristics of the Muslim community, the microfinance industry appears to have a wide field for expansion and growth.

Indicators of that success are illustrated by several factors that can be summed as following:

First, Islamic nation, from a long time, is experimenting one from the highest rates of poverty and unemployment in the World, it disposes also on a huge market that can absorb all investment initiatives and offering a sustained level of consumption. A market that represents 24% of the population of the World, exceeding one billion and eight hundred million people.

Second, Muslim countries dispose on huge sources of wealth: fertile lands, precious and diverse minerals, exceptional energy sources, cheap and young qualified labor.

Third, a rich experience that Islamic finance has matured from the period of it emergence since the early seventies. Banks and other financial institutions were able to develop their operational systems and their legal status through a combinating international standards, as known in conventional finance industry, and sharia financial provovisions.

In a general constation, we can assume that the Islamic microfinance industry disposes on all elements necessary to alleviate and limit the expansion of poverty and destituting it, at least in Islamic countries. Only real facts show ineffective and substandard results, a widning gap between the goals settled in public policy and the real living of citizens.

Islamic microfinance: instrument of redistribution and creation of wealth

Before initiating the evaluation of the Islamic microfinance experience in terms of effectivenesss, it is among the objectives of this paper to expose, the priorities of Islamic economic theory, so as not to separate between the general underpining and the special funding (microfinance), as an instrument to redistribute and create wealth in a complex paradigm realizing balanced growth and prosperity.

Islamic economic theory, when establishing its foundamental elements, did not limit its construction just to maximize benefits and profits, which comes to say the material dimension of the human life. It settled its priorities and objectives in consideration of two large pillars. First pillar reflects the relationship between man and God "*al-iman*", a consideration that places faith at the center of this report. It means that believers submit to divine predictions to reject or accept a transaction and, consider the preventiveness to not derogate sharia rules. Second pillar concerns the human relationship in guided by a real sense of responsibility, a relationship transleted to real economy, as the main source of wealth next the Man work. The interaction between the two categories of relationship results in a deep consciousness that balances the faith and the material life of human **[** Cafouri. A.H, 2000**].**

Decoding the precedent leeds to a conclusion imposing a certain control of lawfulness of all transactions, financial or not,"*Shari'yyatu AT-tasaruf wal mu'amalah*". A verification process ensuring the duties of the individual and governance to protect the common interest.

The teaching of Islamic economic theory focusing on human behavior distinguished two situations, situation when man acts on the environment to dominate the nature and produce more wealth (production relationship), and the situation when man undertakes relations to satisfy his needs and develops his richness, on the same basis of rights all to enjoy goods generated by the nature to benefit more from the interrelational report in a given socjety, (distribution and redistribution of wealth). As for the production activities, the distribution one is also subjected to fairness rationality up to sharia rules limiting waste and improving performance, without harming sources or other individual. The interaction between the two categories of relationship (production, distribution), should in no way have a negative influence on the stability of the distribution ratio, which reflects generally the best side and appearence of common life. To consolidate this economic construction the work (intellectual or physical), in Muslim society is indicated as the instrument for a dignified life and sustainable development **[**Al-'Umur F.A., 2003**].**

Poverty in the juridical (religious) context

To clarify the value of this approach "religious juridical context", we have to recall the nature of the rules and provisions that organize, even in a secondary way, private and public life in countries that are guided by religious principles. These principles traditionally enjoy unanimous consensus of the community and, are reproduced in international charters, do not deeply differ from the ten Commandments in the Torah, then which have been confirmed in the Bible and in the Quran. These principles are the so-called *"Furqan"*, in the Quran, a system of common morality in the three monotheistic religions, which is the basis of human relationship, regardless of faith [Shahrour M., 1990]. These principles are summarized by the Quran in two verses of chapter Al-An'am: "*Come, I will recite what your Lord has prohibited to you. [He commands] that you not associate anything with Him, and to parents, good treatment, and do not kill your children out of poverty; We will provide for you and them. And do not approach immoralities - what is apparent of them and what is concealed. And do not kill the soul which Allah has forbidden [to be killed] except by [legal] right. This has He instructed you that you may use reason*"; "*And do not approach the orphan's property except in a way that is best until he reaches maturity. And give full measure and weight in justice. We do not charge any soul except [with that within] its capacity. And when you testify, be just, even if [it concerns] a near relative. And the covenant of Allah fulfill. This has He instructed you that you may remember*" [Quran 6; 151-152].

Quran approach to poverty

Several verses introduced, in a generous specification, the meaning of poverty according to its different degrees and situation. Quran imposes a known right to the needy and the deprived in the goods (fortunes) of wealthy people under the form of *charity* "Sadaqah", obligatory charity "*Sadaqah wajibah*", alms "*zakat*" and endowment "*waqf*". In the same time Quran classified them in categories and segments according to specific criteria, including age, gender and economic capaciy. Referring to the verses about poverty, we do not find a definition that is beyond the scope of the need to determin the meaning of poverty "*al.-faqr*". *The word poor indicates the humiliated person in his society, because of his law income or lack of income. And more concretely, this determination charges on the society, establishment and individuals, the responsible for those people according to their relations with the means of production and, the possibility of assistance in the commonity. The circle of the word poor, up to this reasoning, can be widened or retracted according to the circumstances in the society [*Shahrour M., 1990*]*. Judaizm and Christianity, others important component in many Arab societies, even in countries where Muslims are majority, are no different in their vision to the poor and poverty. The two oldest monothestic systems, clearly emphasize the need to preserve the dignity of the poor urging wealthy people to care of them, and to end this injustice.

Poverty in international standards

To measure poverty and its evolution, four methods are the most commonly used: the first is based on a level of income (the poverty line) defined in relation to the general standard of living of the population; the second, on receiving a minimum income allowance; the third on criteria of deprivation in terms of living conditions; and the las test, on the definition of a minimum standard of living (absolute poverty) **[**Zümrüt Selçuk Z., 2015**]**. Since the 1990s, the World Bank has been measuring poverty in the world using the international comparison program. A statistics system based on converting the poverty line of the world's poorest countries into a common currency using exchange rates in parity of purchasing power, which allows to attract a value equivalent to the same quantity of goods and services from one country to another. Regardless of the effectiveness of this system in conveying the expansion of poverty in the World, the World Bank in its report of 2016 estimated that the extreme poverty rate for 2013 was 10.7%; today, it is amounted to 11.2%. [The World Bank's 2018 Report on Poverty and Shared Prosperity: Completing the Poverty Puzzle]. The recent data we dispose on to determine the international poverty threshold was established on 2011 conversion rates in purchasing power parity, that settled US $ 1.90 per person per day, as determinant base distinguishing the poor from the others **[**The World Bank's 2018**]**.This determination is the same indicator adapted in Arab and Muslim countries, fact that raises doubts on its effectiveness as this measuring instrument applies a standard of statistics to different regions of the world with citizens who express multidimentional needs. In order to perfect the instrument of poverty measurement, statistical specialists have introduced new methods and approaches to solve the inefficiency of this instrument and its shortcomings. Consequently as the debate on poverty has been enriched by new terms such as extreme poverty and multidimentional poverty, experts use different approaches (

monetary, basic needs, livelihood, life satisfaction, capability), to satisfy the methodological requirements for the study of the phenomenon **[**Burchi F., 2018**]**.

Islamic microfinance: challenges and impact

The World Bank in its annual report ``Poverty and Shared Prosperity 2018'', established a new conception of poverty according to a number of living considerations. All of a sudden, many negative repercussions changed the map of poverty in developing countries, especially Arab and Islamic world. From Asia to the Middle East to North Africa, where most governments are trying to adapt their reports to the international requirements and standards for a decent appearance, the consequences of such change affected these regions in depth **[**World Bank, 2018**].** The five criteria adopted in the report that are:

Cash income per capita and household,

level of education,

level of infrastructure and utilities,

level of health services,

level of security.

These criterias pushed thousands of citizens from these countries to the circle of the poverty and deeply affected the decision-making independence of its governances. Factly, the important deduction that emerges from these five criteria used to determine the global poverty rates are directly related to the suffering of the people in these countries since ages. Before presenting some cases from these regions we have to consider that the majority of Arab and Islamic countries experienced several forms of fluctuation in their economic systems. The persisting tensions between equity and growth, import substitution, industrialization for export, investment in agriculture against industry, oil wealth, workflows, remittances and bilateral aid, all these factors have significantly influenced the course of development in this area stretching from Morocco to Indonesia.

The case of Arabia Saoudia

The world's largest oil producer Saudi Arabia, in more than one official report has acknowledged the phenomenon of poverty, but did not disclose the numbers or percentage as they deliberately concealed any statistics on this subject, in contrast unofficial reports revealed that the poverty rate has worsened to range between 15 and 25% of the total number of Saudis of 32.6 million in 2017 (non saidi *37% from the* population that is 12.2 million).*The programs launched by Saudi Arabia did not succeed in reducing poverty despite possessing tremendous resources and wealth. According to the State Statistics Authority, poverty is linked to unemployment as one of the most prominent indicators of the aggravation of living crises. The percentage of unemployed Saudis reached 12.7% during the first quarter of this year. 22.6% in the Al.-*

Madinah 21.2%, in Jazan 17.5% and in Hail 16.8% and in Riyad 11.6%. . In April 2017 the Saudi Ministry of Labor published that more than 11.84 million Saudis have applied for the government's cash subsidy program to ease the consequences of imposing fees and further increases on many goods and services, (about 60% of the Saudis) ***[****Ministry of Labor Saudi-Arabia 2017****]****.*

Saudi officials, in general, talk about the "needy" rather than talking about poverty or extreme poverty, however they offer no information on the subject despite its centrality for the reports that should be made in this area **[**Human Rights Council, Report Saudi Arabia, 2017**].** Which increases the astonishment of specialists and scholars is the Arab report on multidimensional poverty published on 2017, prepared by the Economic and Social Commission for Western Asia, League of Arab States, United Nations Children's Fund and Oxford university **[**Arab report on multidimensional poverty published on 2017**].** It turned out to be a simple essay which describes the interaction between poor households and poor children especially in countries known for their extreme poverty either from Asia or North Africa (no data about MENA countries). This is a sign that raises doubts about the usefulness and the authenticity of the study. Generally information on who benefits from microfinance in Saudi Arabia, conditions for beneficiary, capital invested, economic and social impact will remain among the mysteries of faith in this country.

Technical efficiency

Depending on the approach, experts analyses (DEA), from 2008 to 2016, demonstrated a variation in the averages scale (inputs outputs, constant return), resulting from local factors such as size and volume, the reach of the bank and the duration on the market, also from international factors so as oil market and regional stability (Yemen and Syria wars) **[**Ul-Hassana M., 2018**]**. Indulgent approaches evaluating technical efficiency reveal an overall, financia and social inefficiency, that Islamic microfinance has a long way to go before achieving its objectives, especially poverty alivation or social and financial inclusion **[**Widiarto I., 2015**].**

Feasibility challenges for Saudi Arabia's microfinance

In 2006 Saudi Industrial Development Fund launched Kafalah program to provide credit for SMEs however, the results were disappointing. Banks and customers found themselves facing the di lemma related to the Lack of grantees, higher risk and the lack of codified legislation and model that could be applied for all cases and custmers. These facts are among other multiple factors limiting the impact of microcredits and its feasibility **[**Adewale A.A., 2015**]**.

Indonesian Islamic microfinance model

Republic of Indonesia most populous Islamic country, 264,162,000 citizens up to the 2018 census, is facing a real problem in curbing unemployment which has led to widespread poverty in large segments of the Indonesian territory. Indonesian finance system rappresents a distinguished system with micro-and rural finance in which Islamic microfinance is evolving consistently (cooperatives, commercial banks and rural banks). Apart from the bids regarding the effectiveness of this sector and the achievement of the desired results (poverty reduction), it has enjoyed a systematic legal organization since the late 1990s. From the 1998 (Act. No. 10) Bank Indonesia recognized a dual banking system, conventional and sharia-based. And *under Law No. 23 of 1999,* Bank Indonesia introduced sharia financing authorizing the central bank to act also according to sharia provisions. Actually Indonesia disposes of three categories of Islamic financing institutions: Islamic commercial banks; Islamic banking units and Islamic rural bank [Hans D. S. 2005]. From the begining in 1977, Islamic Microfinance activities covers the main services such as saving, Lorans and charity loans in the entire territory of Indonesia. It is a sector in continuous development but still insufficient to satisfy the needs of tens of millions of customers in both rural and urban areas (covering middle and upper class and SMEs) **[**Nurfadilah D., 2018**]**. Among the factors limiting the effectiveness and the profitability of this sector araising customer distrust we note:

weak Communications and absence of interaction,

low return,

lack of supervision and reporting,

lack of professional management,

lower professional staff

limited infrastructure,

less innovative product.

Mostly, these factors form the basis of criticism of Islamic finance, but it would be prudent to take into consideration the specificity of some Islamic finance institutions that have a charitable character. Mainly Zakat (alms) and *waqf* (endowment), remain variable, depending on the circumstances, so they can not constitute stable and sustainable funding sources on which the financial institutions can base their forecasts and activities. These two institutions serve more to satisfy the persistent needs of individuals and households more than fund to invest, this reasoning is supported by the legal rules that are the basis of these practices. Zakat is due or not due to the poor according to the rules establishing the merit of the interested, the same consideration determines the people who usufruct the Waqf. Deduction is that these instruments are means of wealth redistribution among members of society more than funds that could be used to fight against poverty or to finance SMEs **[**Mysqaoui O., 2010**].**

Islamic microfinance effeciency in Indonesian Market

In a holistic approach, Islamic microfinance in Indonesia seems to sustain the Gross domestic products (GDP) maintaining financial stability and social cohesion. From a social point of view zakat and sadaqat generate a positive impact limiting negative and collateral effects of recession, risks and credit cycle life. It is a system functioning and acting as stabilizer the country rconomy **[**Widodo A., 2018**]**. We read in the report of Islamic finance news 2018 under the title of "Social financing expansion", that Indonesia is combining financing and faith to achieve financial inclusion. Charitable acts is directed to investments (infrastructure and trade arrangements), exploiting local capital instead of borrowing with exhausting conditions subjecting the economy to foreign institutions. Simultaneously the report highlights the potential of the halal industry exploiting natural resources, Indonesia's strategic position and the global aspect of Islamic finance (providing capital). Also the report focuses on micro-waqf financing (endowment) offering considerable loans to SMEs to support their activities (US$ 66.5-199.49). in fact Waqf banks made a customer portfolio of 6,764 in a budget of 493,653 USD. To cope with global political constraints, the report raises the question of green investment project through "*Green sukuk*". investments that would be used to achieve energy efficiency sustaining renewable energy, green buildings, green tourism and agriculture **[**Report, 2018**]**.

Technical efficiency

Studies conduct up to 2012 (applying DEA method) shown that commercial Islamic banks did not realized optimal efficiency, that cost efficiency of this sector compared to conventional banks stayed at a low level. Despite this result relatively insufficient, Islamic banking succeed when acting as intermediary enhancing resource inputs to produce outputs **[**Ray A., 2017**]**.

Dilemma of evaluation

Emperical studies, rhetorical paradigms offer several instruments and present different factors measuring social and financial impacts of Islamic microfinance fighting poverty. It is a struggle for a holy cause and an objective enjoying the consensus of religious and secular standards, but from other hand it is a system of measure deprived from a unified standard of indicators **[**Adair, 2010**.** In the absence of a single instrument of measure, scholars use different factors in substitution such as the number of customers, scale of outreach, number of borrowers, the average loan balance per borrowers but these indicators do not inform us about howmany families and individuals were succefuly saved from the sphere of the poor or from the extreme poverty (not only the profit of the Islamic financial institutions must interest the scholars). Financial profit, instead, is measured by the return on equity and asset and the cash flow, factors opposing the Islamic ratio when redristributing wealth considering charitable characteristic and solidarity feature **[**Fersi M, 2016**].**

Conclusion

The analysis presented in the paper encountered a number of challenges and constraints related to the availability and comparability of data across the two countries. These difficulties affect both the struggling and analysing of poverty and multidimensional poverty, *also it affect* the data related to the impact of Islamic microfinance in combating the poverty and multidimensional poverty in the two chosen models and analogically in the Arab and Islamic regions. This conclusion is what Economic and Social Commission for Western Asia of United Nations *presented in the Arab report on multidimensional poverty for 2017 as* recommendations. In exceptional cases researchers can obtain or prepare them surveys on the ground yet for the region of the MENA and the North of Africa, however their efforts remain less credible because of their limited effectiveness. Wars that flame in the Middle East or the instability of the systems in the Maghreb do not allow the access to reliable and correct data. For Indonesia the World bank in its wb pages announces an economic advance for the region of South East Asia witn an avrege of growth of 7.0 percent in 2019, then 7.1 percent in 2020 and 2021, if the region increases its exports. Only that this previsions did not annouce any thing about Indonesia. Certainly the Islamic microfinance can have an real impact, even extraordinary, in its fight against poverty and multidimensional poverty but even its effectivite remains very limited because of differents factors more related to the public policy, the lack of cooperation and the preparatory studies which approach the population falling every day in the economic, financial and social exclusion.

Bibliography

[1] Cafouri, A.H, (2000). Islam et économie: Réflexion sur les principes fondamentaux de l'économie islamique, Al-Bouraq, pp. 23-29,
[2] Al-'Umur, F.A., (2003). Introduction to the History of Islamic economy and its development, IRTI, Jeddah, pp. 119-141.
[3] Shahrour, M., (1990). the book and the Quran - Modern lecture, Al.-Ahali. Damascus , pp, 491- 492.
[4] Quran 6; 151-152.
[5] Shahrour M., (1990). the book and the Quran - Modern lecture, Al.-Ahali. Damascus , pp, 484-467.
[6] Zümrüt Selçuk Z., Mazhar H., OBA N., (2015). Measurement of poverty in oic member countries: enhancing national statistical capacities, SESRIC, COMCC, pp – 8-11.
[7] The World Bank's, (2018). Report on Poverty and Shared Prosperity: Completing the Poverty Puzzle.
[8] Burchi F., Rippin N., Montenegro C. E., (2018). From income poverty to multidimensional poverty - an international comparison, Working paper, International Policy Centre for Inclusive Growth, pp 5-7.
[9] World Bank report, (2018). Poverty and Shared Prosperity.

[10] Report (2017). Ministry of Labor, Saudi-Arabia.
[11] Human Rights Council Thirty-fifth session, (2017). Report of the Special Rapporteur on extreme poverty and human rights on his mission to Saudi Arabia, pp 4-6.
[12] Arab Report (2017). Multidimensional Poverty, E/ESCWA/EDID/2017/2.
[13] Ul-Hassana M., Nauman Khanb M., Bin Amina M., Khokharb I., S.A (2018). Measuring the Performance of Islamic Banks in Saudi Arabia, Int. Journal of Economics and Management 12 (1), pp 99-115.
[14] Widiarto I., Emrouznejad, (2015). Social and financial efficiency of Islamic microfinance institutions: A data envelopment analysis application, Socio-economic Planing Science 50, pp 6-8.
[15] Adewale A.A., (2015). Islamic microfinance and SMES development in saudi Arabia: a Qualitative inquiry, International Journal of Education, vol. 3 N9. pp 62-65.
[16] Hans D., Seibel, (2005). Islamic Microfinance in Indonesia, University of Cologne, Development Research Center, pp 6-8.
[17] Nurfadilah D., Samidi S., Iwan Kurniawan S. I., (2018). A Service Quality of Islamic Microfinance Institutions in Indonesia: An Im portance-Performance Analysis Approach, TIFBR-Tazkia Islamic Finance and Business Review, Volume 12(1), , pp 100-114.
[18] Mysqaoui O., (2010). Waqf system and its legal and shar'itic provisions, Dar Al - Fikr Damascus, pp 249-253.
[19] Widodo A., (2019). The Role of Islamic Commercial and social finance for curling credit cycles and achieving macroprudential objective, Journal of Islamic monetary Economy and Finance, vol.3 No 2 pp 167-169.
[20] Islamic financial news (2018). Indonesia Report 2018, Kwala Lumpur, Malysia, pp 16-19.
[21] A., Suwitob Asfario D., Kondi Dabutarc L., (2017). Efficiency of Islamic banks in Indonesia: Data envelopment analysis, International Journal of Economics, Management and Accounting 25, no. 2 pp 337-354.
[22] Adair, P., Berguiga, I., (2010). Les facteurs déterminants de la performance sociale et de la performance financière des institutions de microfinance dans la région MENA: Une analyse en coupe instantanée, Région et Développement, Toulon Var, vol. 32, pp 91-120.
[23] Fersi M., Boujelbéne M., (2016). The Determinants of the Performance and the Sustainability of Conventional and Islamic Microfinance Institutions, Economics World, Vol. 4, No. 5, pp 197-215.

VECM Analysis to House Price Index. Case of Tirana

Egerta Marku

PhD in Finance, Lecturer in Department of Finance,
Faculty of Economy, University of Tirana

Llesh Lleshaj

PhD in Statistics, Lecturer in Department of Finance,
Faculty of Economy, University of Tirana

Arjana Lleshaj

MSc. in Finance, Financial Specialist in Treasury
Department, Ministry of Finance and Economy

Abstract

This paper analyzes long-run equilibrium of "house price index" in Tirana (the capital city of Albania) achieved by the long-run performance of macroeconomic factors.We have used the techniques and analysis of linear multiple regression by VECM (vector error correction model), to identify endogenous factors, that effect the stability of "house price index". The analyze is based on data series 2010-2018 (with 3-month frequency), with independent variables: mortgage loan, interest rate on long-term loans, construction cost index, EUR/ALL exchange rate, house price index with lag(1).We conclude that all these independent variable (expect EUR/ALL exchange rate) are statistically significant, in long-run equilibrium and in the elasticity assessment of "house price index".

Keywords*:* Real Estate, VECM model, house price index

Introduction

Real estate is nowadays in the focus of several academic studies all over the world. Although, it is commonly known that real estate markets are rather illiquid, the majority of academics assume that these markets are efficient; it is assumed that participants act in accordance with rationality.

The dynamics of house prices is closely related to the performance of macroeconomic variables, housing market conditions and financing characteristics for home purchase. The factors are so many that we can group them into: economic factors;

government factors; geo - climate factors; and socio-demographic factors. The following are extensively explained in the literature of this paper.

Due to the role housing plays in modern societies, the focus of this paper is on housing prices. Transactions in the housing market constitute an important part of a country's GDP and household spending. The performance of house prices affects the well-being of families and their ability to borrow mortgages, which can have significant macroeconomic consequences. Housing market analysis today faces several challenges:

- the housing market is regarded as a market of highly heterogeneous and illiquid products, where the cost of obtaining information is high;
- the specific nature of the real estate market product itself is contingent on a rigid supply and periodic blossoming, creating opportunities for wrong decision making.
- the housing market is one of the markets with high government intervention, mainly in terms of territory management or social policies. Consequently, developments in this market, and especially the supply of this product, are significantly influenced by the institutional and legal framework of a country.

Based on the official publications of a house price index in Tirana (capital of Albania), as well as a review of the literature on the main factors affecting the performance of house prices, in this paper we have applied the econometric technique VECM to identify exogenous factors in determining the price of housing. The housing market in Albania has followed the trend of the construction sector, which has been associated with a major development phase a decade ago, while the last decade we have seen a marked deterioration. This trend is also observed in the market price of housing with a progressive growth phase (before 2010) and a very volatile price phase (after 2010).

The housing market in the last decade has been in frequent imbalance (as well as having the effects of the 2008 financial crisis). This is one of the main reasons why we have decided to study this market after 2010. Our study aims to assess the long-term equilibrium and resilience of the key economic factors that determine this equilibrium. Official data on the housing market in Albania are missing, they are recorded in the form of time series (with 3-month frequency) for the housing market index, only for the city of Tirana. The study therefore analyze this city. However, seeing the degree of concentration of the economy, population, level of housing construction, etc Tirana Housing Price Index is a very good representative of this market nationally. It is difficult to study “house price index” in Albania, due to the following reasons:

- The buying of a house is mainly the highest expenditure of a family, so the transactions of this type are timely rare.
- It is very difficult to find two identical houses in a time difference.
- If a "group" of houses will be fixed in a certain time, further changes in a house, such changes as the building of another public or private facility near the house or any qualitative change, will direct to a variability of the price.

Literature Review: Determination factors REGARDING real estate market

Theoretical and empirical studies have resulted that a high increased level of credit portfolio, accompanied with a sensitive increase of dwelling prices is one of the most consistent and warning indicator of future financial crisis (Borio and Lowe, 2002). Some comparative studies among countries with different economical and financial development (Tsatsaronis and Zhu, 2004;Annt2005; Egert and Mihaljek, 2007), concludes that the elasticity coefficients of changes in dwelling prices toward main factors sensitively varies according to country's measure, its financial markets development and the period of the study as well. Egert and Mihaljek (2007), while comparing Central East European Countries and OECD ones, analyzed that besides the abovementioned factors, the dynamic of the dwelling' prices is affected by some specific ones such as: the lack of the institutionalization of the dwelling markets; the limited supply of the new dwellings in the moment of the market liberalization; the improvement of the qualitative of the dwellings; the increased demand of nonresidents etc. Some other studies in the field of real market estates, such as Hilbert et.al. (2008); FTI Consulting (2012) mention 4 main group factors that affect the demand and supply of the market:

a) Economic Factors
b) Governmental factors
c) Geo – Climate factors
d) Socio-demographic factors

Economic Factors: Main economic factors are (Minsk, 1982; Kindlerberger, 1978; Valverde and Fernandez 2010; Suljoti, 2014; Ibrahimaj and Mattarocci, 2014):

The Unemployment level or the employment one, (in a local of national context) indicates the potential of a country to generate the individual income, affecting this way the demand for real estate.

The personal income level shows the ability of the individuals to invest in real estates, measured mainly by the average level of wage, and is considered as a key element of the real estate demand.

Construction costs are considered as the main factor of determining the real estate supply. This factor is considered in determining the initial price of these real estates and in Albania this is measured by the "Construction cost index" published by INSTAT. This index is focused on the direct costs of the construction (material costs, wages expenditures, machinery costs, transport costs, electricity costs etc.) and indirect ones.

Credits, is another supply factor (when credits is demanded by the construction companies) and demand factor (when credits is asked by individuals, as a financial tool to buy his/her real estate). Kindlerberger (1978) and Minsky (1982) have analyzed the role that credits have in the price of dwellings history. So, if the credits are in terms of cheap conditions, this will affect the behavior of real estate markets in these countries. In Albania, this can be measured either due to the value of the credits dedicated to buying dwelling estates or business estate , or due to the multiplication of the real estate credits published by the Bank of Albania or Statistical Reports. Measured as well by analyzing the facilitated or limited conditions published by the second level banks in the country.

Interest rate: the same as the credits is the factor of demand as well as the factor of the supply. Interest rates are an important factor of residential' investments decision, sensitively influencing the demand for real estate. The measurement of the effects that interest rate have, can be analyzed through crediting rates of the economy. In Albanian case, the financing of the real estate for dwelling or services intentions has the lowest credit rates, compared with other credit rates for other intentions. (Bank of Albania, Statistical report, 2005-2015).

Treasure bonds rates. In Albania the interest rates of treasure bonds, 12months' maturity terms, represent the essential quota, from which it is indexed each credits rates or other deposits in second level banks. This means that this rate is considered as the initiation phase of every change in interest rates even for the long term individual credits, which in 90% of the cases is destined for buying dwelling estate. Since in the beginning 2012 and ongoing, this rate has been considerably deduced, while the interest rate of credits in banking sector has not reflected this kind of deduction, this one has remained in the almost sustainable situation (Bank of Albania, Statistical Reports 2005-2015).

Remittances: In Albania, the remittances are a key factor as far as domestic demand is concerning. Since 2013 and ongoing, the remittances level has decreased compared to its level in GDP (Bank of Albania, Statistical Reports 2005-2015). Even though, it doesn't exist any statistical indicator to show us which part of remittances that enters Albania is destined to the real estate market and which portion of it goes to consumption. Considering this explanation, it is not clear enough to judge for the correlation of this variable with real estate market trend, for all the post-communist period in Albania.

Exchange rate is another important demand factor (domestic currency is ALL) and supply factor; due to the fact that the majority of construction materials are imported in Albania. (General Custom Directorate, Albania 2002-2015). Referring to the internal reports of second level banks in Albania, such as: Raiffeisen Bank, National Commercial Bank, Credins Bank etc, the currency of the credits issued for real estate issues is not in national currency ALL, but manly it is in Euro (Manjani, 2014). As Euro, is the main currency used for exchange in real market estate in Albania, the exchange rate Euro/ALL, is considered to have an important impact in the real income level for all those buyers, whose monthly income are in ALL. During 2006-2010, the exchange rate Euro/ALL, has been considerably increased, but ongoing it has remained in a sustainable level within the interval 138-140, which means that the Albanian currency is constantly devaluated comparing with Euro, which means that Euro has become more expensive for Albanian buyers, whose income are in ALL (Bank of Albania, 2015).

Inflation: as an indicator of decreasing buying power, it affects the disposable income of individuals, so far the demand for real estate. Although, the investments in real estate, are considered as investments which deduct the effects of inflation either in the estate of individuals or businesses. In Albania, the inflation rate is kept stable with the parameters of 2-4% (Bank of Albania, Statistical Reports 2005-2015).

Financial services: are those services linked with: initial credit commissions for real estates, other commissions and tariffs, which refers to the payment for notary services due to buying –selling process.

Governmental factors: The governmental factors are very complex, but still affective, such as:

Fiscal Policies: Fiscal policies are treated as factors, in the contexts of their evaluation process, the legalization etc. In Albanian contexts, these have been accompanied with so many changes and high level of informality (General Taxation Directorate in Albania, 2015).

The literate impact of Government in real estate market. This has to do with the governmental policies toward the decrease of costs of credits for buying dwelling estate.

Educational development, the quality of education is directly linked with the buying of real estate for living purposes.

Development of unions: this is an indicator which reduces the risk of undo for the employment contracts by the employee’s side, so it affects the employment markets and as a result, the stability of the disposable income of the employers.

The quality of public services: there are included here many different public services, but those which counts more are: Health public service, security issues, firefighters services, public transport etc. Many studies have classified these services as very influential toward the real estate demand, especially for living purposes.

Geo – Climate factors: These factors have a convincing importance in real estate market, such as:

Locality: local position of real estate markets, such as different geographic or regional areas. Capital cities, main trade centers (customs), port cities, airport cities, big industrial cities, touristic areas etc. has a higher demand regarding real estate, comparing with other city types.

Transport: This factor impacts the demand for real estate and has to do with many types of transport such as: the nearby location with the highways, trade centers, working centers etc.(Smersh, Smith and Schwarts, 2003).

Topography: This factor has to do with the topographic position of the area where the real estate is located and is a factor that impacts the demand. Such areas may be: seaside areas, or under the sea level, lake –side areas, river-side areas, mountain areas etc.

Climate conditions: even this factor is a demand one. Climate conditions are linked with the cost for a normal life, transport problems, energy. Internet etc. So these issues will affect the living costs or costs of doing business.

Socio-Demographic factors: Lastly, within the factors that affect the price of real estates are the ones of socio-demographic nature (Miles et al, 2000), such as:

Population: This refers to the population number in a certain area, the density per square kilometers, average age etc. This factor impacts the demand in a real estate market, mainly for the estates used for living purposes. Albania is a country with young age population and the average age is 35.5 years old (INSTAT, Census 2011), this shows for the high potential need for dwelling estates and services ones.

Family composition: is another incentive or inhibitor demand factor in real estate markets. In reality, families with one or two children may inherit estates from their parents or grandparents; in this case they were not obliged to buy other estates.

Conceptual changes of living and work conditions: As the post-communist period is going on in Albania, the concept of the dwelling space for household is changing, so far, the measures of a house has begun to extend its limits 2-3 time more than before, now we can talk for studio, or office space within the house etc. This influences the demand for real estate.

The holidays' culture. This is a new culture, especially for big cities, and has potential impacts to increase the demand and needs for more living space. While, in the context of business purpose, even the office's culture has begun to adopt the European standards, the companies have established their own campuses, many businesses, even small ones, are adopting themselves with the conceptual changes of the spaces, evaluating the architectural aspects and so on.

The perception of life and property security: facilitated by the insurance companies, the level of security for private properties of individuals in Albania, is one of the most fragile in the Europe, as far as insurance culture is concerning. Although, the idea that an area is percept as one with high level of risks and criminality, holds back the buying of estates for living or business purposes as well as the development of business, especially the small and medium business.

Being friendly with the environment: This is a recent time phenomenon and is expected to be part of the Albanian culture, even though in some cities it is already settled. We are speaking here for the friendly constructions, using sunny energy etc., often, these kind of buildings are accompanied with additional costs compared with traditional constructions, so that, they impact the supply and demand of real estate.

Methodology of study

In this study are used the techniques and analysis of linear multiple regression by VECM (vector error correction model), with some macroeconomic independent variables and one specify dependent variable "house price index". The data are taken from official statistics published in statistical reports and institutional studies. These data represent a 3-month time series, for 2010 - 2018. The analysis will begin with finding significant statistical relationships of the unit root, co integration, and VECM estimate.

ADF Test of Unit Root: ADF Test of Unit Root. This test is the fundamental of testing the series and return to a stationary series. To realize this, we have used the Augmented Dickey-Fuller test (ADF). According to this test, we test whether a time series of data is influenced by its initial value, by the trend of time or by both simultaneously. The basic equation of ADF test linked with the constant and the trend is:

$$\Delta X_t = \lambda_0 + \lambda_{1t} + \lambda_{2t} X_{t-1} + \sum_{i=1}^{n-1} \lambda_i \Delta X_{t-1} + \varepsilon_t$$

This equation shows a time series (variable in the study) in the form of the first difference $\Delta X_t = X_t - X_{t-1}$ in the period t, where $\lambda_0$is the constant and t is the trend, with the null hypothesis, H_0: $\lambda_2 = 0$ (time series data is non stationary).

Johansen Test for Co-integration: After addressing the issue of unit root, the co-integration test can be applied in order to establish the long run relationship among the variables. To identify these long-run relationship we will use the trace test for co integration and its maximum eigenvalue statistic(Johansen, 1991). Theoretically, the Johansen test is based on matrix theory and the theory of its eigenvalue. Let k> 2 be the number of non stationary and integral first order series I(1) included in the model, and r the number of vectors that co integrate with each-other, where r ∈ [0; k - 1], then the co integration hypothesis is:r ≥ 1 (there is at least one cointegrating pair).Trace test and Max-Eigen values are lower than the critical values and p-values for them are also insignificant which asserts that Vector Error Correction Model (VECM) is not applicable in this specific case.

*Vector Error Correction Model (VECM):*VECM limits the long-run behavior of endogenous variables to converge towards their co integration relations. If there is a single relation for two time series X_t and Y_t such that: $u_t = Y_t - a_0 - a_1 * X_t$ and the series are stationary with first difference I(1) and these series I(1) cointegrate with each-other. The dependent variable is Y_t series and the endogenous independent variable X_t, create a VECM model with lag = p and k dimensions:

$$\Delta Y_t = \underbrace{c + \sum_{i=0}^{p} \beta_i \Delta X_{t-i} + \sum_{j=1}^{k} \delta_j \Delta Y_{t-j}}_{\text{short-run}} + \underbrace{\{(-1) * \lambda\}[Y_{t-1} - \alpha_0 - \alpha_1 X_{t-1}]}_{\text{long-run}} + \varepsilon_t$$

The most important coefficient of the equation is λ which we can define as the coefficient of adjustment and explanatory of the long-run relationships between variables only under conditions where this coefficient is statistically significant.

Empirical analysis and results

The analysis of this study are based on quarterly frequency of time series from 2010 to 2018.

Based on the literature review we have selected the following variables in table 1. We think that these variables rapresent the specific of Albanian real estate market.

The meaning of the variables in the model and their description and the source of information is shown, as well in table 1:

Table 1. Meaning and description of variables of the VECM model.

The variable code	Description of the variable	Source of information
Dependent variable:		
CMIM	Housing Price Index in Tirana (Capital of Albania), measured in base index, year 2002 = 100.	Bank of Albania
Independent variables:		
IKN	Construction Cost Index (measured in % change, includes all types of direct and additional costs for construction).	INSTAT

KURS	Currency exchange rate EUR/ALL (the housing market has the price in Euros and the Albanian income in ALL).	Bank of Albania
INT	Interest rate on long-run loans (measured in %, loans with maturities greater than 5 years).	Bank of Albania
HUA	National Mortgage Loan (measured in million Euros, measures the source of funding for individuals, where 90% of mortgage loan).	Bank of Albania

Source: Author's summary

To create a VECM model, some steps need to be followed correctly. These steps will be detailed below, and we will have an effective VECM model at the end. The table 2 below shows the unit root test results for each variable of the model. The Dickey-Fuller approach is used to apply the unit root tests.

Table 2. ADF unit root test results.

Time series	Levels (prob.)			First differences (prob.)		
	with constant	with trend constant	without constant and trend	with constant	with trend constant	without constant and trend
CMIM	0.5903	0.1280	0.5205	0.0118	0.0058	0.0007
HUA	0.9662	0.0252	0.0044	0.0000	0.0000	0.0024
KURS	0.9882	0.9914	0.4192	0.0003	0.0000	0.0000
IKN	0.9742	0.1150	1.0000	0.0000	0.0000	0.0000
INT	0.8932	0.0178	0.2326	0.0000	0.0000	0.0000

Source: authors' calculation in Eviews 9. If probability is less than 0.05 (percent significance level), the time series is stationary.

According to ADF test all of the variables are found out to be non-stationary for level form, however their first difference turns these series into stationary ones.

The second step of VECM model is the Johansen and Juselius (1990) approach. Using this test we have only two possibilities: co integrating relationship or no co integration. This approach suggests two kind of statistical tests: trace test and maximum eigenvalue test. Firstly we have to determine the optimum lag (time retrospective of the variable). The results of optimum lag are in table 3 below:

Table 3. Lag Order Selection Criteria

Endogenous variables: CMIM, INT, KURS, IKN, HUA

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-439.6802	NA	5158147.	29.64535	29.87888	29.72006
1	-308.5202	209.8561 *	4473.623	22.56801	23.96921 *	23.01627
2	-283.5320	31.65171	5210.412	22.56880	25.13766	23.39060
3	-243.7460	37.13362	3005.706	21.58307	25.31959	22.77841
4	-189.9255	32.29231	1268.155 *	19.66170 *	24.56589	21.23059 *

* indicates lag order selected by the criterion

Source: authors' calculation in Eviews 9.

We have decide to choose the "lag" equal 4 because the most of criterions suggest it. This lag is the best according to economics meaning (the data are quarter of year). Now we need to identify co integration pairs, and the results are shown in the table 4 below:

Table 4. Cointegration test

Hypothesized/	Trace		Maximum Eigenvalue	
No. of CE(s)	Trace Statistic	Prob.	Max-Eigen Statistic	Prob.
None *	203.4329	0.0000	93.97013	0.0000
At most 1 *	109.4628	0.0000	52.00393	0.0000
At most 2 *	57.45887	0.0000	34.80985	0.0004
At most 3 *	22.64902	0.0035	22.04342	0.0024
At most 4	0.605602	0.4364	0.605602	0.4364

Source: authors' calculation in Eviews 9.

Based on the above results, we can find four co integrating relationship between variables. This fact shows us that we can build the VECM model for the long-run variables relationships between them. Using estimation method "Least Squares" in Eviews, we can find the coefficients of VECM model. The model has 4 co integration pairs, four coefficients of long-term links will be found. After processing the data in Eviews 9, (the time series was transformed into stationary by the first differences) using the VECM technique in identifying endogenous factors in explaining the dynamics of the housing price index in the city of Tirana (the capital of Albania) in long-run, the results are as in the table 5, below:

Table 5. VECM model.

System: VECM
Estimation Method: Least Squares
Sample: 2010Q2 2018Q4
Included observations: 35
Total system (balanced) observations 35

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-0.655673	0.244567	-2.680950	0.0231
C(2)	-10803.28	4228.527	-2.554856	0.0286
C(3)	3.912146	7.644301	0.511773	0.6199
C(4)	-196.4402	74.35231	-2.642019	0.0246
C(5)	0.523694	0.270716	1.934476	0.0818
C(6)	8121.495	4718.743	1.721114	0.1160
C(7)	-5.079796	15.62860	-0.325032	0.7519
C(8)	98.10432	80.44481	1.219523	0.2506
C(9)	-0.023651	0.016485	-1.434755	0.1819
C(10)	-0.240361	0.212503	-1.131090	0.2844
C(11)	3286.754	4015.241	0.818569	0.4321
C(12)	-26.96906	17.43568	-1.546774	0.1530
C(13)	66.61706	78.25166	0.851318	0.4145
C(14)	-0.006031	0.017605	-0.342571	0.7390
C(15)	0.037457	0.207247	0.180736	0.8602
C(16)	3733.466	3087.112	1.209372	0.2543

C(17)	-3.270062	14.21971	-0.229967	0.8228
C(18)	63.92001	61.81467	1.034059	0.3255
C(19)	0.006731	0.016745	0.401953	0.6962
C(20)	-0.400024	0.174920	-2.286900	0.0453
C(21)	428.6888	1825.886	0.234784	0.8191
C(22)	-15.81584	15.20398	-1.040244	0.3227
C(23)	22.39680	45.29795	0.494433	0.6317
C(24)	-0.008454	0.016387	-0.515902	0.6171
C(25)	-52.20464	33.01013	-1.581473	0.1449
Determinant residual covariance	377.3274			
R-squared	0.873547	Mean dependent var	-15.02052	
Adjusted R-squared	0.570061	S.D. dependent var	55.42294	
S.E. of regression	36.34069	Sum squared resid	13206.46	
Durbin-Watson stat	2.315663			

Source: authors' calculation in Eviews 9.

The general equation of the VECM model is:

$$\Delta CMIM_t = -52.2 + \overbrace{\begin{cases} \lambda_1 \cdot (1; 0.5808) \cdot \begin{pmatrix} CMIM_{t-1} \\ HUA_{t-1} \end{pmatrix} \\ \lambda_2 \cdot (1; -2.72E-06) \cdot \begin{pmatrix} INT_{t-1} \\ HUA_{t-1} \end{pmatrix} \\ \lambda_3 \cdot (1; -0.000667) \cdot \begin{pmatrix} KURS_{t-1} \\ HUA_{t-1} \end{pmatrix} \\ \lambda_4 \cdot (1; -0.0018) \cdot \begin{pmatrix} IKN_{t-1} \\ HUA_{t-1} \end{pmatrix} \end{cases}}^{long-run} +$$

$$\overbrace{+\begin{pmatrix} 0.5237 & 8121.5 & -5.0798 & 98.1043 & -0.0237 \\ -0.2404 & 3286.7 & -26.9691 & 66.61706 & -0.0060 \\ 0.0375 & 3733.5 & -3.2701 & 63.9200 & 0.0067 \\ -0.4000 & 428.69 & -15.8158 & 22.3968 & -0.0085 \end{pmatrix} \cdot \begin{pmatrix} \Delta CMIM_{t-1} & \Delta CMIM_{t-2} & \Delta CMIM_{t-3} & \Delta CMIM_{t-4} \\ \Delta INT_{t-1} & \Delta INT_{t-2} & \Delta INT_{t-3} & \Delta INT_{t-4} \\ \Delta KURS_{t-1} & \Delta KURS_{t-2} & \Delta KURS_{t-3} & \Delta KURS_{t-3} \\ \Delta IKN_{t-1} & \Delta IKN_{t-2} & \Delta IKN_{t-3} & \Delta IKN_{t-4} \\ \Delta HUA_{t-1} & \Delta HUA_{t-2} & \Delta HUA_{t-3} & \Delta HUA_{t-4} \end{pmatrix}}^{short-run}$$

The model co integration terms are λ1, λ2, λ3 and λ4. Only λ3 is not statistically significant (with p <5%), while the other three terms (λ1, λ2 and λ4) are statistically significant (with p <5%), and explain the long-run relationships of our model. In the general equation of the VECM model are specified variables with long-term and short-term relationships (according to time delays). This equation of the VECM model confirms the basic working hypothesis:

Working hypothesis: Long-term equilibrium price index of Tirana housing is achieved by the long-term performance of macroeconomic factors (mortgage loan, interest rate on long-term loans, construction cost index, EUR / ALL exchange rate, and prior house price index): Hypothesis "at least one λi ≠ 0 for i = 1, 2, 3, 4".

Our VECM model shows us the following statistically significant long-term relationships:

CMIM: In equilibrium conditions, the change in CMIM in the short run will contribute to the achievement of long term equilibrium index of 65%. If the previous 3-month period has had an increase of 1% in the CMIM, it is expected that this increase will be followed by a long-term CMIM growth average of 0.65%. Short-term fluctuations (market imbalances) in the short run of housing prices have a major impact on maintaining long-term equilibrium. The change in the market price of housing that has taken place in Tirana over the last decade has been accompanied by a continuing decline in this market. The reasons for this economic situation are many, such as: many building permits at one time and construction suspension at another; numerous fiscal and bureaucratic changes in obtaining building permits; high level of corruption in the country; significant fluctuations of the business climate in the country; financial difficulties of construction companies; investing informal money in real estate; etc.

Construction Cost Index (IKN): If IKN rises by 1% in the long run it will result in an average increase of about 2% of the equilibrium CMIM in the long run. The increase in the construction cost index indicates an increase in the cost of production factors, which will consequently be accompanied by a decrease in the market supply, which under conditions of unchanged demand will be reflected in the increase of housing prices. This phenomenon is based on market expectations and economic principles. It is the task of policymakers to ratify more international free trade agreements and with concrete effect on domestic production, by applying construction industry's mitigating fiscal policies for production factors. Protectionist fiscal policies for the production of raw materials in the construction sector are detrimental to the housing market and should not be applied to the Albanian economy.

Long-Term Interest Rate (INT): If INT increases by 1% over the long-term, this will result in an average increase of about 108 points of the equilibrium CMIM index in the long-term, or an average increase of 13%. Housing price has the highest elasticity against the variable INT. The absolute value of resilience was expected to be higher than all other variables taken into account, but the direction of the link leaves us in doubt. There are two explanations for this phenomenon: firstly, an increase in the market interest rate on loans would discourage individuals to borrow, bringing about a decrease in demand for housing (hence lowering the quantity and price in equilibrium bidding conditions ceteris paribus). Secondly, an increase in the market interest rate on loans will lead to an increase in the cost for construction companies, leading to a decrease in the supply of residential real estate (consequently lower quantity and lower price, in terms of demand paribus). The net effect of these two phenomena at the same time has resulted in a stagnant economic situation of the Tirana housing market (a trend of decreasing residential built areas and rising housing prices). By the economic nature of the market, the interest rate will reflect a faster impact on demand than supply, so supply is less flexible than demand in the short run.

In the long run the opposite happens, supply is more flexible than demand. Construction companies in Tirana are big business company with domestic capital and have an optimal capital structure with over 60% debt (Ll. Lleshaj, 2016), therefore they finance a construction project on loan at least 60% on average (of construction cost). Whereas individuals under the banking system conditions in Albania can borrow up to 70-75% of the market value of the house (Bank of Albania, 2018). Referring to official publications for Tirana (for the three-month period 2016-2018) the level of lending for housing purchase is as much as 1.8 times the amount of loans granted for construction (Bank of Albania, 2016-2018 statistics). This coefficient also indicates the change in the elasticity of supply with demand coming from the lending factor. On the other hand, coefficient 1.8 indicates the large change in the cost of construction and sale price for apartments in Tirana. If Euro/m^2, 0.7*P is the value borrowed from the individuals and (0.7 / 1.8) * P = 0.39 * P is the value borrowed from the construction company, where 0.39 * P = 0.6 * K hence the “K” cost of construction is K = 0.65 * P and the gain is 0.35 * P (such a conclusion is also supported by real estate market valuation experts). So the elasticity of supply is minimum 1 / 0.39 = 2.56 while the elasticity of demand is maximum 1 / 0.7 = 1.43, which means that a change of one m2 of residential building surface will bring a greater response to supply than demand. Under these conditions the net effect indicates an increase in price. Looking at the market interest rates, according to the official publications in Albania for the years 2010 - 2015, the interest rate was about 4-5% higher for loans to construction companies than for mortgage loans to households, while for 2015 - 2018 this difference has dropped to about 2%. This fact indicates an additional net increase in the house price as a result of the increase in the lending rates in the banking market. Under these conditions, the multiplier effect of interest rate hikes is very large on the price of housing, so credit risk supervision authorities should use an expansive monetary policy (by lowering the key interest rate). Monetary policy in Albania has not provided the required efficiency in lending as expected, two issues arise here: first, there is a need to increase the monitoring of expansive policy implementation through rigorous bank auditing; and second, there is a liquidity trap in the Albanian economy (lower interest rates and lower investment levels), this indicates excess liquidity in the economy, i.e. money outside the financial system (informal money in circulation at levels that have made expansive monetary policy ineffective for at least the last half-decade).

Euro Housing Loan (HUA): If the HUA increases by 1% in the long run, this will result in an average decrease of about 0.7% of the equilibrium CMIM index in the long run. Under normal conditions an increase in these loans would affect the increase in demand and therefore in the short run would be accompanied by an increase in the price of housing only, while in the long run the increase in the price should be lower as the housing area would increase. According to our model, in the long run there is a negative relationship, so the loan for home purchase in Tirana does not serve as the only financial instrument of repay. As long as this market exists and is present in every area of Tirana, why does the loan not serve as the main instrument of payment? The average standard of living in the city of Tirana (INSTAT, average salary and family budget 2010-2018) does not provide income for the purchase of housing as a secondary loan source. Here is the suspicion that there is a lot of informal or illegal money in this market. This argument is further supported by the INT variable. Albania, for years, has had a high level of informal money in the country. The trend has been increasing in recent years, expressed by the Basel AML Index, 2015-2018, which ranks Albania as a high risk country. Compared to the Western Balkan countries, Albania is the country with the highest level of money laundering.

Exchange rate EUR / ALL (exchange rate): The exchange rate variable has no long-term relationship with the house price index. According to the statistical technique of the least squares the reason for the discrepancy is: the COURSES variable had a steady performance during the period under study (with the exception of a significant decrease in the last year), whereas housing prices were accompanied by a volatility and increasing in recent times, the performance of these variables turns out to be independent.

Conclusions

The analysis of the VECM model identifies statistically significant relationships for the endogenous variables relationship over the long run. The housing price index in the Albanian capital, Tirana, reaches the long-run equilibrium affected by some key variables of this paper. Macroeconomic variables in the form of time series for 2010 - 2018 (with 3-month frequency) are included in the analysis. The number of data fulfills the criteria of econometric implementation of VECM evaluation.

From the analysis we found that the short-term dynamics of this index itself contributes to the achievement of long-term equilibrium by 65%. This is the basic quantitative reason that the values of this index are volatile in the long run and often disequilibrium.

In addition to the economic reasons of market agents, there are other factors: political, legal, and other extra economic or illegal that have brought about this last decade's imbalance. Tirana Housing Price Index has a direct and statistically significant relationship with the Construction Cost Index. A facilitating fiscal policy of the construction industry for production factors would therefore be suggested. In order for the prices to be in equilibrium and acceptable for the average living standard of the inhabitants of this city.

Also the Housing Price Index has a straight and statistically significant relationship with the interest rates on long-term loans, with the highest degree of resilience from all the variables included in the analysis.

The long-term effect of interest rates on both supply and demand (in the long run, supply is more flexible than demand), the construction sector in this city is stagnant and the multiplier of interest rates on housing prices is very high. The fact that Albania's monetary policies have been expansive in recent years, the country is heading for a liquidity trap, means that there is a high informality in this market. The house price index has a statistically significant negative relationship with the level of mortgage lending at the national level, i.e. home buying loans in the city of Tirana do not serve as the only financial instrument of payment.

As long as citizens' livelihoods are low enough to meet housing prices, there is a stream of informality and illegal money invested in this market. In our analysis, in the long run, the exchange rate is not statistically significant in relation to the equilibrium price of housing.

After considering all the albanian specific variables and the conclusion we have meet, we also think that there are some opening issues, as housing specific evaluation, the comparion of market value between the real estate in Tirana and Wester Balcans capital cities, etc.

References

[1] Agnello, L., & Schuknecht, L. (2011). Booms and busts in housing markets: Determinants and implications.

[2] Ahmand, A., Kasim, R., & Martin, D. (2011). Factors Affecting Housing Development in Makama Jahun Area of Bauchi Metropolis, Nigeria. 25 (4).

[3] Annett, A. (2005). House prices and monetary policy in the euro area. IMF Working Paper.

[4] Bank of Albania. (2002, 2003, ..., 2018). Annual Report.

[5] Bank of Albania. (2002, 2003, ..., 2018). Financial Stability Report.

[6] Bank of Albania. (2002, 2003, ..., 2018). Supervision Annual Report.

[7] Bank of Albania. (2002, 2003, ..., 2018). Monthly Statistical Reports

[8] Bank of Albania. (2002, 2003, ..., 2018). Monetary Policy Annual Report

[9] Blejer, M. (2006). Asset Prices, Globalisation and Implication for Monetary Policy.

[10] Borio, C., & Lowe, P. (2002). Asset prices, financial and monetary stability: exploring the nexus. BIS Working Paper.

[11] Car, M. (2009). Selection of factors influencing the residential property prices in Slovakia.

[12] Clois, K., & Joan, K. (2009). Residential Housing. The Goodheart Willcox Company.

[13] Dougherty, C. (2007). Introduction to Econometrics (bot. i 3nd Edition). Oxford Press.

[14] Egert, B., & Mihaljek, D. (2007). Determinants of house prices in central and eastern Europe. BIS Working paper.

[15] Farlow, A. (2004a), UK house prices: A critical assessment, paper prepared for Credit Suisse First Boston Housing Conference 12 May 2003.

[16] Feldstein, M. (2007). Housing, credit markets and the business cycle . NBER Working Paper.

[17] FTI Consulting. (2012). Report: A study on understanding supply constraints in the housing market.

[18] Glindro, T., Subhanij, T., Szeto, J., & Zhu, H. (2008). Determinants of house prices in nine Asia-Pacific economies. BIS Working Paper.

[19] Goodhart, & Hoffman. (2002). Deflation, credit and asset prices.

[20] Hilbers et. al. (2008). House price developments in Europe: A Comparison. IMF Working Paper.

[21] Ibrahimaj, D., & Mattarocci, G. (2014). Sektori i Ndërtimit dhe Tregu i Pasurive të Paluajtshme: Evidenca nga Shqipëria. Buletini i Bankës së Shqipërisë.

[22] Klimczak, K. (2010). Determinants of real estate investment. Economics & Sociology, Vol. 3, No 2, 2010, pp. 58-66

[23] Kristo, E., & Bollano, E. (2012). Indeksi i Çmimeve të Banesave: Metodologjia dhe përdorimi. Buletini i Bankës së Shqipërisë .

[24] Lawrence, J., Gitman, & Zutter, C. (2012). Principles of Managerial Finance (bot. i 13th edition). Prentice Hall.

[25] Manjani, O. (2014). Vlerësimi i përcaktuesve të nivelit të euroizimit financiar në Shqipëri. Buletini i Bankës së Shqipërisë.

[26] Plazzi, A., Valkanov, R. (2012). Forecastin real estate prices.

[27] Ruzha, O., Voronov, V., &Tambovceva, T. (2013). Econometric models for the estimation of the commercial value of residential real estate objects in Latvia.

[28] Sherwin, R. (1997). Hedonic Prices and Implicit Markets. Journals of Political Economy .

[29] Smersh, G., Smith, M., & Schwartz, A. (2003). Factors Affecting Residential Property Development Patterns. JRER, 25 (1), 62-75.

[30] Suljoti, E. (2014). Një analizë kointegruese e përcaktuesve të çmimit të banesave. Buletini i Bankës së Shqipërisë .

[31] Suljoti, E., & Hashorva, G. (2011). Çmimet e banesave dhe kredia hipotekare Analizë empirike për Tiranën. Buletini i Bankës së Shqipërisë .

[32] Tsatsaronis, K., & Zhu, H. (2004). What drives housing price dynamics: cross-country evidence1. BIS Working Paper.

[33] Valverde, S., & Fernandez, F. (2010). The relationship betëeen mortgage markets and housing prices: does financial instability make the difference?

Financing and Fiscality in the Context of Artificial Intelligence at the Global Level

Dr. Otilia Manta

Abstract

The current financing models, as well as the fiscal models, are based on the current resources available at both the financial system and the fiscal system, but in close interdependence with those existing at the global level, the technology being one of them. Moreover, we consider that increasingly in the resource hierarchy, the place of the human factor is replaced by artificial intelligence (regardless of whether we are talking about industrial robots or intelligent technologies as is the case in the banking financial field). The new ways of approaching and coordinating finances aim to increase the degree of flexibility of financial networks and harmonize the results of those financial institutions that master and use complex but complementary technologies in order to obtain a final product or services optimal and with direct connection to its beneficiary. The defining elements for any financing and control model, regardless of whether we think of Fintech or other programs such as Fiscalis , are given by the following characteristics: digitization (artificial intelligence tools are crucial for digitizing financial services and fiscal), mobilization (virtual space offers not only the possibility but especially the platform for achieving the mobility of services), disintermediation (virtual space offers the possibility of direct access without intermediaries) and automation (through the financial services existing on the online platforms, the beneficiary of the service and the service provider optimizes its time and cost in favor of making the service profitable).

Keywords: financial technologies, artificial intelligence, financial and fiscal inclusion and sustainable development

JEL Classification: E44, F65, O31

Introduction

Currently both at the institutional level and especially at the personal level, we are directly and indirectly involved in the process of the great challenges at the global level, which confirms that we are no longer under the direct influence only of the decisions at the local level but we are predominantly under the decisions at the global level. , especially when discussing the markets for financial and fiscal services. In this context of the challenges we can say that we are in the stage of redefining the systems, mechanisms and not least of the instruments regarding the new architecture of the financial markets and of the system of supervision at European and global level. Artificial intelligence has a major role in the process of these great challenges and with a direct impact on the financial services architecture. Arthur Bachinskiy presented in his paper "The Growing Impact of AI in Financial Services: Six Examples", six examples of the implication of artificial intelligence in finance, namely: decisions of artificial intelligence and credit; artificial intelligence and risk management; artificial intelligence and fraud prevention; artificial intelligence and trade; artificial intelligence and personalized financial institution; artificial intelligence and process automation.

In this global context, *identifying the tools and mechanisms for accessing financial resources,* especially for those in need, is not only a priority for new researchers in the economic field, but also a challenge in defining the new architecture of financial markets, respectively identifying financial instruments, mechanisms and financial means to ensure societal sustainability, respectively social, economic and financial inclusion. In many advanced economies, the great challenges are due to the growing inequalities between the poor and the rich, between those with resources and those without resources, but especially the impact of technological and climate change on economies, "*the complex impact of globalization - including those related to trade in goods, services and data, and the movement of people and capital. In emerging economies, the sharp decline in poverty and the rise of the middle class have fueled better aspirations and demands for better public goods; these requirements are now facing slower growth and tightening of government budgets. The order resulting from the adversity principle has produced an economic, financial and ideological polarization. The state we are in is one in which one (state) controls the whole (globe), manages discretionary global powers, exercises unilaterally of decisions and favors levelling diversity (including financial). In this global context, identifying the financial resources to support those who have need is not only a priori for new economic researchers, but also a challenge in identifying financial instruments, mechanisms and financial means to ensure the sustainability of society*

Artificial intelligence influences not only finances, but also the definition of tools and mechanisms of tax and tax management at European and global level, with direct impact on the global phenomenon of "fraud". At European level, the EU Fiscalis 2020 program was promoted, in which fiscal harmonization at European level will be achieved both through directives and regulations, but especially through artificial intelligence instruments. In many advanced economies, the major challenges are due to increasing inequalities between wealth and resource shortages and the impact of technological and climate change impacts on the economy, the "complex impact of globalization - including those related to trade in goods, services and data, and movement people and capital. In emerging economies, the sharp decline in poverty and the rise of the middle class have fueled better aspirations and demands for better public goods; these requirements are now facing slower growth and tightening of government budgets. The order resulting from the adversity principle has produced an economic, financial and ideological polarization.

The European Union through its own policies and programs contributes permanently and actively to fight inequality and poverty, especially since "*equality and equity are an integral part of European values and are a cornerstone of the European social model, the EU and the EU member states; whereas both the Member States and the EU aim to promote employment, enabling a high and sustainable level of employment and combating exclusion*." Given this European and global context, the role and importance of artificial intelligence for financing and taxation is essential, more precisely on the one hand starting from the elements of creation of the financing instruments and mechanisms for the financially excluded (the business environment in the rural area , vulnerable groups, etc.) and, on the other hand, the creation of standardized fiscal instruments at European level leading to a financial-fiscal discipline and actively contributing to sustainable growth at local, national, European and global level both now and in the future. In this global context, in the process of identifying the financial and fiscal resources, a major role is played by the ethical principles, principles that are also valid in research, respectively: the principle of honesty; the principle of replicability, the principle of responsibility, the principle of validity, the principle of reliability; the principle of transparency and the principle of respect are permanent concerns of researchers in the economic field, and beyond. The innovation of products and services as support elements for those in need is not only a priori for new economic researchers, but also a challenge in identifying financial instruments, mechanisms and financial means to ensure the sustainability of the company. Moreover, through the current digital technologies, we believe that together with the identification of financial resources, we should also identify a mechanism for their management and from a fiscal point of view, respectively a better functioning of the tax systems within the European internal market and which would it depends on the efficient and effective processing of cross-border transactions by national tax administrations, on the prevention and combating of tax fraud and on the protection of tax revenues.

This implies the exchange of large amounts of information between tax administrations, but also the more efficient functioning of administrations, with the concomitant reduction of administrative, economic and time consuming costs for taxpayers involved in cross-border activities. This can only be achieved through cooperation between the Member States' tax administrations and third parties. Given the increasing globalization, the effective fight against fraud should also have an international dimension. Therefore, the program will also support the exchange of information with third countries, in the context of international agreements concluded with the third countries concerned"[1]

[1] The Growing Impact of AI in Financial Services: Six Examples

Research methodology

The *methodology of the paper* will have as direct instruments the collection of data and information from the literature and from the existing practice at the global level in public and private institutions, but especially scientific articles published on specialized research networks (Research Gate, Academia.edu, RePec etc.), articles published in different journals, relevant books in the field of reference, legislation, analyses and studies, official documents of various tax bodies, tax documents and interactive database of the Federal Banks and Central Banks, other relevant sources identified at the libraries Romanian Academy, National Bank of Romania, National and International Library, etc. Moreover, in the methodology we will analyses the documents using the comparative, analytical, descriptive method, no participative and participatory observation, and the use of a set of informational sources, the collection of financial data in the established databases. Also, the paper will be based on annual reports, publications, consolidated statistical data provided by the Federal Banks, the European Central Bank (ECB), the International Settlement Bank (BRI), World Bank, World Economic Forum, CGAP, CFI, the European Commission, OECD, published annually, data to be processed in order to be able to provide a general and analytical picture of the most important changes taking place in the globally - considered representative for the understanding of the phenomena studied.To substantiate the funding model for innovation, we used observation and examination tools, research methods based on the basic principles of scientific research, and we also created procedures based on factual analysis as a result of a significant practical experience and of intensive documentation at the level of national and international literature.

Literature review

The literature and the sources of information are multiple, especially as a result of the impact that artificial intelligence has not only in the field of finance and tax, but especially on our daily lives. A presentation of the evolution of artificial intelligence in finance was made by Bonnie G. Buchanan, PhD, FRSA in the work "Artificial intelligence in finance", respectively: John McCarthy is a parent of the concept and definition of the term "artificial intelligence" since 1956. The Oxford English Dictionary defines AI as "*The theory and development of computer systems capable of performing tasks normally requiring human intelligence, such as visual perception, speech recognition, decision-making and translation between languages*"6 FSB (2017) defines AI as, "*The theory and development of computer systems capable of performing tasks that have traditionally required human intelligence*". At the beginning artificial intelligence was based on algorithms based on logic, now there are working hypotheses that confirm that artificial intelligence is currently based on blockchain technologies, respectively the so-called concept of "machine / technology based

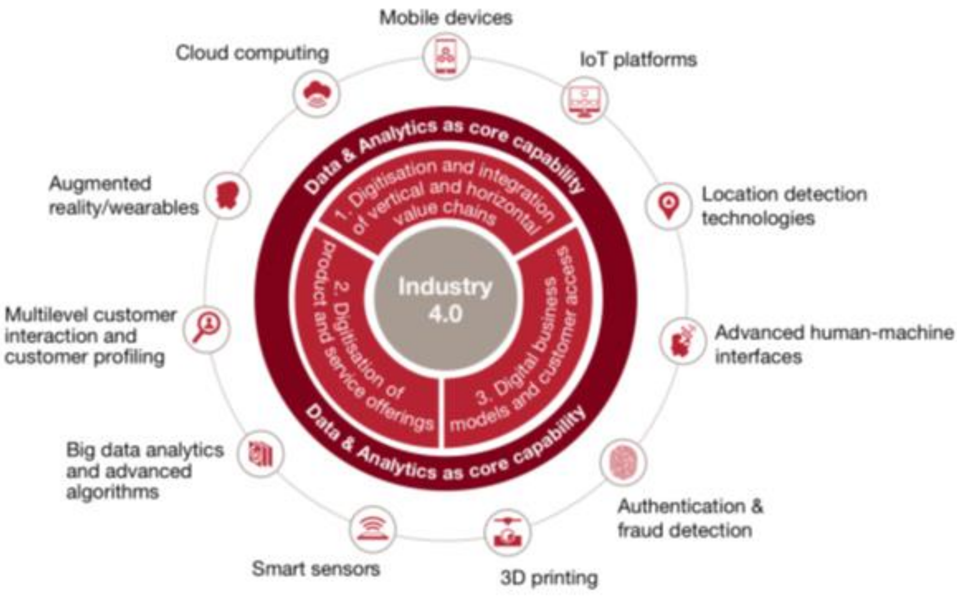
https://tow ardsdatascience.com/the-growing-impact-of-ai-in-financial-services-six-examples-da386c0301b2 decision". Turing (1950) detail an operational test (the Turing Test) for intelligent behavior. In his seminal work, Turing provided the major components for future AI work with language, reasoning, knowledge, learning and understanding. Through the Turing Test, Turing laid the ground work for ML, genetic algorithms and reinforcement learning. The attempt to replicate the logical flow of human decision making through processing symbols became known as the "symbol processing hypothesis" (Newell, Shaw, and Simon, 1957; Newell and Simon, 1961, Gilmartin, Newell and Simon, 1976).

Much of AI in the 1950s and 1960s did not focus on finance applications. In the 1960s, a substantial body of work on Bayesian statistics was being developed that would later be used in ML. Neural networks (which would become a cornerstone of deep learning) were developed in the 1960s and grew rapidly. However, due to a lack of sufficiently available electronic data and computing power, AI fell out of favor into what became known as an "AI winter" (Kaplan, 2016; FSB, 2017). The term "AI Winter" also connotes a slowdown in investment and interest. In 1973, the UK Lighthill Report ended government support for AI research.The 1980s witnessed an AI revival due to new funding and techniques. During the 1980s, Japan, the UK and the USA competed heavily in AI funding. Japan invested $400 million through the Japanese Fifth Generation Computer Project. The UK invested £350 million in the Alvey Program and DARPA spent over $1 billion on its Strategic Computing Initiative. In 1982 AI made inroads into the financial services industry when James Simons founded quantitative investment firm Renaissance Technologies.This included the development of "expert systems" (or "knowledge systems") which is a technique that solves problems and answers questions within a specific context. Brown, Nielson and Phillips (1990) provide an overview of integrated personal financial planning expert systems. They emphasize expert systems that use heuristics and the separation of knowledge and control as well as providing examples of expert systems that were prevalent at the time.Kaplan (2016) describes AI as, "The essence of AI, indeed the essence of intelligence, is the ability to make appropriate generalizations in a timely fashion based on limited data. The broader the domain of application, the quicker the conclusions are drawn with minimal information, the more intelligent the behavior."

The advancement of financial technologies includes robotic financial trading, payments made through encrypted cashless platforms, crowdfunding financial platforms, financial consulting, technical and robotic assistance through virtual space, and not least virtual currencies so developed lately. "The value of FinTech's global investment in 2015 increased by $ 22.3 billion by 75%. Corporations, venture capital and private equity firms have invested more than $ 50 billion in nearly 2,500 FinTech companies globally since 2010 "(Financial technology (FinTech): Prospects and challenges for the EU, EPRS, Cemal Karakas, Carla Stamegna - Graphics: Christian Dietrich, 2018). However, financial technologies (FinTech), although registering a rapid growth in the virtual space, have positive aspects, especially regarding the speed with which the financial services (adapted and flexible) reach the many financially excluded, but also have risks, challenges such as be especially the data and consumer protection issues, the risk of increasing financial volatility, as well as the alarming increase of cyber-crime). The risks in particular attract the attention of the financial services regulators, and a Financial Technology Task Force (FTTF) has been set up at the European Commission, which together with the European Parliament's Committee on Monetary Affairs (ECON) made the FinTech report published in January 2017. At the global level, respectively the G20, the Financial Stability Committee (FSB) presented the report on FinTech in July 2017. The concerns at global and European level were transposed into discussions / topics / conferences and regulatory initiatives, at national level.

The current process of financial technologies and the definition of financing models start primarily with the contribution of digital technologies to the development of the financial industry, as can be seen in the graph below.

Figure no.2. Industry 4.0. Framework and contributing digital technologies



Source: PwC report, 2019

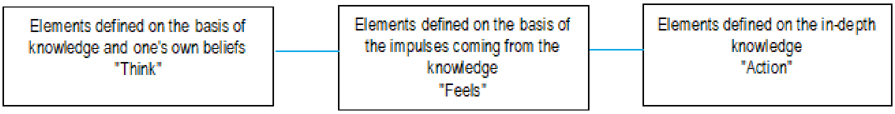
The ***process of globalization*** inevitably leads to the reconsideration (conceptual reconstruction) of the paradigm of growth and economic development, and especially in financial technology (Fintech). The challenge, on the one hand, of the depletion and / or deterioration of resources (especially natural) and, on the other hand, of our optimization model - maximizing the objective functions of economic actors - is likely to require a radical change the options and the means by which we address this important activity of the individual and society: economic activity. At the same time, it is obvious that economic activity can no longer be regarded in itself as a mode governed by a distinct rationality distinct from others, rationality based on a consistent and sufficient logic. Logic and economic rationality must accept, under the pressure of global problems, a permanent and fundamental communication with the other logic of individual and social behavior (praxis). In addition, they must accept the possibility and desirability of re-evaluations, repositions, or even refunds, in light of the new paradigms of the economic process (including paradigms, for the time being, academic, such as the entropic model).

Sustainable development (or growth) is a direct function of resources of the same category, i.e. sustainable resources, inclusive financial resources. The subject of this study is the research of a special resource, namely the financial technology (FinTech). Studying this resource from a sustainable development perspective will lead us to the proposal and the conceptual, methodological and technological development of what we will call a sustainable financial resource. For its part, the concept of a sustainable financial resource will generate some considerations about the sustainable sources of financial resources, including Fintech - our ultimate goal, on the other hand. As we develop more broadly at the right time, the financial sources for sustainable development are more sustainable financial sources for development. This is not just a game of words but an emphasis on an extremely important idea, namely the idea that points to the depth of the sustainability feature. Since, as will be demonstrated, the financial resource (and, as a consequence, the source of the FinTech resource) is one of the foundations of any economic process, it is natural that our attention goes to ensuring this foundation in terms of sustainability in order to be able to speak with some justification and confidence about sustainable economic processes (systems).

Research results

In our empirical research, with direct elements related to the major challenges at European and global level, a problem that impacts both the financing mechanisms and the fiscal ones is given by the problem of inequality, which has become more important in recent years, more chosen in the context of crises. Although we are witnessing increasing developments in the artificial intelligence sector at European level, the effects of the economic crisis on Europe have been and are still present, reversing the convergence process of the standard of living (which has been a priority for several years) with increasing pressure on social protection systems. The degree of inequality has increased in most Member States, the trend being similar to the global one, generating concerns and concerns both from the perspective of the sustainability of economic growth and from the perspective of social cohesion. However, solutions through financial and fiscal instruments could create the premise of systemic balances at European level, and implicitly at the level of each state. In addition to an inventory of the challenges of global challenges, based on documentation and knowledge of current phenomena, we believe that presenting current developments and trends could be the starting point in defining proposals that can directly support the process social, economic and financial inclusion. The UN

2030 agenda, presents us very clearly the 17 SDGs that are found in our daily tasks, but through the personalized way of involvement and adaptation. While an example of differentiated involvement, but which leads us to the same "sustainable development goals no.1 poverty eradication", the Europe 2020 strategy focuses on poverty reduction, but the challenge of reducing the risk of poverty is related to the inequality debate[1].In the process of challenges our motivation must have elements of determination, respectively our involvement to be governed by something, and that something can be passed through the following defining stages, respectively:



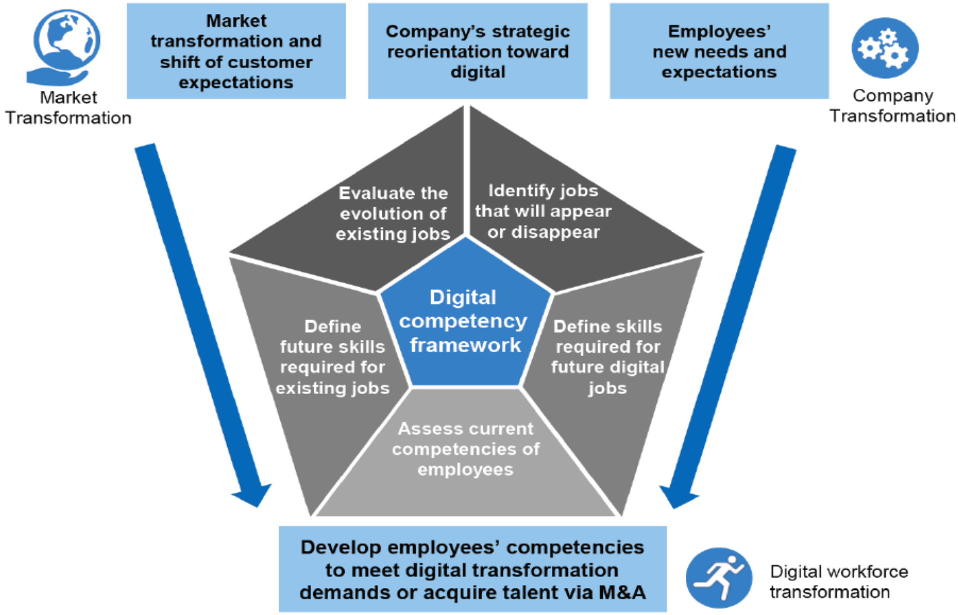
If in the past the decisions were based on the results of the past numerical series, at present due to the involvement of artificial intelligence, the calculation algorithms are given on the existing bars in the global data blocks, respectively based on blockchain technology. Moreover, the speed of penetration of artificial intelligence both in the financial industry and in the control mechanisms, demonstrates how quickly the architecture of the entire system changes, with a change of business, jobs, even in traditionally conservative areas.

The most popular examples regarding the involvement of artificial intelligence in finance: Influence of lending decisions through artificial intelligence decisions; The direct link between risk management and artificial intelligence;The role of artificial intelligence in preventing fraud in the financial-banking field;The impact of artificial intelligence on trade; The direct link between artificial intelligence and personalized financial institution; The impact of artificial intelligence on process automation.

Financing tools and mechanisms directly influenced by artificial intelligence have the following specific attributes, respectively: digitization, mobilization, augmentation, disintermediation, automation[2].

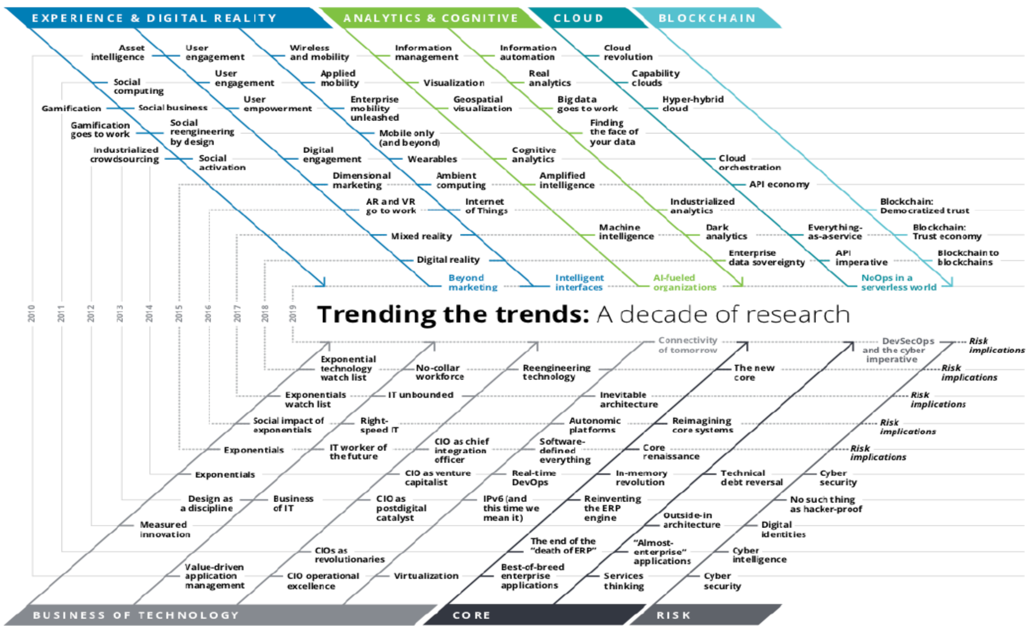
[1] Saez E. (2016), „Striking it Richer: The Evolution of Top Incomes in the United States".
[2] *YouTube; Digital transformation: are you ready for exponential change? Futurist Gerd Leonhard, TFAStudios*

Figure no.3. Digital competency framework



Source: Accenture, 2018

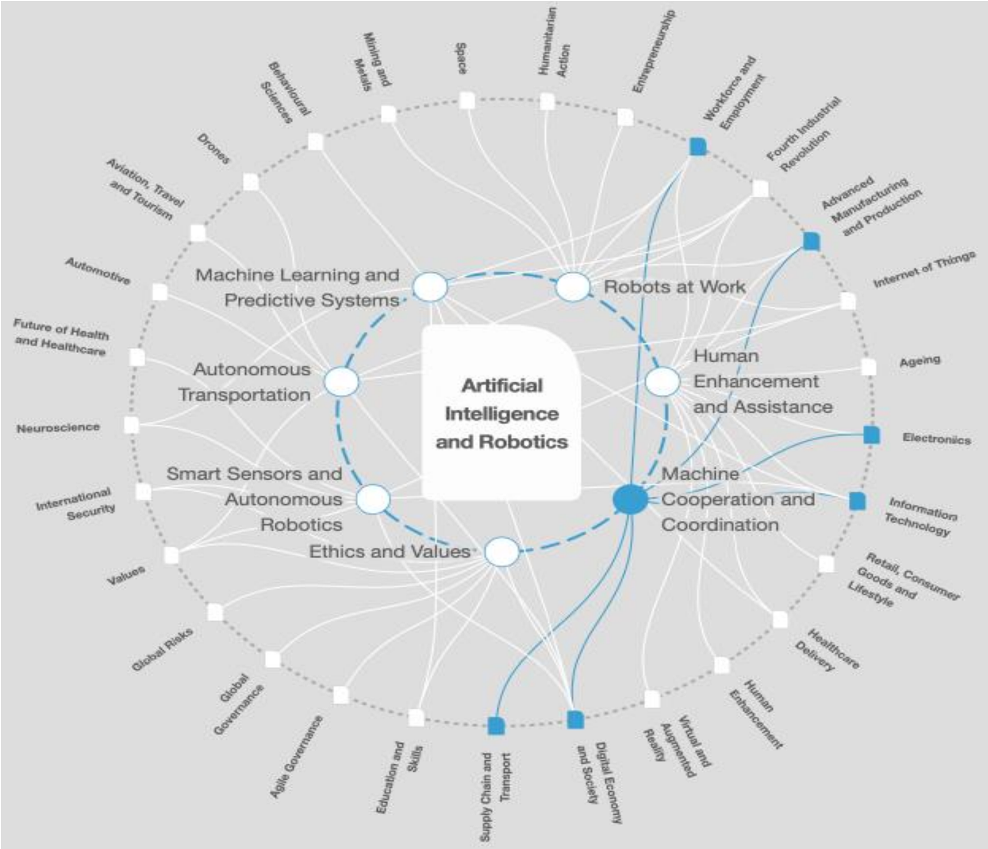
Figure no.4. Current trends of research with impact on finances



Source: Prof. Adrian Curaj, research paper Economic Model 2040, Quo Vadis Romania?, 2019

In order to be able to develop financial instruments and mechanisms in line with current trends globally and under the direct influence of artificial intelligence, we believe that adapting to current digital financial technologies and creating models using them is the basic pillar in the development of the new architectures of financial services connected on the one hand to the real needs of the society, but especially connected to the global trends as they are reflected in the figure above.

Figure no.5. Artificial Intelligence and Robotics



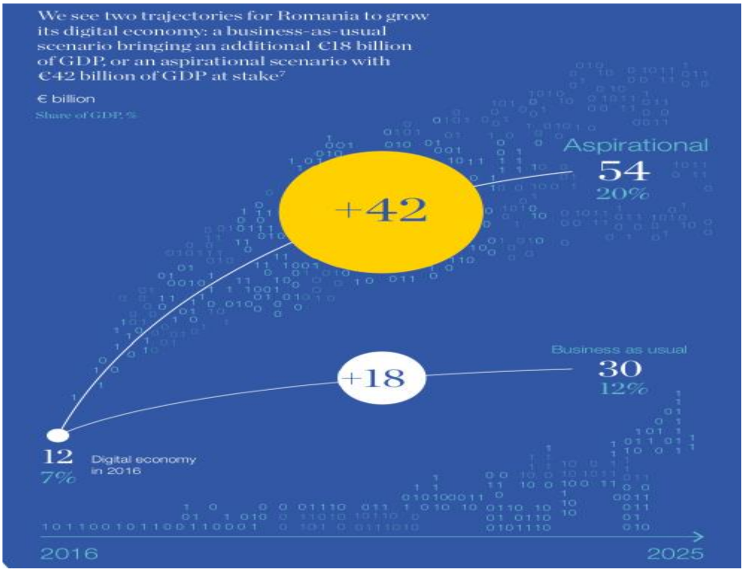
Source: World Economic Forum, 2019

Between artificial and robotic intelligence for finance, there is a direct connection and a direct impact on the service provided in the financial-banking field. Moreover, many of these services will be provided directly by robots as a result of the resource optimization process, as can be seen in the figure above.The trend of digitization is not just in the field of finance, it is found in the vast majority of the economic branches.

In our work to reflect the impact of artificial intelligence on the real economy, we will also find our analysis on the main indicators of stability of the real economy.

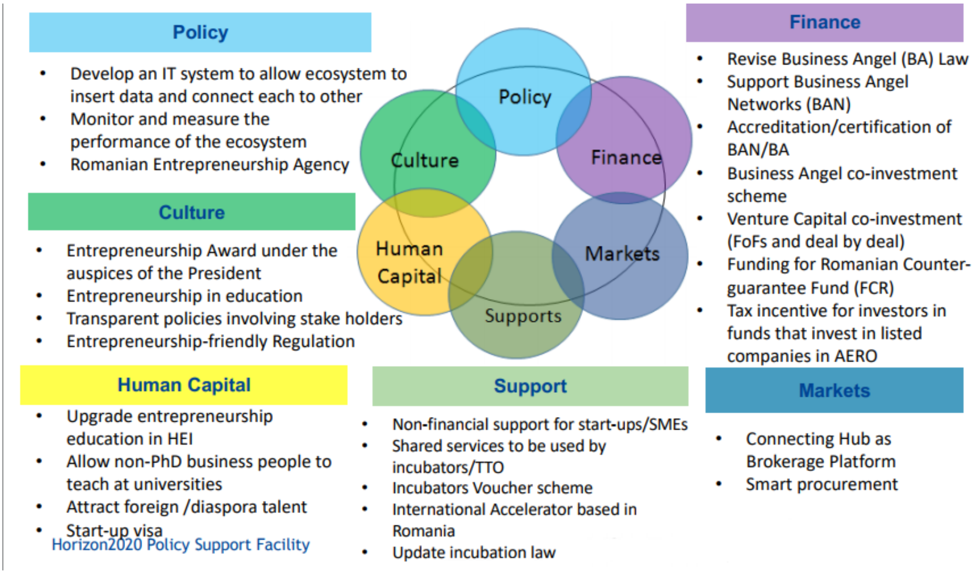
The holistic approach of the phenomenon of expansion of financial innovations, respectively of current financial technologies, as otherwise abbreviated to FinTech, knows very specific elements and adapted to the global financial context, and lately the share of financial services in the virtual space is dominant compared to their traditional form. Moreover, this new financing instrument has arisen mainly due to the need to streamline the financing system, based on technology, either to provide financial services adapted to the current needs of consumers (especially those who are in need of financing, this is also the real reason for the fintech coupling of the financial inclusion of the financially excluded), as well as the design of new financial products that are reliable and responsive to the market. The impact of these financial technologies will be directly on the real economy, more precisely its digitalization.

Figure no.6. Scenarios regarding the digitization of the economy in Romania



Source: McKinsey, The rise of Digital Challengers, Perspective on Romania, 2018

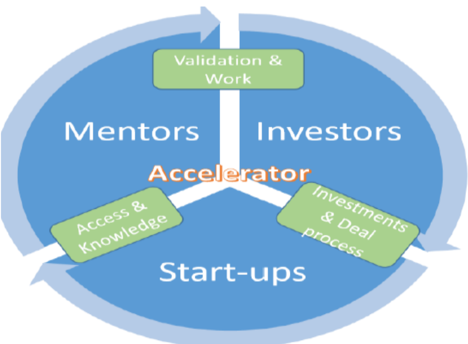
Figure no.7. Transforming accelerators in Romania: EC Recommendations



Source: H2020 PSF Report, 2017

In order to be able to estimate at national level our capacity for innovation, technological transfer and entrepreneurship, especially in the financial field, we consider that besides the elements related to intelligent specialization, industrial transformation, a knowledge of the real economy at the level of each state could lead to the realization a financial architecture based on both the combination of the traditional form of financing and the current financial technologies.

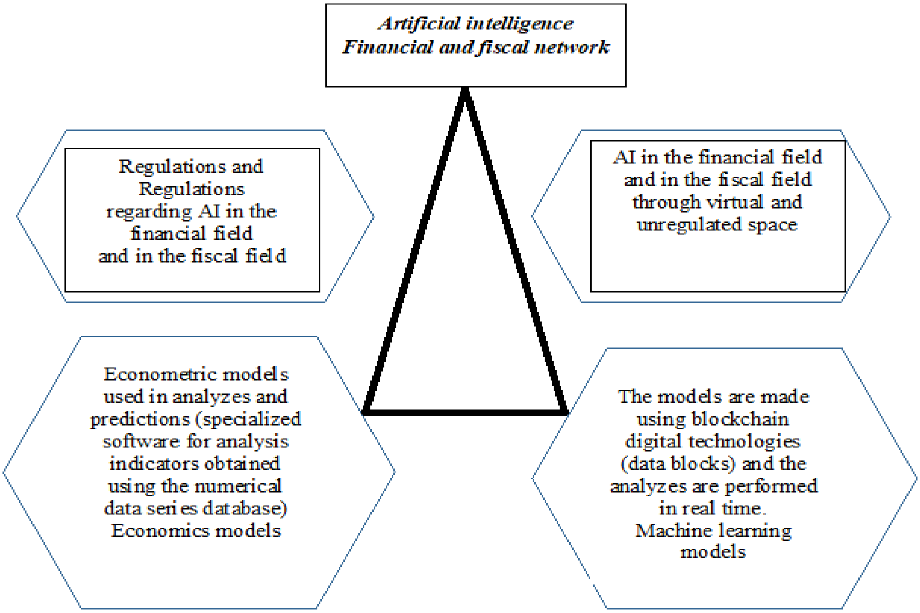
Figure no.8. The business accelerator model in the context of AI



Source: H2020 PSF Report, 2017

In order to be able to rethink the architecture of financial services, in the context of the real economy (direct beneficiary of the finances), as well as the impact of artificial intelligence on these economic sectors, we consider that we should reflect some relevant information about the real economy, more precisely the reference indicators regarding the financial state of the real economy.

Figure no.8. Financial and Fiscal Network (concept) based on AI



Source: own processing

As we mentioned in the figure above, the economic models differ depending on the positioning of the network, more precisely on the regulatory mode. Moreover, at European level, artificial intelligence in finance and fiscal, we believe should be directly connected to the three key factors for economic growth, provided by the European Commission, respectively:

smart growth (promoting knowledge, innovation, education and digital society);

sustainable growth (a more competitive production, with a more efficient use of resources);

inclusive economic growth (increased participation in the labor market, skills acquisition and the fight against poverty).

We are currently witnessing a dynamic of the economic models at European level, the business model being "the most intellectual and the most surviving species" if we were to paraphrase Charles Darwin ("The surviving species is the one who is capable of adapt best to the changing environment in which it is found"). This famous quote summarizes the essence of transforming the business model into the context of the economic model. It is applied in particular for the development of international business, in which the organization faces different, yet unexplored markets.The economic model of the country is conditioned by the internal resources (human resource from health, education, etc.) and the way of managing them in the medium and long term. A correct way of administration starts from the inventory of sources and resources, followed by the creation of a mechanism by which these resources are exploited.The mechanism of transformation from source to resource is related to the policy addressed at the level of the European institutions, the national policy of the state, the policy at regional level and the policy at local level.

The risk of the network, it acquires concrete forms of action, of manifestation, of certain forms, as a rule, of the characteristics of the network that are affected by the decoupling, distortion of the phase, the distortion, the weakening of the force of a characteristic of the financial network. Obviously, these forms target the impact of the radiant of the institutional characteristic of the network, materialized in norms, bodies, rules, structures, etc. on the interactive features of the network. The instinctive radiant of the network represents the force, the ability of the interactive feature of the network to influence, in a negative sense, to alter the performances of the components. Based on these aspects, the global risk of financial and fiscal networks must be evaluated in the current context of the challenges regarding the functionality of the financial network principle based on artificial intelligence. The complex relationship in which the network risk acts on the performances, on the aims, functionalities and potentialities of the network, is presented in figure no. 1, in the form of an impulse relation.

Figure no.1: The impulse relations between risks and performance

The meaning of the symbols is as follows:

DIM = institutional deficiencies of the financial and fiscal network;

CIR = the institutional characteristic of the network;

CIF = the interactive features of the network;

ICR = network interconnections;

IAR = network interactions (real-time and virtual interactive flows);

ELR = network elements;

FRR = risk forms of the network;

RSM = risks specific to the financial network;

PCT = losses and costs.

Starting from the principles listed in the paper and correlating with the impact of artificial intelligence on finances, we can mention the forms of the network risk, respectively:

The credibility risk, represents the essential form of risk of the financial network, the attenuation or distortion of the confidence of the economic subjects in the forms of currency, in the financial instruments, the financial-monetary institutions, due to the malfunctions that appear, induces, directly or indirectly, by contagion, immediately or offset, with a time lag, all the specific risks and, first of all, the risk of currency depreciation.

The financial networks are irreducible to the simple economic reasoning centered on the profit-oriented economic interest, the monetary transactions, the operations and the financial flows, being based on the confidence of the entities, the economic subjects, in the financial network, in the network of transactions, the fiduciary dimension being vital for the reproducibility of the networks and for their continuity over time. Trust is an integral part of maintaining interconnections and interactive financial flows, especially considering the uncertainty and complexity of transactions.

The profit-oriented economic rationality does not cover the trust space in the currency, these being dependent on different factors, the economic rationality depending on the individual interests, selfish, competing and confronted in the market, while the confidence is conditioned by the coexistence, social, political, cultural relations, but also economic, trust assuming reciprocity, while economic rationality implies exclusion through competition (even if the market harmonizes, through profits, interests).

Trust is an essential property of the currency, an abstract feature of money in general, which does not imply the stability and validity of the concrete forms of the currency, because trust in the stability and validity of a monetary form, a financial instrument, means trust in institutions and rules, in regulations and rules, directly responsible for the administration of this form of currency. In this sense, the nature of the risks involved in financial transactions, in interactive flows, reflects their unique character in the modern world, namely that they are generated by human-created institutions. It can be stated that, the risk of credibility is not associated with trust in money as a social institution, but with trust in social institutions, i.e. regulations and organizations, which create and manage specific monetary forms, financial instruments traded on markets.

The risk of credibility in the financial network is determined by economic conditions, but especially extra-economic, placing the monetary forms in an environment centered on economic rationality, dependence on financial transactions, the interactivity of the financial network of interests and economic gain denature and vitiate the functions of the currency, its transitive potential, the aims of the network, serving the concrete forms of the currency of improper and adverse purposes and functionalities. In this sense, the forms of speculative capitalization or financial derivatives, as quaternary, anticipatory forms of currency, at the same time constitute extreme forms of the credibility risk, which generates risk, covering it.

The vulnerability risk, represents a generic risk of the financial network, determined by the inadequate, caused instinctively, of some characteristics of the flows and of the financial network, such as: reliability, complexity, integrability, intensity, connectivity, affecting the network considered as a whole, but differentiated by elements, interconnections and interactivities.

The vulnerability expresses the weakening of the transitive potential of the interactive flows of the network, this favoring, in particular through the channel of inadequacy, but also through the one of inactivation, the emergence of the specific risks, such as the exchange rate risk, monetary depreciation, the interest rate risk, the market risk.

Organizational, configurational incoherence of the financial network, inconsistency of financial instruments, currency forms in the financial asset hypothesis, inadequacy of financial operations, stiffness and temporal or dimensional incongruence of sources and destinations of interactive flows are causal institutional factors of the network vulnerability risk perceived by the participants in the network by diminishing the reliability of the flows, which may generate liquidity or solvency risk, through the volatility of the asset prices, through the conjuncture of network nodes, i.e. financial institutions or markets, which may ultimately lead to bankruptcy risk and so on

The *risk of vulnerability* is, therefore, par excellence a risk of institutionalizing the financial network and derives from the inadequacy of the network to the environmental conditions, to its requirements and needs, and in this sense, the direct effect of this network risk, the currency depreciation, in its form transactional, interactive, currency risk, is connected with the degradation of these conditions, with the relationship between internal and external environment.

The *risk of desynchronization*, is a risk of the flows, of their interconnection in the network, affecting the interactivity of the network, i.e. its essence, being generated formally by the institutional regulation and organization of the network, so by the implementation of the network, and functionally, by the relation between the attributions, that is, the activities, responsibilities and competences of the component entities.

The institutional causes of this risk are connected and often dependent on economic, social, and political causes (if we do not consider monetary policy itself as an institution), but it is obvious that the way of building the financial network, its architecture, its size and its institutional adequacy, contributes significantly to the occurrence and maintenance of this risk.

The risk of agglomeration, of agglutination, correlated with the two previous risks, is manifested by the abundance, segregation and concentration of currency forms and financial instruments in flow, in certain areas of the network, by regionalization, and polarization, phenomena with different etiologies , but highlighting the institutional inadequacy of the network, creating favorable conditions, especially through the incapacity channel, for the occurrence of the risks of rate, insolvency and, of course, of market risks, of the price of financial assets, of the currency.

The *management of this network risk* is mainly a problem of institutionalization and, functionally, a problem of evaluation and supervision, because the flexibility of the currency, its equitable freedom should also be found in its capitalized forms, financially instruments, between the trust in the currency, which- it confers its omniscience, and the economic reasoning, which regulates fragmentary rule, segregating the capital flows, of the saved currency, manifesting contradictions, crisis-generating confrontations, which partly reflects the existence of this agglomeration risk, with speculative openings.

The risk of detachment and polarization is the specific network risk, respectively:

The *risk of detachment* is manifested by detaching the financial network from the whole socio-economic environment, from its real markets, including the health, culture, education, financial network, sometimes becoming adverse to the specific evolution of these human areas, and this is essentially due to the way of speaking of the guiding principles of its configuration and architecture, so that the detachment induces in the financial network specific risks, such as the rate and the rate, the real, not speculative-arbitrary, volatility and coverage of them, generating local crises, regional, absorbed hardly, with losses and costs by the environment, but also liquidity risks, finalized by bankruptcy of the banking entity, as well as non-financial ones.

The risk of polarization highlights the tendency of the network to create competitive poles, financial centers, officially represented, through the Central Bank, which, beyond the attributes of coordination and regulation, becomes, in the name of monetary policy, an operator in the markets, conferring “confidence” in the currency. , in its purchasing power, but also operational financial centers, which concentrate with currency, financial instruments, the power to influence, to intervene, sometimes unbalancing the markets in ″desire″ to balance them according to already esoteric objectives, or at least selectively beneficial. Polarization is a phenomenon common to all networks, from mineral, natural to neural and spiritual ones, but the polarizing institutionalization of the financial network can have perverse, sometimes unexpected effects, polarization contributing to the accentuation of network risks, of those specific to the financial network, to the extent in which polarization does not serve the network, the currency, the confidence in the currency, exacerbating, for example, the orientation towards profit, according to the economic reasoning.

A significant effect of the risk of detachment and polarization, which potential, but also real, effect generates devastating specific risks, consists in the unmatched expansion of the value of financial flows compared to the value of real flows, most financial flows grinding into empty currency, obviously for the gain, for its transfer, rarely converted into real, consumer or investment assets.

The five types of network risks developed above do not cover the entire range of risk possibilities intrinsic to the financial network, only highlighting their existence, specificity and relevance in the monetary space, as well as their decisive institutional etiology. At the same time, the above approach wanted to point out that the risk of credibility is paramount, being the generic network risk, placing the currency, its forms and instruments, in an area dominated by economic reasoning, centered on interest and profit, diminishing currency credibility, the ability of the currency to perform its original functions.

The network risk, its five types delimited above, are generated by determinative or conditional factors, and in turn generate direct and indirect effects, through the risks specific to the financial and fiscal network, the network risk being placed in a structure of interdependencies, immediate and immediate influences.

Conclusion and indications for future research

Artificial intelligence in the financial and fiscal field is still at the beginning of laying the foundations, especially due to the fact that networks are found especially in the virtual space, hence the multiple challenges and vulnerabilities (regulation including in the virtual, ethical, economic, and social). However, due to the digital technologies that are part of our current life, we believe that artificial intelligence will become predominantly present in the financial and fiscal fields, contributing to current technologies and to the continuous development, to the creation of complex but easy eco-glotech-system financial models. Although the opinions of the specialists are different regarding the involvement of companies in the development of these technologies, we researchers believe that these financial and fiscal models based on artificial intelligence come with a focus on optimizing resources for each individual, which determines us to appreciate that artificial intelligence combined with the Internet of Things (IoT) will result in physical things becoming more adaptive and responsive, extending their useful lives.

Along with the big data, AI is regarded in the financial services sector as a technique that has the potential to offer immense analytical power. However, many risks still need to be addressed. Many AI techniques remain untested in financial crisis scenarios. There have been several cases in which the algorithms implemented by the financial firms appeared to act in unexpected ways by their developers, which led to flash errors and crashes (in particular the flash crash of the pound following the 2016 Brexit referendum). Lo (2016) calls for the development of a more robust technology, capable of adapting in favor of people, so that users can use these tools safely, efficiently and effortlessly.

Much remains to be done. And clearly more education is needed on the competence and awareness of AI. The late Stephen Hawking summarized: "Raising strong AI will be the best or worst thing that has ever happened to humanity. We don't know yet. "

Appendix

Timeline of artificial intelligence milestones *(Bonnie G. Buchanan PhD (2019): Artificial Intelligence in Finance, the Alan Turing Institute).*

1937 Claude Shannon proposes that Boolean algebra can be used to model electronic circuits;

1943 McCulloch & Pitts recognize that Boolean circuits can be used to model brain signals;

1950 Alan Turing develops the Turing Test;

1950 Minsky and Edmonds build the first neural network computer (the SNARC);

1956 The term “artificial intelligence” is coined by John McCarthy;

1956 Newell and Simon create the Logic Machine;

1957 Economist Herbert Simon predicts that computers would defeat humans at chess within the following decade;

1958 Frank Rosenblatt introduces a new form of neural network known as “perceptron”;

1958 Early genetic algorithms experiments;

1959 Arthur Samuels demonstrates that a computer can play checkers better than its creator, and even play against itself to practice;

1961 Newell and Simons creates General Problem Solver;

1964 Computers understand natural language enough to solve algebraic and word problems;

1965 Herbert Dreyfus’ report severely criticizes the emerging AI field;

1967 Marvin Minsky predicts that within a generation the problem of creating “artificial intelligence” would be solved;

1969 Bryson and Ho develop a back propagation algorithm;

1971 Terry Winograd’s program SHRDLU answers questions in natural language;

1973 UK Lighthill Report ends British government support for AI research;

1974 – 1980 First “AI Winter”;

1980 Expert Systems, or Knowledge Systems, emerge as a new field within AI;

1980s Early part of decade – Benioff and Feynman create Quantum Computing;

1982 Plan Power is conceptualized by Applied Expert Systems (APEX);

1982 James Simons starts quant investment firm Renaissance Technologies;

1984 American Association for AI coins the term "AI Winter";

1987 Personal Financial Planning System (PFPS) used by Chase Lincoln First Bank;

1987 – 1993 Second "AI Winter";

1988 David Shaw founds D.E. Shaw and is an early adopter of AI among its hedge funds;

1990s The AI industry shows renewed interest in neural networks;

1990 Neural net device reads handwritten digits to determine amounts on bank cheques;

1993 FinCen puts FAIS (its AI system) into service to monitor money laundering;

1997 Deep Blue defeats Garry Kasparov, world chess champion at the time. IBM's stock price increases by $18 billion;

2005 The DARPA 132-mile challenge sees AI applied to autonomous driving;

2007 The DARPA Urban Challenge;

2009 Google's first self-driving car;

2010 Flash Crash occurs on 6 May. In 36 minutes, the S&P crashed 8%, before a rebound;

2012 On 1 August, Knight Capital loses $440 million 45 minutes after deploying unverified trading software;

2014 Man Group starts to use AI to manage client money;

2016 Google's DeepMind AlphaGo applies ML algorithms to win at international Go championship;

2017 Two Sigma hedge fund which uses ML, crosses the $50 billion in assets under management;

2017 Beijing announces plans to lead the world in AI by 2030;

2018 UBS announces development of recommendation algorithms;

2018 The Merkel government announces €3 billion will be spent on AI capabilities;

2018 President Macron announces that all algorithms developed for government use will be made publicly available;

2018 Alibaba announces plans to bring AI chips to market the following year;

2018 MiFID II takes effect;

2018 GDPR takes effect on 25 May;

2018 Baidu becomes the first Chinese tech giant to join a US led consortium on AI safeguards.

References

[1] Altman, E. I., Marco, G., & Varetto, F. (1994). Corporate distress diagnosis: Comparisons using linear discriminant analysis and neural networks (the Italian experience). Journal of Banking & Finance, 18 (3), 505-529;

[2] Athey, S. (2017). The Impact of Machine Learning on Economics. In Economics of Artificial Intelligence. University of Chicago Press;

[3] Auria, Laura and Moro, R. A. (2008) Support Vector Machines (SVM) as a Technique for Solvency Analysis. DIW Berlin Discussion Paper No. 811. Available at SSRN: https://ssrn.com/abstract=1424949 or http://dx.doi.org/10.2139/ssrn.1424949;

[4] Bao, Y., and A. Datta, (2014) simultaneously discovering and quantifying risk types from textual risk disclosures, Management Science 60, 1371–1391;

[5] Baracos, S. & Selbst, A. (2016) Big Data's Disparate Impact. California Law Review, 104(3):671-732;

[6] Barnes,Y.(2016): Around the world in dollars and cents. Available at: http://www.savills.co.uk/research_articles/188297/198667-0;

[7] Bauguess, S. W (2017) The Role of Big Data, Machine Learning, and AI in Assessing Risks: A Regulatory Perspective, Keynote Address: OpRisk North America;

[8] Björkegren, Daniel and Grissen, Darrell, (2018) Behavior Revealed in Mobile Phone Usage Predicts Loan Repayment. Available at SSRN: https://ssrn.com/abstract=2611775 or http://dx.doi.org/10.2139/ssrn.2611775;

[9] Bonnie G. Buchanan PhD (2019): Artificial Intelligence in Finance, the Alan Turing Institute;

[10] Brandi, J. T. (1988). Artificial Intelligence Expert Systems and Financial Planning. Journal of Financial Service Professionals, 42 (2), 64;

[11] Breiman, L. (2001). Random forests. Machine learning, 45 (1), 5-32;

[12] Brummer, C., & Yadav, Y. (2019). The Fintech Trilemma. Georgetown Law Journal, 107, 235-307;

[13] Buchanan, B and C. Cao (2018) Quo Vadis? Fintech in China versus the West. Working Paper. Available at: https://swiftinstitute.org/wp-content/uploads/2018/10/SIWP-2017-002-_Fntech_China_West_BuchCao_FINAL.pdf;

[14] Carl Shapiro and Hal R. Varian (1999). Information Rules. Harvard Business School Press. ISBN 0-87584-863;

[15] Chakraborty, C., & Joseph, A. (2017). Machine learning at central banks. Available at: https://www.bankofengland.co.uk/working-paper/2017/machine-learning-at-central-banks;

[16] Coats, P. K., & Fant, L. F. (1993). Recognizing financial distress patterns using a neural network tool. Financial Management, 142-155;

[17] Deloitte Insights (2018) Tech Trends: The Symphonic Enterprise. Available at: https://www2.deloitte.com/content/dam/insights/us/articles/Tech-Trends-2018/4109_TechTrends-2018_FINAL.pdf;

[18] Dietvorst, B. J., Simmons, J. P., & Massey, C. (2015). Algorithm aversion: People erroneously avoid algorithms after seeing them err. Journal of Experimental Psychology: General, 144 (1), 114;

[19] Financial Stability Board (2017) Artificial intelligence and machine learning financial services. Working Paper. Accessed at: http://www.fsb.org/2017/11/artificial-intelligence-and-machine-learning-in-financial-service/;

[20] Frame, W. S., Wall, L. D., & White, L. J. (2018). Technological Change and Financial Innovation in Banking: Some Implications for Fintech. In Oxford Handbook of Banking, edited by Berger, A., Molyneux, P and J.O. Wilson. 3rd Edition;

[21] Future Today Institute (2017) Tech Trends annual report. Available at: https://futuretodayinstitute.com/2017-tech-trends/;

[22] Geoffrey Parker and Marshall Van Alstyne (2005). "Two Sided Networks: A Theory of Information Product Design" (PDF). Management Science. 51 (10).doi:10.1287/mnsc.1050.0400. Retrieved 2011-06-21;

[23] GDPR (2018) https://ec.europa.eu/commission/priorities/justice-and-fundamental-rights/data- protection/2018-reform-eu-data-protection-rules_en;

[24] Golberg et al (1995) The FinCEN Artificial Intelligence Systems: Identifying Potential Money Laundering from Reports of Large Cash Transactions;

[25] Guo, L., Shi, F., & Tu, J. (2016). Textual analysis and machine leaning: Crack unstructured data in finance and accounting. The Journal of Finance and Data Science, 2 (3), 153-170;

[26] Hendershott, T., & Riordan, R. (2013). Algorithmic trading and the market for liquidity. Journal of Financial and Quantitative Analysis, 48 (4), 1001-1024;

[27] Hunt, S. (2017) From Maps to Apps: The Power of Machine Learning and Artificial Intelligence for Regulators. Beesley Lecture Series on Regulatory Economics;

[28] Hutchinson, J. M., Lo, A. W., & Poggio, T. (1994). A nonparametric approach to pricing and hedging derivative securities via learning networks. The Journal of Finance, 49 (3), 851-889;

[29] Kaplan, J. (2016). Artificial Intelligence: What Everyone Needs to Know? Oxford University Press;

[30] Kirilenko, A. A., & Lo, A. W. (2013). Moore's law versus Murphy's Law: Algorithmic trading and its discontents. Journal of Economic Perspectives, 27 (2), 51-72;

[31] Koyuncugil, A. S., & Ozgulbas, N. (2012). Financial early warning system model and data mining application for risk detection. Expert Systems with Applications, 39 (6), 6238-6253;

[32] Madureira, António; den Hartog, Frank; Bouwman, Harry; Baken, Nico (2013). "Empirical validation of Metcalfe's law: How Internet usage patterns have changed over time". Information Economics and Policy. 25: 246–256. doi:10.1016/j.infoecopol.2013.07.002;

[33] Magnuson, William J., Regulating Fintech (2017). Vanderbilt Law Review, Forthcoming; Texas A&M University School of Law Legal Studies Research Paper No. 17-55. Available at SSRN:https://ssrn.com/abstract=3027525;

[34] Manela, A., & Moreira, A. (2017). News implied volatility and disaster concerns. Journal of Financial Economics, 123 (1), 137-162;

[35] Mizuta, T., Izumi, K., & Yoshimura, S. (2013). Price variation limits and financial market bubbles: Artificial market simulations with agents' learning process. In Computational Intelligence for Financial Engineering & Economics (CIFEr), 2013 IEEE Conference;

[36] Perols, J. L., R. M. Bowen, C. Zimmermann, and B. Samba (2017). Finding needles in a haystack: Using data analytics to improve fraud prediction, Accounting Review 92, 221-245;

[37] Philippon,T.(2016): The Fintech Opportunity. NBER Working Paper 22476. http://www.nber.org/papers/w22476;

[38] Rohner, Philippe and Uhl, Matthias, Robo-Advisors vs. Traditional Investment Advisors - An Unequal Game (2017). Journal of Wealth Management, Forthcoming;

[39] Robert M. Grant (2009). Contemporary Strategy Analysis. John Wiley & Sons. ISBN 0-470-74710-2;

[40] Russell, S., & Norvig, P. (1995). Artificial intelligence a modern approach. Artificial Intelligence. Pearson;

[41] Samuels, A.L. (1959): Some studies in machine learning using the game of checkers. IBM Journal of Research and Development, 3(3), 210-229;

[42] Tam, K. Y., & Kiang, M. Y. (1992). Managerial applications of neural networks: the case of bank failure predictions. Management science, 38 (7), 926-947;

[43] Turing, A (1950) Computing machinery and intelligence, Mind, 59 (236), 433;

[44] Varian, H. R. (2014). Big data: New tricks for econometrics. Journal of Economic Perspectives, 28 (2), 3- 28;

[45] Yadav, Y. (2015) How algorithmic trading undermines efficiency in capital markets, Vanderbilt Law Review, 68, 1607-1671;

[46] Yeh, C. C., Chi, D. J., & Lin, Y. R. (2014). Going-concern prediction using hybrid random forests and rough set approach. Information Sciences, 254, 98-110;

[47] Zhang, Y. and Trubey, P. (2018) Machine Learning and Sampling Scheme: An Empirical Study of Money Laundering Detection. Available at SSRN: https://ssrn.com/abstract.

Multiple Regression Analysis used in Analysis of Private Consumption and Public Final Consumption Evolution, case of Albanian Economy

Ilva Isa

Aleksander Xhuvani" University, Faculty of Finance and Accounting, Elbasan, Albania

Bederiana Shyti

Aleksander Xhuvani" University, Faculty of Mathematics, Elbasan, Albania

Kamen Spassov

St Clement" University, Sofia, Bulgaria

Abstract

This paper approaches the evolution of the final consumption recorded at the level of Albanian economy. According to statistical methodology the public and private consumption are two of the components of the final consumption. The main variable of our study is final consumption, which is set to be influenced by at least two independent variables, such as public and private consumption. Lately, Albanian economy has been presented with a new and different macro economic policy, a new form of partnership of investments between public and private sector. We are highly interested in the impact of these changes on final consumption .The correlation between the main parameter and its influence factors is analyzed through a regression model. Eviews is the software that the data will be processed under standard methods. The model and the results are part of the paper. To be emphasized is that the reliability of the multiple regression model does not exclude the possibility to analyze the single correlation between the parameters, in parallel.

Keywords consumption, fiscal policies, private consumption, public consumption, private to public partnership

Introduction

Some of the factors that contribute to the calculation and the evolution of Gross Domestic Product are private consumption and public consumption. Private and public consumption are two of the components of final consumption. We have used previous studies and economic analysis by applying econometric methods to realize our study for the correlation between main factor, that is final consumption and its two independent factors, private and public consumption. Anghelache (coord.,2014) approached the use of econometric models in macroeconomic analysis in calculating and forecasting macroeconomic indicators. The basis of statistical and econometric instruments and concepts were provided by Anghelache (2008), Voineagu et al (2007). Multiple regression analysis is a great statistical technique able to estimate the relationship among two or more variables. (Anghelache et al. 2014) offers a number of advantages compared to unifactorial alternative because it is conducted under the assumption of the simultaneous action of several important factors and it generates information on the structure of the process by quantifying causal links thus increasing determination ratio, numerically expressed by its proximity to 1 (or 100%) and offers a more accurate description of the economic process.

According to Anghelache et al 2014 a significant argument in using multiple linear regression can be considered to be the high enough value of free that could be specific to be encountered in single factor approaches, where the main indicator keeps its role as dependent variable and the influence factors become, in turn, independent variables in distinct, dedicate models. In this paper, we give a model of the multiple linear regression to make a prescription of economic development in Albanian economy. The data have been derived from World Bank, Eurostat and INSTAT for a period approximately for ten years. Lami.E, Kächelein.H, Imami. D (2014) have been conducting previous studies related to consumers' expectations before elections, the main factors underlying expectations, and the way in which these expectations influence their behavior toward spending, and consequently the macroeconomic outcomes, deploying standard econometric methods widely applied in PBC related research. According to their research results, households' consumption spending decreases before elections because of the higher uncertainty about their future economic situation due to the highly politicized public employment. Çakerri.L ,Petanaj.M, Muharremi.O (2014) took under the study one of the most important factors the role and size of public spending, where his positive link between economic growth is a undisputed fact .So, the role and size of public spending is considered as an element key development and economic growth. Thy concluded that government spending positively affect economic growth, unlike reportedly mostly in theory. This conclusion is because Albanian economy is a transition economy where the public sector is very important in the progress of economic reform, private sector development, etc.. Productive expenditures also positively affect economic growth, as predicted in theory. Merko.F, Kalaj.E, Zisi.A (2017) empirically investigate the relationship between the private consumption and fiscal policy in Albania by using the static multiple regressions for data over the period 2000–2016. Their findings have an important implication in terms of policy recommendations. Private consumption is positively affected by the government spending, income growth, and deficit. Second, policy-makers also need to anticipate the country's demographic structure and income level. However, they recommend that further research of the issue of how private consumption promotes economic growth in Albania should be on the focus of researchers. Curcija. M (2018) found that the analysis on GDP per capita, credit to private sector and investment ratio to GDP in Albania for the period from 1993 to 2015 shows similar results with those of other works in this field of study. In this paper it is noted that contracting institutions have a limited impact (enforcing contracts on gross capital formation) or no impact on the economic outcomes considered. A possible explanation is that individuals have different instruments to reduce the risks of loss following failure to comply with the contractual terms by the counterparty.

Our attention has been mostly attracted by publications and economic development of Rumanian Economy, because Albania has had very similar steps toward its economic development as a transitory economy and has faced similar challenges to Rumanian economy. For these reasons in conductiong this search will take into the consideration the studies conducted by Censolo and Colombo (2008) where they study the composition of the public consumption in a growing economy, as they consider that the Romanian economy is generally perceived as growing. The households' consumptions and the correlation between private and public consumption was studied by Bastagli and Hills (2013) . Scutaru et al. (2009) focus on the study of the two components of the consumption from the perspective of the GDP. Various aspects of public and private consumption were also approached in the works of Wolff et al. (2003), Mir Nahid and Mansur (2012), and Bachman (2011). Anghelache.C, Anghel M.G, Popovici.M (2015) designed a model that was representative for the purpose of their research and it accurately described the relationship between the final consumption and its factors such as household consumption and public consumption. They concluded that the indicator of final consumption was significantly influenced by private and public consumption indicators. The author stated that the reliability of the multiple regression model designed in this paper does not exclude the possibility to analyze, in parallel, the single correlations between the indicators.

Research methodology. Dataset

MRA multiple linear regression is a significant method in macroeconomic studies in Albanian economy. MRA is the statistical method that expresses the attitude or variation of a definite number of factors otherwise known as independent variables with the only purpose to express the influence they have on the other factor; otherwise known as dependent variable. This is a technique or method that requires relatively a satisfactory number of data. A sufficient dataset helps to have a higher level of confidence. To analyze the correlation among the selected variables we have selected a dataset from a period of 10 years.

Years	Private Consumption	Public consumption	Final Consumption
2008	10393900000	13669312300	24063212300
2009	9508449000	13263751174	22772200174
2010	9436425000	13200038170	22636463170
2011	10357530000	13272270782	23629800782
2012	9789527000	13666446062	23455973062
2013	10070900000	18159405940	28230305940
2014	10973450000	13813434771	24786884771
2015	9038930000	12638382236	21677312236
2016	9315567000	12887766990	22203333990

After we have created the table with all the data taken, we proceed with the econometric analysis of multilinear regression using Data Analysis Tool pack in Microsoft or Eviews. The regression analysis is realized through the least square method that can enable to fit a line through a set of observations. Method of the least square is the most common to use to define the regression equation by solving a system of simultaneous linear equations in which the unknowns are the constants of the regression equation ()

In our case, MRA is developed according:

Finding a correlation among the values of final consumption expenditure that is dependent variable y and two independent variables x1 and x2 ; that are private consumption expenditure and public consumption expenditure.

For this reason we will create a simple regression model between these variables:

A linear regression model between final consumption and private consumption that explains the variation among these two factors in Albanian economy.

A simple linear regression model that explains the correlation between final consumption and the level of public consumption in Albanian economy.

And last, a multi regression model, MRA that is based in the coherent role of two common factors of multi regression analysis.

Based on the previous assumptions on the variables that are part of this analyses we could present the following mathematical model of multi regression analysis:

$Y1 = b1 + \alpha 1i * x1 + \alpha 2i\ x2 + \varepsilon i$

Research model. Results

First we check and see the correlation that exists between private consumption and Final public- consumption. Here we look for any type of correlation among an independent variable and Dependent Variable: FINAL_CONSUMPTION

Method: Least Squares Date: 10/16/19 Time: 11:31 Sample: 2008 2019 Included observations: 12

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-5.31E+09	6.25E+09	-	0.4153
PRIVATE_CONSUMPTION	3.002219	0.668738		0.0012

R-squared	0.668375	Mean dependent var	2.24E+10
Adjusted R-squared	0.635213	S.D. dependent var	5.37E+09
S.E. of regression	3.24E+09	Akaike info criterion	46.78928
Sum squared resid	1.05E+20	Schwarz criterion	46.87010
Log likelihood	-278.7357	Hannan-Quinn criter.	46.75936
F-statistic	20.15455	Durbin-Watson stat	1.857242
Prob(F-statistic)	0.001162		

Then as previously done we check for the correlation and the variable of significance for public consumption and its impact on final consumption.

Dependent Variable: FINAL_CONSUMPTION Method: Least Squares

Date: 10/16/19 Time: 11:32 Sample: 2008 2019 Included observations: 12

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	6.13E+09	1.09E+09	5.627890	0.0002
PUBLIC_CONSUMPTION	1.236083	0.078851	15.67610	0.0000

squared 0.960898 Mean dependent var 2.24E+10 Adjusted R-squared 0.956988 S.D. dependent var5.37E+09

E. of regression 1.11E+09 Akaike info criterion 44.65145 Sum squared resid 1.24E+19 Schwarz criterion 44.73227 Log likelihood -265.9087 Hannan-Quinn criter. 44.62153 F-statistic 245.7402 Durbin-Watson stat 1.240166

Prob(F-statistic) 0.000000

Then we continue using a different statistical software, SPSS and we run a regression model and we check fo the correlation between variables.

Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method
1	CPL, CPa	.	Enter

a. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	1,000a	1,000	1,000	,00000

a. Predictors: (Constant), CPL, CP

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3,174E20	2	1,587E20	.	.a
	Residual	,000	9	,000		
	Total	3,174E20	11			

Predictors: (Constant), CPL, CP

Dependent Variable: CF

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1,	,000		.	.
	CP	1,000	,000	,272	.	.
	CPL	1,000	,000	,793	.	.

a. Dependent Variable: CF

Based on the aquired data of last 11 years on SPSS 7, to do the evaluation of model MRA on which three variables that are part of the model are in correlation with each other. The Final Consumption (CF) is the dependent vaiable product of correlation of two independent variable: private consumption and public consumption.

We can see another free term that expresses the influence of other factors, which is expresses in the traits of an error.

Equation that express regression:

CF= -0.001907 + 1.000272 CP + 1.000793 CPL

As it can clearly be stated by the equation, keeping a constant variable tells the norm of increase or decrease on the other variable.

We can say that Albanian economy for the period 2008-2019 there exists a linear correlation between Final Consumption and Public and Private Consumption. As we judge from statistical point of view, as we have used the least square method we can say that the values of R and R^2 are near maximum, so the build up model is significant. Its significance can easily be stated by the value of F statistics = 0.

Conclusions

Based on all information gathered from the analysis of Albania's final consumption using the regression model described above, we conclude that this indicator is significantly influenced by changes in private and public consumption.

The authors wish to state that the reliability of the multiple regression model designed in this paper does not exclude the possibility to analyze, in parallel, the single correlations between the indicators, as described above.

The model is representative for the purpose of this research, and it accurately describes the relationship between the final consumption and its factors: household consumption and public consumption.

References

[1] Anghelache C., (2008). Treaty on economic and theoretical statistics. Bucharest: Economica Publishing House.

[2] Anghelache, C., Anghel, M.G., Prodan, L., Sacală, C., Popovici, M. (2014). Multiple Linear Regression Model Used in Economic Analyses. Romanian Statistical Review Supplement, Volume (Year): 62 (2014), Issue (Month): 10 (Octomber), 120-127.

[3] Anghelache, C. (coord.) et al. (2014). Statistical-econometric Models used to study the Macroeconomic Correlations. Romanian Statistical Review (Supplement), December 2014.

[4] Anghelache.C, Anghel M.G, Popovici.M (2015), Multiple Regressions Used in Analysis of Private Consumption and Public Final Consumption Evolution International Journal of Academic Research in Accounting, Finance and Management Sciences Vol. 5 (4), pp. 69–73,

[5] Bastagli, F., Hills, J. (2013). What Gives? Household Consumption Patterns and the 'Big Trade Off' with Public Consumption. Centre for Analysis of Social Exclusion, LSE in series CASE Papers with number case170.

[6] Cakerri, L., Petanaj, M., & Muharemi, O. (2014). The Effect of Government Expenditures on Economic Growth: The case of Albania. European Journal of Social Sciences, 2(1), 242– 253. http://doi.org/10.1142/S0217590803000608

[7] Censolo, R., Colombo, C. (2008). Public consumption composition in a growing economy. Journal of Macroeconomics. Volume (Year): 30 (2008), Issue (Month): 4 (December), 1479-1495.

[8] Curcija.M (2018) , Contracting Institutions, Property Rights and Economic Growth in the Post- 90s Albania, European Scientific Journal January 2018 edition Vol.14, No.1, Doi: 10.19044/esj.2018.v14n1p176

[9] Imami, D., Kaechelin, H.,Lami, E. (2014). "A new view into Political Business Cycles: Household Behavior in Albania". Acta Oeconomica

[10] Merko.F, Kalaj.E, Zisi.A (2017) Estimating the effects of fiscal policy on the private consumption: evidence from Albania. 13th International Conference of ASECU, Social and Economic Challenges in Europe 2016-2020,

[11] Mir Nahid, M., Mansur, A. (2012). Government Expenditure and Household Consumption in Bangladesh through the Lens of Economic Theories: An Empirical Assessment. University Library of Munich, Germany in MPRA Paper with number 36016.

[12] Scutaru, C. et al. (2009). The Relation between Predictability and Complexity: Domestic and Public Consumption in the Romanian Economy. Romanian Journal for Economic Forecasting. Volume (Year): 6 (2009), Issue (Month): 3 (September), 34-46.

[13] Squin. William, A& Bonini, Charles.P, Statistical Analysis for Business Decisions , Homewood, Illinois, Richard.D Irwin, 1973; 503.

[14] Voineagu, V., Ţiţan, E. et al. (2007). Theory and practice in econometrics, Editura Meteor Press.

Corporate Governance Issues: Disclosure and Transparency. An Interdisciplinary Approach

Christian Zhelev

PhD, University of National and World Economy, Bulgaria

Abstract

Two of the pillars of contemporary corporate governance are examined in this article – disclosure and transparency. Though an interdisciplinary approach, knowledge from different fields of the economic science are brought together in order better clarify the interdependence and the level of interaction between these. Knowledge traditionally considered to be part of the Corporate Governance (disclosure and transparency and what is most modern nowadays - ESG) is examined form the perspective of the governance bodies and other stakeholders, taking into account tools from the fields of sustainable development, project management and marketing. The processes of digitalization also find their reflection in the current article. The case study approach is used to illustrate the interdisciplinary interaction.

Keywords: corporate governance, disclosure, transparency, ECG

1. Introduction

Nowadays corporate governance (CG) is considered to be inseparable part of the company's performance and results. The vast interest in CG from international institutions and policymakers is a proof that CG matters. Academia is not lagging behind. In the recent years plenty of authors deal with CG. This permeant interest is one more illustration of its importance and relevance.

In this article disclosure and transparency are the main issues which is tried to be shed light on. Through the methods of induction and deduction, literature review and case study, it is argued that disclosure and transparency is a key principles of CG that has interdisciplinary nature. That is why the interdisciplinary interactions between CG and other scientific branches is a subject of the analysis.

2. Corporate governance - scope defined

In order to better understand the pillars of contemporary corporate governance, especially the ones the article is focused on (disclosure and transparency), we should have the basic understanding what actually it is. Many definitions have been provided, many members of academia strive to provide such definitions so that they could subordinate the existing knowledge to their own understanding. Paraphrasing Huse (2000), his understanding could be summed up as follows: corporate governance can be defined as the set of interactions between internal and external stakeholders of the company and the corporate governance bodies that direct the company. Demb & Neubauer (1992) state that corporate governance is a managerial process by which corporations take into account the rights and preferences of stakeholders. Another group of authors (Corbetta (2001), Gnan & Montermerlo (2001) and many others) define corporate governance in a similar way. According to them basically the essence of CG is: how companies are directed and controlled, but this understanding can no longer be successfully applied in the current situation. It would be precise in case further explanation is provided. By adding “CG is also the set of formal and informal relationships between corporate executives, senior management of the company, shareholders and other relevant stakeholders” to the above-mentioned definition we could clarify the matter; only in this way we could reflect the shift of CG from inside the company to society at large.

The diversity of perspectives on the problems in the existing knowledge regarding corporate governance definitions leads to different definitions. In the current article, another of the well-recognized definitions shall be provided, followed by an author’s interpretation.

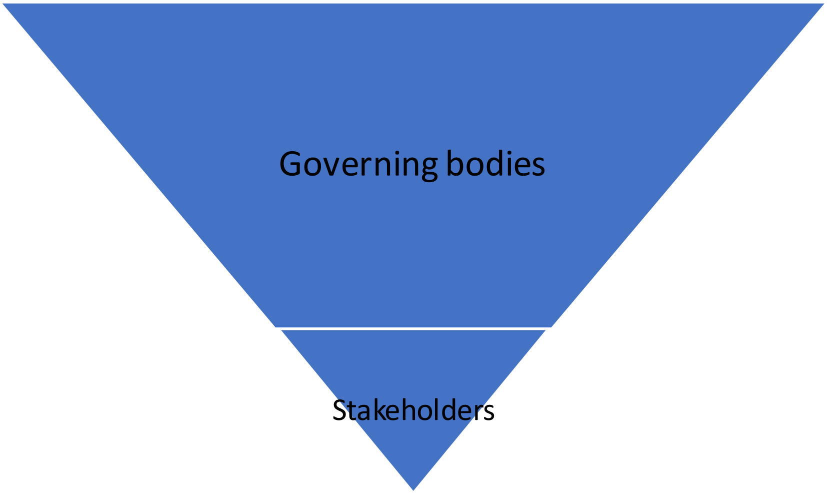
Indisputably, OECD provides this one understanding of what corporate governance is. Namely: Good corporate governance helps to build an environment of trust, transparency and accountability necessary for fostering long-term investment, financial stability and business integrity, thereby supporting stronger growth and more inclusive societies[1].

Led by this understanding, in this article, a further light on the matter is shed.

Deriving from OECD’s definition, also taking into account and the other definitions mentioned and not mentioned in the preceding lines, another understandings of corporate governance is provided here. It serves the established goals and objectives of the study. That is why the proposed definition is: "Corporate governance can be represented as an inverted pyramid that balances at its top, and the foundation of this pyramid is the governing body of the corporation."

Figure 1. Corporate governance – pyramidal presentation

[1] http://www.oecd.org/corporate/



Source: The author, based on his PhD thesis.

This thin balance could tilt the entire pyramid easily. The balance is the key in the proposed understanding of what contemporary corporate governance is. Namely the governing bodies are responsible for this balance, because (as it is well known), they are responsible for giving the strategic direction of the organization.

More arguments in support of this definition could be added here. They could be summed up as follows:

Corporate executives are representatives of the owners. In the face of a representative democracy, they express the interests of those who have aired them to run their property;

Corporate executives are the ones who set the path for the development of the company;

They balance the interests of different stakeholders by:

- being responsible for enhancing shareholder wealth;
- caring for the society as a whole;
- being responsible for creating customer satisfaction mechanisms for the company.

Provide suitable conditions for building effective relationships with suppliers, creditors, etc.;

Finally - they are the ones who are also responsible for the successes and failures of the company.

This understanding is also driven by the fact that in the triad (owners, company managers / corporate executives/ governing bodies) the key role of the corporate executives is in directing companies in their relationship with various stakeholders, including stakeholders form the international markets. In addition, CG is seen as an effective synergy of this triad, for the purposes of disclosure and transparency, especially in the field of sustainable development. The role of corporate governance working in the interests of shareholders and stakeholders cannot be left in the background as well. It is evident that disclosure and transparency play key roles in the relationships of the organization with the various stakeholders, at least because poor disclosure would lead to information asymmetry, which is something highly undesirable, especially in the digital society today.

3. Selected theories supporting the understanding of the importance of the role of disclosure and transparency in CG

There is a vast availability of theories that deal with Corporate governance[1].The various authors strive to prove that the theoretical foundations of what we call CG today. This could be traced even at the beginning of the manifestation of economic relations between the subjects in the economic system. Such searching may have its reasons, but it is unlikely such explicit links and interdependencies to be deduced in this case . That is why, in this section the article shall not focus on those theories. More or less, interdisciplinary theories shall be discussed in order to better outline the searched interactions.

3.1. The Firm as a Nexus of Contracts

The nexus of contracts theory depicts the firm in a network of implicit and explicit contracts with stakeholders; however, the shareholder has predominance over other stakeholders. The boards and management continue to have a fiduciary responsibility to maximize shareholder value. The firm as a nexus of contracts describes the firm in relation to its environment—a view of the firm looking outward into its environment. This is the useful moment is support of the main goals and objectives of the current paper. Moreover, well recognized economists such as Michael Jensen and William Meckling as well as Frank Easterbrook are considered to be the developers of this theory.

3.2. Resource Dependence Theory

Resource dependence theory provides a similar view. It also describes power dependence in the relationships between the firm and other actors in its environment and focuses primary attention to those stakeholders in the environment who have the greatest impact on the profitability of the firm. According to some authors, the basic notion of resource dependence theory is the need for environmental linkages between the company and outside resources. In this perspective, directors connect the firm with external factors by choosing the resources needed to survive (Pfeffer

[1] The fundamental theories that have formed the contemporary CG over the years are consider as well illuminated in the literature. That is why here theories such as Principal – Agent, stewardship theory etc. are not mentioned in the paper. As it was mentioned, the idea here is to see the interdisciplinary interaction by providing theoretical and empirical knowledge from other fields of the economic science.

and Salancik, 1978). Consequently, boards of directors serve as an important instrument for receiving critical elements of environmental uncertainty into the firm. Environmental linkages or network governance could reduce transaction costs related with environmental interdependency. The organization's need to require resources and these leads to creation of relationships or network governance between organizations. Additionally, the uneven distribution of needed resources results in interdependence in organizational relationships. Several factors would appear to intensify the character of this dependence, e.g. the importance of the resource(s), the relative shortage of the resource(s) and the extent to which the resource(s) is concentrated in the environment.

Moreover, governance bodies can serve to link the external resources with the firm to overcome uncertainty and managing effectively uncertainty is critical for the existence of the company. According to the resource dependency rule, the directors bring valuable resources like skills, information, key constituents (suppliers, buyers, public policy decision makers, social groups). Thus, it is considered that the potential outcome of connecting the firm with external environmental factors and reducing uncertainty can decrease the transaction cost.

3.3. Stakeholders theory

According to the research design, it is appropriate to point out the next theory recognized by an even wider range of economic disciplines, in order to find the interaction there by tracing different stages of the evolution of the views in this theory.

We will start with Coleman (2008), who states that the initial interpretation of the stakeholders theory is too narrow because it presents shareholders as the only stakeholders. However, it better explains the role of corporate governance because it emphasizes a different way of building a business. A review of the theory confirms that this is so, but on the other hand, we cannot ignore even the initial stages of this theory. This is where the focus is placed on the rights of shareholders and the performance of fiduciary duties by the management of the company (corporate management). And the fulfillment of fiduciary obligations is also in the foundation of "company laws.

Of interest here is the critique of Jensen (2001). He states that the success of the organization is not only about contributing to the stakeholders, and in no case can it be measured alone. There are other key elements such as information flows from corporate executives, relationships between people within the organization, work environment, etc. that are vital and must be kept in mind.

This stakeholder theory in its contemporary understanding includes the wide range of individuals the company encounters in its operations. From the perspective of CG, we can say that this theory reflects the dynamics, modernity and new players that corporate governance and stakeholders are considering and developing.

Given that it is central to contemporary corporate governance theories, it makes sense to look at how stakeholders are classified and what stakeholder management policies can be taken.

It is well known, that the basic stakeholder classification, derived directly from the theoretical formulation, is that of internal and external to the company. Internal are the shareholders, corporate executives and employees of the company. While external are suppliers, creditors, government, pressure groups, etc. that are relevant or can in any way affect the business of the company.

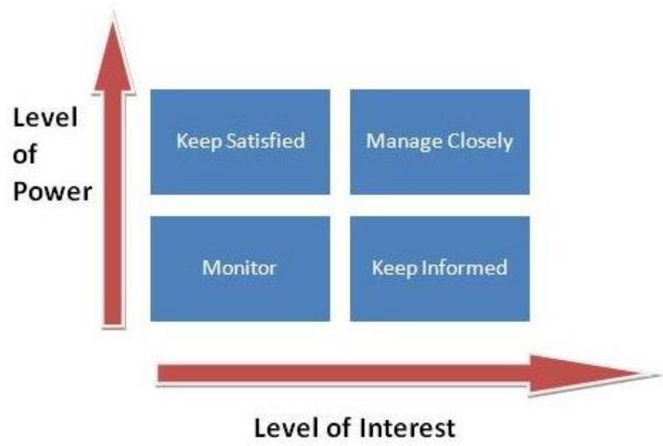
Another classification scheme put the stakeholder question that way: consubstantial, contractual and contextual. It is important to mention that, not only stakeholders can be judged in terms of their affiliation with the company environment, but it must also be emphasized in terms of their importance to the company, because the company cannot treat them in one and the same way.

3.4. The Project Management Institute and stakeholders

The Project Management Institute (PMI) offers an instrument (The Power Interest Grid), which is typally used in the project management field of knowledge, but keeping in mind the interdisciplinary approach and also the fact that this instrument is used outside the area of project management, it could be applied in the article as a beneficial one as well. What is more – empirical checks have probed its relevance to the matter discussed.

Aa stated on the website of PMI "the Power Interest Grid, which is also known as the Power Interest Matrix, is a simple tool that helps you categorize project stakeholders with increasing power and interest in the project. This tool helps you focus on the key stakeholders who can make or break your project. In turn, this helps you in stakeholder prioritization."

Figure 1. The Power Interest Matrix



Source: https://www.brighthubpm.com/

This instrument will help the governance bodies to prioritize their policy concerning stakeholder management and could also provide them with meaningful insight for further reaction in the disclosure and transparency area.

4. The OECD/G20 Principles of Corporate Governance (2015)

The Principles could be defined as the pillars of contemporary corporate governance, because they are a fundamental document for countries that have adopted these principles as a guideline for developing CG codes. They, together with the White Papers, lay the foundation for a solid frame for what is known as good corporate governance. On the following lines, an attempt will be made to schematically compare the principle "disclosure and transperancy" with the previously mentioned theoretical statements.

Disclosure and transparency according to the OECD Principles[1]

Their last revision of the principles, from 2015, defines the key areas of disclosure and transparency in point V[2] of the document.

The corporate governance framework should ensure that timely and accurate disclosure is made on all material matters regarding the corporation, including the financial situation, performance, ownership, and governance of the company…Disclosure requirements are not expected to place unreasonable administrative or cost burdens on enterprises… Experience shows that disclosure can also be a powerful tool for influencing the behaviour of companies and for protecting investors. A strong disclosure regime can help to attract capital and maintain confidence in the capital markets. By contrast, weak disclosure and non-transparent practices can contribute to unethical behaviour and to a loss of market integrity at great cost, not just to the company and its shareholders but also to the economy as a whole. Disclosure also helps improve public understanding of the structure and activities of enterprises, corporate policies and performance with respect to environmental and ethical standards, and companies' relationships with the communities in which they operate.

But what are the main areas of the disclosure and transparency principle? They are defined in depth in the principle, that's why here only key moments are marked:

Table 1. Principle V – Disclosure and Transperancy

A. Disclosure should include, but not be limited to, material information on:

1. The financial and operating results of the company.

[1] The following point is driven out directly form the principles of corporate governance OECD/G20 2015. Author's comments follow the listing.

[2] Only certain moments of the principle are presented. This approach aim to serve the objectives of the article.

2. Company objectives and non-financial information.

3. Major share ownership, including beneficial owners, and voting rights.

4. Remuneration of members of the board and key executives.

5. Information about board members, including their qualifications, the selection process, other company directorships and whether they are regarded as independent by the board.

6. Related party transactions.

7. Foreseeable risk factors.

8. Issues regarding employees and other stakeholders.

9. Governance structures and policies, including the content of any corporate governance code or policy and the process by which it is implemented.

C. An annual audit should be conducted by an independent, competent and qualified, auditor in accordance with high-quality auditing standards in order to provide an external and objective assurance to the board and shareholders that the financial statements fairly represent the financial position and performance of the company in all material respects.

D. External auditors should be accountable to the shareholders and owe a duty to the company to exercise due professional care in the conduct of the audit.

E. Channels for disseminating information should provide for equal, timely and cost-efficient access to relevant information by users.

Source: OECD, Principles of Corporate Governance (2015)

Basically in the table above we could easily trace the interaction of the principles with the theoretical framework, discussed in the previous section. The stakeholders are evidently present, what is more with the new edition of the principles the new moment – disclosure of non –financial information is explicitly present. The companies should disclose such information as well. This new moment widens the scope of the corporate governance, deepens its interdisciplinary nature and bridges the gap to what is known as interdisciplinary approach. There are authors (Boeva, Zhivkova, 2017; Boeva, 2019) who examine these interdisciplinary interactions from the prospective of sustainable development, global supply chain management, ESG disclosure and so on. According to Boeva and Zhivkova (Boeva, Zhivkova, 2017)The return rates of the companies' share and the dividends are no longer the only thing that matters for the managers. For different reasons they incorporate the sustainable development policy, in all its three dimensions, into the corporate governance. Most of the companies nowadays have developed a corporate social responsibility policy and make quite a lot of efforts to communicate it to the public. The most popular aspect of the sustainable development is the environmental pillar. The cited authors also state that in the area of ESG disclosure: Responsible investment relies on the ability or the prerequisite for achieving long-turn and sustainable returns based on the acceptance and compliance of the environment protection policies, establishment of effective social system and governance. Following such policy of responsible investing means that there already is a new approach to analysis, investment decisions and engagement of the shareholders[1]. Boeva in her book "Capital, Melting Glaciers and 2°C" (Boeva, 2019) also makes a fundamental analysis of the role of ESG disclosure in the disclosure and transparency policy of the contemporary companies. What is more, according to an article from Concordia University: Firms that value and practice environmental transparency in their reporting to stakeholders are in general better economic performers than those whose practices are more opaque.

It is evident that the disclosure and transparency principle put a challenge in front of the companies, but this challenge, if successfully managed with, should serve in favor of their long run development in a sustainable way, with the interests of the stakeholders in mind.

It is worth mentioning here who are the best companies in Europe according to "Ethical Boardroom", pointed as winners in complying with the corporate governance principles. Because this classification is with a leading indicator disclosure.

Table 2. Corporate Governance Winners 2019 – Europe

Engineering	Schneider Electric SE
Automotive	Volvo Group
Insurance	Allianz SE
Financial Services	Barclays Bank PLC
Transportation & Logistics	Deutsche Post DHL Group AG
Aerospace & Defence	Leonardo S.p.A.
Utilities	Iberdrola S.A.
Leisure & Hospitality	TUI AG
Oil & Gas	Royal Dutch Shell PLC
Beverage	Diageo PLC
Conglomerate	Nestlé S.A.
Pharmaceuticals	Sanofi S.A.
Telecommunications	Teléfonica S.A.

[1] ibid

Source: https://ethicalboardroom.com/corporate-governance-winners-2019-europe/

As it can be seen these are companies from various sectors, but the compliance with the principles has provided them not only with awards. A quick check of their annual reports and their capital market presence confirms that good disclosure and transparency put the company on a relevant future strategic path. What is more, all the companies comply with the principles and disclose information on regular babes.

The big auditing companies also underline the importance of further disclosure. According to a PwC publication: in addition to financial information, organizations should disclose policies relating to business ethics, the environment and other public policy commitments, as this information can be important to investors and others in better evaluating the relationships between companies and the communities in which they operate. Deloitte offer the disclosure and transparency checklist, form which is obvious the necessity of the companies not only to disclose financial but also social and governance information.

5. Case study: Nestle vs Greenpeace from another angle

So far the good examples and the trendsetters were pointed out. The case study presented below shows the consequences of untimely / poor disclosure and lack of transparency and the potential undesirable outcomes for the company.

According to official information in Financial Times on March 17 2010, environmental group Greenpeace launched a social media attack on Nestlé's Kit Kat brand vie video in YouTube. Greenpeace had found that Nestlé was sourcing palm oil from Sinar Mas, an Indonesian supplier that it claimed was acting unsustainably. Nestlé said it used only 0.7 per cent of global palm oil. Nestlé's initial response was to force the video's withdrawal from YouTube, citing copyright. This led to enormous social media buzz. The lesson, according to FT is: showing leadership on sustainability is becoming a business imperative. A sustainability risk is potentially big when the whole world can find out about it overnight.

The conclusion, proposed by FT corresponds to the initial tasks and objectives of the current article if the disclosure ad transparency principle is applied What is more to be added here is the reaction of the capital markets. One more result from the scandal was the drop of Nestlé's share prices.

The thorough investigation of case study presents a solid ground for some conclusions:

The interdisciplinary interactions are evident, including interactions Marketing - Corporate Governance;

The rightfulness of the thesis of ESG disclosure is once more confirmed;

The need for integrated approach in the field of disclosure and transparency is obvious;

Timely disclosure is a must for the contemporary corporation.

Companies can no longer rely on being non-transparent in front of the various publics;

The proper managing of different stakeholders is required, because the potential power and interest of those stakeholders should not be underestimated.

Conclusion

In the current article the main focus was on disclosure and transparency as one of the pillars of contemporary corporate governance. The investigation of the problem was executed within the assumption of the possibility for applying interdisciplinary approach. The proposed theoretical framework, together with the case study, proved the possibility of applying such an approach. Once again, the basic understating of the author that such collaboration of the different fields of knowledge is possible was confirmed.

In the light of CG, disclosure and transparency the importance of the timely, effective, and ongoing disclosure was confirmed, because the poor disclosure leads to undesirable effect for the long run performance of the companies and not only. Because according to OECD insufficient or unclear information may hamper the ability of the markets to function, increase the cost of capital and result in a poor allocation of resources. And this statement sets a fruitful ground for further research.

References

[1] Baker, E. (2012). Planning effective stakeholder management strategies to do the same thing! Paper presented at PMI® Global Congress 2012—North America, Vancouver, British Columbia, Canada. Newtown Square, PA: Project Management Institute.

[2] Boeva, Bistra (2019) , Capital, Melting Glaciers and 2°C, Iztok – Zapad

[3] Boeva, Bistra; Zhivkova, Stela; Stoychev, Ivan (2017). Corporate Governance and the Sustainable Development. European Journal of Economics and Business Studies

[4] Coleman, Anthony. (2008). Corporate governance and firm performance in Africa: A dynamic panel data analysis. Journal for Studies in Economics and Econometrics. 32. 1-24.

[5] Corbetta, G., and D. Montemerlo (1999). “Ownership, Governance and Management Issues in Small and Medium Sized Family Businesses: A Comparison of Italy and the United States,” Family Business Review XII(4), 361–374.

[6] Demb, Ada & Neubauer, F.. (1992). The Corporate Board: Confronting the Paradoxes. 10.1016/0024-6301(93)90307-2.

[7] Gnan, L. & Montemerlo, D. 2001. Structure and Dynamics of Ownership, Governance and Strategy: Role of Family and Impact on Performance in Italian SMEs. In G. Corbetta & D. Montemerlo (Eds.), The Role of Family in FamilyBusiness: 224-244. F.B.N. Research Forum Proceedings, Rome, Italy.
[8] Huse, M. 2000. Boards of directors in SMEs: A review and research agenda. Entrepreneurship & Regional Development, 12: 271-290
[9] Jensen, Michael C. (2000) Value Maximization, Stakeholder Theory, and the Corporate Objective Function. European Financial Management Review, N. 7, 2001, HBS Press
[10] OECD. (2015). OECD Principles of Corporate Governance.
[11] Pfeffer, J. and Salancik, G. (1978), “The External Control of Organizations”, New York: Harper & Row
[12] https://singapore-academy.org/index.php/en/education/research-consulting/library/item/350-corporate-governance-disclosure-and-transparency
[13] https://www.sciencedaily.com/releases/2019/04/190418131246.htm
[14] https://www2.deloitte.com/global/en.html
[15] https://www.oecd.org/daf/ca/corporate-governance-factbook.pdf
[16] https://www.oecd.org/
[17] https://www.ft.com/content/90dbff8a-3aea-11e2-b3f0-00144feabdc0

Qualitative Analysis Concerning Universal Basic Income - Perceptions in Portugal

Diamantino Ribeiro

CEFAGE-UE - Centre of Advanced Studies and Training in Management and Economics of the University of Évora, Portugal

António Pedro Costa

University of Aveiro, Portugal

João Filipe Ribeiro

UBI – University of Beira Interior, Covilhã, Portugal

Abstract

The economic and social debate has been intensifying globally as a result of concerns about the increase in poverty in the world and the progressive separation between rich and poor. There is an urgent need to find ways and alternatives that can be tested and put into practice. This is an exploratory study on the perception of the Portuguese regarding Unconditional Basic Income or Universal Basic Income (UBI). UBI has defenders and opponents, both parties with convincing arguments about its practical applicability, however, conclusions cannot be reached without experience in the field and convincing results. Likewise, the idea should not be abandoned without understanding its real applicability, as its success could be important for the future development of the world. Studies on the UBI are still in their infancy. Therefore, Portugal's contribution to the enrichment of knowledge within the topics of "the future of work" and "work of the future" and, more specifically, about UBI, is seen as urgent. In this context, we prepared and analysed a survey, having obtained 273 valid responses. The results of the qualitative analysis on which this study focuses allow us to infer that there are still many flaws in the management and leadership of human resources and, among other aspects, that, in general, the respondents would prefer to work even though they might eventually receive a UBI.

Keywords: development, future, unconditional or universal basic income, work

Introduction

The word "trabalho" ("work" in Portuguese) comes from the Latin *tripalium*, which means punishment. *Tripálio* (from the late Latin "*tri*" (three) and "*palus*" (stick) - literally, "three sticks") is a Roman instrument of torture, to which slaves were subjected. Hence the verb in vulgar Latin *tripaliare*, which initially meant to torture someone on the *tripálio*. This instrument made of three sharp sticks, sometimes still equipped with iron spikes, would also serve for farmers to beat the wheat and ears of corn, to separate and fray them. These terms gave rise to, in Portuguese, the words "*trabalho*" and "*trabalhar*" (to work), although in the original sense the "*trabalhador*" (worker) would be the executioner, and not the alleged "victim", as is the case today.

Based on the concepts of slave labour, servility or a change in the paradigm from the industrial revolution, a historical context was developed with the main objective of understanding how the (possible) myth about compulsory labour (wage-labour) took root in the industrial revolution, complemented by the contributions of Karl Marx in his essays "Wage-Labour and Capital".

The philosopher Hannah Arendt in her work "The Human Condition" studied and interpreted the structures that condition the human experience, investigated the meaning and the modes of human activities and their respective dignities. For Arendt, work is an activity that man imposed on his own species, that is, it is the result of a cultural process (Arendt, 2010).

Governments of several countries concerned about the future of work and the predictable social changes that the changes may cause, have been discussing the possibility of implementing a basic and unconditional income for all citizens.

Finland was the first country in Europe to implement (in 2017) an idea close to UBI, which consisted of paying a group of unemployed people 560 euros per month, without conditions or demanding anything in return. The experience, limited to two years, covered two thousand unemployed people, but was abandoned by the Government. The pilot project ended without having achieved the desired results. Olli Kangas, an expert involved in the project, said: "Two years is a too short period to be able to draw definitive conclusions from such a valuable experience. We should have had more time and more money to achieve reliable results"[1].

Defenders of UBI want to grant state support capable of ensuring a dignified life for all citizens. UBI is a regular fixed payment of money provided by the government - or another institution in the public sphere - to each citizen or resident, regardless of whether the individual is rich or poor and/or in a paid employment. This income is based on three characteristics (Van Parijs, 2004):

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[1] The project covered unemployed people aged between 25 and 58. Retrieved from: https://www.demoshelsinki.fi/en/2016/08/30/thousands-to-receive-basic-income-in-finland-a-trial-that-could-lead-to-the-greatest-societal-transformation-of-our-time/. Accessed on: 30/09/2019

Universality: it must encompass the entire population;

Individuality: it must be designed to serve individuals, not families, since it is considered a truly individual right;

Unconditionality: it must be unconditional (or employ conditions that do not violate inclusion).

In a changing world, where the reality of work is changing due to automation, there are those who believe that UBI makes perfect sense. With the granting of this support, the State could ensure living conditions for its citizens, preventing the growth of political populisms, allowing everyone to share the success of a "new economy" (Birnbaum, 2012; FitzRoy & Jin, 2018; Huws, 2017; Pereira, 2017a, 2017b; Widerquist, 2001; Yunker, 2013).

For some authors, work arises from humans' need to satisfy their needs and survive, while for others work is the activity developed by humans, under certain forms, to produce wealth (Chandra, Chandra, & Pasma, 2010; Frank, 2008; Jordan, 2010; Pech, 2010). There are, however, several authors who contest UBI, reflecting and presenting studies with the aim of demonstrating that it is not a reasonable option (Altman & Markham, 2019; Aydinonat, 2015a; Denniss & Swann, 2016; Kaighin, 2019; Mays, 2016; Quiggin, 2019; Van Donselaar, 2009; Widerquist, 2018).

This work intends for the reflection to not be limited to the UBI, to its pros or cons, defenders or critics. Rather it is intended that it be seen in a broader perspective, taking into account the inevitability of changes in the "work of the future" and the "future of work".

Theoretical framework

Evolution of work

The denomination of work first appeared in the Bible, in the book of Genesis, when it referred to the division of tasks between men and women; men would be responsible for hunting and guaranteeing protection, and women for fulfilling domestic duties, as well as educating and caring for offspring. After the Neolithic period, and the development of animal husbandry and agriculture, manual labour was constantly devalued. In classical Greek philosophy, work was seen as a punishment, that is, it was inherent in negative thinking, although there are two theories about it: one related to the fact that work is considered the essence of man, created by those who practised it, and another, interconnected with the idea that work neglected and stifled human intelligence. Among thinkers in Ancient Greece, work was frowned upon. Aristotle put work in opposition to freedom, and Homer saw a desirable goal in the idleness of the ancient Greek nobility. Hard labour was for women, servants and slaves (Silva, 2016). In the Middle Ages, working in agriculture was an arduous task. Those who were obligated to practise forced labour by their employers had no choice. But whoever had the choice, preferred leisure and festivity and not worrying about tomorrow.

Thinking of some kind of profit was considered an addiction. A quota of up to one hundred days off per year served to ensure that work was not in the foreground[1]. In the 16th century, Martin Luther declared idleness a sin. Man was born to work, Luther wrote. According to him, work is a "divine service" and at the same time "vocation" (Silva, 2016). In Anglo-American Puritanism, work was seen as a sign that whoever did it was chosen by God. This philosophy accelerated the development of capitalism (Guilherme De Moura & Florianópolis, 2006). In the 18th century, the time of industrialisation in Europe, the population grew and the cultivable space decreased. People migrated to cities in search of work in factories and foundries. In 1850, many workers worked 14 hours a day, six days a week. Wages were barely enough to survive. Discoveries such as the steam engine and the loom tripled production (Burns, 2011). In the early 20th century, Henry Ford perfected work on the automotive industry's assembly line, setting standards for the industry in general. With that, the production of the Ford Model T in series, reduced the costs, which on the one hand lowered the sale price of the vehicle and on the other hand enabled higher salaries to the employees[2]. With the factories a new class appears: the proletariat. For Karl Marx, who coined this term, work is the essence of man. The socialist Paul Lafargue, son-in-law of Carl Marx, said in 1880 that a strange addiction dominated the working class in all countries; he referred to the "love" of work and classified it as a frantic addiction, responsible for leading individuals to exhaustion (Henrique & Mota, 2016). Throughout the 20th century, social costs for workers in the world's richest nations have increased significantly. As a result, companies have moved production to where labour is cheaper. In many poor countries, circumstances that are reminiscent of the beginning of industrialisation in Europe still prevail: child labour, low wages and a lack of social security. Meanwhile, in Europe jobs are increasing in the service sector. Elderly caregivers are desperately wanted. New fields of work are opening up as a result of social changes and technological advances. Over time, the workday was reduced and the volume of work per capita decreased by 30% between 1960 and 2010 (Ursula Huws, 2016). Then there is robotization; machines do not strike, do not demand salary increases and are extremely thorough: industrial robots are revolutionising the world of work.

The American economist Jeremy Rifkin argues that we are experiencing an industrial revolution that will end wage-labour. Will the Robots replace us? This question has been asked for 40 years, since automation arrived at the factories, but now the situation intensifies the debate. With the advancement of digitalisation, the Internet of Things and the Industrial Internet of Things 4.0 (Fourth Industrial Revolution), many occupations are becoming "obsolete" - and not only in industry (Rifkin, 2014). Seen from a positive point of view, if machines do the work normally under the responsibility of humans, people now have time for other tasks such as environmental

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[1] Retrieved from: http://www.amaso.com.br/PDFs/AMASOn18.pdf. Accessed on: 30/09/2019

[2] Retrieved from: https://www.ford.pt/experiencia-ford/historia-e-herenca. Accessed on 30/09/2019

protection, support for the elderly, sick and needy, many tasks that are already being performed at the moment by volunteers. Maybe in the job market of the future, people can go back to doing what they like and what gives them pleasure? The question remains.

Dani Rodrik (2015), professor of International Political Economy at the John F. Kennedy School of Government, Harvard, and author of "Economics Rules: The Rights and Wrongs of the Dismal Science", argues that there is good and bad news for the future of work in developing countries. Thanks to social policies and labour rights, workers can become full players in the economy much earlier in the development process. At the same time, the traditional engine of economic development - industrialisation - is likely to operate at much lower capacity. The resulting combination of high public expectations and low growth production capacity will be a major challenge for all the developing economies in the world (Aydinonat, 2015a).

With all these transformations happening at a speed that can make predictions difficult, in addition to it being necessary to take maximum advantage of the differentiating competences of the human being, especially our creative and innovative side in order to develop alternatives, it is also necessary to think beyond the normal; Bill Gates, for example, launched the idea of charging a fee for users and implementers of robotics, which in parallel can provide an income for citizens[1].

Unconditional Basic Income (UBI)

The idea of an Unconditional Basic Income for the poor emerged in the 16th century, defended by humanist thinkers Thomas More and Ludovicus Vives. Thomas More defended the idea in his book Utopia in 1516 (More, 2014), curiously by the voice of a Portuguese traveller, Raphael Nonsenso, but it is Ludovicus Vives in 1526 who in his book "De Subventione Pauperum" defends the idea in more detail (Vives, 2017). In the 18th century, the idea of an income paid at once to all was defended by the Marquis de Condorcet in his posthumous book entitled "*Esquisse d'un tableau historique des progrès de l'esprit humain*" (Condorcet, 1795) and shortly after (1796) by his friend Thomas Paine in his book "Agrarian Justice" (Foner, 1995). This idea of income paid at once was also defended by two law professors at Yale University, Bruce Ackerman and Anne Alstott, in the book "The Stakeholder Society" (Ackerman & Alstott, 1999) and is now widely discussed by other authors, as can be read in the book "The Ethics of Stakeholding" (Dowding, Wispelaere, & White., 2003). In the 19th century, the idea of an Unconditional Basic Income that is defended is that which combines the two previous ideas - that of a basic income for the poor, with the idea of an income paid at once to everyone. This idea was defended by several distinguished thinkers, among them, the French utopian Charles Fourier in his book "*La Fausse Industrie*" (Fourier, 1836), the 19th century English political thinker and philosopher,

[1] Retrieved from: https://www.ft.com/content/d04a89c2-f6c8-11e6-9516-2d969e0d3b65. Accessed on 30/09/2019

John Stuart Mill in his 1848 book "Principles of Political Economy" (Mill, 2006), and the Belgian Joseph Charlier) who defends the idea in his book "*Solution du problème social or constitution humanitaire* (Charlier, 1848).

In the 20th century, there were three periods in which the UBI was defended

First, it was during the period between the two great world wars, mainly in Great Britain, with the philosopher and mathematician Bertrand Russell, the first to do so in his book "Roads to Freedom" published in 1918, (Russell, 2004), followed by economist George DH Cole in several of his books (Pound, Davis, & McWhirter, 2015), and by economist James Meade, winner of the Nobel Prize in Economics, in his book "Outline of an Economic Policy for a Labour Government" published in 1935, (Blankenagel, 2012).

In the 60-70s, the debate took place mainly in the USA, where two of its most famous defenders and both Nobel Prize winners in Economics, Milton Friedman, and James Tobin, emerged (Friedman, 2009; Tobin, 1980). Other prominent figures showed themselves to be in favour of UBI, such as Martin Luther King and American President Richard Nixon (Marcelo, Merrill, Bizarro, & Pinto, 2019).

Since the 1980s, the UBI was mainly defended in continental Europe, particularly through the creation, in 1986, of the BIEN (Basic Income European Network) based at the Catholic University of Louvain, with Belgian philosopher Phillipe Van Parijs, Head of Hoover Chair, and one of its most active founders. Since 2004, BIEN has come to mean Basic Income Earth Network.

At present, the debate is moving forward and backward, with defenders and opponents settling their arguments. It is expected that the debate will leave the academic circuit and be shared with citizens so that they can reflect, discuss and consolidate their ideas.

Universal Basic Income (UBI) in Portugal

In Portugal, the existence of a movement organised around the defence of a UBI is very recent. Until today, the experience that exists in Portugal closest to a UBI is the payment of a Guaranteed Minimum Income, created during the socialist government of António Guterres (1999 to 2002). Currently, it is called Social Insertion Income (RSI) and consists of the payment of a minimum income to all individuals who do not integrate in the work and social livelihood circuit. The bibliography produced in Portugal is almost non-existent, but there is some activity and ideas on the subject, mainly reflected on the website: *www.rendimentobasico.pt.*

Martim Figueiredo (2013) in his book "Será que os surfistas devem ser subsidiados?" (Should surfers be subsidised?) presents some reflections (Figueiredo, 2013). Roberto Merrill presented an article entitled "O Rendimento Básico Incondicional como um novo direito humano?" "Da exploração à pré-distribuição" (Basic Unconditional Income as a new human right? From exploration to pre-distribution), published on the website Esquerda.net, in which he develops a normative defence of the UBI[1]. In 2017, the 17th BIEN Congress was held in Portugal, as a way to encourage debate on the topic of UBI, with the participation of several speakers, researchers and academics and the presentation of articles[2]. Two years before the aforementioned congress, several public figures addressed their arguments in the media. Francisco Louçã, a politician with a left-wing ideology and a university professor, criticised the UBI saying that "it is strangely unfair, because it pays the same to the poor and the rich, and it is poorly reasoned, because it does not propose any consistent way of paying the bill"[3]; this position was immediately criticised by several defenders of the UBI such as Roberto Merril, spokesman of the campaign in favour of UBI, who accused him of being "a right-wing guy", also by André Barata, leader of the Livre Party, who compared him to a modern-day slave trader, and José Neves, a defender of the UBI, who criticised him for outright refusing the idea without wanting to discuss it. Louçã supports his concerns by saying "(…) if it is a commitment that should be left to the State and to be paid by all, then the minimum in this debate is for us to evaluate the feasibility, costs, effects and ways of proceeding"[4]. However, in the initiative for the European petition[5] on the possible implementation of the UBI within the European Union, one of the UBI's responses would be to simplify social security systems, concentrating all social support, namely unemployment benefit, social reintegration allowance, family allowance, etc., in a single social support. For sociologist Adriano Campos and party leader Ricardo Moreira, giving up the requirement of full employment is announcing the death of the right to work[6]; they also accuse that "(…) the proposers of the UBI refuse the utopian nature of the proposal, claiming its full application as a real and effective possibility, but in doing so they are entangled in a narrative that denies the most immediate of possibilities: the creation of jobs"[7]. Turning to the Austro-French philosopher André Gorz, Adriano Campos and Ricardo Moreira say that "it is important to understand the extent to which the notion of abstract work - the pillar of the theory of value/work - will have to be updated in order to provide a more accurate analysis of new forms of labour exploitation, at a time when the social cost of labour is increasingly moving away from the market measure of its immediate cost. The hypothesis of the disappearance of work is therefore not to be confused with the search for a better analysis of its crisis in the

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[1] Retrieved from: https://www.esquerda.net/dossier/rendimento-basico-incondicional-2/33969. Accessed on: 01/10/2019
[2] Retrieved from: http://rendimentobasico.pt/17o-congresso-bien/ Accessed on 01/10/2019
[3] Retrieved from: https://blogues.publico.pt/tudomenoseconomia/2015/03/02/rendimento-basico-incondicional-como-quanto-e-para-quem/ Accessed on: 10/10/2019
[4] Retrieved from: https://blogues.publico.pt/tudomenoseconomia/2015/03/02/rendimento-basico-incondicional-como-quanto-e-para-quem/ Accessed on: 25/10/2019
[5] Retrieved from: https://www.grundeinkommen.de/content/uploads/2011/10/11-10-09-mindesteinkommen-grundeinkommen-europa-en.pdf Accessed on: 11/10/2019
[6] Retrieved from: https://www.esquerda.net/dossier/rendimento-basico-incondicional-1/33951. Accessed on: 11/11/2019
[7] Retrieved from: https://www.esquerda.net/dossier/rendimento-basico-incondicional-1/33951#sdfootnote3sym. Accessed on: 11/11/2019

commercial and capitalist way of our times "[1]. In 2019, Gonçalo Marcelo, Roberto Merrill and Sara Bizarro, presented the book "Rendimento Básico Incondicional: uma defesa da liberdade" (Basic Unconditional Income: a defence of freedom) in order to, in their words, make an old idea known, in detail but accessible to the general public, but which has had a renewed interest in recent years (Marcelo et al., 2019).

From the brief framework carried out, it can be inferred that in addition to the reflections and debates on UBI in Portugal being recent and reduced, there are still many doubts about those who have already thought, reflected and discussed the topic. It was in this context that it is important to investigate the topic and, in particular, about the perception of ordinary Portuguese citizens. Namely, on the one hand whether you have heard of the UBI and, on the other hand, what your possible stance is on various issues about current and future work and about the implementation of the RBI.

Experiences and work on UBI in the World

Some restricted and inconclusive experiences took place in India and Namibia. In 2012 in India, for a year and a half, only for some villages in the state of Madhya Pradesh in which around 200 rupees per month (2.74 euros) and 100 rupees for children were allocated. In Namibia, between 2008 and 2012, approximately 10 euros per month was allocated to around 1200 inhabitants.

In turn, in Switzerland, a group of protesters and apologists of the UBI, who, with the justification that the unemployment level would increase with the replacement of humans by robotics, due to the progression and acceleration of technological development, gathered 126 thousand signatures to be delivered to Parliament in order to change the constitution and implement the UBI. In 2016, there was a referendum to propose the implementation of a UBI of 2,500 Swiss francs per adult and 625 francs for every minor under 18 years old. The measure was rejected by a wide margin; 76.9% of voters opposed the idea. Albert Jörimann, in his article "Financing Basic Income in Switzerland, and an Overview of the 2016 Referendum Debates" presents some studies to determine the real static cost of introducing UBI in Switzerland, analyses the available funding resources, and assesses the benefits of social security, pointing out several issues and concerns with its sustainability (Jörimann, 2017).

Finland was the first country in Europe to test the allocation of a universal basic income in the year 2017, allocating €560 to two thousand unemployed people, aged between 25 and 58 years old, every month, with no obligations or compensation on their part. After 2 years of implementation, the Government ended the experiment. Olli Kangas, an expert involved in the project, said: "Two years is a too short period to be able to draw definitive conclusions from such a valuable experience. We should

[1] Retrieved from: https://www.esquerda.net/dossier/rendimento-basico-incondicional-1/33951#sdfootnote6sym. Accessed on: 11/10/2019

have had more time and more money to guarantee reliable results"[1]. The conclusions were disappointing for those who believed that the UBI would be a good strategy with regard to increasing employment. According to the preliminary results of the study (Fig.1), people who received UBI had more half-days employed for an entire year, compared to what happened in an identical group of unemployed (control group) who did not receive this benefit. Those on the pilot test were employed for 49.6 days in 2017. Those in the control group worked for 49.3 days. "We can say that during the first year of the experiment, those who received the UBI were neither better nor worse than those in the control group," said Ohto Kanninen, one of the people in charge of the pilot test[2]. If they got a job, UBI beneficiaries would continue to receive the benefit; on the other hand, they had no penalty if they did not actively seek employment, or refused offers that arose.

Figure 1 - Effects of UBI on employment (Finland 2017 experience)

	Treatment group	Control group	Difference	p-value
Employment status				
Days in employment (number of days)	49.64	49.25	0.39	0.87
Persons with earnings or income from self-employment (%)	43.70	42.85	0.85	
Earnings and income from self-employment, total (€)	4,230	4,251	-21	
Benefits provided by Kela (€)				
Unemployment benefits	5,852	7,268	-1415	
Social assistance	941	1,344	-403	
Housing allowance	2,525	2,509	16	
Sickness allowance	121	216	-96	
Number of observations	2,000	173222		

Note: (i) The days in employment are based on data on accrual periods from the Finnish Centre for Pensions. Days of employment are defined as periods in the open labour market for which the calculated daily wage amounts to at least 23.74 euros; (ii) The percentage who have received earnings or income from self-employment and their number is based on data from the Finnish Tax Administration; (iii) The data on benefits provided by Kela is based on data from Kela's benefit register; (iv) The p-value shows the level of significance at which the equality of the averages for the treatment group and the control group can be cancelled out. Typically the difference between the groups is considered statistically significant when the p-value is 0.05 or smaller.

Source: Kela – The Social Insurance Institution of Finland

If the impact on employment was negligible, the UBI ended up improving the well-being of the people included in the test (Fig.2). "The UBI beneficiaries in the pilot test reported better levels of well-being in all criteria, compared to what was reported in the comparison group", says another person in charge of this test, Olli Kangas[3].

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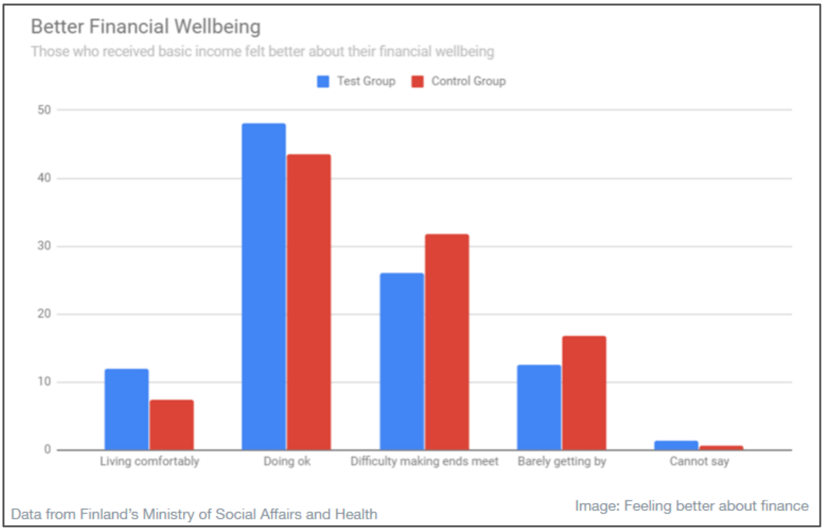
[1] Retrieved from: https://expresso.pt/internacional/2018-04-23-Finlandia-acaba-com-a-experiencia-de-rendimento-basico-universal. Accessed on: 15//11/2019

[2] Retrieved from: https://www.sabado.pt/ultima-hora/detalhe/rendimento-basico-incondicional-nao-ajudou-a-criar-emprego-na-finlandia. Accessed on: 15/11/2019

[3] Retrieved from: https://www.jornaldenegocios.pt/economia/seguranca-social/detalhe/rendimento-basico-incondicional-nao-ajudou-a-criar-emprego-na-finlandia. Accessed on: 15/11/2019

Figure 2 - Effects of UBI on Well-Being (Finland 2017 experience)



Source: Finland's Ministry of Social Affairs and Health

The people included in the test showed "fewer stress symptoms, fewer concentration difficulties and fewer health problems," said Minna Ylikanno, a researcher who was also involved in this experiment. Beneficiaries "were also more confident in the future," he added[1]. Finland is seen as a model country in social support policies, especially with regard to education and encouraging births; the northern European country, one of the oldest in the region, has experienced solid economic growth and has managed to lower the unemployment rate in recent years. The rate dropped to 6.6% in December 2018, which corresponds to the lowest level in 10 years. In parallel to the various experiences that are emerging, several researchers have followed and supported reflections worldwide:

In Australia, Altman, (2016) and Altman & Markham, (2019) studied the application of a basic income for indigenous Australians in a subsistence approach in neoliberal times and the reasons for the failure of the Government's goals to halve the difference in results employment between indigenous and other Australians by 2018. In the year 2016, Greg Marston, asks the question whether the UBI can play an important role in the future and answers in his article "Greening the Australian Welfare State: Can Basic Income Play a Role? In Basic Income in Australia and New Zealand" (Marston, 2016). Gary Flomenhoft (2017), in his article "Total Economic Rents of Australia as a Source for Basic Income" presents an approach to UBI establishing a link with artificial intelligence (AI), defending the urgency to resolve the issue of how to finance the UBI

[1] Retrieved from: https://www.sabado.pt/ultima-hora/detalhe/rendimento-basico-incondicional-nao-ajudou-a-criar-emprego-na-finlandia. Accessed on: 15/11/2019

(Flomenhoft, 2017). In a very recent approach, Tin Hollo argues that the implementation of UBI in Australia requires an examination of the political context and a political strategy to change the discourse and build power, which is why in his article "Finding a Political Strategy for a Basic Income in Australia", he describes the political context in Australia, analysing the positions of the main political parties and civil society organisations, proposing approaches to create support for Unconditional Basic Income (Hollo, 2019).

In South America, Alzúa, Cruces, & Ripani, (2013) analysed the effect of 3 welfare programmes and incentives for work and the supply of adult labour in developing countries in rural areas: Mexico's National Education, Health and Nutrition Programme (PROGRESA), Nicaragua's Social Protection Network and the Honduras Family Allowance Programme and concluded that the effects that the programmes had on the labour supply of participating adults were mainly negative, but they are still small and are not statistically significant.

In the Netherlands, in 2019, Loek Groot, Ruud Muffels and Timo Verlaat, realising that the focus on state support for well-being has shifted from anti-poverty policies to social investment strategies, address the UBI and its motivational psychological perspectives and behavioural economics in his article "Welfare States' Social Investment Strategies and the Emergence of Dutch Experiments on a Minimum Income Guarantee" (Groot, Muffels, & Verlaat, 2019).

In Ireland, following the serious financial crisis that shook the country in the early 2010s, concerns about future employment became one of the concerns and in this way we can see the emergence of some studies and proposals on the implementation of the UBI; Randall Wray, studies and presents some proposals in his article "The Euro Crisis and the Job Guarantee: A Proposal for Ireland" (Wray, 2013).

In Alaska, since the 1980s, the annual payment of a Permanent Fund dividend to all residents has been instituted, but its impacts on the economic, social and political scenario have never been studied; Scott Goldsmith, in his article "The Economic and Social Impacts of the Permanent Fund Dividend on Alaska" presents only a systematic reflection based on various observations, interpretations and research (Goldsmith, 2012).

In China, the topic of UBI is relatively new, but it could become relevant, especially in a post 2020 approach, when, despite the projected eradication of extreme poverty at the national level, other forms of social challenges may arise or become more prominent. This can raise questions about current welfare policies and possible barriers to maintaining effective support for those in need. In this context, China has started a research project to discuss UBI. According to promoters, the goal is to start exploring the potential of UBI as an alternative political tool to provide social protection, based on theoretical discussions about the pros and cons of UBI, as well as an overview of its current or expected practices (Zhen, Guerriero, Lopez, & Haverman, 2020).

Finally, it is also interesting to refer to the vision of UBI and its future impacts on the perspective of gender equality, shared by Eva Cox, in her article "Feminist Perspectives on Basic Income" where she demonstrates concerns regarding the integration of women in future work (Cox, 2019).

Methodology

In order to investigate the perception of the Portuguese about "the future of work" vs "the work of the future" and its relationship with UBI, an online survey was created on the Google Drive platform. 273 individuals participated in the survey. All responses were considered valid. After the profiling of the participants (sex, age, marital status, workplace and profession), 21 closed questions for quantitative assessment and 4 'open' questions for qualitative analysis were asked. In this study, the answers to the 4 open questions are analysed:

If you work. If your hours were cut in half, without reducing your pay, what would you do in the remaining hours?

If you work. For some people, work is simply a means of "earning a living"; for others it means much more than that. What about you?

If you work. What amount of money would allow you to stop working?

If you work. What was the most useless task (job) you have ever performed in your professional life?

In complementary studies, other variables will be analysed, such as knowledge about UBI, the position regarding the application of UBI in Portugal, the opinion about the increase in the minimum wage, about current work and the work of the future and the relationship between work and happiness.

3. Data analysis

To handle the answers to the open questions, the qualitative analysis software webQDA was used. WebQDA is a software to support the analysis of qualitative data in a collaborative and distributed environment; it is a software aimed at researchers, in different contexts, who need to analyse qualitative data, individually or collaboratively, synchronously or asynchronously. With webQDA, the researcher can edit, view, link and organise documents. Simultaneously you can create categories, code, control, filter, search and question the data in order to answer the questions that emerge in your investigation (Costa, 2016; Costa & Amado, 2018; Costa, de Sousa, Moreira, & de Souza, 2017; Costa, de Souza, Moreira, & de Souza, 2018; Costa, Linhares, & de Souza, 2014; Costa, Moreira, & Souza, 2019). From our point of view, qualitative research aims to develop an understanding of the context in which phenomena and behaviours occur and, for this reason, we believe that qualitative approaches can be complementary to quantitative studies. Altinay & Paraskevas (2008) also indicate that the qualitative approach is based on an inductive model and on phenomenology.

3.1 Characterisation of the sample

The total sample consists of 273 participants (Table 1); the majority of respondents are female (66.9%) and 57.4% were between 36 and 67 years old; about half of the respondents were married or in a non-marital partnership (50.4%); 90.4% of the sample were workers, with 71% working for others.

Table 1 – Distribution of sociodemographic variables

		n	%
Gender	Male	90	33.1
	Female	182	66.9
Age	≤ 18 years	4	1.5
	19 to 25 years	51	18.8
	26 to 35 years	50	21.7
	36 to 49 years	91	33.5
	50 to 67 years	65	23.9
	>67 years	2	0.7
Marital Status	Single	105	38.6
	Married/ Non-marital partnership	157	50.4
	Divorced	28	10.3
	Widower	2	0.7
Occupation	Employed	246	90.4
	Student	26	9.6
Type of contract	Self-employed	50	18.4
	Dependent employment	193	71.0
	Unemployed	29	10.7

3.2 Analysis of the findings

The results obtained with the support of the software for home are presented below, one of the open questions posed to the respondents.

3.2.1 Question 1: If you work. If your hours were cut in half, without reducing your pay, what would you do in the remaining hours?

The data obtained shows that 21.8% of the respondents report that they would use the available time to dedicate to their family and friends, 21.5% would dedicate more time to their hobbies and leisure activities, 15.5% would choose to use the time on their training and 13.9% report that they would take advantage to practice more sport and physical exercise. It should also be mentioned that 9% of respondents, if they had more time available, would choose another job, 6.8% would dedicate more time to themselves and their personal life, 5.2% would dedicate the time to volunteering and 3.5% chose that they would simply rest The analysis of the answers to the first question, by sex of the respondents, shows that female individuals would primarily spend more time with family and friends (22.6%), followed by Hobbies and Leisure activities (21%) and training (14.3%). Regarding male individuals, the order of priorities is different: first, they would choose to dedicate more time to hobbies and leisure activities (22.6%), followed by family and friends (20%) and thirdly, they would dedicate more time to their training (18.3). In addition to these three items, which represent more than 50% of the sample in both sexes, especially 13.9% of the sample, which also refers to dedicating more time to physical exercise and sport. On the other hand, only 9% said they would find another job and 5.2% would volunteer. They report that they would dedicate more time to themselves and their personal lives, 6.8%, and 3.5% say they would use that free time to rest. The age analysis of the respondents shows that individuals aged between 19 and 25, of they had more free time, would favour training (33.3%) while respondents between 26 and 35 would favour dedicating themselves to family and friends (32.6%) as well as those aged between 36 and 49 years (28.1%). Those aged 50 and over say that they would favour their hobbies and leisure activities. Regarding the analysis of the options for the use of free time, by respondents' marital status, 21.7% of single respondents said they would use it to invest in their training and 20.7% to their hobbies and leisure activities, married people say they would choose to dedicate more time to family in first place (30.6%) and 20.2% would choose to increase the time they spend doing leisure activities and hobbies. Divorced people in turn respond that they would use the free time for their hobbies and leisure activities in first place (27.9%), with 18.6% devoting more time to sport and exercise.

3.2.2 Question 2: If you work. For some people, work is simply a means of "earning a living"; for others it means much more than that. What about you?

Regarding the second question, 7 tree codes were created. The data shows that 15.2% of respondents only work because they need to earn money. Of the remainder, 13.1% say that it is effectively a way to make money, but not exclusively and still 24.1% of the respondents say that for them work is more than a way to make money. In addition to these generic responses, 23.8% of respondents say that work is part of their personal fulfilment, 8.2% like their work and 2.8% even say they love their work. Finally, 12.8% consider that work makes them feel useful to society. The analysis of the answers to the second question, by sex shows that there is a great proximity between sexes, in relation to work being simply a way of making money; 16.3% male and 14.8% female. There is also a great similarity in the percentage between women and men when they consider it a way to make money, but not just that. 40.7% of individuals say that for them work is more than a way to earn money in contrast to 16.8% of women. In addition to these three items, which represent more than 50% of the sample in both sexes, 27% female and 16.3% male consider that work is part of personal fulfilment.

The age analysis of the respondents shows that individuals aged between 19 and 25 consider that work is a way of earning a living (27%); respondents between 26 and 35 also consider it a way to earn a living (22.7), with an equal percentage considering that work is a form of personal fulfilment. Regarding the age group between 36 and 49 years old, only 8.2% consider that work is just a way to earn money, with 24.5% defining work as part of their personal fulfilment. The respondents aged 50 and over have a similar opinion; only 11.7% say that work is a way of making money; 29.9% consider work to be a form of personal fulfilment. Regarding the analysis by respondents' marital status, 26.6% of singles are of the opinion that work is only a way to earn money, while only 10% of married or unmarried partners and 15.7% of divorcees have the same opinion. For married people, work is more than a way to earn a living (28%) and is part of personal fulfilment (26%). For widowers, 19.4% also agree that it is more than a way of earning a living, with 30.6% saying it is also a way of personal fulfilment.

3.2.3 Question 3: If you work. What amount of money would allow you to stop working?

Regarding the third question, 9 tree codes were created. The data shows that 16.9% would never stop working. Of the remainder, 23% say that if they had an income between 500 and 1,000 euros they would stop working; 17.7% say that to stop working they would need a monthly income between 1,000 and 1,500 euros and 14.8% between 1,500 and 2,500 euros. On the other hand, only 2.5% of respondents would stop working if they had an income below 500 euros. Above 2,500 and up to 3,500 is indicated by 7.8%; between 3,500 euros and 4,500 euros by 1.2% and above 4,500 euros by 6.6% of respondents. The analysis of the answers to the 3rd question by sex (Graph 7), shows that there is a great proximity between sexes, in relation to never stopping working; 17.3% of men and 16.7% would never stop working whatever their income. Regarding the values that each sex mentioned that with which they would stop working, there are some differences: For income of up to 1,500 euros, only 28.4% of men would stop working, as opposed to women (50.6%). For values between 1,500 euros and 2,500 euros, 18.5% of men say they would stop working and 13% of women. The age analysis of the respondents (Graph 8) shows that 55.9% of individuals aged between 19 and 25 years old would stop working with an income below 1,500 euros; for that same value, in the age group between 25 and 35 it reduces to 50.9%; in the 36-49 age group, 36% would stop working if they had an income of up to 1,500 euros and 37.1% of the age group of 50 and over. Regarding the analysis by respondents' marital status, while 20.9% of married or unmarried partners would never stop working and 15.5% of singles, while only 3.6% of divorcees express this opinion. With regard to the amounts of money they would need to stop working, the answers are different: for 35.7% of singles, less than 1,000 euros per month would suffice; this value for married couples would only attract 20.9% and 17.9% of divorcees.

3.2.4 Question 4: If you work. What was the most useless task (job) you have ever performed in your professional life?

Regarding the 4th question, of the 273 respondents, 140 reported having already performed unnecessary work in their professional lives (51.4%). Of these, 59.3% were reported by female respondents and 40.7% by male respondents. In the analysis by age, it is clear that as age advances (up to 50 years), the opinion about useless jobs also increases: 12.1% up to 25 years old; 22.1% between 26 and 35 years old and 36.4% between 36 and 49 years old; over the age of 50, this value reduces to 28.6%. When analysing the results by marital status, it is noticed that there are significant differences because while divorcees report 13.6% of useless jobs and singles, 34.3%, the majority, 51.4%, of married people report the same opinion: In the tables below, we highlight some of the references noted by respondents. In table 8, as we can see, there are several indications that reveal problems with managers and leaders, which add up to almost 10% of the total observations.

In table 2, we report the references to useless jobs that are related to wasting time; there are several comments about "useless meetings" in the opinion of the respondents as well as the dead time in companies.

Table 2 - Selected references

Observations about useless jobs - wasting time		
1	Reference 21	*Meeting presentations that were never seen. Preparation of repetitive documents with no added value.*
2	Reference 42	*Being inside a store waiting for customers to enter*
3	Reference 44	*Training time or completely useless meetings*
4	Reference 72	*Staying at work having no customers to serve*
5	Reference 74	*"Dead" times with no customers*
6	Reference 78	*Doing tasks a few minutes before finishing time.*
7	Reference 85	*Wasting hours in useless meetings*

Finally, in Table 3 we present some references related to personal observations about jobs considered useless by the respondents:

Table 3 - Selected references

Observations about useless jobs - Functions		
1	Reference 76	*Counting 5000 advertising pamphlets to certify that the company was not being cheated!!!!*
2	Reference 95	*I don't know, I work for the State, so there are several useless situations.*
3	Reference 99	*Working for the extremely heavy and grinding machine called "the State" where there is no meritocracy*
4	Reference 103	*Bringing coffee to people when I have a master's in marketing management*

The data allows us to highlight that two of the references are directed to public services and, according to their authors, to the lack of meritocracy and the uselessness of various situations; the other two refer to situations related to the functions performed by the authors.

In general, the results of the qualitative analysis allow us to infer that there are still many flaws to resolve with regard to the management and leadership of human resources.

Among other aspects, the qualitative analysis allows us to infer that, in general, the respondents would prefer to work even though they could possibly receive a UBI. At the same time, it appears that there is no clear awareness of the implications of the UBI and that there is a great variation in the value that respondents understand as the minimum value to not need to work.

Finally, it should be noted again that the results of this qualitative study complement other quantitative articles on the same theme published by the authors[1].

4. Final considerations

Technological advances, together with demographic changes, globalisation and work organisation, have changed the structure and nature of work. Technological developments, namely in terms of digital transformation and robotization, open up space for the development of new sectors of work, but also raise growing concerns about future job losses. The question of how to maintain balanced living conditions for all is inextricably linked to these global trends, especially for those whose jobs may be more negatively affected by advances in technology. The UBI therefore appears as a possible solution to this growing problem. The solution is considered attractive, as it could help support social, environmental, cultural areas, etc. also acting in the key areas of personal development and being able to generate positive synergies, such as the free choice of individual activities, flexibility in employment and promotion of the entrepreneurial spirit, in addition to providing support for the basic rights that each citizen should have.

However, the UBI has other implicit problems as it may be seen as a negative incentive for work (due to the current parameters) and will imply the allocation of financial resources that are incalculable at this stage. It is too early to study a possible performance of the UBI in global terms, since most pilot projects, on the one hand, cannot be considered universal and unconditional and, on the other hand, some are only in the initial stages of implementation.

The results of the qualitative analysis of the survey on the work of the future and the future of work and the perception of the UBI allow us to infer, as indicated in the previous chapter, that there is no clear notion about the UBI or its implications, so from our point of view it is essential and urgent to launch the debate in Portugal at the academic level; this must be done in a careful and objective way, based on literature and approaches by international researchers, as well as on studies and

[1] Rendimento Básico Incondicional – A perceção em Portugal. Available at: https://www.finersistemas.com/atenaeditora/index.php/admin/api/ebookPDF/3026?fbclid=IwAR0X7BhI_2Ri75BJFIZ3leQUU7x-3O4vHNv7QyT0uWCz7QhlyHJLX_YrPu8. Accessed on: 19/02/2020.

results of previous experiences, some of which are presented in a summary form in this study.

Bibliography

[1] Ackerman, B. A., & Alstott, A. (1999). The stakeholder society. Yale University Press.

[2] Altinay, L., & Paraskevas, A. (2008). Planning research in hospitality and tourism. Oxford ; Burlington, Mass. : Butterworth-Heinemann.

[3] Altman, J. (2016). Basic Income for Remote Indigenous Australians: Prospects for a Livelihoods Approach in Neoliberal Times. In Basic Income in Australia and New Zealand (pp. 179–205). New York: Palgrave Macmillan US. https://doi.org/10.1057/9781137535320_9

[4] Altman, J., & Markham, F. (2019). Basic Income and Cultural Participation for Remote-Living Indigenous Australians (pp. 87–109). https://doi.org/10.1007/978-3-030-14378-7_5

[5] Alzúa, M. L., Cruces, G., & Ripani, L. (2013). Welfare programs and labour supply in developing countries: experimental evidence from Latin America. Journal of Population Economics, 26(4), 1255–1284. https://doi.org/10.1007/s00148-012-0458-0

[6] Arendt, H. (2010). A condição humana. Forense Universitaria.

[7] Aydinonat, N. E. (2015a). Dani Rodrik's Economics rules: the rights and wrongs of the dismal science. New York: W. W. Norton & Company, 2015, 272 pp. Erasmus Journal for Philosophy and Economics, 8(2), 94. https://doi.org/10.23941/ejpe.v8i2.203

[8] Aydinonat, N. E. (2015b). Dani Rodrik's Economics rules: the rights and wrongs of the dismal science. New York: W. W. Norton & Company, 2015, 272 pp. Erasmus Journal for Philosophy and Economics, 8(2), 94. https://doi.org/10.23941/ejpe.v8i2.203

[9] Bagus, P., & Howden, D. (2010). Munich Personal RePEc Archive Causes and Consequences of Inflation Causes and Consequences of Inflation 1. https://doi.org/10.1111/basr.12043/abstract

[10] Berrios, L. A., & Santos, J. A. (2013). Impactos da inflação no poder de compra do salário mínimo: um breve panorama. Revista de Administração Do Unisal, 74–91.

[11] Bessa, D. (2006). Teorias explicativas da inflação: apreciação crítica* 1. O PROCESSO INFLACIONADO: REALIDADE DE LOCALIZA-ÇÃO HISTÓRICA PRECISA. Análise Social (Vol. XVI).

[12] Birnbaum, S. (2012). Equality of Status and Its Priority: A Rawlsian Case for Basic Income. In Basic Income Reconsidered (pp. 41–63). New York: Palgrave Macmillan US. https://doi.org/10.1057/9781137015426_2

[13] Blankenagel, W. (2012). Geschichte des Grundeinkommens. Books on Demand.
[14] Burns, E. M. (2011). A Revolução Industrial dos séculos XIX e XX – Consciência.org. Retrieved November 3, 2019, from http://www.consciencia.org/a-revolucao-industrial-dos-seculos-xix-e-xx
[15] Chandra, P., Chandra, & Pasma. (2010). Working Through the Work Disincentive. Basic Income Studies, 5(2), 1–20.
[16] Charlier, J. (1848). Solution du problème social ou Constitution humanitaire, basée sur la loi naturelle et précédée de l'exposé des motifs - Google Play. Bruxelles.
[17] Condorcet, J.-A.-N. de C. marquis de. (1795). Esquisse d'un tableau historique des progres de l'esprit humain. Ouvrage posthume de Condorcet. https://doi.org/10.1017/CBO9781107415324.004
[18] Costa, A. P. (2016). Cloud Computing em Investigação Qualitativa: Investigação Colaborativa através do software webQDA. Fronteiras: Journal of Social, Technological and Environmental Science, 5(2), 153. https://doi.org/10.21664/2238-8869.2016v5i2.p153-161
[19] Costa, A. P., & Amado, J. (2018). Content Analysis Supported by Software. Aveiro: Ludomédia. Retrieved from https://www.ludomedia.pt/en/prod_details.php?id=172&catId=13&offset=0
[20] Costa, A. P., de Sousa, F. N., Moreira, A., & de Souza, D. N. (2017). Research through Design: Qualitative Analysis to Evaluate the Usability (pp. 1–12). https://doi.org/10.1007/978-3-319-43271-7_1
[21] Costa, A. P., de Souza, F. N., Moreira, A., & de Souza, D. N. (2018). webQDA 2.0 Versus webQDA 3.0: A Comparative Study About Usability of Qualitative Data Analysis Software (pp. 229–240). https://doi.org/10.1007/978-3-319-58965-7_16
[22] Costa, A. P., Linhares, R., & de Souza, F. N. (2014). Possibilidades de Análise Qualitativa no webQDA e colaboração entre pesquisadores em educação em comunicação. In R. Linhares, S. de L. Ferreira, & F. T. Borges (Eds.), Infoinclusão e as possibilidades de ensinar e aprender (pp. 205–215). Universidade Tiradentes, Aracaju - Brazil: Editora da Universidade Federal da Bahia.
[23] Costa, A. P., Moreira, A., & Souza, F. N. (2019). webQDA - Qualitative Data Analysis. Aveiro - Portugal: Aveiro University and MicroIO. Retrieved from www.webqda.net
[24] Denniss, R., & Swann, T. (2016). Consumption Smoothing with Basic Income: The Role of Administrative Loans. In Basic Income in Australia and New

Zealand (pp. 115–132). New York: Palgrave Macmillan US. https://doi.org/10.1057/9781137535320_6
[25] Dowding, K., Wispelaere, J. De, & White., S. (2003). The Ethics of Stakeholding. New York: Palgrave Macmillan.
[26] Europeu, B. C. (2009). A estabilidade de preços é importante porquê?
[27] Figueiredo, M. A. de. (2013). Será que os surfistas devem ser subsidiados? e se no futuro os nossos impostos pagarem um rendimento garantido a todos, igual para pobres ou ricos, preguiçosos ou viciados no trabalho? Alêtheia Editores.
[28] FitzRoy, F., & Jin, J. (2018). Basic income and a public job offer: complementary policies to reduce poverty and unemployment. Journal of Poverty and Social Justice, 26(2), 191–206. https://doi.org/10.1332/175982718X15200701225179
[29] Flomenhoft, G. (2017). Total Economic Rents of Australia as a Source for Basic Income. In Financing Basic Income (pp. 77–100). Springer International Publishing. https://doi.org/10.1007/978-3-319-54268-3_4
[30] Foner, E. (1995). Thomas Paine : collected writings. Library of America.
[31] Fourier, C. (1836). La fausse industrie, morcelée, répugnante, mensongère, et l'antidote.
[32] Frank, R. H. (2008). Context Is More Important Than Keynes Realized. In Revisiting Keynes (pp. 143–150). The MIT Press. https://doi.org/10.7551/mitpress/9780262162494.003.0011
[33] Friedman, M. (2009). Capitalism and Freedom: Fortieth Anniversary Edition: Fortieth Anniversary Edition (Google eBook). University of Chicago Press.
[34] García, J. A., & Werner, T. (2010). Working PaPer Serie S - n 1162 InFLation riSkS and InFLation riSk PreMia. Retrieved from http://www.ecb.europa.eu
[35] Goldsmith, S. (2012). The Economic and Social Impacts of the Permanent Fund Dividend on Alaska. In Alaska's Permanent Fund Dividend (pp. 49–63). New York: Palgrave Macmillan US. https://doi.org/10.1057/9781137015020_4
[36] Groot, L., Muffels, R., & Verlaat, T. (2019). Welfare States' Social Investment Strategies and the Emergence of Dutch Experiments on a Minimum Income Guarantee. Social Policy and Society, 18(2), 277–287. https://doi.org/10.1017/S1474746418000283
[37] Guilherme De Moura, E., & Florianópolis, P. (2006). UNIVERSIDADE FEDERAL DE SANTA CATARINA CENTRO DE FILOSOFIA E CIÊNCIAS HUMANAS Programa de Pós-Graduação em História A posição política da Igreja Presbiteriana do Brasil (IPB) nos anos de chumbo (1964-1985).

[38] Henrique, P., & Mota, P. (2016). A noção de essência humana no jovem Marx The notion of human essence in the young Marx. Retrieved from www.marilia.unesp.br/filogenese
[39] Hollo, T. (2019). Finding a Political Strategy for a Basic Income in Australia (pp. 129–145). https://doi.org/10.1007/978-3-030-14378-7_7
[40] Huws, U. (2017). Where Did Online Platforms Come From? The Virtualization of Work Organization and the New Policy Challenges it Raises. In Policy Implications of Virtual Work (pp. 29–48). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-52057-5_2
[41] Jordan, B. (2010). Basic Income and Social Value. Basic Income Studies, 5(2). https://doi.org/10.2202/1932-0183.1140
[42] Jörimann, A. (2017). Financing Basic Income in Switzerland, and an Overview of the 2016 Referendum Debates. In Financing Basic Income (pp. 49–74). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-54268-3_3
[43] Kaighin, J. (2019). What About Young People? Why a Basic Income for Young People Matters (pp. 179–198). https://doi.org/10.1007/978-3-030-14378-7_10
[44] Marcelo, G., Merrill, R., Bizarro, S., & Pinto, J. (2019). Rendimento Básico Incondicional: uma defesa da liberdade. Leya.
[45] Marston, G. (2016). Greening the Australian Welfare State: Can Basic Income Play a Role? In Basic Income in Australia and New Zealand (pp. 157–177). New York: Palgrave Macmillan US. https://doi.org/10.1057/9781137535320_8
[46] Mays, J. (2016). Disability, Citizenship, and Basic Income: Forging a New Alliance for a Non-disabling Society. In Basic Income in Australia and New Zealand (pp. 207–251). New York: Palgrave Macmillan US. https://doi.org/10.1057/9781137535320_10
[47] Mill, J. S. (2006). Principles of political economy. Cosimo Classics.
[48] More, T. (2014). Utopia. Brasilia: Instituto de Pesquisa de Relações Internacionais_ Editora Universidade de Brasl1ia_.
[49] Pech, W. J. (2010). Behavioral Economics and the Basic Income Guarantee. Basic Income Studies, 5(2). https://doi.org/10.2202/1932-0183.1167
[50] Pereira, R. (2017a). Introduction: Financing Approaches to Basic Income. In Financing Basic Income (pp. 1–5). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-54268-3_1
[51] Pereira, R. (2017b). The Cost of Universal Basic Income: Public Savings and Programme Redundancy Exceed Cost. In Financing Basic Income (pp. 9–45). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-54268-3_2

[52] Pound, E., Davis, M. T., & McWhirter, C. (2015). Ezra Pound and Globe magazine : the complete correspondence.
[53] Quiggin, J. (2019). Basic or Universal? Pathways for a Universal Basic Income (pp. 147–161). https://doi.org/10.1007/978-3-030-14378-7_8
[54] Rifkin, J. (2014). A Terceira Revolução Industrial. Bertrand Editora.
[55] Rodrik, D. (2015). Economics Rules: The Rights and Wrongs of the Dismal Science (an excerpt). Journal of Economic Sociology, 16(4), 39–59. https://doi.org/10.17323/1726-3247-2015-4-39-59
[56] Russell, B. (2004). Proposed roads to freedom. Cosimo Classics.
[57] Silva, A. S. da. (2016). DESTINO, HUMILHAÇÃO E DIREITO: A REINVENÇÃO NARRATIVA DA COMUNIDADE -Volume 2. Universidade de Coimbra.
[58] Tobin, J. (1980). Asset accumulation and economic activity reflections on contemporary macroeconomic theory. Chicago: University of Chicago Press.
[59] Ursula Huws. (2016). Logged labour: a new paradigm of work organisation? Work Organisation, Labour & Globalisation, 10(1), 7. https://doi.org/10.13169/workorgalaboglob.10.1.0007
[60] Van Donselaar, G. (2009). The Right to Exploit: Parasitism, Scarcity, and Basic Income. The Right to Exploit: Parasitism, Scarcity, and Basic Income. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780195140392.001.0001
[61] Van Parijs, P. (2004). Basic Income: A Simple and Powerful Idea for the Twenty-first Century. In Politics and Society (Vol. 32, pp. 7–39). SAGE Publications Inc. https://doi.org/10.1177/0032329203261095
[62] Vives, J. L. (2017). Tratado Del Socorro De Pobres: De Subventione Pauperum. Madrid: Pré textos.
[63] Widerquist, K. (2001). Perspectives on the Guaranteed Income, Part I. Journal of Economic Issues, 35(3), 749–757. https://doi.org/10.1080/00213624.2001.11506401
[64] Widerquist, K. (2018). Why UBI Experiments Cannot Resolve Much of the Public Disagreement About UBI. In A Critical Analysis of Basic Income Experiments for Researchers, Policymakers, and Citizens (pp. 87–91). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-030-03849-6_11
[65] Wray, L. R. (2013). The Euro Crisis and the Job Guarantee: A Proposal for Ireland. In The Job Guarantee (pp. 161–177). New York: Palgrave Macmillan US. https://doi.org/10.1057/9781137297990_8
[66] Yunker, J. A. (2013). The Basic Income Guarantee: A General Equilibrium Evaluation. Basic Income Studies, 8(2). https://doi.org/10.1515/bis-2013-0014

[67] Zhen, Y., Guerriero, M., Lopez, E., & Haverman, P. (2020). Universal Basic Income: A Working Paper A Policy Option for China beyond 2020? UNVP China.

Regional Features of Social Entrepreneurship Development and Georgia

Nino Janelidze

PhD student, Ivane Javakhishvili Tbilisi State University

Abstract

Social entrepreneurship as an event appeared in XIX century. However, the emergence, development, forms of origin, scale of activity and speed of dissemination of social entrepreneurship are uneven across countries due to objective institutional factors. Based on the analysis of the emergence and development of social entrepreneurship worldwide, we can say that social entrepreneurship is a global event, which, on the one hand, extends to all regions of the world, on the other hand, has its national forms and characteristics depending on the degree of development of institutions, traditions and cultures in any one country. In generalizing the key trends in the development of social entrepreneurship worldwide, we can infer that the temporal and geographical frameworks for the spread of social entrepreneurship are driven by objective preconditions. Historical, political and socio-economic factors have influenced the period of formation of social entrepreneurial firms, organizational-legal forms and the intensity of the spread of social entrepreneurship in different regions of the world. The article discusses the regional features of social entrepreneurship development not only in countries where it has an established tradition, but also in countries where social entrepreneurship is starting to emerge. The main objective of the presented analysis is, on the one hand, to show the global scale of this event worldwide, and on the other, to reveal its national features.

Keywords: social entrepreneurship; regional features of social entrepreneurship development

Introduction

The dominance of one or more institutions in solving societal problems in different countries, in different historical periods, has had different impacts on the formation of traditions, norms and customs in relation to socially important issues. For example, the main role of the Church in European countries until the beginning of the eighteenth century was due to its continued involvement in dealing with various social issues, in particular the care of refugees, the homeless and the sick. The Great Industrial Revolution, which swept through most of the world, changed the attitude towards solving social problems. The development of the role of capitalism in European countries reinforced the social responsibility of the states, which emerged largely after the world economic crisis of 1929-1933 and World War II. Most of the state budgets included social spending: education, health care, social benefits, unemployment benefits, and much more. However, after the collapse of market and state policies, relying on private equity as the main driving force for the stability and prosperity of these countries has increasingly begun. Private companies have increasingly become involved in the social aspects through various corporate social responsibility programs. The nature and preconditions for the formation and development of social entrepreneurship vary across different regions of the world. According to a study by J. Kerlin (Kerlin, Social enterprise: a global comparison 2009), social entrepreneurship operates in the US at the intersection of civil society and the commercial sector, and in Europe at the intersection of civil society and the public sector.

The traditions and customs prevalent in society tell us more about the structure and nature of acute social problems in different countries. For example in Muslim countries, there is usually no problem with orphans, as religious beliefs and the development of kinship in these countries do not allow an individual to leave a child without a family. Contrariwise in Russia, there is a problem of overcrowded child shelters. This example illustrates the importance of context in discussing the features of the development of social entrepreneurship in the world. Also, as J. Kerlin (Kerlin, Social enterprise: a global comparison 2009) points out that by defining the boundaries and understanding the essence of the event, "social entrepreneurship" must necessarily be realized by joining it to the regional context.

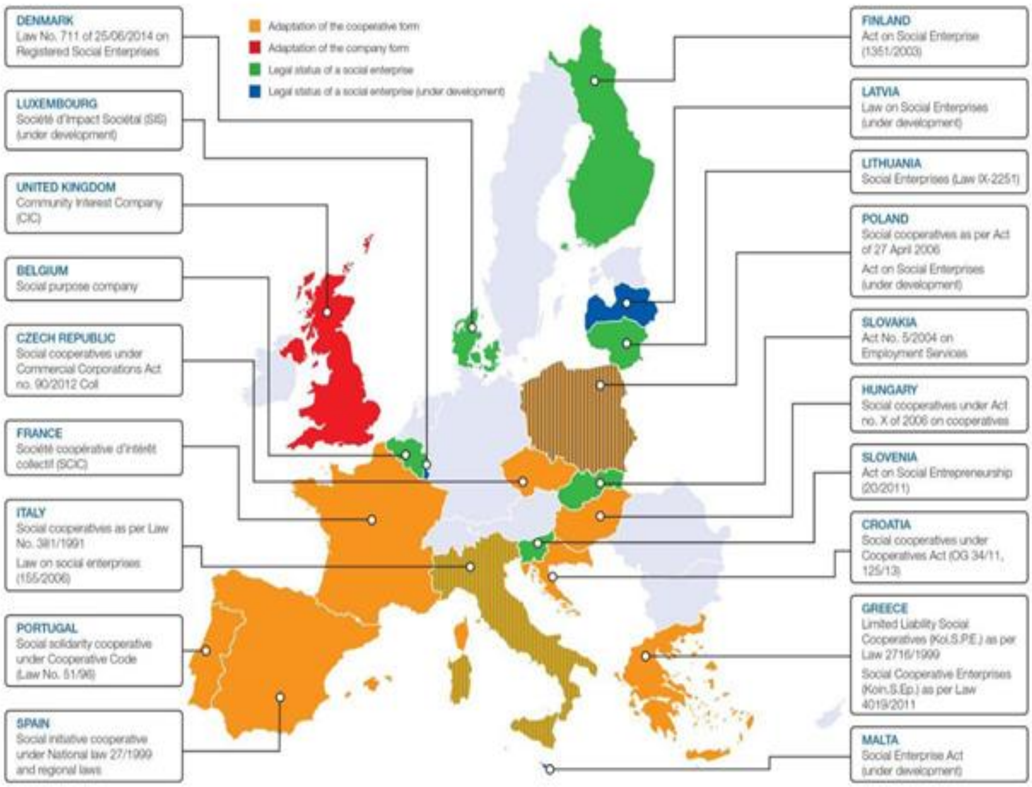
Developed countries - Europe

Social entrepreneurship emerged in Europe as early as the nineteenth century, when the development of the so-called "social economy" began with the active growth and strengthening of the non-profit sector, the main agents of which were cooperatives, mutual organizations, Associations and funds (Арай, 2010)

At the end of the 20th century, most European countries faced social, employment, health and education problems that required immediate resolution. These problems were practically impossible to be solved only by the government and the private sector, which is why the activities of non-profit, civil and local community organizations were intensified during this period. Gradually, nonprofit organizations began to diverge from their core function - protecting the interests of certain strata of the population, becoming increasingly involved in the production of goods and services, requiring an entrepreneurial approach to achieve efficiency and financial stability.

Nowadays most social European enterprises are operating within the traditional third sector legal framework. They are formed in the form of associations, alliances where the law is relatively loyal, although in countries where the law is relatively strict and restricted to third sector economic activity (eg Northern European countries) Social entrepreneurship occurs as cooperatives (A map of social enterprises and their eco-systems in Europe, 2015).

Figure 1.1 Countries with specific legal forms or statutes for social enterprise



Source: file:///C:/Users/User/Downloads/Synthesis%20report%20FINAL.pdf

The first country to regulate the activities of social enterprises was Italy, where in 1991 such enterprises were given the official status of "Social cooperatives". In 1995, the Law on Companies with Social Mission was adopted in Belgium. An entirely new form was adopted for social entrepreneurship organizations in the UK in 2001 by a 'community interest company'. However, it should be noted that “most of the social entrepreneurs in Europe still function in the traditional legislative framework as the 'third sector' (Social Enterprise: New Model for Poverty Reduction and Employment Generation 2008).

EU initiatives to support social entrepreneurship programs and research play an important role in creating favorable conditions for the development of social entrepreneurship in European countries. International foundations, associations and organizations (USAID, Ashoka Foundation, EMES European Research Network) also play an important role in the development of social entrepreneurship in European countries. Speaking of social entrepreneurship, it is important to note that unlike the US, where social entrepreneurship is studied both in business schools and in the faculties of sociology, in Europe social entrepreneurship research is mainly conducted by sociologists, which shifts the research vector from economic to social.

North America

Social entrepreneurship in the U.S. and Canada is viewed in a much broader context than in other countries. The notion of “social entrepreneurship” encompasses a continuum of socially oriented organizations: ranging from commercial organizations involved in social responsibility to non-profit organizations. Such a broad understanding is due to the historical context of the formation of social entrepreneurship in Canada and the US (Арай 2010).

By the end of the eighteenth century, commercial activities in non-profit organizations in the United States were legalized and virtually comprehensive. For example, religious and community groups owned markets and, along with voluntary contributions, also sold household goods (Kerlin, Social entreprise in the United States and Europe: understanding and learning from the differences 2006). In the 60s of XX century, the US government developed the Great Society program, under which the federal government invested billions of dollars in assistance programs for the poor, in education, health care, public development, the environment, and the arts. Many funds have operated through non-profit organizations to avoid unnecessary bureaucracy, which has led to an increase in the number of non-profit organizations (Kerlin, Social entreprise in the United States and Europe: understanding and learning from the differences 2006). However, the economic downturn In the 70s and 80s of XX century led to a decline in federal programs, reflecting the financial stability of nonprofits that began looking for other sources of income instead of donations. This is how active development of income-generating socially oriented activities in the United States began.

It should be noted that the institutional environment of social entrepreneurship in the US is mainly formed by private foundations that provide financial support to carry out educational, training, advisory services, provision of social entrepreneurs (unlike, for example from Europe, where these functions are performed by the state, or public organizations). Support for social entrepreneurship in the United States by private equity funds began in the 60s of XX century. Some foundations (the Kellog Foundation, the Kauffman Foundation, the Rockefeller Foundation) focused on the formation of a network of social entrepreneurs, others supported startups with social missions (Roberts Enterprise Development Fund). International funds, engaged in social entrepreneurship consulting, training and retraining as well as grants to social entrepreneurs have gradually emerged (Skoll Foundation, Ashoka, Schwab Foundation). Research centers, universities (The Fuqua School of Business, Duke University, Harvard Business School, Columbia School of Business) play an important role in the development of favorable conditions for social entrepreneurship in the United States, also associations of practitioners in the field of social entrepreneurship (Social Enterprise Alliance, SeeChange, National Gathering for Social Entrepreneurship).

Social entrepreneurship in the US encompasses many areas and sectors - "from profitable micro-lending institutions designed to provide small business financing to non-profit pharmaceutical companies seeking to improve the health of the population" (Fostering social entrepreneurship: a comparative study : a summary of recommendations for governments, policymakers and social entrepreneurs in Brazil, Germany, India, Poland, UK and USA: paper presented at the World Economic Forum in Davos 2006) Depending on the goals and objectives of organizations, US law allows for the choice of the appropriate legal form.

Differently from the United States, where historically the foundations and foundations of civil society have a strong position in solving social problems, the Canadian government has been pursuing a "welfare state" since World War II. Using the principle of shared justice, the Canadian government seeks to overcome economic and social barriers to achieving "common good" by minimizing social differences and discrimination (Арай 2010). Community economic development initiatives (CED)1 have been actively developing in the country for the last 30 years. In the US and Canada, there are various forms of inter-sectoral interaction that ensure the effectiveness of social policies. Social Innovation, Social Entrepreneurship Research

Socio-Economic Development Network (CED Network) - uniting individual citizens and organizations to create favorable economic opportunities and social conditions, especially for vulnerable groups of the population.

Centers play an important role in Canada's overall focus on social entrepreneurship Operating in universities (eg John Molson School of Business, Concordia University, Montreal; Rotman School of Business, University of Toronto; Universitéde Québec àMontréal, Faculty of Management; Mcgill School of Management), associations (eg, Canadian Community Economic Development Network; Chantier de l'Economie Sociale). (e.g., Canadian Community Economic Development Network; Chantier de l'économie Sociale).

Developing countries - Asia

When discussing social entrepreneurship in Asia, one must bear in mind that this is a region where 60% of the planet's population lives, but the socio-economic situation in many Asian countries is unstable. It is precisely the environmental, social and economic imbalances in this region that have catalyzed the use of innovative approaches to problem-solving. The formation and development of social entrepreneurship in Asian countries was uneven. The beginning of the mass development of social entrepreneurship in Asia can be traced back to the 1990s, when social entrepreneurial firms emerged in Asian countries.

The first socio-entrepreneurial firms emerged in Asia in the absence of sources for capital raising. The only way to do business was either the entrepreneur's own funds, and / or grants. Funders and religious organizations were usually the grantees. The role of foundations in shaping and further developing social entrepreneurship in the world is undeniable. After achieving social and economic stability in Europe, European funds began to allocate funds to support Third World countries (Арай 2010).

The main religions of countries such as Indonesia, Pakistan, Bangladesh, Malaysia, are Muslim. According to Muslim traditions, all believers who own more than others are obliged to offer alms once a year. "Zakat". The funds raised have opened many social enterprises in Asian countries (https://www.zakat.org/en/).

In addition to the major funding sources discussed above for social entrepreneurship, the development of non-profit organizations focused on earning income has also begun in Asian countries. For example, a non-profit organization whose main activity is to protect children's rights in India has started selling postcards and stationery to support the organization's core business. Gradually, many non-profit organizations became financially more stable at the expense of forming their own sources of income (https://www.muslimaid.org/). The trend of recent years has been to change the legal status of financially stable non-profit organizations and to transform the charity from an organization into a socially oriented enterprise. Social entrepreneurship can be found in virtually every aspect of the economy in Asian countries - education, healthcare, media industry, transportation, insurance and more. India should be selected from Asia, where social entrepreneurship has a rich history. The socio-cultural traditions of India have always promoted social entrepreneurship and promoted societal initiatives through various forms such as philanthropy, free trade, inclusive business models. The brilliant period of the development of social entrepreneurship in the country was the period of Mahatma Gandhi (1921-1934), when numerous socially oriented enterprises were set up that are nowadays clearly within the framework of the generally accepted definitions of social entrepreneurship (https://in.thehackerstreet.com/social-entrepreneurs-2/).

Nowadays, in light of the rapid economic development in India, social problems have also been exacerbated (the gap between rich and poor, between urban and rural population is increasing). Many large companies are focusing on programs to support vulnerable populations and build their businesses based on the concept of a “pyramid foundation”. For example, one of India's largest Tata corporations has not only developed a number of products for the "pyramid seabed", but has also created several social enterprises that address important societal problems (http://www.tatasechallenge.org/).

Corporate interest in social entrepreneurship has not been driven by the state's reluctance to address social problems. The Government of India is taking a proactive stance in support of social innovation. The National Innovation Council, which supports innovation projects, including in the social field, plays an important role in this regard. Today we can talk about the existence of an entire 'ecosystem' of social entrepreneurship in India, which includes educational institutions, social networks, government institutions, foundations, venture capitalists, etc.

A distinctive event in the development of social entrepreneurship in Asia was the creation of Grameen Bank in 1976 by Muhammad Yunus, who provided loans to the poor people of Bangladesh (their daily income does not exceed $ 2) without taxes and interest rates (https: //en.wikipedia.org/wiki/Grameen_Bank). Subsequently, other services in the field of microfinance also emerged and began active microfinance development around the world as an effective socially oriented business. The creation and distribution of microcredit in Bangladesh, India and later in other Asian countries, has been made possible by the close interconnected traditions of these societies where rules are considered wrong.

Social Entrepreneurship for China - is a fairly new phenomenon that "nowadays lacks strength and lacks a clear framework for development" (The general report on social enterprise in China 2008). The widespread use of the term "social entrepreneurship" in Chinese society began only at the beginning of the 21st century, when David Bornstein translated "How to Change the World: Social Entrepreneurs and the Power of New Ideas" in Chinese 2004) and Charles Leadbeater's The Rise of the Social Entrepreneur (1997). It was then that social entrepreneurship became the topic of discussion at conferences, seminars, roundtables with the participation of nonprofits, scientists, and the mass media. The essence of "social entrepreneurship" is so uncertain in Chinese consciousness and research that according to a British Council report "only a small proportion of firms that consider themselves to be social enterprises can be considered as such" (The general report on social enterprise in China 2008).

Among the factors hindering the development of social entrepreneurship in China, we must definitely state policy that does not create favorable conditions for the development of non-profit organizations. Only in 2011, as stated in the Skoll World Forum 2011 (http://skoll.org/skoll-world-forum/about/). The situation in the social sector showed positive trends - the number of private funds exceeded the state, increasing private equity participation in solving social problems. Although philanthropy is not typical for China, the tradition of donations is widespread, playing a major role in helping the community to realize and support social initiatives. G.Dizzy, professor of the university of Fuqua Duke which is director of the Center for Spreading Social Entrepreneurship, thinks that for the past 30 years, China has shown that it is capable of building new institutions and instruments quickly enough. If the process of building the infrastructure needed to support and stimulate social entrepreneurship continues, then China will be able to set an example for the whole world (Dees 2001).

The strong impetus for the development of social entrepreneurship in Southeast Asian countries became the economic crisis, that spread to the region in 1997. The economic crisis has exacerbated the social problems of society - unemployment, social inequality. In pursuit for a solution to the crisis, along with the introduction of programs, governments in Southeast Asian countries have begun to consider social entrepreneurship as one of the most important mechanisms for addressing social problems. Based on experiences in North America and Europe, governments have begun to introduce mechanisms to support social entrepreneurship (Арай 2010).

The policies of many Asian countries today are aimed at supporting social entrepreneurship. For example, in the Republic of Korea, the government views this event as an effective way to create additional jobs and provide social services, which is why it gives social entrepreneurs preferences when delivering goods and services to public institutions. In 2006, the government developed an ambitious action plan in support of social programs Social Dimension 2030 (Social Vision 2030), which provides such firms with state support for decent competition in market conditions. The British Council, Ashoka Foundation, Schwab Foundation, Creative Grammy Lab, which runs a range of educational programs in the field of social entrepreneurship, organize various seminars and conferences in the Asian region. In 2010, thanks to the initiative of Muhammad Yunus, a Declaration on the Establishment of a Social Business Hub in Asia1 was signed in Fukuoka, Japan (https://startup.fukuoka.jp/). The main objective of the Hub is to promote the development and dissemination of social business ideas in Asia.

Latin America

The opportunity to involve vulnerable groups in the process of supplying goods and services to disadvantaged populations, as well as market tools and resilient business models, has also been discovered in Latin America. Latin America has a high rate of poverty, which implies a myriad of social problems (restricting access to social services for poorer populations, health care, education, high levels of crime, income disparities, etc.) [https://www.ashoka.org / en / story / promoting-social-entrepreneurship-latin-america]. While the number of poor residents in Latin American countries has been declining for the past 15 years, the degree of socio-economic inequality remains high. Thus, according to the Commission for Economic Affairs of the Latin American and Caribbean States (Comisión Económica para América Latina y el Caribe), this region is considered to be the most “unequal” in the world (Арай 2010).

An important feature of the socio-economic situation in Latin American countries is the so-called “Social Exclusion”. In the context of Latin America, this term may be interpreted as a process when individuals or groups are deprived of market opportunities. Various barriers and constraints hinder the less well-off population from becoming independent agents of financial-economic relations. Even under the pressure of international organizations and associations, even in the face of escalating

In 2011, the city of Fukuoka was awarded the title of "City of Social Business". The first city to receive this title was Wiesbaden (Germany) in 2010. The title was suggested by the Creative Lab Grammin, an initiative supported by many social or political organizations that have officially demonstrated their involvement in the development of the idea of social entrepreneurship.

social tensions, lately various projects of engaging the poorest class of the population in Latin America have slowly emerged.

Social Entrepreneurship, as the interaction of vulnerable class of the population, is actively developing around the world, but in Latin America we can only talk about the initial phase of social entrepreneurship formation and development (Social enterprise: making a difference 2006).

Social entrepreneurship in Brazil, as in the rest of Latin America, has emerged relatively late. According to the 2009 Global Entrepreneurship Monitor report, early socially oriented entrepreneurial activity in Brazil is one of the lowest and almost 6.5 times lower than in China (Global Entrepreneurship Monitor 2010) [3]. In Brazil, the SEA is 0.4%; In China - 2.6% (Global Entrepreneurship Monitor 2010). As the most dynamically developing country in Latin America (average annual GDP growth over the last 10 years - 3.2%), Brazil is one of the first countries in the world in terms of social inequality (Human Development Report 2006). There are many social problems in the country that are not resolved by the state and at the same time are increasingly becoming the focus of socially oriented businesses. Problems with discrimination, environmental pollution, and access to essential services such as medicine, education, have become areas where social-purpose entrepreneurs not only create social values but also achieve economic outcomes. It is important to note that the Brazilian legislative system supports private initiatives, including the socially oriented ones. For example, there are a number of tax and credit benefits for social enterprises. However, benefits are provided by public authorities as a quick response to existing social problems that require immediate resolution, which is why these processes are not consistent with the state and, in turn, make it difficult to understand and apply. In Brazil, a more favorable environment for social entrepreneurship is gradually emerging thanks to active venture capital formation and active involvement of foundations, educational institutions, associations (eg SEKEM, Ashoka McKinsey Center for Social Entrepreneurship), which are engaged not only in education and consulting but also in Financial support for social entrepreneurs is also pouring in. According to the research of the Aspen Network of Development Entrepreneurs (Brazil), in 2011, among the founders of social enterprises that took part in the survey, 72% were from the poorest population, with households earning about $ 680 a month. Thirty-six percent of these organizations focused on women's rights, 30% on children's and adults rights, and 16% on helping people with disabilities (www.nb-fund.ru).

Nowadays, the Latin American countries face an important task - to increase the scope of social entrepreneurship activities by creating favorable conditions for public-private partnerships that benefit all parties. In Latin America, associations - the Social Enterprise Knowledge Network and the Sustainable Development Fund (Fundación para desarrollo sostenible (FUNDES)) play an important role in shaping social entrepreneurship.

Africa

It is clear that for African countries where most of the social problems remain without the attention of the state and the private sector, social entrepreneurship may become the driving force that would not only solve specific social problems of society but also initiate social transformation of these countries. However, the authorities of a number of African countries, which regard social entrepreneurs as people of risky nature and do not pursue their activities as "free thinking efforts", are directly involved in social entrepreneurship (Urban 2008). The inability of the state to cope with the many contradictions in society and the unawareness that the "invisible hand of the market" cannot handle the situation by what would be the best public option (Christie and Honing 2006), is further aggravated by the fact that the state restricts the freedom of activity of socially oriented organizations. For example, the state's "restrictive" policy towards nonprofits is due to the fact that, first of all, nonprofits have a great deal of potential in non-governmental structures, Secondly, non-profit organizations, with the change in donor policies for the creation of civil society institutions, may receive funding that would otherwise be directed to government projects (Sesan 2006).

In the face of resistance to financial instability and reliance on external funding, non-profit organizations have attempted to move to a new model of functioning that will ensure their financial stability. Thus, the first social enterprises emerged among non-profit organizations in African countries at the end of the 20th and early 21st centuries (for example, the FATE Foundation (2002); Lagos Digital Village (2004)). active work of international associations supporting social entrepreneurs (Ashoka and Schwab funds) provides a conducive environment for the development of social entrepreneurship and has a positive impact on the formation of institutional foundations for social entrepreneurship in Africa through the organization of various conferences, educational programs About Yale Entrepreneurship. 1

[1] In 2011, the International Forum of Social Enterprises (The Social Enterprise World Forum) was held in South Africa. The Italian School of Business at Altis and Sacro Cuore University (ALTIS Postgraduate School of Business and Society, Universita Catholica del Sacro Cuore) implements MBA programs in Kenya in the field of social entrepreneurship.

Georgia

For Georgia, social entrepreneurship is not a new phenomenon, but its active development began only at the end of the 20th century. Since the post-Soviet period, there has been an increase in private initiatives in the social sphere that were previously largely locked in by the state.

The researcher conducted a survey in September-November 2019 to determine the degree of awareness of social entrepreneurship as an event in Georgia. The methodology of the study was to conduct random interviews with residents of the capital from 18 to 70 years old through direct interviews. A total of 200 respondents were interviewed. At the initial stage a research instrument - questionnaire was developed. Based on the survey data we obtained, the result showed that only 9% of the population said they knew what social entrepreneurship meant.

Do you know what the term "social entrepreneurship" means?

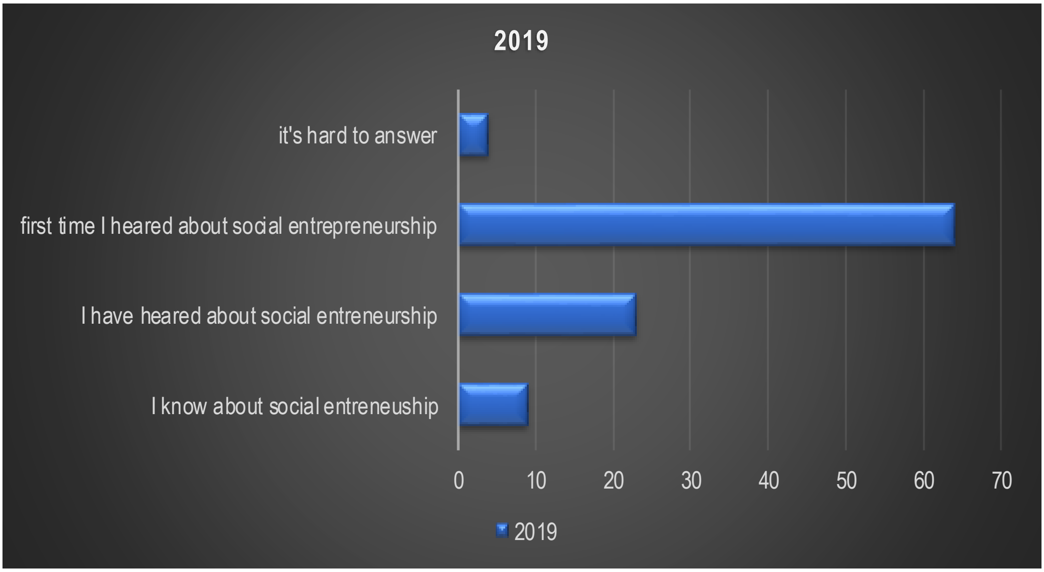


Figure 1.2 Population Awareness of Georgia on Social Entrepreneurship Source: Author, 2019

Georgia, as with all transition economies, is characterized by a lack of legislative framework, which explains the low effectiveness of socially oriented organizations.

There are not so many examples of social entrepreneurship set up in Georgia today at the organizational level so far as to speak of an already established trend, but there are some successful initiatives that have taken off and are actively developing.

With regard to social entrepreneurship activities in the real world and the scale of measurement, including Georgia is very difficult, the indicators, such as the awareness of the phenomenon of the structure supporting the existence of a legal framework, this event shows the degree of development and institutionalization of this event in a particular society. It is important to note that there is no definition of social entrepreneurship in Georgia, so such organizations operate within the legal framework of commercial and non-profit organizations.

It should be noted that the active work of organizations that support social entrepreneurship in Georgia (eg, Global Initiative - Tbilisi) 1 and increasing the role of social entrepreneurs at the expense of the social impact they have achieved in society, it has a positive impact on creating favorable conditions for the development of social entrepreneurship in the country. In addition, liberal tendencies are considered as a positive factor for the development of social entrepreneurship in Georgia, which, as in many other countries, has led to state interference in the lives of people becoming increasingly restricted. Social areas traditionally attached to the state (eg education, medicine, etc.) have become more "open".

Inadequate development of socio-economic institutions (small entrepreneurship, credit co-operation, microfinance, non-profit activities in the socio-economic field) are considered as hindering the development of social entrepreneurship. assume that the development of social entrepreneurship in Georgia due to the low rate of the social importance of the intervention of business and there is no tradition of the role of the state primarily by awarding appropriate institutional environment does not exist, and that the social innovations by entrepreneurs not considered as a source of competitive advantage.

The potential for social entrepreneurship to develop in Georgia is enormous if we focus on the growing social problems on the one hand, and on the other, realize the ineffectiveness of using traditional state and market mechanisms to solve social problems. An important prerequisite for the further formation of a favorable institutional environment for social entrepreneurship is to behave as the object of the general social attention of social entrepreneurship in terms of both scientific research and socio-economic transformation.

[1] The mission of the social enterprise Arbo, founded by the organization, is to socialize probationers, retirees and the disabled by making children safe and environmentally friendly wooden toys.

Conclusion

Global trends in the sector of non-profit organizations, the transformation of the concept of corporate social responsibility and the search for sustainable development by companies are also relevant for Georgia. However, the Georgian specifics of the institutional environment (in most cases the low efficiency of business social programs, the short period of development of the nonprofit sector, the low rate of entrepreneurial activity) are due to the so-called "Fragmented" development of social entrepreneurship in Georgia. Formation and development of this new event for social entrepreneurship - for Georgia should be carried out under the proactive and mutually agreed actions of business, state and society.

We may conclude that there is no region in the world that has nothing to do with the spread of social entrepreneurship. It is clear that no participant of the economic system can ignore this event in the modern stage. However, the process of formation and development of social entrepreneurship in different countries is not equal and is characterized by national specificity. Social Entrepreneurship - is an event that is usually bounded by contextual frameworks, and therefore the practice of social entrepreneurship must be disseminated in the light of an accurate analysis of the developmental features and regularities of the region concerned, in order to achieve maximum effect.

References

[1] 2006. "Fostering social entrepreneurship: a comparative study : a summary of recommendations for governments, policymakers and social entrepreneurs in Brazil, Germany, India, Poland, UK and USA: paper presented at the World Economic Forum in Davos." London. 8.
[2] 2006. "Human Development Report."
[3] 2006. "Social enterprise: making a difference." Harvard Business Review Latin America.
[4] 2008. Social Enterprise: New Model for Poverty Reduction and Employment Generation. EMES & UNDP report.
[5] 2008. The general report on social enterprise in China. Cultural and Educational Section British Embassy.
[6] 2010. "Global Entrepreneurship Monitor."
[7] 2015. A map of social enterprises and their eco-systems in Europe. Final report.
[8] Austin, James, and Ezequiel Reficco. 2009. Corporate social entrepreneurship. Cambridge: Harvard Business School.

[9] Boschee, Jerr. 2001. "Eight basic principles for nonprofit entrepreneurs." Nonprofit World 15-18.
[10] Christie, M J, and Honing. 2006. "Social entrepreneurship: new research findings." Journal of World Business 1-5.
[11] Christie, Michael, J. 2006. "Social entrepreneurship: new research findings." Journal of World Business 1-5.
[12] David Rockefeller Center for Latin American Studies, Harvard Universit. 2006. Social enterprise: making a difference. Cambridge: ReVista : Harvard Business Review Latin America; Fall 2006.
[13] Dees, Gregory J, and Beth B Anderson. 2006. "Framing a theory of social entrepreneurship: building on two schools of practice and thought." ARNOVA Occasional Paper Series 1-28.
[14] Dees, Gregory J. 2001. "The meaning of social entrepreneurship." http://www.caseatduke.org/documents/dees_sedef.pdf.
[15] Defourny, Jacques, and Marthe Nyssens. 2008. "Social enterprise in Europe: recent trends and developments." Social Enterprise Journal 202-228.
[16] Defourny, Jacques, and Marthe Nyssens. 2010. "Conceptions of social enterprise and social entrepreneurship in Europe and the United States: convergences and divergences." Journal of Social Entrepreneurship 32-53.
[17] https://en.wikipedia.org/wiki/Grameen_Bank. https://en.wikipedia.org/wiki/Grameen_Bank.
[18] https://in.thehackerstreet.com/social-entrepreneurs-2/. https://in.thehackerstreet.com/social-entrepreneurs-2/.
[19] https://skoll.org/skoll-world-forum/about/. http://skoll.org/skoll-world-forum/about/.
[20] https://startup.fukuoka.jp/. https://startup.fukuoka.jp/.
[21] https://www.zakat.org/en/.
[22] Kerlin, Janelle A. 2006. "Social entreprise in the United States and Europe: understanding and learning from the differences." International Society for ThirdSector Research and The Johns Hopkins University 247-263.
[23] Kerlin, Janelle A. 2009. "Social enterprise: a global comparison." Tufs University Press 211.
[24] Mair, Johanna, and Ignasi Marti. 2006. "Social entrepreneurship research: a source of explanation, prediction, and delight." Journal of World Business 6-44.
[25] Neuman, Laurence W. 2003. "Social research methods : qualitative and quantitative approaches." 131. Boston: Allyn and Bacon.

[26] Nicholls, Alex. 2006. "Social entrepreneurship – New Models of Sustainable Social Change." Oxford University Press 1-35.

[27] Nicholls, Alex. 2010. "The legitimacy of social entrepreneurship: reflexive isomorphism in a pre-paradigmatic field." In Entrepreneurship Theory and Practice, by Alex Nicholls, 611-633.

[28] Osterwalder, Alexander, and Yves Pigneur. 2010. "Business model generation: a handbook for visionaries, game changers, and challengers." 288. Hoboken: NJ : Wiley.

[29] Sesan, Gbenga. 2006. " Social enterprise in Africa : an emerging concept in an emerging economy." International NGO Journal 4-8.

[30] Urban, B. 2008. "Social entrepreneurship in South Africa." International Journal of Entrepreneurial Behavior & Research 346-364.

[31] www.muslimaid.org. https://www.muslimaid.org.

[32] www.nb-fund.ru. www.nb-fund.ru.

[33] www.tatasechallenge.org. http://www.tatasechallenge.org/.

[34] Yunus, Muhammad. 2010. "Building social business models : lessons from the Grameen experience." In Long Range Planning, by Muhammad Yunus, Bertrand Moingeon and Laurence Lehmann-Ortega, 308-325.

[35] Арай, Юлия Н. 2010. "Социальное предпринимательство: проблемы типологии (предисловие к разделу)." Вестник.

Establishment of a Subsidiary European Company

Asen Vodenicharov

PhD, Assoc. Prof. Department of Civil Law,
Faculty of Law and History, South-West University
"Neofit Rilski", Bulgaria

Abstract

One of the four exhaustively formulated legal means for the emergence of a European company, Council Regulation (EC) No 2157/2001 of 8 October 2001 on the Statute for a European company (Societies Europaea –SE) is the constitution of a Subsidiary European company. Compared to the other legal models for establishing this new organizational form for business association in the company typology within the European Union, the establishment of this particular entity possesses its own specific characteristics. The regulatory framework for the establishment of a Subsidiary European company is of a hybrid legal type. On the one hand, it takes account of the Community Act Regulation. However, in a number of cases the Community Act refers to the national law of the Member State where the company has its registered office under its constitution within the Union, and where its head office is located. The article discusses the legal prerequisites and the individual components of the procedure for the establishment of a Subsidiary European company.

Keywords: Subsidiary European company, European company, Societies Europaea – SE, participation of workers and employees in the business activities of European companies, informing and consulting the workers and employees

Introduction

Council Regulation (EC) № 2157/2001 of 8 October 2001 on the Statute for a European company (Societies European - SE)[1] [hereinafter Regulation (EC) № 2157/2001] establishes the legal mechanism for the creation of a European company [hereinafter SE] in a special Part Three entitled “Formation" comprising Articles 15-38 each with a number of paragraphs. The structural relation of the Regulation compared to the legal framework of the other components of the SE legal status is much more detailed and exhaustive.

[1] *OJ L 294, 10.11.2001, p. 1–21.B*

The Community act imperatively establishes the rules for the establishment of the European Company (hereinafter referred to as the "ES"). It expressly states that 'subject to this Regulation the formation of an SE shall be governed by the law applicable to public limited-liability companies in the Member State in which the ES has its registered office. The Regulation thus establishes the primacy of its provisions over the national shareholder legislation of the individual countries. This is a new form of manifestation of the hierarchical structure of the sources of the legal framework of SE enshrined in Art. 9, para. 1[1]. The defined regulatory framework is in line with the characteristics of the Regulation as a legal act of the Union that has general application. It is binding in its entirety and is also directly applicable in all Member States (Article 288 TFEU (former Article 249 TEC)). The Community imperative provision in question eliminates the possibility for national legislation to derogate from some of the established ways for creating an SE and to formulate new ones, taking into account the economic, demographic, historical, geopolitical and other specific characteristics of the respective country.

Methodology

In this research general and specific methods are used. The logical method of comparison and juxtaposition of the legal provisions concerning the matter in view are applied involving both induction and deduction. A historical and a systematic approach to the studied fragments of the establishment process and the functioning of the European subsidiary are combined. The comparative legal method is particularly extensively used in outlining the regulatory framework in the Member states of the European Union. This allows for further harmonization of the existing regulatory packages in these countries and raising the role of European subsidiaries in the sustainable competitive and intellectual development of the Community economic environment.

On the basis of the documentary method an analysis of the relevant provisions contained in the Regulations and Directives of the European Union, the national legislation and the jurisprudence of the European Union in the considered field that are related to the objectives of the research is conducted

Legal identity of the subsidiary European company (results of the analysis)

The Regulation exhaustively specifies the ways in which ES emerges:

a) merger of joint stock companies into ES;

b) establishment of a European parent company;

[1] Draganov, J. European Union law, Sofia, UNWE, 2012, 288 p. (Драганов, Ж., Право на Европейския съюз, София, УНСС, 2012, 288 с.); Tormanov, Z. Sole entrepreneur, Sofia, Sibi, 2006, 544 p. (Торманов, З. Едноличен търговец, София, Сиби, 2006, 544 с.); Grozdanov, A. International commercial law. Short course. VFU, 2014 (Грозданов, А. Международно търговско право. Кратък курс. ВСУ, 2014).

c) formation of a European subsidiary; and

d) transformation of an existing joint stock company into an ES.

By defining these four ways the possibility of the emergence of a new SE in a different way is excluded. Each of these methods has its own legal identity.

It is noteworthy that the Bulgarian lawmaker has excluded from the catalogue three of the imperatively regulated methods in the Regulation of the ways to establish an SE based in our country. These are: the establishment of a European parent company; the formation of a European subsidiary, and the transformation of an existing joint stock company into an ES.

I believe that this is a significant lapse in our legislation. However, this shortcoming has no serious legal consequences and does not hinder the establishment and functioning of SE in our country. Regulation (EC) (2157/2001 exhaustively regulates the nomenclature of methods for the emergence of SE in the Member States. It is an act of general application which is binding and directly applicable in all Member States (Article 288 TFEU[1], ex Article 249 TEC[2]). Therefore, regardless of the absence of the other three ways of establishing an SE in the Bulgarian legal system, they can be used to create ES. Along with this, it should be pointed out that according to Art. 5, para. 4 of the Constitution, the international treaties ratified in accordance with the constitutional order that promulgated and entered into force for the Republic of Bulgaria, are part of the country's domestic law. They have an advantage over those norms of domestic law that contradict them. The Treaty of Accession of the Republic of Bulgaria and Romania to the European Union[3] meets all constitutionally established requirements. As a result, the Regulation as an Act of the Union takes precedence over the Commerce Act. Therefore, all the ways formulated by the Community act for the establishment of SE in Bulgaria will have legal effect on the territory of our country.

The possibility of setting up an SE in the ways set out in the Regulation, has found a *mutatis mutandis* expression in the current bylaws. Ordinance № 1 of 14 February 2007 on keeping, storing and accessing the Commercial Register and the Register of non-profit organizations[4] issued by the Minister of Justice is a valid normative administrative act. The Ordinance is formulated by the central body of the executive power within its competence. It is in compliance with the established form, the administrative procedural rules are observed, and it corresponds to the purpose of the Regulation and to the law. Art. 33k para. 1 designates the necessary documents

[1] Treaty on the Functioning of the European Union, *OJ C 326, 26.10.2012, p. 47–390.*
[2] Treaty on European Union, *OJ C 326, 26.10.2012, p. 13–390.*
[3] In force as of January 1, 200, State Gazette of the Republic of Bulgaria (hereinafter SG) № 103 and 105 of 20 December 2006, last amend. SG, № 17 of 28 February 2012.
[4] SG, № 18 of 27 February 2007, last. ed. and ext. SG, № 23 of 14 March 2020. As of January 1, 2018, the said by-law shall give rise to legal consequences under a new title - Ordinance № 1 of February 14, 2007 on keeping, storing and access to the Commercial register and the register of non-profit organizations, SG, № 77 of 26 September 2017.

for the circumstances subject to entry at the establishment of an SE by merger/ acquisition; para. 2 - upon the establishment of a European parent company; para. 3 - upon the establishment of a European subsidiary, and para. 4 - upon the transformation of a joint-stock company into an ES. This approach is even more clearly expressed in the template of the Application for the entry circumstances concerning a European company in form A 12 attached to the Ordinance. In item 70 it requires the applicant to indicate the manner of creation of the SE according to the relevant provisions of the Regulation:

by acquisition under Art. 2, para. 1 and Art. 17 to Art. 31;

by merger under Art. 2, para. 1 and Art. 17 to Art. 31;

by establishing a European parent company under Art. 2, para. 2 and Art. 32 to Art. 34;

by establishing a European subsidiary under Art. 2, para. 3 and Art. 35 and Art. 36 and

by transforming an existing joint stock company into a European company under Art. 2, para. 4 and Art. 37.

Three European companies have been established in our country: one through the establishment of a European parent company and two European companies through the transformation of existing joint stock companies. Unlike in other Member States, there is currently no European subsidiary registered in this country.

Regulation (EC) № 2157/2001 in the mandatory catalogue of the methods for creation of a European company provides for the possibility of setting up a European subsidiary. Compared to the other models for the emergence of ES[1], this method has its own specifics[2]. A wide range of legal entities can participate in the process of establishing a subsidiary ES. It includes companies under Art. 54, para. 2 of the Treaty on the Functioning of the European Union. The regulation refers to Art. 48, para. 2 of

[1] The establishment of a subsidiary SE in different Member States is as follows: Austria - Gründung einer Tochter-SE; Belgium - Constitution d'une SE/filial; Bulgaria – Учредяване на дъщерно Европейско дружество; Chroatia - Osnivanje društva kćeri u obliku SE; Cyprus - Σύσταση θυγατρικής SE; Czech Republic - Založení dceřiné SE; Denmark - Stiftelse af et SE-datterselskab; Estonia - Tütar-SE moodustamine; Finland - Tytäryhtiö-SE:n perustaminen; France - Constitution d'une SE/filial; Germany - Gründung einer Tochter-SE; Greece - Μετατροπή ανώνυμης εταιρίας σε SE; Hungary - SE leányvállalat alapítása; Ireland - Formation of a subsidiary SE; Italy - Costituzione di una SE affiliate; Latvia - SE meitas uzņēmuma dibināšana; Lithuania - Dukterinės SE steigimas; Luxemburg - Constitution d'une SE/filial; Malta - Formazzjoni ta' sussidjarja SE; Netherlands - Oprichting van een dochter-SE; Poland - Powstanie spółki zależnej SE; Portugal - Constituição de uma SE «filial»; Romania - Constituirea unei filiale a SE; Slovakia - Založenie dcérskej SE; Slovenia - Ustanovitev hčerinske SE; Spain - Tytäryhtiö-SE:n perustaminen; Sweden - Bildande av ett SE-dotterbolag.

[2] Cathiard, C. La Société Européenne – Aspects de droit comparé, Droit et patrimoinen, 125, avril 2004; Fouassier, Ch. Le statut de la société européenne: Un nouvel instrument juridique au service des entreprises. Revue du Marché Commun et de l'Union européenne 2001, n° 445. Grundmann, S. Europäisches Gesellschaftsrecht: eine systematische Darstellung unter Einbeziehung des europäischen Kapitalmarktrechts, Heidelberg (C. F. Müller), 2014.

the Treaty establishing the European Community. After the Lisbon Treaty this provision takes a new numbering in the TFEU. It therefore refers to "companies established in accordance with Civil or Commercial law, including cooperatives and other legal entities governed by Public or Private law, with the exception of non-profit institutions". This wide range of possible founders covers practically all corporate entities, except the non-profit legal entities. These should be established under the right of a Member State and under their Constitutional Act shall have their registered office[1] and headquarters in the territory of the European Union. This is a significant difference compared to the other ways of establishing a SE. A European company can be created by a merger through the acquisition or creation of a new company from existing joint stock companies only. The legal situation is different when establishing a parent SE, which can be created only by functioning joint stock companies and limited liability companies[2].

It is necessary that either each of at least two of the companies be governed by the law of a different Member State, or, have had a subsidiary governed by the law of another Member State, or a branch located in another country of the European Union for at least two years[3].

The European subsidiary is one of the effective legal instruments for exercising the right of association[4].

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[1] Vodenicharova, K. Headquarters of the company, Commerce and Competition Act, Sofia, 2010, vol. 8, pp. 5 – 11 (Воденичарова, К. Седалище на търговското дружество, Търговско и конкурентно право, София, 2010, кн. 8, стр. 5 – 11); Vodenicharova K. Systems for linking companies and their impact on their mobility in the European Union. Annual Scientific Conference 2014 "Problems of Legislation and Law Enforcement Related to Business Development in the Republic of Bulgaria and Europe". Sofia, Publishing Complex of the University of National and World Economy, 2015, pp. 194-204 (Воденичарова К. Системи за привръзка на дружествата и влиянието им върху тяхната мобилност в Европейския съюз. Годишна научна конференция 2014 „Проблеми на законодателството и правоприлагането свързани с развитието на бизнеса в Република България и Европа". С., Издателски комплекс на Университета за национално и световно стопанство, 2015 с., 194-204.)

[2] Rickford, J. The European Company: Developing a Community Law of Corporations: Collected Papers from the Leiden University Unilever Programme, 2013, 154 p.; Geens, K., Klaus J. Hopt. The European Company Law Action Plan Revisited. Leuven University Press, 2010. p. 376; Gubin, E.P., P.G. Lakhno. (Eds.). Enterprise Law of the Russian Federation. Moscow: Norma Publisher. 2018, p. 993 (Губин,Е.П., Лахно, П.Г. – отв. редакторы, Предприемагельское право Российской Федерации. Москва, Издательство. Норма, 2018, 993 с.). Judgment of the Court (Second Chamber) of 21 June 2017. N. W and Others v Sanofi Pasteur MSD SNC and Others.Request for a preliminary ruling from the Cour de cassation (France). Case C-621/15. , T-109/02, T-118/02, T-122/02, T-125/02, T-126/02, T-128/02, T-129/02, T-132/02 , T-136/02, EU:T:2007:115, т. 132

[3] Menjucq, M. La société européenne. Revue des sociétés, 2017, № 4; Wymeersch, E. Cross-Border Transfer of the Seat of a Company – Recent EU Case Law and the SE Regulation. – In: The European Company: developing a Community Law of Corporations: collected papers from the Leiden University Unilever Programme, 2002.

[4] Cherneva, B. The institutional essence of law as a manifestation of the limits of legal knowledge. - In: Law and Limits. Sofia, 2018, University Publishing House "St. Kliment Ohridski ", pp. 46-53; Cherneva, B. The Pilot-Judgment Procedure of the European Court of Human Rights – Bulgarian Experience. In: Dei, M. (Ed.). Human Rights: Theory and practice. Collection of scientific papers. London: Iashe, 2017, pp. 65-78 (Чернева, Б. Институционалната същност на правото като проявление на границите на правното познание. – В: Право и граници. С., 2018, УИ"Св. Климент Охридски", с. 46-53).

The Regulation does not provide a legal definition of a "European subsidiary" (Subsidiary SE, SE filial, Gründung einer Tochter - SE). The establishment procedure is simplified and facilitated for its implementation. Compared to other ways of creating European companies is less formal.

The Community act states that companies and other legal entities participating in the establishment of a subsidiary operation are subject to the provisions governing their participation in the formation of a subsidiary under their national law (Article 36)[1]. In this connection, the Commercial Law stipulates that a subsidiary should operate in another Member State and its legal status will be regulated by the legislation of that country (Article 273, para. 3). In this respect, the "Rule of law" principle should be strictly observed[2].

Based on these regulations, the regime for a subsidiary SE with its registered office in Bulgaria is determined by the Commerce Act[3]. It indicates that a subsidiary is one in which the parent company directly or indirectly owns or indirectly controls at least 25 per cent of the shares or units or may appoint directly or indirectly more than half of the members of the management board (Art. 277, para. 3 of the Commerce Act). This percentage is not large and therefore cannot have a decisive influence on the decisions of the General Meeting. Through it, however, the parent company can influence to some extent its sustainable development in a competitive business environment and receive comprehensive information about its activities[4].

Council Directive 2011/96 / EU of 30 November 2011 on the common system of taxation applicable in the case of parent companies and subsidiaries in different Member States[5] defines "parent company" stating that it is a company from a Member State with a minimum of 10% of the capital of a company from another Member State where the latter meets the same conditions as the company from the Member State which participates with a minimum of 10% in the capital of a company from the same Member State. Such participation shall be wholly or partly held by the place of

[1] Vodenicharov, A. European Company, Sofia, Siela, 2018,448 p. (Воденичаров, А., Европейско дружество, София, Сиела, 2018, 448 с.); Vodenicharov, A. European Cooperative Society, Sofia, Siela, 2019, 388 p. (Воденичаров, А. Европейско кооперативно дружество, София, Siela, 2019, 388 с.). Grozdanov, A. European Economic Interest Grouping. In: Notifications of Union of scientists-Varna. Series "Humanities science", 1`2008, pp. 83-85. (Грозданов, А.Европейското обединение по икономически интереси", В: Известия на Съюза на учените - Варна. Серия „Хуманитарни науки", 2008 г., No 1, стр. 83-85.).

[2] Neykova, M. Basic democratic principles of public administration. Burgas, BFU, 2014 (Нейкова, М. Основни демократични принципи на държавното управление. Бургас, БСУ, 2014); Topchiyska, D., Rule of Law. Theoretical aspects. S., "Avangard Prima", 2016, p. 320 (Топчийска, Д., Върховенство на правото. Теоретични аспекти. С., Авангард Прима, 2016, с. 320); Topchiyska, D., Social Justice and the Rule of Law. In: Collection "The Law of Law and the Law of Law", Sofia: NBU, 2016, pp. 222 - 231.

[3] SG. No. 48 of June 18, 1991, last. ed. and ext. SG. No. 83 of 22 October 2019.

[4] Judgment of the Court (Second Chamber) of 21 June 2017. N. W and Others v Sanofi Pasteur MSD SNC and Others.Request for a preliminary ruling from the Cour de cassation (France). Case C-621/15. , T-109/02, T-118/02, T-122/02, T-125/02, T-126/02, T-128/02, T-129/02, T-132/02 , T-136/02, EU:T:2007:115, т. 132.

[5] Official Journal of the European Union, L 345, 29.12.2011, pp. 8-16. The Directive has been transposed into Bulgarian legislation with an amendment to the Corporate Income Tax Act. SG, No. 40 of 29 May 2012.

business of the first company situated in another Member State. A "subsidiary" is defined as a company whose capital includes the above-mentioned participation. A subsidiary shall operate in another Member State and its legal status shall be regulated by the legislation of that country (Article 273, para. 3 of the CL).

A necessary precondition for the emergence of a subsidiary SE is that the founders subscribe for its shares. This is a mandatory condition, which means that if the subsidiary is by form a joint stock company, it is inadmissible for the entities participating in its establishment not to have the status of its shareholders.

The group of possible founders of a subsidiary includes *mutatis mutandis* the existing European companies. That is why they can set up a European subsidiary themselves. This hypothesis is explicitly regulated in Art. 31 para. 2, stating that the SE itself may establish one or more subsidiaries in the form of European companies. As the owner of the capital is the parent SE company, then the established subsidiary will be a sole European joint stock company. In this way, the founding SE becomes a parent SE. In all cases, the latter is imperatively obliged to have a legal organizational form of a capital trading company in the form of a joint stock company, a limited partnership with shares, or a limited liability company. Under this hypothesis, the parent European structure is created vertically from top to bottom. Initially, an SE is established, later a subsidiary (s) is established and this eventually leads to the establishment of a parent SE company.

When establishing a subsidiary SE from an already existing SE, there will be no requirement for the former to have shareholders from at least two Member States. This is especially evident in the case of a sole proprietorship subsidiary SE, whose capital belongs entirely to the already established SE.

It is particularly important that the provisions of the national law of the Member State in which the subsidiary is established set out in its Constituent Act, which require public limited-liability companies to have more than one shareholder, do not apply in the case of a SE subsidiary.

The European legislator has found a suitable solution in view of the identity of the number of holders of assets of sole proprietorship European subsidiaries and sole proprietorship companies with limited liability. It is explicitly emphasized that the legislation of the Member States transposing Directive 2009/102 / EC of the European Parliament and of the European Council of 16 September 2009 in the field of Company Law concerning sole proprietorships with limited liability[1] also applies to European companies' *mutatis mutandis*. The Regulation refers to the Council Directive in the field of Company law of 21 December 1989 on sole proprietorships

[1] Directive 2009/102/EC of the European Parliament and of the Council of 16 September 2009 in the area of company law on single-member private limited liability companies (Text with EEA relevance), OJ L 258, 1.10.2009, p. 20–25.

with limited liability (86/667 / EEC) [1], which was in force at the time of its adoption[2]. It has been substantially changed many times. In the interests of clarity and rationality, it has been codified by the said Directive.

The entity of a subsidiary is established in the regulatory area and the business practice in our country. A number of provisions regulate its legal position in various spheres of public life. The detailed regulatory framework of European subsidiaries is available in the Law on Information and Consultation of Employees in multinational enterprises, groups of enterprises and European companies[3]. Thirty-four provisions regulate the status of a European subsidiary with a view to the participation of employees in its management. It is stated that when the management bodies of the participating companies draw up a plan for the establishment of a European company and its European subsidiaries, immediately after the announcement of the merger, the acquisition plan, the creation of a holding company, or after the coordination of a plan for setting up a subsidiary or for a transformation of a company into a European one, the management body of the company or the companies operating in the territory of the Republic of Bulgaria and participating in the establishment of a European company shall provide to the managements of the trade unions in the enterprise and to the representatives of the employees information according to Art. 7, para. 2 of the Labor Code about the participating companies, the subsidiaries or branches and the number of the employees in them in order to establish a special body for negotiations.

Where the outcome of the negotiations results in a reduction of the rights to participate, the required majority shall be two-thirds of the members of the special negotiating body, representing at least two-thirds of the employees, including the votes of the members representing the employees in at least two Member States, where the European company is established by setting up a parent company or a subsidiary, if the participation covers at least 50 per cent of the total number of employees in the participating companies. There are a number of other provisions in the field of the regulated matter.

The entity of the subsidiary is subject to legal regulation in a number of laws and regulations, such as the Public Offering of Securities Act[4]; The Law on the Activity of Collective Investment Schemes and Other Collective Investment Enterprises[5]; The Civil Aviation Act[6]; The Markets in Financial Instruments Act[7]; Law on Rehabilitation

[1] Twelfth Council Company Law Directive 89/667/EEC of 21 December 1989 on single-member private limited – liability companies. No longer in force. OJ L 395, 30.12.1989 r. p. 40–42.
[2] The Directive has been transposed into Bulgarian legislation by the Law on Amendments to the Commerce Act. SG, No. 66, August 12, 2005.
[3] SG. No. 57 of July 14, 2006, last ed. and ext. SG No. 93 of November 21, 2017.
[4] SG. No. 114 of December 30, 1999, last. ed. SG. No. 44 of 13 May 2020.
[5] SG. No. 77 of October 4, 2011, last ext. SG. No. 26 of March 22, 2020.
[6] SG. No. 94 of December 1, 1972, last. ed. SG. No. 62 of August 6, 2019.
[7] SG. No. 15 of 16 February 2018, last ext. SG. No. 26 of March 22, 2020.

and Restructuring of Credit Institutions and Investment Intermediaries[1], etc. They are also applicable to European subsidiaries registered in the Republic of Bulgaria.

Conclusion

The subsidiary European company has taken its significant place in the process of expanding and enriching the institutionalized European business partnership. It contributes to the sustainable and intelligent economic development of the European Union's economic segment, to enriching the diversity of its organizational structures, and to speeding up the integration processes between the Member States and the full completion of the internal Community market. They contribute to achieving optimal economic, technological, social and organizational outcomes. The rationalization of the legal regulatory framework for the formation of European subsidiaries is an effective legal instrument for their expansion on a Community and a national level.

References

[1] Cathiard, C. La Société Européenne – Aspects de droit comparé, Droit et patrimoinen, 125, avril 2004
[2] Cherneva, B. The institutional essence of law as a manifestation of the limits of legal knowledge. - In: познание. – В: Право и граници. С., 2018, УИ"Св. Климент Охридски", с. 46-53).
[3] Directive 2009/102/EC of the European Parliament and of the Council of 16 September 2009 in the area of company law on single-member private limited liability companies (Text with EEA relevance), OJ L 258, 1.10.2009, p. 20–25.
[4] Draganov, J. European Union law, Sofia, UNWE, 2012, 288 p. (Драганов, Ж., Право на Европейския съюз, София, УНСС, 2012, 288 с.); Tormanov, Z. Sole entrepreneur, Sofia, Sibi, 2006, 544 p. (Торманов, З. Едноличен търговец, София, Сиби, 2006, 544 с.); Grozdanov, A. International commercial law. Short course. VFU, 2014 (Грозданов, А. Международно търговско право. Кратък курс. ВСУ, 2014).
[5] Menjucq, M. La société européenne. Revue des sociétés, 2017, № 4; Wymeersch, E. Cross-Border Transfer of the Seat of a Company – Recent EU Case Law and the SE Regulation. – In: The European Company: developing a Community Law of Corporations: collected papers from the Leiden University Unilever Programme, 2002.
[6] Neykova, M. Basic democratic principles of public administration. Burgas, BFU, 2014 (Нейкова, М. Основни демократични принципи на държавното управление. Бургас, БСУ, 2014);
[7] Official Journal of the European Union, L 345, 29.12.2011, pp. 8-16. The Directive has been transposed into Bulgarian legislation with an amendment to the Corporate Income Tax Act. SG, No. 40 of 29 May 2012.

[1] SG. No. 62 of August 14, 2015, as amended and ext. SG. No. 37 of May 7, 2019.

[8] Rickford, J. The European Company: Developing a Community Law of Corporations: Collected Papers from the Leiden University Unilever Programme, 2013, 154 p.; Geens, K., Klaus J. Hopt.
[9] SG. No. 94 of December 1, 1972, last. ed. SG. No. 62 of August 6, 2019.
[10] The Directive has been transposed into Bulgarian legislation by the Law on Amendments to the Commerce Act. SG, No. 66, August 12, 2005.
[11] The establishment of a subsidiary SE in different Member States is as follows: Austria - Gründung einer Tochter-SE;
[12] Treaty on European Union, OJ C 326, 26.10.2012, p. 13–390.
[13] Treaty on the Functioning of the European Union, OJ C 326, 26.10.2012, p. 47–390.
[14] Twelfth Council Company Law Directive 89/667/EEC of 21 December 1989 on single-member private limited – liability companies. No longer in force. OJ L 395, 30.12.1989 г. p. 40–42.
[15] Vodenicharov, A. European Company, Sofia, Siela, 2018,448 p. (Воденичаров, А., Европейско дружество, София, Сиела, 2018, 448 с.);
[16] Vodenicharova, K. Headquarters of the company, Commerce and Competition Act, Sofia, 2010, vol. 8, pp. 5 – 11

Mexican Airlines in the Current Situation of COVID 19. Evolution and Prospects

Mtro. Sergio Solís Tepexpa [1]

Luis Fernando Muñoz González [2]

Dr., Universidad Autónoma Metropolitana.

Unidad Xochimilco, México

Abstract

The present work seeks to analyze and contrast the previous characteristics of the general financial situation of the main Mexican airlines. This is especially relevant, since in general there were problems in leverage and profitability in some of them, since exercises prior to 2020. In this sense, it is important to clarify the conditions in which several surgical surgeries were developed, faced by economic and health crisis of the first decade of this century and finally, they will face this global phenomenon unprecedented in the economic history of this century and much of the previous one. In the part of presenting the figures of reduction in passenger flows today, the characteristics and problems they have faced, as well as some reflections on how they can be better rid. Likewise, a model is presented that emphasizes the change in Aeroméxico's financial situation, towards a critical state in terms of the fall in the activity of commercial aviation worldwide. Finally, there are some reflections and recommendations regarding the possible alternatives for this important sector of the Mexican economy, in general, Aeroméxico in particular, can get out of this difficult and complex current environment.

Keywords: economic and health crisis, main Mexican airlines, Mexican economy, model, possible alternatives

[1] Mtro. Sergio Solís Tepexpa. Professor of the Department of Economic Production of the Universidad Autónoma Metropolitana (UAM) Xochimilco Unit. Degree in Administration; Specialization in Econometrics; Master in Economics. PhD student in Social Sciences. E mail: solin77@gmail.com, ssolis@correo.xoc.uam.mx

[2] Dr. Luis Fernando Muñoz González. Professor of the Department of Economic Production of the Universidad Autónoma Metropolitana (UAM) Xochimilco Unit. Degree in Administration and Degree in Economics; Master in Finance and Doctor in Social and Administrative Sciences. E mail: lmunoz@correo.xoc.uam.mx, lfmg60@gmail.com

Introduction

To give an idea of the conjunctural panorama, before the COVID 19 pandemic, a data that sounds very shocking is that of the decrease in the arrival of total passengers, national and international, same as in annual variation, according to Airports and Auxiliary Services, was of the 29%, for the first four months of 2020. In relation to the five most relevant airports in the country (69.5% of the total), namely: México City, Cancun, Guadalajara, Tijuana and Monterrey, the steepest drop corresponds to Cancun (35.0%), followed by Monterrey (31.0%), México City (29.5%), Guadalajara (26.3%) and Tijuana (19.0%). It should be noted that this situation is general in the 30 most important airports, as well as in the rest of them, according to this source. Additionally, generalized falls are seen when said period is compared against that of 2018. (ASA, 2020) By type of flights, the decrease was 26.1% for domestic flights, while international flights accounted for a decrease of 31.5%. Given the steepest drop in this last line, the share of domestic flights, at the end of April 2020 was 50.5% of the total, reversing the highest relative share of international flights, shown in the same period of 2019.

At the national flight level, for the first quarter of 2020, five Mexican lines absorbed 96.7% of passengers, with the following order in their relative participation: Volaris 33.2%, Vivaaerobus 21.0%, Interjet 18.7%, Aeromexico Connect 13.7% and Aeromexico 10.1%. It should be noted that these lines show very pronounced drops in the number of passengers transported, with Vivaaerobus being the least pronounced -14.2%, followed by Volaris with -23.3%, Aeromexico with -29.9%, Interjet with -30.5% and Aeromexico Connect with -32.8%. Another relevant data refers to the fact that in April 2020, the falls in passengers transported compared to the same month of 2019, were more than 86% in the five aforementioned lines, the sharpest being that corresponding to Interjet, with -97.2%. With reference to international flights, for the January-April 2020 period, Mexican lines participated with 30.3% of the passengers transported (against 42.9% of the US ones). Of this percentage, 26.8% was absorbed: Aeromexico 10.3%, Interjet 9.1% and Volaris 7.4%, leaving Aeromexico Connect, Vivaaerobus and Magnicharters with marginal percentage shares. Falls in this area are more severe than for domestic flights. Aeromexico Connect stands out with -47.4%, Aeromexico with -41.5%, Interjet with -24.3% and Volaris with -18.9%. If only the month of April is considered, compared to the previous year, all the lines (except Magnicharters, which has a negligible participation) presented falls of more than 93% in the number of passengers transported. (AFAC, 2020)

Literature review: Current situation of low-cost airlines in the commercial aviation industry

As part of the deregulation process, especially reflected in the liberalization of fares and the expansion of routes to foreign destinations, faced by the commercial aviation industry since the end of the last century, low-cost airlines have observed significant growth, as well as a greater participation in the market. Among the most notable proportions, it can be seen that at the beginning of the last decade one in three passengers traveled in these in the United States, in Europe one in four and in Asia and Oceania one in two. In the case of the Latin American subcontinent, the market is concentrated in very few lines, unlike what happened in Europe, although with an interesting dynamism, which is mainly concentrated in Brazil, México and to a lesser extent in Colombia. In México, just under 2 out of 3 passengers in the domestic market traveled in them in the period indicated above.

Approximately it is appreciated that more than half of its cost structure is made up of those of flight operation, with the consumption of jet fuel playing a key role here. It is noteworthy that in México this type of air services offer is oligopolistic in nature, having been concentrated since the last decade, especially during the 2008 global crisis, where recession and impact on fuel prices were combined. Among the main advantages that this type of flight has used for its proliferation and presence in the market, the elimination of intermediaries in the sales process, the reduction of costs by offering more basic services, the greater frequency of nonstop flights, the Round-trip flights, as well as the encouragement of flying by socio-demographic strata that previously did not, given the accessibility of fares, competitive even with those of buses, in the Mexican case.

As a problematic situation prior to this global situation, there is not having the cargo market covered, the lack of more comprehensive connectivity in terms of destination airports, consumer complaints, due to the concomitant reduction of the services offered by the fee, as well as those caused by delays and cancellations, among other factors. Another topic that is appreciated is focusing on the tourism market, rather than on business travelers. In general, in the current context, the following statement seems very eloquent: "…these costs may be affected by financial circumstances, as happened between 2007-2008; health crises like influenza and of course due to economic recessions". (Canseco, 2015: 10). For some time now, it has been necessary to rethink the strategic direction of low-cost airlines, by generating competitive advantages that can face the competition and, as it is currently appreciated, face the sharp drop in flows, within a context of high volatility in costs. In this sense, the challenge will be extremely difficult, since among the attributes most indicated by the segment of the market oriented to the "businessman", punctuality, comfort and above all convenient hours are privileged. In general, the latter will be a challenge when facing a return to activities, predicting that these flows will be much more restricted than in the days prior to the current pandemic. Perhaps in the case of the tourist segment these situations are much less severe. Another issue that has affected since the beginning of the century is the one related to the costs derived from insecurity, following the terrorist attacks of 2001, which add to the volatility indicated in fuels.

In this sense, to account for the vulnerability of this economic activity and unintentionally anticipating what happened in the context of the current situation, we have the following assessment, made in the previous decade: "Unfortunately and without having achieved recovery Overall, airlines around the world are facing a new crisis, this time caused by high fuel costs and in many cases putting them at imminent risk of bankruptcy…" (Urzúa, n.d.: 7). Taking into consideration all the above factors, it is necessary to seek to attend quickly to the two highly relevant segments in this field, namely: the business market, on the one hand, and the tourism market, the latter representing a potential aspect of the How companies that survive can recover. Regarding the tourism market, special attention should be paid to its ability to boost income, since its economic relevance and dynamism are general globally, as stated in the following: "It is one of the most important economic sectors and dynamic in today's world, both for their level of investment, participation in employment, contribution of foreign exchange, and contribution to regional development." (Urzúa, n.d.: 8). Concerted action is required in inter-institutional cooperation (both local, national and international), in the prevailing regulations, in the training of the human factor, in infrastructure as a system, in the marketing mix oriented to the different segments, as well as risk management, among other factors.

In this order of ideas, attention should be paid to the possible reactivation of the tourism sector, in terms of the Mexican air network, and its characteristics of connectivity, centrality and intermediation, due to their impact on the capacity for growth in said activity economic. In general, connectivity fosters a multiplier effect in activity directly related to the airport industry and related services, as well as in the tourist network connected to the place in question. It highlights that in 2012 tourism generated about 2.3 million jobs (about 6% of the national total). One of the possible threats that could be presented in the current scenario is the public policy of "air freedoms", which allows foreign lines to attend local flights. According to data from the Ministry of Communications and Transportation, the air network carries 2.5% of passengers, while only 0.1% of cargo. Relating to connectivity, for 2013, it observed that it is found in the three main cities of the country (with a clear centralizing predominance at the country level, in México City), as well as in Cancun, Puerto Vallarta, Los Cabos, Acapulco and Tijuana. The shorter distances increased their frequency by 22% between 2000 and 2012. Cancun stands out with 100 airports added to its network, reaching the position of being the second airport in the country. With respect to centrality, which measures the relevance as an origin and destination of an airport, the same concentration can be seen in the three main cities in México, with Cancun in second place and Tijuana in fifth. In this sense, it is relevant to take into account that this excess of centrality could be counterproductive in the event of a reactivation of tourism. In fact, ex ante, it had been pointed out that: "The projections proposed by Aviasolutions suggest that during the period 2009-2020 we will face a growth rate of 6.1% ... double the traffic over the next 10 years..." (Lichtle, 2015: 9) Evidently it is clear that this will not be achieved, although it reflects the inertia that prevailed in the market. Regard to intermediation, Cancun, Los Cabos and

Puerto Vallarta stand out. Only 8% of flights can be direct from origin to destination, the rest requires two or more stops.

Another interesting aspect is the one regarding the correlation between the arrival of national flights and hotel occupancy in national tourist destinations. In this regard, however, and evidently reflecting the drop in airline activity, it should be noted that: “However, there is a divergence between both series as of 2008, as a result of the negative impact of the health crisis in México during 2009 derived from the outbreak of influenza…From 2012 the behavior of the number of flights and the arrival of national tourists began to move in the same direction, as a result of the improvement in economic conditions…” (Lichtle, 2015: 10). Without being able to obtain an accurate forecast of the duration and magnitude of the current economic recession, what is evident is that it will be much more severe than that of 2008.

Within this context, the strong impact that exogenous aspects to the industry have generated on it can be seen, particularly the fall in the markets, the result of global confinement. Likewise, the effect of public policies around the concentration of the Mexican air network, described above, can be seen intertwined. To this are added endogenous aspects, mainly in matters of managing the financial function of companies, although at this point each economic entity entails the consequence of its own organizational management, regardless of the situation the referred sector.

In this order of ideas and admitting the synergistic causality of external and external factors, the following seems plausible: "It is necessary to monitor and detect all those events that occur outside the company and that may affect it, but cannot always be controlled from a company in particular; from this, strategies can be developed to face these events.” (Alvarez, 1997: 8). Of course, an event like the current one goes far beyond the proportions that occurred before, at least since the first half of the last century. Finally, it is convenient to articulate alternatives between internal strategies that generate a critical mass of survival, and incidents of public policy in the area of communications and transportation, that support the Mexican airline industry in particular and tourism in general.

Methodology

Vector Autoregressive Model (VAR)

To analyze the way in which the evolution of each of the selected independent variables (as described below) influence Aeromexico's share price, the Autoregressive Vectors methodology was used, which is explained in more detail. then:

At first glance, the VAR methodology (Joselius, K. (2006); Neusser, K. (2016)) is similar to the simultaneous equation models, since it considers various endogenous variables together. But each endogenous variable is explained by its lagged or past values, and by the lagged values of all the other endogenous variables in the model;

there are usually no exogenous variables in the model. When considering models of simultaneous or structural equations, some variables are treated as endogenous and others as exogenous or predetermined (exogenous and endogenous lagging. The term "autoregressive" refers to the appearance of the lagged value of the dependent variable on the right side, and the term "vector" is attributed to the fact that we are dealing with a vector of two (or more) variables, mathematically the model is summarized as follows.

$$A_0 X_t = \sum_{j=1}^{m} A_j X_{t-j} + \varepsilon_t$$

With $E(\varepsilon_t{}'\varepsilon_s) = I \; if \; t = s \; and \; E(\varepsilon_t{}'\varepsilon_s) = 0 \; if \; t \neq s \; and$

Where $A_0 \; y \, A_j$ are matrices and ε_t is the unexplained part of the model, which is included as a vector of white noise variables. As mentioned in the VAR model, it is expressed as a linear variable of its own past values, of all other variables, and of a stochastic error term. Formally the VAR is presented as:

$$B_0 y_t = Z + B_1 y_{t-1} + B_2 y_{t-2} + \cdots + B_p y_{t-p} + e_t$$

Where B_0 is a matrix of $k \; x \; k$ of coefficients of the variables included in the VAR, Z is a vector of constants, $B_1 . \beta_2 \ldots, \beta_p$ are matrices of lag coefficients and e_t is a vector of white noise errors. Furthermore, it is supposed to follow an autoregressive process of order r.

$$e_t = F_1 e_{t-1} + F_2 e_{t-2} + \cdots + F_p e_{t-r} + u_t$$

Once the system is solved the reduced form is found:

$$y_t = c + \emptyset_1 y_{t-1} + \emptyset_2 y_{t-2} + \cdots + \emptyset_p y_{t-p} + \varepsilon_t$$

Where $c = \beta_0^{-1} Z$: $\emptyset = \beta_0^{-1} \beta \; s$; $\varepsilon_t = \beta_0^{-1} e_t$.

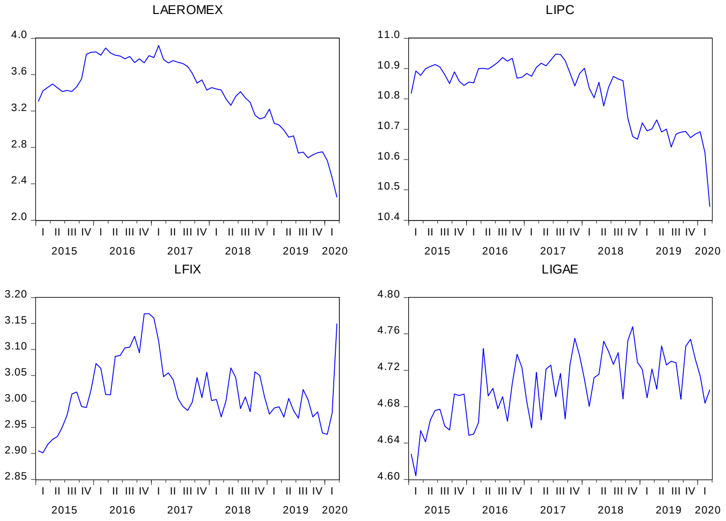
Analysis

Econometric Model

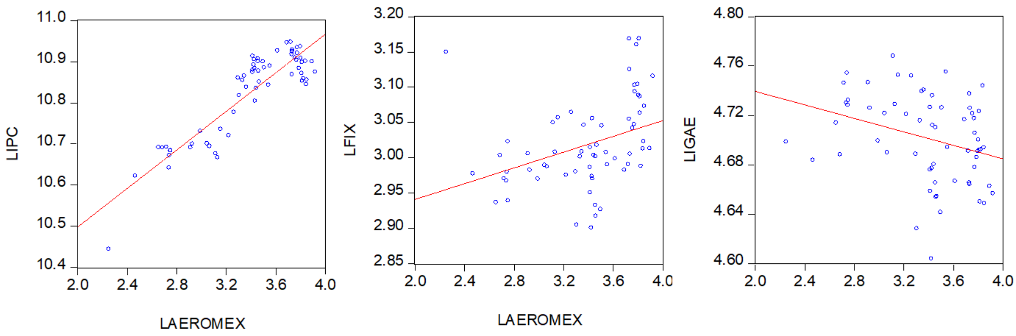
The aim of this model is to analyze the impact that the macroeconomic environment has on the market value of Aeromexico and thereby determine whether the country's economic conditions are decisive in the level of Aeromexico's share price. For this, an Autoregressive Vectors model is proposed with monthly data in the period from January 2015 to March 2020. The variables used to build the model are: AEROMEX (monthly closing price), IPC (Price Index and Quotes), FIX (peso-dollar exchange rate) and IGAE (Global Index of Economic Activity). The following graph shows the variables in their logarithmic version to illustrate their behavior. In it, it is possible to observe that the market value problems in Aeromexico come from the end of 2016 and have not recovered. Likewise, the Scatter is presented where we can observe the most significant functional is that of Aeromexico with the IPC. The next procedure was to calculate the yields and growth rates of the variables, but before that, the unit root tests were performed. The test results show that the variables have order of integration 1, so it is possible to include them in the model with a difference.

Graph 1

Variable behavior



Scatter diagrams



Source: Own elaboration with Eviews

Table 1

Unit Roots Test

Variable	*ADF*	*Phillips-Perron*	*KPSS*	*Integration order*
laeromex	*-7.644806 (0.0000)*	*-6.259836 (0.0000)*	*0.085560 (0.146000*)*	*I(1)*
lipc	*-7.752026*	*-6.280828*	*0.058404*	*I(1)*

	(0.0000)	*(0.0000)*	*(0.146000*)*	
lfix	*-6.499266* *(0.0000)*	*-6.093774* *(0.0000)*	*0.143522* *(0.463000*)*	*I(1)*
ligae	*-6.309609* *(0.0000)*	*-15.85080* *(0.0000)*	*0.360857* *(0.463000*)*	*I(1)*

Source: Own elaboration with data from Eviews

The specification of the model obtained is as follows:

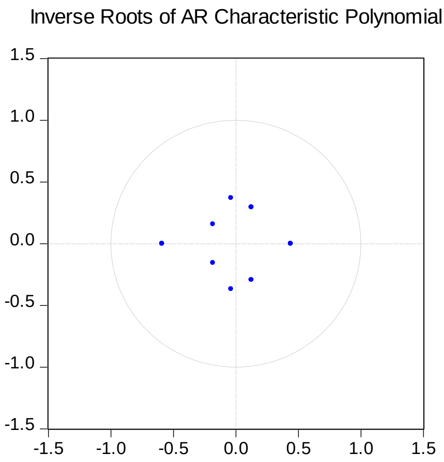
D(LAEROMEX) = C(1,1)*D(LAEROMEX(-1)) + C(1,2)*D(LAEROMEX(-2)) + C(1,3)*D(LFIX(-1)) + C(1,4)*D(LFIX(-2)) + C(1,5)*D(LIGAE(-1)) + C(1,6)*D(LIGAE(-2)) + C(1,7)*D(LIPC(-1)) + C(1,8)*D(LIPC(-2)) + C(1,9) + C(1,10)*DUM2

D(LFIX) = C(2,1)*D(LAEROMEX(-1)) + C(2,2)*D(LAEROMEX(-2)) + C(2,3)*D(LFIX(-1)) + C(2,4)*D(LFIX(-2)) + C(2,5)*D(LIGAE(-1)) + C(2,6)*D(LIGAE(-2)) + C(2,7)*D(LIPC(-1)) + C(2,8)*D(LIPC(-2)) + C(2,9) + C(2,10)*DUM2

D(LIGAE) = C(3,1)*D(LAEROMEX(-1)) + C(3,2)*D(LAEROMEX(-2)) + C(3,3)*D(LFIX(-1)) + C(3,4)*D(LFIX(-2)) + C(3,5)*D(LIGAE(-1)) + C(3,6)*D(LIGAE(-2)) + C(3,7)*D(LIPC(-1)) + C(3,8)*D(LIPC(-2)) + C(3,9) + C(3,10)*DUM2

D(LIPC) = C(4,1)*D(LAEROMEX(-1)) + C(4,2)*D(LAEROMEX(-2)) + C(4,3)*D(LFIX(-1)) + C(4,4)*D(LFIX(-2)) + C(4,5)*D(LIGAE(-1)) + C(4,6)*D(LIGAE(-2)) + C(4,7)*D(LIPC(-1)) + C(4,8)*D(LIPC(-2)) + C(4,9) + C(4,10)*DUM2

According to the unit circle, the model is stable with two lags, as shown below:



Source: Own elaboration with Eviews

To ensure that the model is not expurious, the Autocorrelation tests were performed, with four lags, and the results show that none of these is statistically significant, so it can be said that the model does not present autocorrelation problems in the residuals.

Table 2

VAR Residual Serial Correlation LM Tests

Null hypothesis: No serial correlation at lags 1 to h						
Lag	*LRE* stat*	*Df*	*Prob.*	*Rao F-stat*	*Df*	*Prob.*
1	*20.74978*	*16*	*0.1883*	*1.328223*	*(16, 132.0)*	*0.1893*
2	*39.36250*	*32*	*0.1736*	*1.263773*	*(32, 145.4)*	*0.1776*
3	*60.86734*	*48*	*0.1006*	*1.321233*	*(48, 136.9)*	*0.1086*
4	*71.66033*	*64*	*0.2388*	*1.138784*	*(64, 123.6)*	*0.2669*

**Edgeworth expansion corrected likelihood ratio statistic.*

Source: Own elaboration with data from Eviews

The following correctly specified tests are those corresponding to Normality and Heteroskedasticity. The following table shows the statistics obtained and the p-values that show normal residuals without heteroskedasticity.

Table 3

Normality and Heteroskedasticity Tests

Test	*Value*
White Heteroskedasticity (with cross terms)	*577.9712 (0.1252)*
Jarque – Bera	*3.587681 (0.8923)*

Source: Own elaboration with data from Eviews

Once the correct specification was determined, the Granger Causality test was performed to determine if there was a correlation between Aeromexico's behavior (yields) and the movements that occurred in the macroeconomic variables during the analysis period. The results show that the null hypothesis that indicates that the No Granger variables cause Aeromexico cannot be rejected, which implies that the behavior in the market of this issuer is not correlated to variations in the exchange rate, the IPC or the economic activity.

Table 4

VAR Granger Causality/Block Exogeneity Wald Test

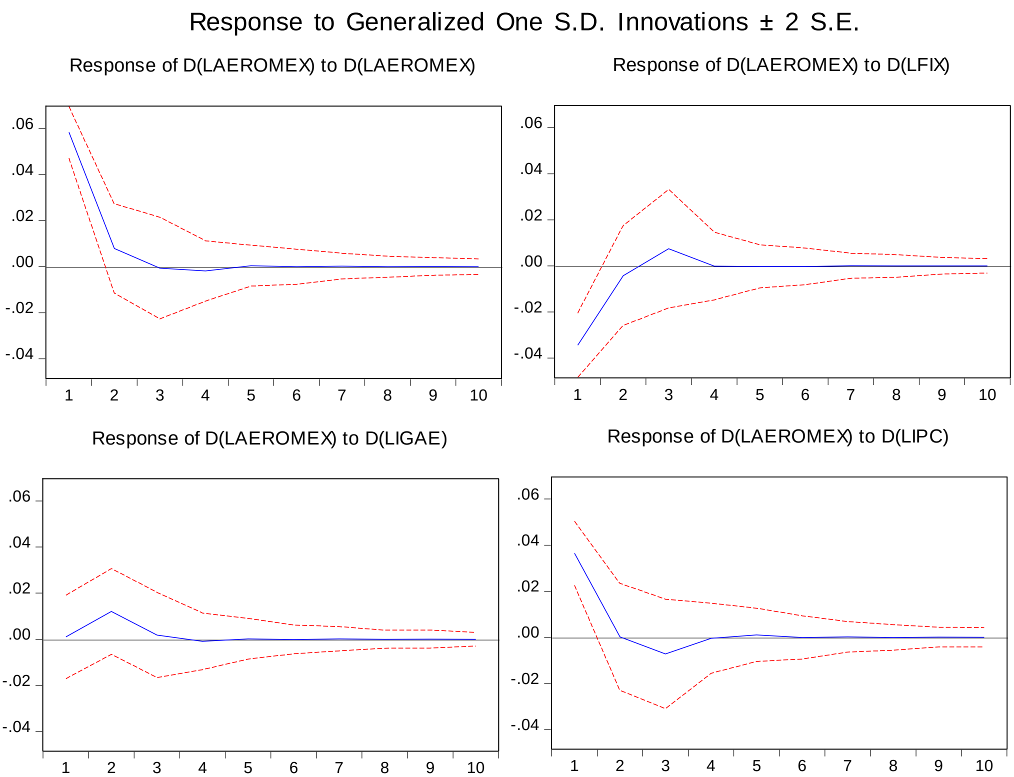
Dependent variable: D(LAEROMEX)			
Excluded	*Chi-sq*	*df*	*Prob.*
D(LFIX)	*0.984377*	*2*	*0.6113*

D(LIGAE)	*2.000652*	*2*	*0.3678*
D(LIPC)	*0.551446*	*2*	*0.7590*
All	*4.491112*	*6*	*0.6105*

Source: Own elaboration with data from Eviews

To expand the previous analysis, the Impulse-Response Functions were listed, shown below. In it we can observe that Aeromexico to a shock in the exchange rate in negative terms and in the third month it takes positive values but that effect is diluted from the fourth month. As for the market, a shock in the IPC implies a fall in aeromexico that is only perceived for three periods and is diluted as of the fourth month. And finally, the effect of a shock on economic activity does not statistically influence Aeromexico's market value.

Graph 2



Source: Own elaboration with data from Eviews

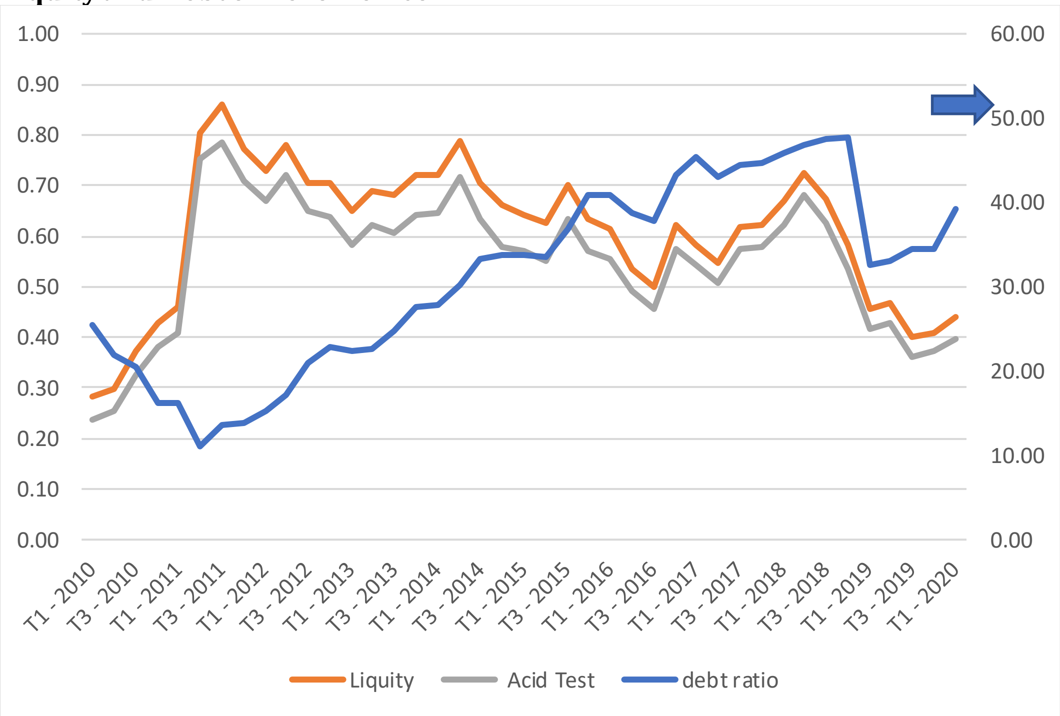
Conclusion

The results obtained with the Autoregressive Vector Model give us indications that external factors have not been the cause of the loss in value of Aeromexico's Market, but rather internal factors and investment decisions over the past ten years. This is evident in the following graphs, in the first the liquidity and the level of indebtedness of the company are presented and in the second the reasons of profitability that Aeromexico has offered in the last five years are presented. As can be seen, liquidity has had a downward trend which, together with the increase in debt, has caused it problems in solving its short-term commitments. In terms of profitability, net margin and return on assets have been on a ten-year downward trend for ten years, and the deepest problem is seen in the return on capital that fell in negative terrain since 2017 and has not achieved recover to positive values.

Once recovery features are reported, Aeromexico must focus on covering the tourism market, in combination with the business-oriented one, so that it can reactivate with the expected increase in its income. Likewise, efforts should be focused in order to exercise greater control over its main operating costs, to the extent possible. Another factor of central importance is to seek certification of the aircraft in its fleet, to be in a position to use them in planning its operations. In this sense, there is a component of an endogenous nature, very important in the financial situation of the main Mexican airline. However, public policy actions must also be articulated, aimed at creating a less adverse environment for the development of the aviation industry in Mexico.

Graph 3

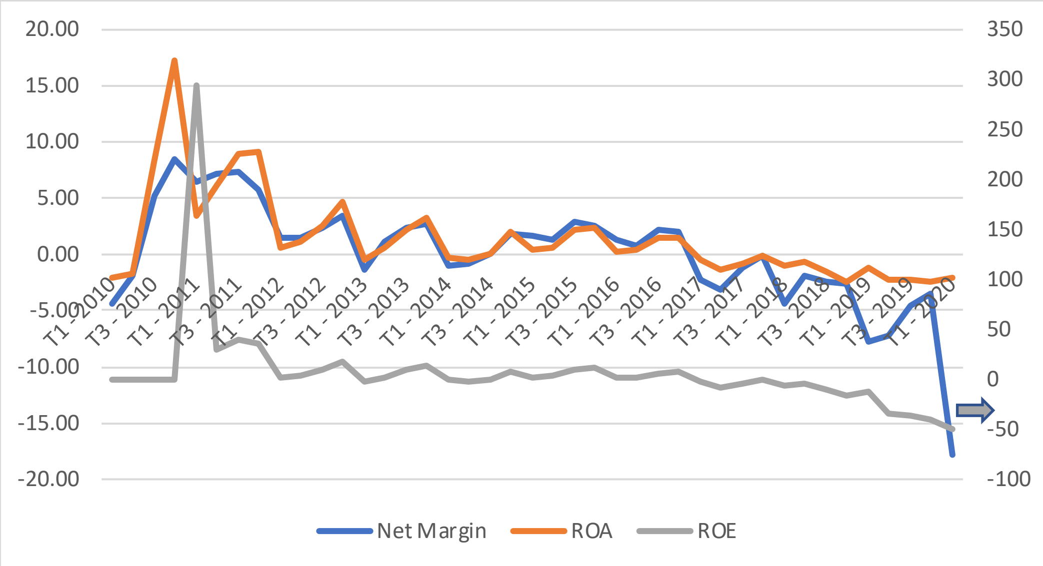
Liquity and Debt of Aeromexico



Source: Own elaboration with data from Economatica

Graph 4

Rentability of Aeromexico



Source: Own elaboration with data from Economatica

References

[1] Aeropuertos y Servicios Auxiliares (ASA). Secretaría de Comunicaciones y Transportes. (2020). Actividades Aeroportuarias. Llegadas por Aeropuerto (Flujo de pasajeros y vuelos). Enero abril 2019-2020. Disponible en: https://www.datatur.sectur.gob.mx/SitePages/TrasnAerea.aspx

[2] Agencia Federal de Aviación Civil (AFAC). Secretaría de Comunicaciones y Transportes. (2020). Actividades Aeroportuarias. Flujo de pasajeros aéreos por aerolínea. Pasajeros transportados en vuelos nacionales por principales aerolíneas mexicanas. Pasajeros transportados en vuelos internacionales por principales aerolíneas. Enero abril 2019-2020. Disponible en: http://www.datatur.sectur.gob.mx/SitePages/FlujoPorAerolinea.aspx

[3] Álvarez, H. (1997). ¿Es posible pronosticar la crisis empresarial? *Revista de Economía y Estadística*, Cuarta Época,Vol. 36, No. 1: 2º Semestre de 1995 (volumen 36); 1º y 2º Semestre (1996-1997), (volúmenes 37-38), pp. 5-11. Disponible en: http://revistas.unc.edu.ar/index.php/REyE/article/view/3783

[4] Canseco, A., Zuñiga, C. y Blanco, L. (2015). Análisis estratégico sobre el desarrollo de las líneas aéreas de bajo costo en México. *Nova scientia,* 7(15), 343-363. Recuperado en 05 de junio de 2020, de http://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S2007-07052015000300343&lng=es&tlng=es

[5] Economatica Decisiva. Database. https://economatica.com/
[6] Joselius, K. (2006). The Cointegrated VAR model. Methology and Aplications. Oxford University Press.
[7] Lichtle, P., Sánchez, J., López, D., y Padilla, J. (2015). Evolución de la conectividad en la red aérea mexicana y el crecimiento del turismo nacional. *Documentos de Investigación Estadística y Económica.* No. 2015-2. Febrero, 2015. Secretaría de Turismo. Subsecretaría de Planeación y Política Turística. Disponible en: https://www.datatur.sectur.gob.mx/Documentos%20Publicaciones/2015_2_DocInvs.pdf
[8] Neusser, K. (2016). Time Series Econometrics. Springer
[9] Pesaran, H. (2015). Time Series and Panel Data Econometrics. Oxford University Press. UK
[10] Urzúa, J., y Muñoz, M. (s.f.). Líneas aéreas ante el incremento de los costos de seguiridad, impuestos y turbosina. *Red Internacional de Investigadores en Competitividad. Memoria del II Congreso*. Universidad de Guadalajara. Centro Universitario de Ciencias Económico Administrativas. Disponible en: https://riico.net/index.php/riico/article/view/961/320