



*National Institute for Economic Research*

# **ECONOMY AND SOCIOLOGY**

**THEORETICAL AND SCIENTIFIC JOURNAL**  
**founded in 1953**

**No. 1**  
**June 2021**

***ISSN: 1857-4130***

***E-ISSN: 2587-3172***

***Category „B+”***

***<https://economy-sociology.ince.md>***



**Chisinau, 2021**

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*The journal „Economy and Sociology” is recognized as scientific publication in the field, accredited of „B+” category, Decision of the National Agency for Quality Assurance in Education and Research, No. 8 of June 26, 2020.*

*The journal is indexed in the following international databases: DOAJ IDEAS, EconPapers, LogEc, SOCIONET, INDEX COPERNICUS, OAJI, RePEc, EZB, IBN, eLIBRARY.RU, CROSSREF – Digital Object Identifier (DOI)*

*Indexer and bibliographic editing: E. Migunova, S. Neaga.A, Catana, N. Dalinitchi*

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in collaboration with  
the Institute of Legal, Political and Sociological Research, Republic of Moldova

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## ON MOLDOVA'S INCREMENTAL CAPITAL-OUTPUT RATIO AND THE DESIGN OF ECONOMIC POLICY

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**DOI:** <https://doi.org/10.36004/nier.es.2021.1-01>

**JEL Classification:** E17, E29

**CZU:** 330.55+338.2](478)

### ABSTRACT

*The paper analyses the notion of an economy's Incremental Capital-Output Ratio and proceeds to provide estimates of the Incremental Capital-Output Ratio for the Moldovan economy utilising National Accounts data. The purpose of the study is to calculate estimates of the Incremental Capital-Output Ratio for the Moldovan economy's transition period to date, utilise the derived estimates to analyse aspects of economic growth in Moldova over its transition period and use the average value of the Incremental Capital-Output Ratio over the recent period for simulation and forecasting purposes. On the whole the reported empirical estimates of the Incremental Capital-Output Ratio for the Moldovan economy lie within the range of values reported in the economic literature. Furthermore, the evolution of the Incremental Capital-Output Ratio in the first few years of sustainable growth in Moldova reflects the wide availability of unemployed or underemployed resources in the economy at the time thus allowing the achievement significant economic growth which was associated with low values of the Incremental Capital-Output Ratio over the period. The paper proceeds to utilise the recent Incremental Capital-Output Ratio estimates for the Moldovan economy over the period 2015 to 2019 inclusive to calculate an average estimate of the Incremental Capital-Output Ratio and use this average estimate to generate estimates of the Gross Fixed Capital Formation ratios as a share of GDP required to reach a number of indicative growth paths in the medium to long term. It is notable that the growth path which is attainable given current conditions in the economy is close to the latest medium term forecasts by International Financial Institutions and the Ministry of Economy and Infrastructure. The paper concludes by discussing the design of economic policy and development planning in Moldova and suggesting areas for further work.*

**Keywords:** Gross Fixed Capital Formation, Gross Domestic Product, Incremental Capital-Output Ratio, economic policy

*Lucrarea analizează noțiunea de Raportul incremental capital-ieșire (ICOR) al unei economii și prezintă estimări ale ICOR pentru economia Republicii Moldova, utilizând datele conturilor naționale. Scopul studiului este de a calcula estimările ICOR pentru perioada de tranziție a economiei Republicii Moldova până în prezent, de a utiliza estimările derivate pentru a analiza aspecte ale creșterii economice din Republica Moldova în perioada de tranziție și de a utiliza valoarea medie a ICOR din perioadă recentă pentru simulare și prognoză. În ansamblu, estimările empirice ale raportului incremental capital-ieșire (ICOR) pentru economie se încadrează în intervalul de valori raportate în literatura economică. În plus, evoluția raportului incremental capital-ieșire (ICOR) în primii câțiva ani de creștere durabilă reflectă disponibilitatea largă a persoanelor șomere sau subocupate în economie la momentul respectiv,*

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permițând astfel realizarea unei creșteri economice semnificative care a fost asociată cu valori scăzute ale raportului incremental al producției de capital pe parcursul perioadei. În lucrare se utilizează estimările recente ale Raportului incremental capital-ieșire (ICOR) pentru economia Republicii Moldova în perioada 2015-2019, inclusiv pentru a calcula o estimare medie a ICOR și a utilizarea acesteia pentru a genera estimări ale ratelor brute de formare a capitalului fix ca pondere din PIB necesară pentru a atinge o serie de căi orientative de creștere pe termen mediu și lung. Este de remarcat faptul că calea de creștere care poate fi atinsă în condițiile actuale ale economiei este apropiată de cele mai recente prognoze pe termen mediu ale instituțiilor financiare internaționale și ale Ministerului Economiei și Infrastructurii. Lucrarea se încheie cu proiectarea politicii economice, planificarea dezvoltării în Republica Moldova și sugerând domenii pentru lucrări ulterioare.

**Cuvinte cheie:** Formarea brută a capitalului fix, Produsul Intern Brut, Raportul incremental capital-ieșire (ICOR), politică economică

В статье анализируется экономический термин Предельный коэффициент капиталоотдачи (ICOR), а также осуществляются расчеты данного коэффициента для экономики Республики Молдова с использованием данных национальных счетов. Цель исследования - рассчитать значения Предельного коэффициента капиталоотдачи для переходного периода молдавской экономики до настоящего времени, использовать полученные данные для анализа аспектов экономического роста в Республике Молдова в течение переходного периода и использовать среднее значение данного коэффициента за последний период с целью моделирования и прогнозирования. В целом, представленные эмпирические значения Предельного коэффициента капиталоотдачи для экономики Республики Молдова находятся в пределах диапазона значений, приведенных в экономической литературе. Кроме того, эволюция Предельного коэффициента капиталоотдачи в первые несколько лет устойчивого роста отразила наличие большого количества безработных или работников с неполной занятостью в экономике, в то же время это позволило добиться значительного экономического роста, который был связан с низкими значениями данного коэффициента за данный период. В статье используются последние рассчитанные данные Предельного коэффициента капиталоотдачи для экономики Республики Молдова за период с 2015 по 2019 годы включая расчеты среднего значения данного коэффициента и использования данного среднего значения для получения оценок коэффициентов валового накопления основного капитала как доля ВВП необходимая для достижения ряда ориентировочных траекторий роста в среднесрочной и долгосрочной перспективе. Примечательно, что траектория роста, достигаемая в нынешних условиях в экономике, близка к последним среднесрочным прогнозам международных финансовых институтов и Министерства экономики и инфраструктуры. В заключении статьи предлагается к обсуждению разработка экономической политики и планирование развития в Республике Молдова, а также предлагаются направления для дальнейшей работы.

**Ключевые слова:** Валовое накопление основного капитала, валовой внутренний продукт, Предельный коэффициент капиталоотдачи, экономическая политика

## INTRODUCTION

The notion of an economy's Incremental Capital-Output Ratio (ICOR) has been widely used in theoretical and empirical work in economics. Following the seminal contributions by Harrod (Harrod, 1939) and Domar (Domar, 1946), estimates of an economy's ICOR have been widely used by analysts to generate medium to long term forecasts of economic growth as a function of a projected investment path in the future or to generate estimates of the required volume of investments to support the attainment of a targeted path of real Gross Domestic Product for the economy under consideration.

The purpose of this paper is to analyse the notion of the ICOR, provide estimates of the evolution of the ICOR for the Moldovan economy over its transition period to date and compare the derived estimates with the values expected from studies in the economic literature, analyse aspects of economic growth in Moldova in the light of the calculated ICOR estimates over time, utilise the average



value of the ICOR over the recent period to estimate the investment as a share of GDP which is required to reach a number of selected economic growth paths and discuss briefly the design of economic policy and development planning in Moldova.

The rest of the paper is organised as follows: The next section contains a brief literature review. It presents the definition of the ICOR and analyses briefly the ICOR's properties, it presents the hypothesis regarding the expected range of values of the ICOR according to the economic literature and discusses the use of the ICOR for policy-relevant simulation and forecasting purposes. The next section describes the data used for the analysis contained in the paper. These data include the annual evolution of the nominal Gross Fixed Capital Formation and the nominal GDP estimates, as well as the real annual GDP growth rates over the period 1995 to 2019 inclusive. The data section includes also an analysis of the evolution of the economy's output over Moldova's transition period. The paper's next section contains the main results of the paper. These include an analysis of the evolution of the ICOR over Moldova's transition period to date and the use of the average value of the ICOR over the period 2015 to 2019 to estimate the share of Gross Fixed Capital Formation in GDP required in order to reach a number of selected real annual growth paths. The paper concludes by discussing aspects linked to the design of economic policy and development planning in Moldova and suggesting areas for further work.

### LITERATURE REVIEW

Following the seminal contribution in the economic literature by Harrod (Harrod, 1939) and Domar (Domar, 1946) the notion of an economy's ICOR has been widely used in theoretical and empirical work in economics.

More specifically estimates of an economy's ICOR have been widely used to generate:

- ) Medium to long-term forecasts of economic growth, as a function of a projected investment path in the future; or
- ) Estimates of the required volume of investments –or of the financing gap that need to be filled by additional investments- in order to support the attainment of a targeted path of real GDP for the economy under consideration.

We define the ICOR of an economy at time  $t$  by the following equation:

$$\text{ICOR} = I(t) / [\text{GDP}(t+1) - \text{GDP}(t)] \quad (1)$$

Equation (1) defines the ICOR as the ratio between:

1. Gross investment at  $t$ ,  $I(t)$ ; over
2. The increase in the economy's volume of Gross Domestic Product (GDP) between  $t$  and the next period,  $t+1$  (i.e., the difference between  $\text{GDP}(t+1)$  and  $\text{GDP}(t)$ , both measures in prices of time  $t$ ).

Dividing the numerator and denominator of equation (1) by the economy's output at time  $t$  we arrive at the expression:

$$\text{ICOR} = \{I(t)/\text{GDP}(t)\} / \{[\text{GDP}(t+1) - \text{GDP}(t)]/\text{GDP}(t)\} \quad (2)$$

The numerator of equation (2) expresses the ratio of Gross Fixed Capital Formation to GDP, both measured at current prices of year  $t$  –which we will call the investment ratio. The denominator of equation (2) is the rate of growth of real GDP between time  $t$  and  $t+1$ .

With regard to the ICOR's characteristics and its range of values it is worth noting the following points:

- ) In general, economic growth in any economy emerges out of a combination of a number of factors of production which, -in addition to investment and its addition to an economy's stock of capital-, includes also: land, labour, entrepreneurship and managerial skills, and institutional arrangements. Growth may, therefore, emerge out of variations in the above-mentioned factors of production and their productivity through time and/or due to variations in their capacity utilisation.

- ) Equation (1) places emphasis on the importance of investment as a driver of economic



growth and, furthermore, assumes a 1-period time lag between investment and growth in output. Equation (1) implicitly assumes that the other factors of production in addition to capital will be forthcoming to support the growth process in the future.

) The typical value of the ICOR found in the economic literature is in the neighbourhood of 3. The available studies in the economic literature suggest that the ICOR value is likely to range between the values of 2 and 7, with the ICOR of industrialized countries expected to lie within the range of 3 to 3.5. This may be taken as the general hypothesis to be empirically investigated. A paper by Ramos, Pastor and Rivas (2008) provided estimates of the ICOR for the Latin American countries, with the average value of the ICOR for these economies being equal to 5.6.

) The ICOR is frequently thought of as providing an indication of the efficiency of investment in an economy. More specifically the lower the value of the ICOR the higher the efficiency of investment in the economy. This can be readily seen if we re-arrange equation (1) as follows:  $GDP(t+1) = [I(t)/ICOR] + GDP(t)$ . Now, and with the values of  $GDP(t)$  and  $I(t)$  given, the lower the value of the ICOR the higher the value of the economy's output in the next period, i.e. the higher the value of  $GDP(t+1)$ .

) The value of the ICOR is unlikely to remain constant over time and, as Gross and Steinherr (Gros & Steinherr, 1995) note, in Eastern Europe the assumption of a constant ICOR may only be a reasonable approximation towards the end of the adjustment phase.

) The ICOR for an economy should be estimated over a period which is considered as typical (or as normal) as possible, and is usually estimated as an average over several periods. Furthermore, the value of the ICOR is a function of the economy's relative position on the business cycle. As emphasised by Thirlwall (Thirlwall, 1989) in attempting to calculate ICORs the stage of the business cycle must always be born in mind. In particular, as noted by Thirlwall (Thirlwall, 1989), if the economy is working below capacity, very little extra capital will be needed to increase output and substantial growth may thus be associated with a relatively small ICOR value. In other words, it is well-known that if the economy is working well below capacity substantial growth may be associated with relatively low investment. We will return to this point when analysing the evolution of the ICOR in the Moldovan economy.

Turning to the use of the ICOR in empirical work, estimates of an economy's ICOR are frequently used to generate:

1. Medium to long-term forecasts of economic growth, as a function of a projected future investment path, as from equation (1), and with the level of real investment determined for any time  $t$ , it readily follows that the path of real GDP is determined by the relationship  $GDP(t+1) = [I(t)/ICOR] + GDP(t)$ .

2. Estimates of the required volume of investments –or the financing gap that need to be filled by additional investment projects- to attain a targeted path of GDP for the economy under consideration. Given a targeted path of real GDP over a future period, equation (1) may be re-arranged to provide a path of the required investment at any  $t$  through the relationship:  $I(t) = ICOR [[GDP(t+1) - GDP(t)]]$ .

To conclude the notion of the ICOR provides a useful conceptual framework for policy-relevant simulation and forecasting exercises, which is widely used mostly because of its simplicity. At the same time, as Easterly (2002) argued, it is worth keeping in mind that:

1. There is little empirical evidence to suggest that investment is either a necessary or a sufficient condition for economic growth in any economy; and
2. The emphasis placed upon simple calculations of investment needs and/or financing gaps has had the counterproductive effect of diverting attention from the deeper determinants of economic growth in any economy.

From a practical point our view is that the analyst and policy advisor in any economy must try to reach a judgement regarding

) The potential usefulness of the ICOR for analytical and forecasting purposes (and the plausible range of values for the economy under consideration); while

) Keeping in mind the need to avoid using the instrument in a mechanical way to generate simulations and forecasts, and the need to retain a focus on the deeper determinants of economic growth and welfare, which should be at the core of development planning and policy interventions in

the medium to long-term. We will return to this point in the concluding section of this paper which discusses the design of economic policy.

### DATA AND OUTPUT DEVELOPMENTS OVER THE TRANSITION PERIOD

Table 1 below provides the data used for the analysis contained in the paper. The table reports the annual estimates of the nominal Gross Fixed Capital Formation in Moldova and Moldova's nominal GDP estimates, as well as the real annual GDP growth rates over the period 1995 to 2019 inclusive. The estimates were compiled by Moldova's National Bureau of Statistics and exclude the Transnistrian region.

**Table 1**

**The evolution of the nominal Gross Fixed Capital Formation, the nominal GDP and the real annual GDP growth rates over 1995-2019**

	Gross Fixed Capital Formation	Gross Domestic Product	Annual real GDP growth rate (%)
1995	1033791	6479715	-1.4
1996	1539894	7797562	-5.9
1997	1774214	8916975	1.6
1998	2011571	9122113	-6.5
1999	2271950	12321554	-3.4
2000	2472468	16019558	2.1
2001	3189965	19051531	6.1
2002	3681781	22555858	7.8
2003	5127275	27618918	6.6
2004	6786848	32031777	7.4
2005	9257932	37651869	7.5
2006	12691495	44754367	4.8
2007	18221720	53429571	3.0
2008	21391380	62921545	7.8
2009	13654952	60429803	-6.0
2010	19432907	86275377	7.1
2011	22877804	98772814	5.8
2012	24929093	105480184	-0.6
2013	27533035	119532871	9.0
2014	34562267	133481634	5.0
2015	35407562	145753642	-0.3
2016	35714916	160814564	4.4
2017	39868390	178880890	4.7
2018	46817866	192508553	4.3
2019	53012618	210378059	3.7

Source: National Bureau of Statistics

**Note:** The Gross Fixed Capital Formation and GDP estimates reported in table 1 are in MDL thousand. The 1995 to 2009 nominal Gross Fixed Capital Formation and nominal GDP estimates were compiled according to the SNA-93/ESA-95 compilation methodology, while the 2010 to 2019 estimates were compiled according to the SNA-2008/ESA-2010 methodology. The data reported in the table exclude the Transnistrian region

It is notable that the data over the period 1995 – 2010 reported in table 1 exclude the early transition years following Moldova's independence in 1991 that were characterised by a collapse in the economy's output. This significant drop in economic activity at the onset of the transition process has been common for many transition economies, but was particularly severe in the case of Moldova due to:

1. The adverse Terms of Trade effect following Moldova's independence. The breakup of the Soviet Union implied that the Moldovan economy lost access to both subsidized inputs to its production process

(including energy), as well as subsidized markets for its export industries. Indeed the empirical studies of Orlowski (Orlowski, 1993) and Tarr (Tarr David, 1994) suggest that Moldova was the hardest hit among all fifteen Former Soviet Union economies from the breakup of the Soviet Union;

2. The impact of natural disasters in 1992 and 1994; and
3. The adverse effect of the Transnistrian conflict in 1992.

It is clear from the evolution of the real GDP growth rate reported in table 1, that the economy experienced negative rates of growth over the period 1995 to 1999 inclusive, with the single exception being the very modest growth of 1.6 % achieved in 1997. From the year 2000 to the year 2008 inclusive the economy of Moldova experienced a sustainable growth in output. This sustained growth episode ended in 2009 when a significant drop of 6 % was registered in Moldova's real GDP reflecting the adverse effect of the international financial crisis on Moldova's economy. Growth resumed in 2010 and the period 2010-2019 is characterised by positive annual rates of growth of real GDP with the exceptions of the slight drops in real output registered in the year 2012 (-0.6 %) and the year 2015 (-0.3 %).

### MAIN RESULTS

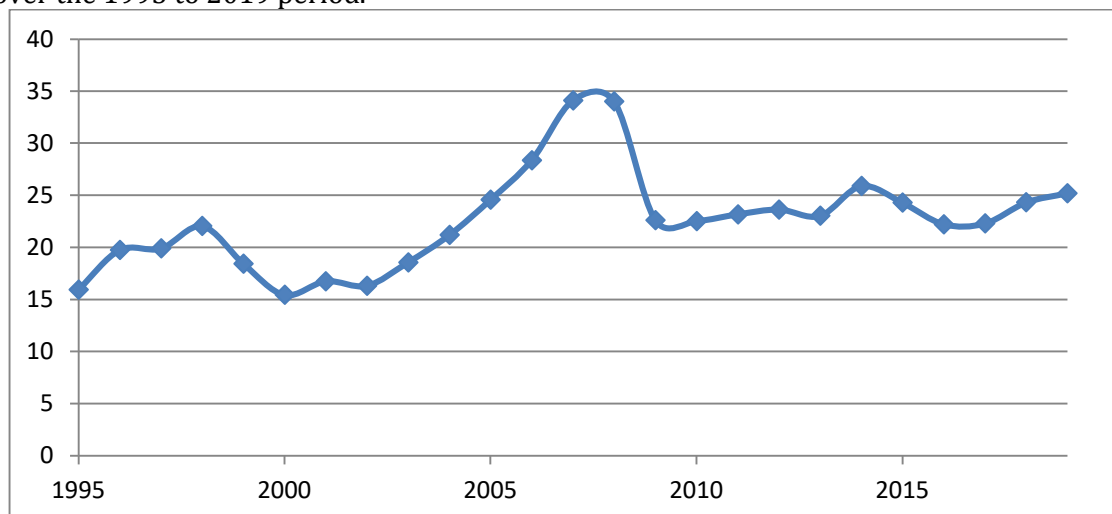
This section utilises the data reported in table 1 above to calculate and analyse the evolution of:

1. The Gross Fixed Capital Formation ratio as a share of GDP over the 1995 to 2019 period inclusive; and
2. The ICOR from the onset of sustained growth in the year 2000 onwards.

The methodology used to derive the ICOR estimates in the paper relies upon the calculation of the ICOR as determined by equation (2) analysed in the literature review section. The results reported below exclude estimates for years when in the next period the economy's real GDP registered a drop. As noted in the literature review section above, the ICOR for an economy should be estimated over a period which is considered as typical (or as normal) as possible, and is usually estimated as an average over several periods. After analysing aspects of economic growth in Moldovan in the light of the calculated ICOR estimates the paper proceeds to use the average value of the ICOR over a recent period to estimate the Gross Fixed Capital Formation ratio as a share of GDP required in order to reach selected economic growth paths in the medium to long term.

With regard to the paper's contribution, it is notable that, in addition to providing concrete estimates of the evolution of the ICOR for the Moldovan economy through time and comparing these estimates with the expected values of the ICOR reported in the economic literature, the paper makes a contribution by providing an analysis of the evolution of the economy's output over time in the light of the values of the calculated ICOR estimates. It furthermore uses the average value of the ICOR over a recent period to study the attainability of selected economic growth paths in the medium to long term and contrasts these results with the latest medium-term forecasts by International Financial Institutions and the Ministry of Economy and Infrastructure.

Graph 1 below depicts of the evolution of the Gross Fixed Capital Formation ratio as a share of GDP over the 1995 to 2019 period.



**Graph 1. The evolution of the Gross Fixed Capital Formation ratio as a share of GDP over 1995-2019**  
Source: Own calculations on National Bureau of Statistics data

It is notable that the period of sustained economic growth in Moldova over the period 2000 to 2008 inclusive was accompanied by a significant increase in the Gross Fixed Capital Formation ratio as a share of GDP from 15.4 % in 2000 to around 34 % in both 2007 and 2008. As depicted in graph 1 the 2009 financial crisis was accompanied by a significant drop in the Gross Fixed Capital Formation ratio as a share of GDP to 22.6 % and the evolution of the Gross Fixed Capital Formation ratio as a share of GDP from 2010 to 2019 has hovered around its average value of 23.6 % over the 2010-2019 period.

We now turn to present estimates of the annual evolution of the ICOR calculated on the basis of the data reported in table 1 according to equation (2). We report ICOR estimates from the year 2000 onwards. It is notable that in the earlier period the annual real GDP growth rates were negative (with the exception of the 1997 estimate) and the ICOR estimates calculated on the basis of equation (2) are nonsensical.

Table 2 below depicts the evolution of the Gross Fixed Capital Formation ratio as a share of GDP (which is referred to as the investment ratio in the table) the annual real GDP growth rate and the ICOR over the period 2000 to 2009 inclusive.

**Table 2**

**The evolution of the Gross Fixed Capital Formation as a share of GDP  
(I ratio) the real GDP growth rate and the ICOR over 2000-2009**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
I ratio (%)	15.4	16.7	16.3	18.6	21.2	24.6	28.4	34.1	34.0	22.6
GDP growth (%)	2.1	6.1	7.8	6.6	7.4	7.5	4.8	3.0	7.8	-6.0
ICOR	2.5	2.1	2.5	2.5	2.8	5.1	9.5	4.4	...	3.2

Source: National Bureau of Statistics and own calculations

The first row in the table provides the evolution of the calculated investment ratio rounded to the first decimal point. The second row provides the evolution of the estimates of the annual rate of growth of real GDP. The final row provides the annual evolution of the calculated estimates of the ICOR rounded to the first decimal point which is defined in accordance with equation (2) by the ratio of: (i) the investment ratio at time  $t$  over (ii) the rate of growth of real GDP at time  $t+1$ . The estimate for 2008 is not reported given that Moldova's real GDP in 2009 registered a drop.

As noted in the literature review section of this article existing empirical studies suggest that the ICOR value of an economy is likely to range between the values of 2 and 7. The range of ICOR values reported in table 2 above lie within this interval, with the single exception being the ICOR estimate for

2006 which reflects the relatively high investment ratio in 2006 (28.4 %) and the modest real growth in GDP experienced in 2007 (3.0 %).

The ICOR values for the 2000-2004 are very low and well below the value of 3. It is notable that this is not surprising as the economy in 2000 emerged from the pronounced depression over the transition period to that date. During the first few years of the 2000-2008 sustainable growth experienced in Moldova the economy operated with significant unemployed or underemployed resources due to the prolonged recession following the break-up of the Former Soviet Union up to and including the year 1999. The availability of idle resources in the economy allowed the achievement of the significant economic growth experienced over the period 2000-2008 which was associated with low values of the ICOR over the period. We should also add that the relatively low value of the ICOR for 2009 reflects the rebound of economic activity in 2010 following the significant drop in output in 2009 (-6.0 %).

Table 3 below depicts the evolution of the Gross Fixed Capital Formation ratio as a share of GDP (which is referred to as the investment ratio in the table) the annual real GDP growth rate and the ICOR over the period 2010 to 2019 inclusive.

Table 3

**The evolution of the Gross Fixed Capital Formation as a share of GDP  
(I ratio) the real GDP growth rate and the ICOR over 2010-2019**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
I ratio (%)	22.5	23.2	23.6	23.0	25.9	24.3	22.2	22.3	24.3	25.2
GDP growth (%)	7.1	5.8	-0.6	9.0	5.0	-0.3	4.4	4.7	4.3	3.7
ICOR	3.9	...	2.6	4.6	...	5.5	4.7	5.2	6.6	...

*Source: National Bureau of Statistics and own calculations*

It is notable that the ICOR estimate for the years 2011 and 2014 is are not reported in the above table as Moldova's real GDP registered drops in 2012 and 2015. The final estimates of the National Accounts for 2020 are not yet available. However, the year 2020 is also likely to be exceptional due to the significant adverse impact of the pandemic and (to a lesser extent) the adverse impact of the drought on the economy's GDP which is expected to register a significant drop.

As noted in the literature review section of this article existing empirical studies suggest that the ICOR value of an economy is likely to range between the values of 2 and 7, with the ICOR of industrialized countries expected to lie within the range of 3 to 3.5. The paper by (Ramos et al., 2008) provided estimates of the ICOR for the Latin American countries, with the average value of the ICOR for these economies being 5.6. It is notable that all the values of the ICOR for the Moldovan economy reported in table 3 lie within the range of expected values in the economic literature. The average value over the period 2015-2018 equals 5.5 and is thus very close to the value of the ICOR for the Latin American countries reported in the paper by (Ramos et al., 2008)

As noted already in the literature review section using the estimated value of the ICOR we may generate forecasts of the GDP growth as a function of the projected investment or, alternatively, calculate the investment required in order to reach a targeted growth path.

We will calculate below the Gross Fixed Capital Formation ratio as a share of GDP which is required to reach annual growth paths of real GDP of 4%, 5 % and 6 % in the medium to long term. It should be emphasised here that an analyst should use the ICOR as an instrument to project the economy's evolution in the medium to long term. In contrast short to medium term projections should rely more on a careful assessment of current economic conditions and their likely trends in the short to medium term.

Now it is notable that the 4%, 5 % and 6 % growth paths analysed below as possible medium to long run growth scenarios are slightly more optimistic that the latest short to medium term projections of real growth for the Moldovan economy, with the 4 % scenario being closer to the short to medium term projections of the International Monetary Fund, the World Bank and the Ministry of Economy and Infrastructure of Moldova. More specifically the latest country report for Moldova of the International Monetary Fund projects the annual rate of growth of real GDP in 2021 at 4.1 %, to be followed by



annual rates of growth of real GDP equal to 3.8% per year for the years 2022 to 2025 inclusive (International Monetary Fund. European Dept., 2020). In its December 2020 economic update for Moldova the World Bank projects the annual rate of growth of real GDP in 2021 at 3.8 % and the annual rate of growth of real GDP in 2022 at 3.7 % (The World Bank, 2020). The latest forecast of Moldova's macroeconomic indicators for the years 2021-2023 published by the Ministry of Economy and Infrastructure projects the annual rate of growth of real GDP in 2021 at 4.7 % to be followed by annual rates of growth of real GDP of 4.0 % and 4.2 % in 2022 and 2023 respectively (Ministerul Economiei și Infrastructurii al Republicii Moldova, 2020).

Turning to our estimation, and given an ICOR value equal to 5.5, in order to reach an annual 4 % real growth path the required ratio of Gross Fixed Capital Formation in GDP is 22%. For an annual 5 % growth path the required investment ratio is 27.5 %, while a 6 % growth path requires an investment ratio of 33 %. We have noted above that the evolution of the Gross Fixed Capital Formation ratio as a share of GDP from 2010 to 2019 has hovered around its average value of 23.6 % over the period. Given current conditions our estimations suggest that the 4 % annual growth path is attainable. However attaining the 5 % and, especially, the 6% annual growth path would require significantly higher investment flows.

It should be emphasised here that the above-mentioned estimates imply that the average value of the ICOR for the Moldovan economy will remain constant and equal to its calculated average value. This is unlikely and the results should be taken as indicative given the current structure of the economy. Furthermore, it is worth keeping in mind that the aim of development planning is likely to be to induce an increase in the overall efficiency of the economy aiming at leading eventually to a drop of the ICOR estimate for the economy.

## CONCLUSION

We now turn to discuss briefly the design of economic policy and development planning in Moldova. The design and conduct of economic policy in Moldova should aim at simultaneously:

1. Increasing investment in the economy; and
2. Inducing an increase in the overall efficiency of the economy (and the efficiency by which the factors of production combine in order to generate growth and development, thus leading to a drop in the value of the ICOR for the economy through time).

To attain the first goal mentioned above a sustained effort should be undertaken to create and maintain a stable macroeconomic and regulatory environment which is conducive to the attraction and retention of domestic and foreign investment in the economy. Of particular importance would be to strengthen the commercial banking system's intermediation which would convert the available domestic savings into productive investment. This sustained effort to create the conditions conducive to investment attraction should also include promotion policies by policy makers supported by targeted interventions, such as the activities of the "Invest Moldova" organisation.

The second goal of economic policy mentioned above should aim at designing and implementing appropriate development strategies at the macro and sectoral levels to induce sustained increases in the efficiency of the economy. Efforts towards this end will be the efficient implementation of the Association Agreement with the EU and the existing National Development Strategy "Moldova 2030", which provides the general framework for the further development of a number of sectoral development strategies as indeed is envisaged in the National Development Strategy "Moldova 2030". It is notable here that work is currently underway by the Moldovan authorities aiming at updating and optimising the sectoral strategies in various key sectors for Moldova's economic growth and development in the years to come which is likely to contribute to the attainment of Moldova's development objectives.

A natural area for further work in the future is the calculation of the ICOR of the Moldovan economy as it evolves through time given the ICOR indicator's insight into aspects of the economic growth record over time and its usefulness for simulation and forecasting purposes.



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## ARTICLE HISTORY

Received 22 September 2020

Accepted 05 February 2021

## CONCEPTUAL ASPECTS AND THE MOST USED PRACTICES IN OBTAINING THE RELIABILITY OF ENTITY VALUE ESTIMATION

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**DOI:** <https://doi.org/10.36004/nier.es.2021.1-02>

**JEL Classification:** E32, F23, F32, F60, F65, M2, P19, P42

**CZU:** 657.922

### ABSTRACT

*Estimating the entity value is topical and of particular interest to managers and business owners, who in turn hope that through the evaluation they will obtain parallel and new possibilities for the business remediation. In this context, managers seek the support of qualified assessors, who will conduct a thorough analysis of the entity's state at a given date, will apply the most effective evaluation methods. In this paper we proposed to investigate and analyze the theoretical aspects of the entity value estimation (EVE), rendered in the opinion of the well-informed researchers and in the light of the evaluation standards. As a result, we note that the criteria of evaluations have been supplemented with the following criterion: by type of activity of the economic entity. We estimate the evaluation methods in order to identify the most accepted and effective method for this important process to the entity. For the practical aspect of the investigation, we focused on the method of comparison in the market valuation of the enterprise, in order to establish the statistical indicators consisting of the calculation of the median and the arithmetic mean. Based on the calculations made in the practical part, we have found that an economic entity can change its own value, in particular, by the way its values are profitable. In estimating the value of the entity, a decision-making function is attributed to the rests with the assessor, in particular with regard to the methods selected and applied professionally by the entity, in compliance with professional valuation standards and current regulations, as the fair estimation of the entity's value leads to a secure future and a guaranteed success.*

**Keywords:** entity, value, valuation methods, valuation standards, evaluator, estimation, median, arithmetic mean.

*Estimarea valorii entităţii este de actualitate şi prezintă un interes deosebit pentru managerii şi proprietarii unei afaceri, care, la rândul lor, speră ca prin intermediul evaluării să obţină paralel şi noi posibilităţi de remediere a businessului. În acest context, managerii apelează la sprijinul evaluatorilor calificaţi, care vor desfăşura o analiză profundă a stării entităţii la o anumită dată, vor aplica cele mai eficiente metode de evaluare. În această lucrare ne-am propus să cercetăm şi să analizăm aspectele teoretice cu privire la estimarea valorii entităţii (EVE), redate în opinia cercetătorilor notorii şi prin prisma standardelor de evaluare. Drept rezultat, menţionăm că a fost completată schema criterială a evaluărilor cu următorul criteriu: după tipul de activitate al entităţii economice. Descriem metodele de evaluare cu scopul de a identifica pe cea mai acceptată şi eficientă metodă pentru acest proces semnificativ pentru entitate. Pentru aspectul practic al investigaţiei ne-am axat pe*

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metoda comparației în evaluarea de piață a întreprinderii, pentru a stabili indicatorii statistici care constau în calculul medianei și a mediei aritmetice. În baza calculelor efectuate în partea practică, am constatat că o entitate economică își poate schimba propria valoare, în special, prin modul de rentabilizare a valorilor sale. În procesul de estimare a valorii entității, o funcție decizională revine evaluatorului, în special în ceea ce privește metodele selectate și aplicate în mod profesional de către acesta, prin respectarea standardelor profesionale de evaluare și a reglementărilor actuale, deoarece estimarea justă a valorii entității conduce la un viitor sigur și la succes garantat.

**Cuvinte-cheie:** entitate, valoare, metode de evaluare, standarde de evaluare, evaluator, estimare, mediană, media aritmetică.

Оценка стоимости предприятия представляет особую актуальность и интерес для менеджеров и владельцев бизнеса, которые, в свою очередь, ожидают, что посредством оценки параллельно получают новые возможности для налаживания бизнеса. В этом контексте менеджеры пользуются поддержкой квалифицированных оценщиков, которые проводят углубленный анализ состояния предприятия на заданную дату и применяют наиболее эффективные методы оценки. В данной статье мы стремились исследовать и проанализировать теоретические аспекты оценки стоимости объекта (EVE), представленные по мнению известных исследователей и с точки зрения стандартов оценки. В результате отметим, что критериальная схема оценок была дополнена критерием «по виду деятельности хозяйствующего субъекта». Мы описываем методы оценки, чтобы определить наиболее приемлемый и эффективный метод для этого важного для компании процесса. Что касается практического аспекта исследования, мы сосредоточились на методе сравнения при рыночной оценке предприятия, чтобы установить статистические показатели, состоящие в вычислении медианы и среднего арифметического. На основе расчетов, проведенных в практической части, мы установили, что экономический субъект может изменять собственную стоимость, в частности, делая свои ценности прибыльными. В процессе оценки стоимости предприятия функция принятия решений возлагается на оценщика, в частности, в отношении выбранных и применяемых методов, путем соблюдения профессиональных стандартов оценки и действующих нормативных актов, поскольку справедливая оценка стоимости предприятия ведет к безопасному и гарантированному будущему.

**Ключевые слова:** субъект, стоимость, методы оценки, стандарты оценки, оценщик, оценка, медиана, среднее арифметическое.

*The value is estimated most accurately by comparison.*

## INTRODUCTION

Estimating the value of the entity is an activity that becomes increasingly important, because the purpose of all economic operators is to carry out a profitable business. The assessment of the economic entity aims to provide a value of the economic entity, in this context the estimate of the value of an enterprise is intensified because its success ultimately depends on the level and how to remedy the value increase, also through management that focuses on the value of the entity. We argue that increasing the value of an entity contributes to a better reputation, which strengthens its safe positioning on the market, but also its stability. "The enterprise is itself a changing entity, obliged to continuously improve and adapt its level, structure and quality of transformations on input elements to meet the needs of the market, personnel, administration and to win itself in terms of profit, image, market share, extension capacity, resistance to competition, etc." (Deliu et al., 2011, 81-87).

We mention that the evaluation represents the process of estimating the value of goods of different types: tangible or intangible, movable or immobilized, of business, business actors, we emphasize that it is also the most important step in determining the fair value of an economic entity. The evaluation work is carried out by an evaluator through a thorough analysis and the outcome of the evaluator's work is based and confirmed using the entity's evaluation methods, based on the actual purpose of the evaluation. Each evaluation method refers to a time model that contains information about how the entity is evolving. Due to the evaluation of the value of the business, managers can identify new possibilities for the development and expansion of the

business, but also eliminate the weaknesses of the company's activity.

The economy is always developing, which is why the entity's valuation methods must comply with these changing aspects, which are determined by local and international market rules. Investigating the aspects of assessing the cost and the economic entity's price mechanisms at a given time are very essential in calculating its fair value.

At the same time, we consider the overall value of the economic entity in the light of new evaluation methods versus the traditional ones to be very difficult to establish. At the same time, we note that in the practice of evaluation there are no standard models that allow the choice of evaluation methods, as it depends on many factors that are specific to a concrete situation. However, the evaluation standards are valid by the evaluation standards.

The declared role of evaluation standards is mainly: to *establish* procedures that to allow value certification under conditions comparable to national (domestic) and international law, evaluation practice and accounting standards; to *assist* evaluators by defining the fundamental elements of evaluation, creating a precise and compatible basis in practical activity; and to *ensure* quality parameters for evaluation beneficiaries" (Țuțui, f.a.).

### LITERATURE REVIEW

Since the valuation has the ability to monitor certain external actions related to the entity, such as the influence of fixed assets, changes in market value in respect of intangible assets and others, respectively, we may mention that the valuation may also identify changes that are not found and presented in the accounting reports in a real way that will help identify the entity's actual value. The main institutions of governance systems actively support the assessment of the entity's value. Of course, the evaluation contributes to the improvement, but, nevertheless, it is not always analyzed in a critical way (*The Evaluation Enterprise*, f.a., 2020, 6).

A proposed objective for the achievement of this study is to deepen knowledge in the conceptual field in the process of estimating the entity's value. To this end, we will then give a description of the scientific approach to assessing the value of the entity in the literature.

Most frequently, the valuation is carried out on financial markets and less on other markets in order to clarify the financial situation, to establish the adaptation to the regulations in force or the association of proprietary transactions. In support of this process, the International Assessment Standards (IES) are developed globally for the purpose of carrying out the evaluation tasks, by using the generally recognized concepts and principles. IES ensures transparency and consistency in evaluation practice. In this context, the International Assessment Standards Committee (IVSC) contributes to the formation to practical approaches to the activities and qualifications of professional assessors. At the same time, we consider it important to stress that in order to comply with international evaluation standards, the evaluation must be carried out in accordance with all the rules that are established by the IES, arising from the purpose and conditions set out in the evaluation process.

For the purpose of estimating the value of the entity, the completion of the entity's valuation process should be carried out on a regular and credible basis. This process begins by identifying by the evaluator the entity that should be evaluated and the basis of the evaluation and ends with reporting the conclusions to the client.

The evaluation has been defined by some researchers as a set of techniques, processes and methods by which the value of a good, group of goods, asset or enterprise is established, is a simple operation of weighing, measuring, etc., being a complex process of estimating the value (Deaconu, 2002).

The evaluation is also defined by other researchers "as the process of estimating a type of value (e.g. market value, insurance value, subjective value, liquidation value, etc.) of a particular identified property at a certain date", and the estimation process involves both elements of "assessment science" and elements of the evaluator's ability, synthesized by the word "assessment art" (*Proiect Procesul de Evaluaare a Intreprinderii - Sinteză Diagnosticelor*, f.a.).

The Romanian researcher Ion Ionita states that "the evaluation of the organization involves not only establishing the value of some properties or assets of its heritage, but also determining its

ability to generate cash flows that the owner of the organization will benefit from, since it is an asset which in turn generates goods" (Ioniță, 2007).

If we define the valuation process from the accounting point of view, it "consists in the quantification and expression in monetary units of the size of the assets (assets, liabilities, expenses and revenues) and of the economic and financial operations with changes in the assets mass" (Oprea and Ristea, 2000).

Thus, by generalizing the above mentioned, we define the estimate of *the entity's value* as the process of determining two types of values (market or non-market) of the business, with the main purpose of profit-making, and the performance, determined by the evaluator within a determined period, allows the development in perspective through a more efficient organization of revenues, through multilateral market research and, inevitably, competition. In the opinion of the authors, the *purpose of an evaluation* is, firstly, to establish the value of the entity by applying the appropriate valuation methods in accordance with the specific features of that entity, in particular by applying the processes and methods, which are maximum accepted by successful evaluators and, secondly, in continuously monitoring and managing the value creation process in order to maximize the market value. *The essential role* in the process of actual estimation of the value of the entity shall be assigned to the assessor with professional skills, theoretical and practical knowledge.

If we refer to the national level, in the Legislation of the Republic of Moldova, "assessment is a process of determining the value of the evaluation object at a determined date, taking into account the physical, economical, social and other factors that influence the value".

According to the Guide on Participatory Monitoring and Evaluation of Social Services, referring to civil society organizations, "the evaluation is an activity of in-depth analysis of interventions in the light of the results achieved, the impact, the satisfaction of needs, to which the public policy, the project, the service, the planned activity have set out to respond. The evaluation refers to the analysis of the extent to which the objectives have been achieved, the exposure of assessments of how effective and efficient the process was, how relevant the activities were, how sustainable the results were achieved" [SOROS, 2019].

Some bibliographical sources related to the investigated topic reveal that these researches are focused on the description of the conceptual foundations of the evaluation activity, on the types of values that represent the basis of the evaluation activity, on the description of the evaluation methods, the place, the role of the evaluation of entities and their regulation in the activity of commercial banks, etc. (Băncilă, 2007).

The financial aspect of the entity's valuation is quite complex, as it represents a synthesis area, where various methods of investment selection, financial forecasting and financial decision-making are used at the same time. In economic practice, the assessment is analyzed as an activity of estimating the value of economic goods, property rights over them, technologies and advantages relating to the assets of economic units and the future profitability created by them. It is worth mentioning that the evaluation process, according to the analyzed bibliography, takes place in stages and constitutes a set of well-defined operations that initiate with the definition of the evaluation mission, follows the collection and analysis of information by applying the methods appropriate to this process, so that finally a special act – the evaluation report (Băncilă et al., 2014).

Further to the study, another researcher in the field proposed a new paradigm within the process of evaluating the heritage of the republic, being argued due to the delimitation of the currents of the theory of evaluation to the contemporary stage. The author argues the correctness of the evaluation theory based on the value based on low entropy, the appropriateness of developing the method of estimating the actual value of the goods according to the entropic and classified value. This paradigm imposes ways of evaluating public assets in emerging economies as a result of highlighting the particularities of the public heritage assessment and the elaboration of the methodology for the evaluation of public assets in the Republic of Moldova (Albu, 2012).

The assessment importance of the value of economic entities in the Republic of Moldova, was initially highlighted during the period of privatization and restructuring of enterprises, which was considered as an important indicator in the development of the real estate market and the market for evaluation services, respectively of the evaluation activity. At the stage of privatization of



enterprises, the primary concern focused on the correct calculation of the value of assets for privatization, including the approval, modification and completion of normative acts in the field of privatization by the Government of the Republic of Moldova, included in Judgment No. 561 of 10.08.1995. I will mention that for the mass privatization of enterprises the method of republican auctions with subscription to shares was applied, with the participation of 3.1 million citizens or 89 percent of the holders of property vouchers. Over the course of a year and a half, 15 Republican auctions with stock underwriting, 94 auctions and 11 public contests were held. As a result, 2235 enterprises (in whole or in part) and 191 thousand apartments were privatized in exchange for property vouchers. Subsequently, the evaluation activity was established by the Law on evaluation activity, No. 989-XV of 18.04.2002, in which we find the definition of the general concept of evaluation, with the exception of the definition of value.

The most important issues put forward for debate and resolution were: the organization of the framework of the evaluation work, the review of the legal, methodological and practical aspects of the evaluation work. In this context, in 2003, the Provisional Regulation on the evaluation of immovable property, drawn up under the 2002 Law, without including methods and techniques for the evaluation of enterprises as property complexes, was approved, and "The State Agency for Land relations and Cadaster had to draw up appropriate measures for the application of the provisions of the nominated Regulation in order to estimate the market value of real estate by valuation undertakings, regardless of the type of ownership and the organizational-legal form".

Simultaneously, in the context of globalization, state capacity to shape the national economic policy, including the using of attracted foreigner funds and resources, operational efficiency of natural, resources, intellectual capacity growth, location and internalization advantages, connections to world markets can increase (Plaskova et al., 2018), (Spivakovskyy et al., 2019), (Prodanova et al., 2019).

Currently, in the Republic of Moldova the Law on Evaluation Activity No. 989-XV of 18.04.2002 is valid, published on 16-07-2002 in Official Monitor No. 102 art. 773, version in force from 17.08.18 on the basis of amendments by LP173 from 26.07.18, MO309-320/17.08.18 art.492. The central public administration body is the Agency for Land and Cadaster Relations of the Republic of Moldova, which carries out the state policy in the field of land relations, cadaster, geodesy, cartography, geoinformatics, subordinated by the Government of the Republic of Moldova according to Government Decision No. 383 of 12 May 2010, with subsequent amendments and additions.

On 21 April 2018, representatives of the Institute of Standardization of Moldova (ISM), ministries, public associations of assessors, academia and the private sector participated in the first meeting of the Working Group on the elaboration of Moldovan evaluation standards that took place in the premises of the Agency for Land and Cadaster Relations of the Republic of Moldova. The meeting participants discussed the subject related to the takeover and publication of international and European Standards for the Evaluation of Goods, developed by the International Assessment Standards Council (IVSC) and the European Group of Evaluators' Associations (TEGoVA). At the same time, in order to ensure an effective collaboration between ISM and ARFC, the Technical Committee for Standardization CT 64 "Evaluation of Assets" was established, in order to streamline the process of taking over, adopting and implementing in the Republic of Moldova *the European and International Standards* for the Evaluation of Real Estate (*Elaborarea standardelor moldoveneti*, f.a., 2018).

It is known that the evaluation activity is regulated by the Evaluation Standards. The European Assessment Standards state: "evaluation is the process of estimating value", and in the International Accounting Standards the valuation is defined as a process by which the values at which the structures of the financial statements will be recognized in the balance sheet and in the profit and loss account" [IAS 2000:64]. The International Assessment Standards state that: "the evaluation is intended to express and certify the value, correctly and unambiguously, in accordance with national and supranational legislation, in accordance with the valuation standards and accounting standards between valuations in order to build indices that reflect financial performance and consistency" (Champness, 1997).



It should be noted that the International Assessment Standards Committee (IVSC), since 1981, has been developing international evaluation standards (IVSs). Since 1997, the European Association of Evaluators (TEGoVA), which develops the European Assessment Standards (EVS), has also been part of this activity. Those standards include: the economic, financial and cultural peculiarities of several countries of the European Community. In the same vein, we recall that the work of assessor was first practiced in England in 1868, through the creation of the Organization of Real Estate Evaluators, currently – the Royal Institution of Chartered. The main objective of this organization is to remedy the evaluation process, but also to promote the evaluator profession. The university discipline of evaluator is taught in the Institute of Evaluation, formerly the American Institute of Real Estate Evaluators of North America, since 1932 (Bîrcă, 2020).

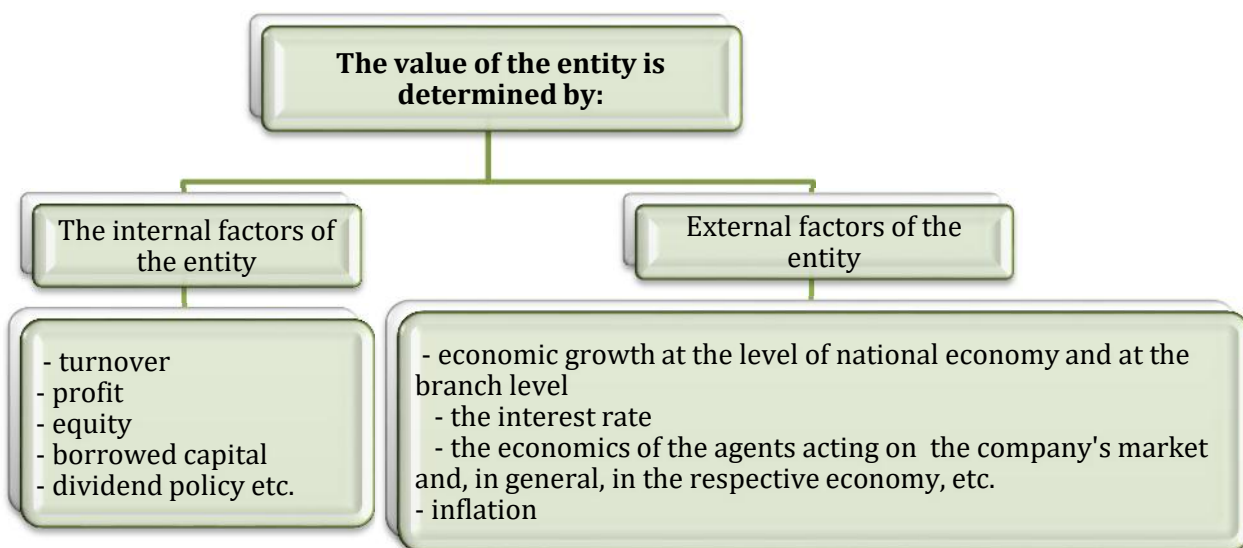
In this context, we note that the profession of evaluator in Romania emerged in 1992, with the establishment of the National Association of Evaluators in the country. The evaluation activity was regulated by the National Assessment Standards (EVS) until 2000, after which they were replaced by International Evaluation Standards (IVSs), and the National Association of Authorized Evaluators of Romania [ANEVAR, 2020] was affiliated with the IVSC. ANEVAR is the Institute of Research in the field of evaluation, established in 1995 under the name IROVAL. The practical evaluation work is carried out on the basis of the ANEVAR Evaluation Standards and the Code of Ethics of the evaluator profession, developed by ANEVAR. The evaluation work is in line with international practice in the field of evaluation, these standards being designed on the basis of international standards, to which have been added elements related to the regulation of evaluation practice in Romania, through the Methodological Guides. The set of standards shall contain the practical work of evaluating undertakings and shall include:

- ✓ *General standards:* SEV 100 General Framework (IVS General Framework), SEV 101 Evaluation Terms of Reference (IVS 101), SEV 102 Implementation (IVS 102), SEV 103 Reporting (IVS 103).

- ✓ *Asset Standards:* Enterprises, Trade Fund and Other Intangible Assets, SEV 200 Enterprises and Business Participations (IVS 200), SEV 210 Intangible Assets (IVS 210), GEV 600 Enterprise Assessment.

**Thus, as of 31 May 2012, the Evaluation Standards have** become mandatory for evaluation work following the entry into force of Ordinance No 24/2011 on certain measures in the field of asset valuation [OG 24/2011]. The evaluator shall take all measures to ensure that all sources of information that have been used are adequate and credible for carrying out the assessment. The standard of assessment PRACTICE GN 6 "Enterprise assessment" states that "the evaluator will follow the reasonable steps to verify the accuracy and credibility of the sources of information and whether they are consistent with the practices in the markets and places where the evaluation is carried out" (*Standarde / ANEVAR, f.a.*).

The most frequent, the following economic concepts are applied in the company evaluation activity: ownership, value, ability to generate profit, which means that the value of the enterprise is based on its ability to profit from activities for the owner. As a result, that value is based on the company's profits, which will be obtained if the business complies with the principle of continuity. Only if the present value of the profits, which would result if the whole undertaking were liquidated (liquidation value), exceeds the value of the business as an undertaking in operation, would the liquidation value be presented as the value of the undertaking. The calculation of the value of the enterprise as the value of the discounted earnings can be created on the capitalization methodology or on the updated monetary flow techniques (Țîrlea, 2012, p.15). The value of the entity is determined by internal and external factors (Figure 1).

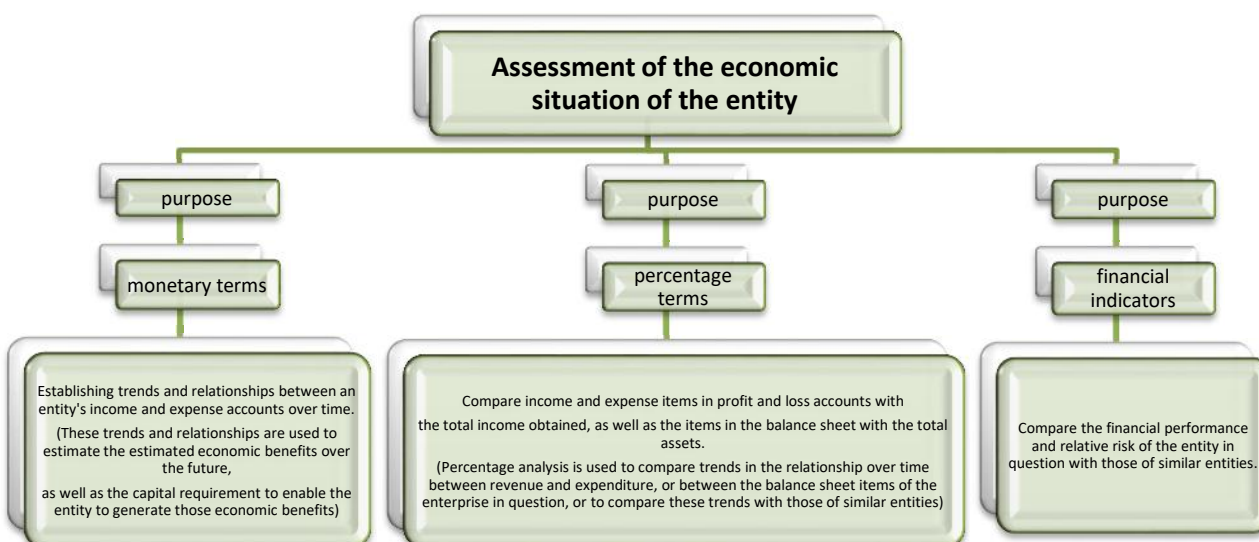


**Figure 1. Factors determining the value of the entity**

Source: Developed by authors.

In the opinion of the authors, it is necessary to evaluate the entity for several reasons: the existence of factors having a stable impact on the value of the entity, for example: influences related to the existence of free prices and changes in the exchange ratio of the national currency; the internal management of each undertaking, i.e. depreciation policies and accounting policies; depreciation of fixed capital; management accounting. For a qualitative assessment, all price changes in the market must be identified, it is necessary to find and measure the impact of these changes on the value of the goods in each undertaking, but also of each undertaking as a whole by using professional evaluation procedures.

In accordance with paragraph 22 of GEV 600, the assessment of the entity's economic situation shall be carried out by analyzing the financial statements in monetary and percentage *terms*, using specific financial *indicators* (Figure 2).



**Figure 2. Assessment of the entity's economic situation using specific financial indicators (in monetary and percentage terms)**

Source: Developed by authors based on GEV 600.

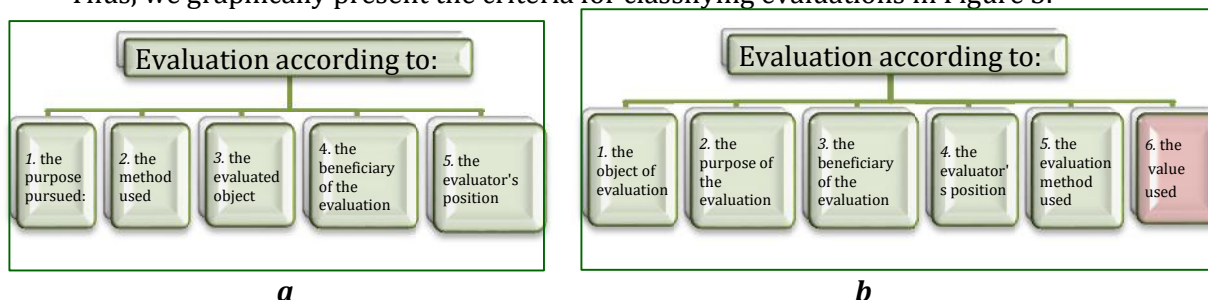
### DATA SOURCES AND USED METHODS

The study consists of theoretical-methodological research on the approach of the value of economic entities, including: analysis of literature, study of International Assessment Standards, European Assessment Standards and National Assessment Standards approved by the Government of the Republic of Moldova, which constitute normative acts applied by evaluators. In the practical part, we focused on the method of comparison in the market valuation of the enterprise.

### RESULTS OF OWN RESEARCH AND DISCUSSIONS

As a result of the research of the specialized literature, especially regarding the specifics of the classification of the economic evaluation procedure, we found that the opinions regarding the classification of the evaluation of the economic value of the entity are different. Thus, in the view of Dumitrescu D. et al., "Evaluations can be classified according to 5 criteria: 1. according to the goal pursued; 2. by the method used; 3. from the point of view of the evaluated object; 4. according to the beneficiary of the evaluation; 5. according to the position of the evaluator (Dragotă et al., f.a. 2002, p. 26). Instead, researcher Tîrlea M.R. reports that the evaluation of the value of an enterprise for different purposes allows the classification of evaluations according to 6 criteria: 1. from the point of view of the object of evaluation; 2. from the point of view of the purpose of the evaluation; 3. from the point of view of the beneficiary of the evaluation; 4. depending on the position of the evaluator towards the enterprise; 5. from the point of view of the evaluation method used; 6. in terms of value used (Tîrlea, 2012b, p. 28).

Thus, we graphically present the criteria for classifying evaluations in Figure 3.

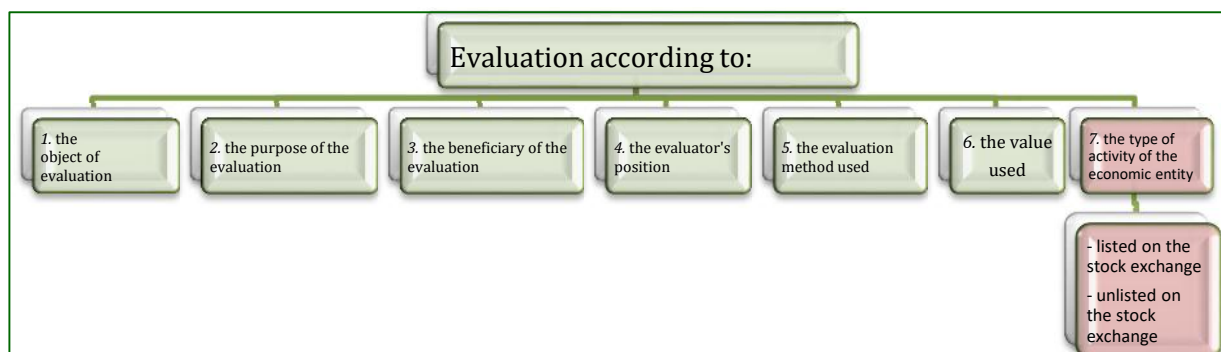


**Figure 3. Criteria for classification of assessments**

Source: Developed by authors based on (Dragotă et al., 2002, p. 26).

According to the information presented in Figure 3, we note that the result of the classification of evaluations highlights a criterion that distinguishes the position of the two researchers, this is the classification of the evaluations in terms of the value used: valuations based on market value, which we appreciate as a welcome complement to more real estimation of the value of the entity.

According to the authors, this supplement is considered to be criteria, however, we consider that the criteria scheme of evaluations can be supplemented by the following criterion: *by type of activity of the economic entity*. According to this criterion, valuations are classified in valuations for publicly traded economic entities and valuations for non-listed entities (Figure 4).



**Figure 4. Criteria for classification of completed assessments**

Source: Developed by authors.

One of the objectives of the study is to choose the most relevant method for evaluating the enterprise on a specific case, taking into account the three approaches used to estimate the value of enterprises.

In the Republic of Moldova, in practice, three main approaches are applied for estimating the value of enterprises – through income, through spending and market (comparative). The general picture of the evaluation process of enterprises in the Republic of Moldova can be presented by the following characteristics:

- in the evaluation of the entity it is important to know the specific adjustments applicable to the different valuation methods according to the given situation;
- from the point of view of the financial information provided by the capital market, there is no sufficient correlation between traditional performance indicators and average market rates
- the valuation of the undertaking based on *three value approaches* (active or costs, income and comparison) is promoted;
- the mechanical application of comparison evaluation is a challenge for the current economic situation, which can lead to errors;
- a particular importance must be given to the professionalism of the assessor in the application of the evaluation methods; when the method is selected, the evaluator must take into account the context of his mission, determine the relevance of the methods according to the field of evaluation, quality, credibility and relevance of the available information, the appropriated objective of the evaluation.

However, it should be noted that the direct application of classic methods in the Republic of Moldova is difficult due to different objective reasons as: the insufficient development of the domestic securities market; limited access to information; the non-interference of the intervention has a large number of adjustments due to the lack of transparency in the accounting; long-term planning, in actual conditions, due to difficulties in the approach application of the revenue method on evaluation; the accounting assessment of the assets is significantly reduced compared to the market assessment.

*In this context, we report that* all methods of approaching the market for business valuation are based on the principle of competition, according to which, in a free market, the interaction between supply and demand will bring the price of business assets to a certain equilibrium.

Turning to the Market Approach which includes the comparison method, I note that this approach is aimed at setting market limits by analyzing the prices normally paid to companies that are competing with the company that has been assessed. Prices are analyzed using appropriate criteria. *The direct comparison method* sometimes requires adjustments. The mechanism for using this method involves the use of company accounting data, in addition to market and price indicators. This method uses two types of values: market value and liquidation value.

*In the context of this study, I would point out that a particular contribution to the market valuation of the undertaking is provided by **the comparison method**.* This refers to the analysis and comparison of the business that is evaluated with competitive companies operating in the market. Information for this method is obtained from open stock markets, previous transactions with business assets and the absorption market. The comparative method is based on comparing the value of the company with similar undertakings on the market according to their ownership. In practice, it is difficult to obtain accurate data, as market information about competitors may be inaccessible or distorted. In addition, competition obliges entrepreneurs to act unconventionally, which in turn shapes the specifics of each business. The comparison in this case becomes ineffective.

This approach to business valuation is very similar to the comparable sales method used in the real estate valuation. The market price of the shares of companies in the same line of business that are actively bought and sold on the open and free market may be an indicator of the market value of transactions involving a sufficient number of shares. The main task of the evaluator is to select a similar undertaking for the comparative study.

The essence of the comparative approach is that the assessed undertaking and the rights transferred to it are compared with rights and similar undertakings that have been sold on the market recently. During the comparison process, sales data is used to deduce the market value of the company being evaluated.

An important aspect when applying the approach studied is the requirement for the availability of reliable and high-quality information required for evaluation. If the evaluator can find data on several similar sales that form a sufficiently representative sample, then he will have more confidence in the reliability of the original information. Similar undertakings should be comparable in terms of the following indicators, which are basic benchmarks for comparison:

- the business must be of the same type;
- the size of the business (sales) must be comparable;
- the form of ownership (rights to the undertaking) must be similar (Smirnickij and Čirkin, 2013)

Depending on the purpose of the evaluation and the specific context of the evaluation, the comparative approach involves the use of three main methods:

- the capital market method;
- market transaction method;
- the method of industry coefficients.

The capital market method (or peer company method) is based on the use of prices generated by the open capital market. In this method, the basis for comparison is the price of a share of companies or public enterprises. In the classical assessment, this method is used to assess a minority holding.

In this context, we will make a concrete point with reference to the methods of market evaluation, implemented in CIS countries, which in most cases correspond to the globally recognized approaches and methods. At the same time, a specific feature of the assessment in these countries is its excessive regulation. Being reflected in national normative acts, the evaluation methods need to be applied unconditionally and involve the application of established algorithms (Buzu, 2011, p. 402). However, in recent years, there has been a wider trend of application, including in the Republic of Moldova, of the International and European Assessment Standards.

The market transaction method is also called the sales method, it focuses on the purchase price of an undertaking as a whole or on a control stake.

The industry coefficient method (industrial multiplier method, price ratio method) shall be used if the evaluator considers that comparable sales data are insufficient and their reliability questionable. In this case, due to insufficient statistical or public sales data, different industrial and regional relationships may be used. In the practice of developed countries, sectoral coefficients are calculated on the basis of long-term statistical observations of the sales prices of companies in certain sectors and their most important financial and production characteristics (Shannon, 1988).

As a result of the study, the following advantages of the comparative approach to business evaluation can be distinguished:

- the use of direct market benchmarks, the minimum number of adjustments, which fully reflect the market view of the undertaking's 'value';
- allows an express rapid assessment of the value of the undertaking;
- can be used to validate cost reference values derived from other approaches.

At the same time, we will also report some of the identified disadvantages of the given approach:

- for proper use, careful selection of appropriate analogue objects and collection of a large amount of information about them is necessary, which is far from always feasible, especially in the context of a small and non-transparent market in the Republic of Moldova;
- depends, inevitably, on the efficiency and current state of the market.

At the same time, according to Romania's experience, we note that in order to carry out the evaluation of the SEV-2018 International Standard presents three types of approaches embodied in: 1. *market approach*; 2. *income-based approach*; 3. *the asset-based approach*.

I. **The market approach** is based on the comparison of the assessed entity with other similar undertakings. Comparison of the company valued with other companies through this type of approach involves:

- ✓ comparison with entities that have been traded on the free market;
- ✓ comparison with similar entities with holdings in undertakings that have been traded on the free market;
- ✓ comparison with similar entities, with shares that have been traded on the free market.



In order to compare the evaluated entity with similar ones, data and information will be used to highlight the common comparison characteristics. It is important that this data and information are able to provide all the characteristics necessary to carry out comparability.

Comparative coordinates that ensure comparability refer to legal conditions, ownership, legal restrictions, location, physical characteristics, available utilities, financing conditions, conditions of sale, market conditions, zoning and best use.

Therefore, the market approach in the valuation of the undertaking, in accordance with C15, IVS 200, consists of comparing the subject undertaking with:

- ✓ other similar undertakings with participation in similar undertakings traded on the market;
- ✓ relevant transactions with the participations of the subject enterprise;
- ✓ previous transactions.

Capital markets provide sources of information on the qualitative and quantitative characteristics of similar undertakings. The analysis of a quantitative but also qualitative nature, according to IVS 200, requires the evaluator to identify the representative characteristics of the subject undertaking which should be analyzed in comparison with those of the undertakings identified as similar which involve the analysis:

1. in the area of the geographical area in which the undertakings concerned operate;
2. the level of profit;
3. the level of sales;
4. the structure of sales;
5. the level of assets;
6. asset structure;
7. the level of profit margins;
8. growth forecasts; etc.

II. **The income-based approach** illustrates the entity's ability to generate revenue through techniques to update future benefits. The income approach involves updating income streams. Specifically, this method estimates the value of an entity based on the present value of future benefits. In practice, two methods are used: (i) *discounted net cash flow* aimed at updating net cash flows for the forecast period with a discount rate and (ii) *the dividend method*. The income approach is a method of yield that illustrates the entity's ability to generate revenue through updating techniques. The purpose of applying this method is to obtain the value of an entity by calculating the present value of the anticipated benefits based on the revenue and cost structure presented in the balance sheet that reflects the economic and financial situation of the assessed entity resulting in the entity's ability to generate cash flows over a period of time.

III. **The choice of the asset valuation of** the assessed entity involves estimating the value using methods based on the market value of the assets from which the liabilities are deducted. The balance sheet at the time of valuation, the company's assets and liabilities are those that play the basic role in this type of valuation. The asset approach usually applies to early-stage or newly established undertakings whose profits or cash flows cannot be credibly determined.

Therefore, by generalizing, we point out that for the purpose of assessing the undertaking, the comparison involves:

- ✓ all calculations made by the evaluator are carried out in a similar way, both for the undertaking under the subject matter and for similar undertakings which have been studied for research and evaluation;
- ✓ the price data are valid at the time of the assessment;
- ✓ data collected on financial indicators of similar undertakings may be historical information on financial indicators and the nature of the information collected;
- ✓ statistical indicators of a medium, median, harmonic mean nature must be motivated by the evaluator;
- ✓ aspects of the adjustment of financial indicators must be adequately substantiated;
- ✓ The multipliers used require the evaluator to argue the option for them;
- ✓ the market information of similar undertakings must be relevant to the assessment of the undertaking subject;
- ✓ adjustments to market information should be explained in the evaluation report;

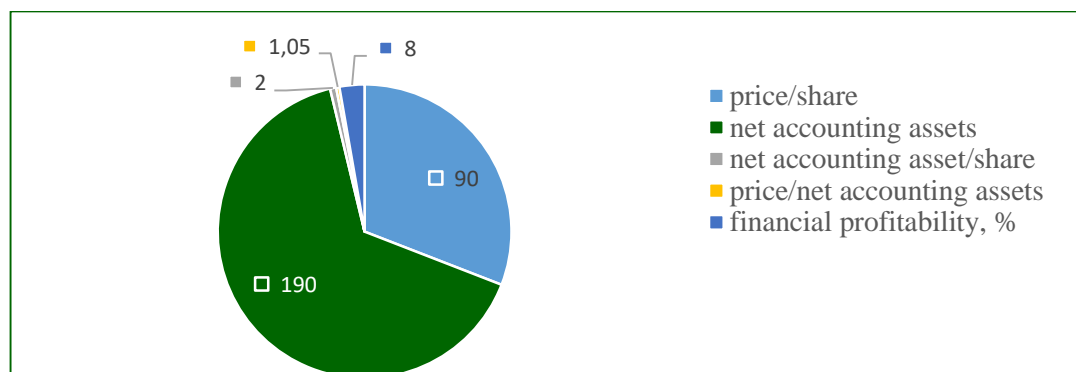


✓ previous transactions may be considered comparable only if the adjustments can be substantiated;

✓ application of premiums or discounts is possible to reflect different levels of control, liquidity/solvency, etc.

For practical exemplification, ten entities similar to the evaluated subject entity were selected in order to determine the statistical indicators consisting of the calculation of the median and the arithmetic mean.

At the time of assessment, the indicators related to the subject entity are presented as follows: price per share 90 lei, net accounting asset 190, net accounting asset per share 2, net accounting asset price 1.05 and financial return 8%, according to the graphic representation below.



**Figure 5. The Situation of the Entity (S) evaluated**

Source: Developed by authors.

According to the data in Figure 5, we find that in order to make an estimate of the market value of the subject enterprise we assessed as net accounting price/asset and the relationship between profitability and net accounting price/asset proved to be relevant. Financial profitability is dependent on the price per share and the book value of the share.

The shares constitute shares of the subscribed and paid-up share capital. The market value of the shares is determined as the ratio between the market value of the equity and the number of shares issued.

The study took into account ten economic entities in the market: A,B,C,D,E,F,G,H,I,J. These economic entities are comparable to the subject entity. The comparison criteria are translated into: price per share, net accounting asset, net accounting asset per share, net accounting asset price and financial return.

At the time of the evolution, the indicators related to comparable entities were provided to us by an active market, as presented according to table 1 and related graphical representation.

**Table 1**

**Situation of entities similar to the entity assessed**

No. Crt.	The evaluated entity	Price/ Action	Net accounting assets	Net accounting asset / share	Price / Net accounting assets	Financial profitability (%)
0.	1	2	3	4	5	6
1.	A	90	190	2,00	1,55	7
2.	B	80	165	2,06	1,24	10
3.	C	85	170	2,00	1,17	6
4.	D	87	165	1,89	1,14	8
5.	And	77	170	2,20	1,29	7
6.	F	86	172	2,00	1,16	5
7.	G	71	152	2,14	1,4	4
8.	H	79	142	1,79	1,26	6
9.	I	91	198	2,17	1,09	10
10.	J	74	160	2,16	1,35	10
11.	Arithmetic mean				1,21	7,4
12.	Median				1,20	7,36

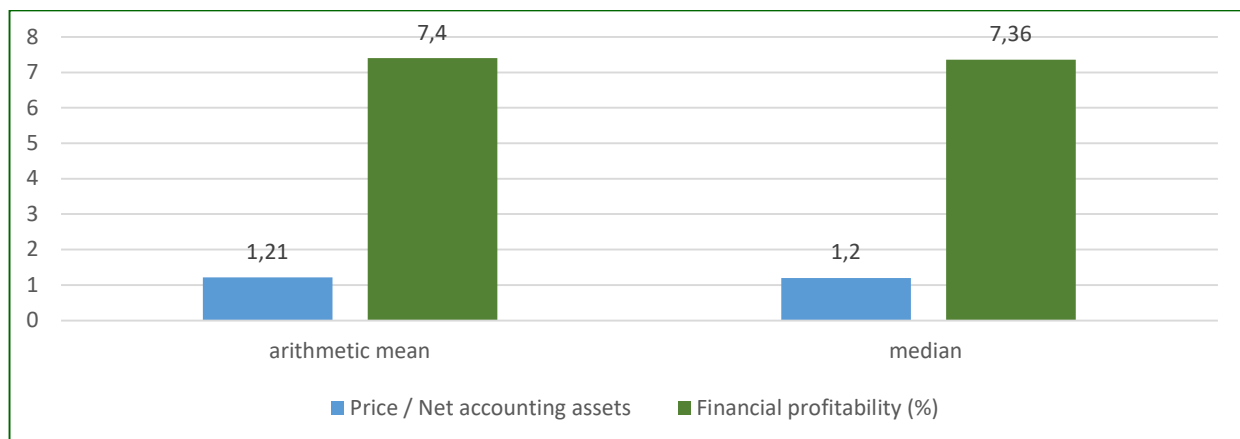
Source: Developed by authors.

The calculations carried out led us:

- ✓ at an arithmetic average for the net accounting asset price of 1.21 and the financial return is 7.4%;
- ✓ The median is 1.20 at the net accounting asset price and 7.36% at the financial return.

Comparable entities offer benchmarks for trading evaluated entities.

The comparison method reflects the best variant of the share price in the market.



**Figure 6. Arithmetic and median mean, calculated for entities similar to the entity assessed**

Source: Developed by authors.

Actions represent financial assets. As a result, they can be assessed on the basis of the three approaches used in the evaluation: the comparison method, the cost method and the future flow method.

The market value of a share is subject to the stock exchange rate.

In our case it is an active market. Shares are traded on a market that is thus efficient that the prices that have been registered for comparable transactions are credible.

The stock exchange rate determines, on the one hand, the market value of a share, and, on the other hand, demonstrates that the chosen method – the comparison method – is the most representative method of valuation.

## CONCLUSIONS

Therefore, the value of the economic entity has become a benchmark for the development of all capacities in order to achieve short and long-term performance, to involve human resources, material means, etc.

By generalizing, we note that generally accepted methods for estimating the value of the entity are an indication of the success and efficient activity of both the enterprise and the assessor. Only because of the accurate and complex estimate of the value of the economic entity will we get a clear picture of both the successes and the gaps and failures to be removed. Effective management, following an evaluation report, will make every effort to achieve performing performance in economic activity by developing a capacity-based activity plan, but also taking into account the means of achieving performance.

We believe that in order to improve the evaluation activity it is necessary to multilaterally investigate the situation on the domestic and foreign market, in particular with regard to supply and demand through open access to the necessary information; strict observance of the regulatory acts in force on the assessment of the overall value of economic entities (VGEA), but also the adjustment and offering of remedial proposals as appropriate; direct state support and the creation of effective collaboration; and last but not least for the Republic of Moldova – the operation of the Land and Cadaster Relations Agency with all representatives in the field of evaluation.

In the global economy, the government must realize, first and foremost, the interests of domestic business as the most active, creative and aggressive elements of society, strongly supporting and guiding its expansion, considering it as one of the key instruments of national economic development and welfare. Inside their own society, government must support the people with its desire for justice and for more equitable resources' distribution. Sustainable economic progress in a complex system of

world economic relations requires from the modern government to develop a set of measures, aimed at consolidating the domestic business. The businesses ability to form the transnational constructs of inputs and finished products distribution, is segmenting the national economy, by creating within the macroeconomic system the complex of autonomous 'strategic business zones', which are a weakly regulated by government due to the networking effects. As the condition of business consolidation, competitiveness of domestic production improving has „to become a new concept of market-based government functions, of public management, which infrastructure is, first and foremost, e-government" (Ushakov et al., 2019, p. 2566-2573).

In order to make an estimate of the market value of the subject entity, the G/L Net Price/Asset ratio and the relationship between profitability and G/L Net Price/Asset are assessed as relevant. Financial profitability is dependent on the price per share and the book value of the share.

Thus, based on the study carried out, we will highlight the most important results obtained:

1. *As a result, on the basis of the calculations made in the practical part, it was found that an economic entity can change its own value by the way its values are profitable (Table 1).*

2. *The difference between the classifications of evaluations in the literature was identified, it was found that the criterion distinguishing the position of the two researches is the classification of valuations in terms of value used, valuations based on market value and valuations based on values different from market value (Figure 3).*

3. *The criterion scheme of the evaluations was completed with the following criterion: "by type of activity of the economic entity: listed on the stock exchange and unlisted on the stock exchange" (Figure 3).*

4. *For the practical aspect of the investigation, we focused on the method of comparison in the market valuation of the entity, establishing the statistical indicators that consisted in the calculation of the median and the arithmetic mean (Figure 6).*

In conclusion, it is noted that in the evaluation process of the entity a decision-making function falls to the selected methods, applied skillfully and skillfully by the evaluator in the evaluation process, i.e. it is a matter of the level of competence, theoretical knowledge and skills to apply them in practice, but not least to its professionalism. The determining factors of the value of the economic entity demonstrate that current policies must be focused on improving the environment both economically and socially.

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## ARTICLE HISTORY

Received 22 September 2020

Accepted 05 February 2021

## SPECIFICS OF FINANCING PUBLIC PROCUREMENT IN THE REPUBLIC OF MOLDOVA IN THE CONTEXT OF OPTIMIZING PUBLIC FINANCE MANAGEMENT

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**DOI:** <https://doi.org/10.36004/nier.es.2021.1-03>

**JEL Classification:** H42, H44, H57, G28

**CZU:** 339.186+336.5](478)

### ABSTRACT

Public procurement is investigated in terms of results and maximum efficiency of allocation of financial resources of the national public budget. In the context of economic development, optimization of the management of public financial resources is based on improving the legislation on public procurement and the financing mechanism. Based on this, public procurement is a complex, multi-level, interdependent system, the functioning at the all public levels. The aim of the research is to conduct a comprehensive study of the main problems and features of public procurement financing in order to optimize public finance management at the national level and to develop recommendations for improving the public procurement system in the Republic of Moldova. The methodology is based on the structural research method. The article is based on a study of the public procurement system in the Republic of Moldova, analyzing its constituent elements. The analytical method was used to study the concept of public procurement. The study established the relationship between the ethical behavior of officials, the effectiveness of control and the implementation of information systems to optimize the system of financing public procurement in the Republic of Moldova. Proposals are presented to improve the efficiency of the public financing mechanism in the context of electronic public procurement procedures within the automated information system "State Register of Public Procurements" MTender.

**Keywords:** public procurement, public financial resources, financing mechanism, national public budgetary funds, budgetary allocations.

Achizițiile publice se cercetează din punctul de vedere al rezultatelor și eficienței maxime a alocării resurselor financiare ale bugetului public național. În contextul dezvoltării economice, optimizarea gestionării resurselor financiare publice se bazează pe îmbunătățirea legislației privind achizițiile publice și a mecanismului de finanțare. Rezultând din aceasta, achizițiile publice sunt prezentate ca un sistem complex, pe mai multe niveluri, de categorii interdependente, a cărui funcționare ar trebui să asigure distribuția optimă a resurselor financiare publice la nivel central și local. Scopul cercetării constă în realizarea unei cercetări complexe ale principalelor probleme și particularităților finanțării achizițiilor publice în scopul optimizării managementul finanțelor publice la nivel național și elaborarea recomandărilor pentru îmbunătățirea sistemului de achiziții publice în Republica Moldova. Metodologia aplicată se fundamentează pe metoda structurală de cercetare. Articolul se bazează pe studierea sistemului de achiziții publice în Republica Moldova, astfel analizând elementele componente ale acestuia. Metoda analitică a fost utilizată pentru cercetarea conceptului de achiziții publice, precum și legislația în vigoare privind sistemul de achiziții publice. În cadrul cercetării a fost stabilită relația dintre comportamentul etic al funcționarilor, eficacitatea controlului și implementarea sistemelor

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informaționale pentru optimizarea sistemului de finanțare a achizițiilor publice în Republica Moldova. Sunt prezentate propuneri pentru îmbunătățirea eficienței mecanismului de finanțare publică în contextul procedurilor de achiziții publice electronice în cadrul sistemului informațional automatizat "Registrul de stat al achizițiilor publice" (SIA „RSAP”) MTender.

**Cuvinte-cheie:** achiziții publice, resurse financiare publice, mecanism de finanțare, fonduri bugetare publice naționale, alocații bugetare

Государственные закупки исследуются с точки зрения результатов и максимальной эффективности распределения финансовых ресурсов национального публичного бюджета. В контексте экономического развития оптимизация управления государственными финансовыми ресурсами базируется на совершенствовании законодательства о государственных закупках и механизма финансирования. Исходя из этого, государственные закупки представляют собой сложную, многоуровневую, взаимозависимую систему, функционирование которой должно обеспечивать оптимальное распределение государственных финансовых ресурсов на центральном и местном уровнях. Цель исследования - провести комплексное исследование основных проблем и особенностей финансирования государственных закупок с целью оптимизации управления государственными финансами на национальном уровне и разработать рекомендации по совершенствованию системы государственных закупок в Республике Молдова. Примененная в статье методология основана на структурном методе исследования. Статья основана на исследовании системы государственных закупок в Республике Молдова, анализируя ее составные элементы. Аналитический метод был использован для исследования концепции государственных закупок, а также действующего законодательства о системе государственных закупок. В ходе исследования была установлена взаимосвязь между этическим поведением должностных лиц, эффективностью контроля и внедрением информационных систем для оптимизации системы финансирования государственных закупок в Республике Молдова. Представлены предложения по повышению эффективности механизма государственного финансирования в контексте электронных процедур государственных закупок в рамках автоматизированной информационной системы «Государственный регистр государственных закупок» (SIA «RSAP») MTender.

**Ключевые слова:** государственные закупки, государственные финансовые ресурсы, механизм финансирования, национальные публичные бюджетные фонды, бюджетные ассигнования.

## INTRODUCTION

Currently, a system of legal norms has been developed in the Republic of Moldova, which regulates the relations regarding the introduction and implementation of a more efficient way of using budgetary funds – the public procurement system. The legal rules governing public procurement relations have developed and emerged in a relatively recent separate group. Therefore, the relationships associated with the procurement of goods and services at the state and local level are the most relevant.

Public procurement means the purchase of goods, the execution of works or the provision of services for the needs of one or more contracting authorities (art. 1 of Law no. 131 of 03.07.2015 on public procurement).

Therefore, public procurement is the purchase of goods (works, services) for the needs of state bodies using budgetary funds.

In the Republic of Moldova, there is a relatively large share of public procurement in the structure of national public budget expenditures, therefore, the issue of forming and developing an efficient system of organization and management of public procurement is of particular importance.



**Hypothesis development:**

1. The public procurement process in the Republic of Moldova is a complex process focused on optimizing the use of public financial resources. This issue includes correcting gaps in national legislation and creating a transparent system that is resistant to political influences.

2. Improving the efficiency of the use of public financial resources must be achieved by implementing modern information systems and increasing the efficiency of public procurement financing at central and local level. This aspect includes the relationships between the ethical behavior of civil servants implementing public procurement, the effectiveness of interdepartmental, community, specialized control and the optimization of the share of public procurement in the gross domestic product.

**LITERATURE REVIEW**

The specialized literature examines in detail the determinants for compliance with the rules for financing public procurement (Dennis orobo and Willy, 2015) (Omagbon, 2016); (Sandada and Kambarami, 2016). These researches were realized using simplified scientific methods. Improving and developing simplified public procurement financing models contributes to the use of strategic models for a broader understanding of the key factors that explain compliance with regulatory requirements in the field of public procurement. This perspective will provide a strategic understanding of public finance management policy, in order to focus on more specific and important factors for improving public procurement legislation and optimizing the funding mechanism. The evaluation of the particularities of public procurement financing in the Republic of Moldova involves a systemic structural analysis to establish factors that influence the establishment of regulatory requirements in the field of public procurement. The analysis of scientific papers conducted by researchers Abere and Muturi (Dennis oribi & Willy, 2015) led to the conclusion that the practices and mechanisms of financing public procurement have a significant impact on optimizing the management of public finances.

According to research by Gabriella Marcarelli, Andrea Nappi civil servants should prioritize raising knowledge and awareness in public procurement. Also, in order to optimize the process of financing public procurement, it is necessary to introduce advanced information systems and also stimulate suppliers to overcome legal barriers to public procurement.

Also, a research conducted by Chi were (Uzoma Chi were et al., 2019) materialized the significant impact of awareness, incompetence, political interference and poor monitoring of non-compliance with the legislative framework for public procurement in developing countries. Therefore, Magnon (Magnon, 2016) reported that the reason for the low level of public procurement standards in local and central public administration is mainly due to a low level of professionalism, insufficient media coverage and non-transparency of public procurement issues, as well as significant political interference. Similarly, Sandada and Kambarami (Sandada & Kambarami, 2016) presented a study according to which compliance with rules and political intervention are key factors for optimizing the management of public finances in process of public procurement.

A study by Lela Mélon, Rok Spruk concludes that the implementation of the public procurement optimization reform in Denmark and the Netherlands has resulted in relatively stronger controls on corruption, while a similar reform has been implemented in Portugal despite a positive and sustained impact on the quality of public procurement and regulation did not lead to increased control over corruption. In the post-reform period, the decline in the quality of public procurement regulation in Portugal is twice as high as the projected decline in the Netherlands.

The application of the relevant national legislation is the main factor in determining compliance with the strategic regulatory requirements for public procurement mentioned in this research. Sutinen and Couperan (Sutinen & Kuperan, 1999) concluded that enforcement remains an important component of a compliance regime, even with high moral obligations and social influence. Also, according to this theoretical postulate, it can be concluded that the application of public procurement regulations will oblige civil servants to behave ethically and therefore to comply with public procurement rules, which will lead to optimal management of public procurement. public finances. Researchers Sutinen and Couperan (Sutinen & Kuperan, 1999) pointed out that people's internal engagement (ethical behavior) can be achieved through the influence of public authorities, such as the police, employers and local and central public authorities, which will eliminate individual interest in the process of financing public procurement.

The publications of Sjors Witjes and Rodrigo Lozano point to the relationship between the share of public procurement in GDP and the purchasing power of public organizations (which is up to 19% of GDP in European countries).

The authors of Deodat Mwesiumo, Kjetil Magnus Olsen, Geir Arne Svenning, Richard Glavee-Geo, as a result of a study of public procurement processes in Norway, concluded that financial investments, as well as costs associated with problems and obstacles to optimizing the public procurement financing system, are justified by the received higher financial benefits and results.

The content of the studies by Cecilia Bratta, Sophie Hallstedta K.-H. Robèrtab Göran Bromana, Jonas Oldmarkb ranges from: analysis of the procurement process in relation to the system for optimizing their financing and the influence of political frameworks that create obstacles to positive changes in the field of cooperation between participants in the public procurement process.

These studies are relevant for the Republic of Moldova from the point of view that the study of the process of reforming the public procurement system in developing countries and can lead to improvements in terms of optimization and development of a strategic approach that could more significantly promote innovative system solutions in support of sustainable development of public procurement in the Republic of Moldova.

Despite the fact that the emphasis of the presented studies is on the problems of organizing and financing public procurement in both developed and developing countries, as well as on the driving forces (political, social, regulatory) that hinder the integration of an effective financing system in the public procurement process, research on these issues is still limited in the context of integrating this issue into optimizing public financial management.

In the submitted publications, one can see inconsistencies in the scientific literature, which states that awareness and professionalism do not significantly affect compliance with regulatory requirements for public procurement financing, while institutional factors are very important in studies of the impact on the public procurement process. financing public procurement in terms of optimizing public financial management.

Given that the existing literature provides a limited understanding of this subject, the results of this study should be of interest to researchers, government agencies, procurement practitioners, small and medium-sized enterprises and other interested parties. In particular, the study contributes to the accumulation of knowledge about public procurement financing in the Republic of Moldova in the context of optimizing public financial management and offers practical conclusions for both practitioners and policymakers.

## DATA SOURCES AND USED METHODS

The study was conducted in the Republic of Moldova with the involvement of public sector institutions. It was estimated that there are over 200 public sector institutions in the Republic of Moldova. In some of these institutions, heads of public procurement departments answered key research questions. An anonymous survey, implemented in 2019, in which more than 100 employees of government agencies and employees of private companies involved in the public procurement process took part, was based on the presentation of a number of statistical data and answers to questions about the main regulatory and systemic problems of the national public procurement system in the Republic. Moldova in the context of optimizing public financial management, which served as the basis for this study.

For the analysis of the dynamic evolution of the statistical indicators of public procurement as the number of public tenders according to the object of procurement and the value of public contracts concluded by the Public Procurement Agency (PPA) in 2018 and 2019, the method of systematic analysis was used. In order to summarize the results regarding the activity of the public procurement system in the Republic of Moldova in 2019 and 2018, the comparative analysis was used.

Literature review was guided by the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) review method. The method of quantitative and qualitative analysis was applied to research the indicator of the share of public procurement in Gross Domestic Product (%) and other indicators of the public procurement system in the Republic of Moldova and establish their impact to optimize finances at the macroeconomic level. A total of 6 articles from the Scopus and Web of Science databases were selected for the review.

Data sources used for these indicators represent the data of the National Bureau of Statistics of the Republic of Moldova and the Report on the activity in the field of public procurement carried out during 2019 prepared by the PPA.

### THE RESULTS OF OWN RESEARCH AND DISCUSSIONS

Based on the results of an anonymous survey employees of government agencies and employees of private companies public procurement provides for:

- covering the needs of the Republic of Moldova, at state and local level, in goods (works, services) necessary for the implementation of the functions of central and local authorities, including for the implementation of national programs for fulfilling the international obligations of the Republic of Moldova;
- the needs of public authorities, administrative-territorial units in goods (works, services) necessary for the implementation of their functions and competencies, including for the implementation of programs at local level;
- the needs of the local public administration in goods (works, services) necessary to solve the problems of local importance and to implement certain state competencies transferred to the local authorities.

With the help of the public procurement system, important tasks are solved such as respecting national security, creating and supporting state material reserves, ensuring the life of the population, etc.

From survey of heads of public procurement departments indicated, public procurement is an effective financial instrument of the state's social and industrial policy, as it allows support to be provided to domestic producers, including small enterprises, organizations, people with disabilities, etc., as well as to stimulate the production of competitive goods.

Suppliers who meet the requirements specified in the application may request a public procurement contract. This means that concluding a contract is possible with a company of any form of ownership, if it offers the most attractive conditions. A public procurement contract cannot be concluded with a company that does not meet the requirements stated by the organizers.

Public procurement or a general list of the needs of public authorities in public procurement planning procedures should be met with the most efficient allocation of budgetary funds. Efficient allocation is not so much about saving money, but about finding the best value for money. Therefore, a company that has applied to participate in a public tender must meet the customer's requirements.

Results of anonymous survey employees of private companies involved in process of public procurement show that public procurement system must also be open, transparent and accountable. Failure to comply with these requirements will lead to a breach of public procurement principles.

In some cases, the results of public procurement do not meet the stated requirements. This may be due to both the irresponsibility and lack of professionalism of the organizers and selfish reasons.

The contract for the implementation of public procurement allows the company to make a profit and offer an order for a long time, so that some participants abuse the right. However, as practice has shown, this can be treated. There are many cases where dubious decisions on signing public procurement contracts have been challenged. The joint efforts of bona fide suppliers and regulators contribute to the efficiency and effectiveness of the public procurement system.

Public procurement is necessary to provide public authorities with the necessary goods (works, services) that meet certain requirements, in the most favorable conditions for all participants in the procurement process. Both state-owned enterprises and private companies can be selected as suppliers.

For private companies that took part in the survey, public procurement of a certain type of service (work) or the provision of products can be an excellent source of income. Public procurement is beneficial to national enterprises for several reasons. First, the company gets a reliable source of sales for its products, which means that commercial costs are low.

Public procurement also guarantees the company cash flows for the services provided in full. This source of profit can be a strong incentive for the further development of the company.

In the public procurement system, entities have been identified that monitor the information in the unified information system. Based on the results of such monitoring, a consolidated analytical report shall be prepared, containing an assessment of the effectiveness of the procurement and measures to improve the legislation. This report is also published in a unified information system.

Control over public procurement is carried out primarily by the Public Procurement Agency, the Court of Auditors and the Competition Council.

In the monitoring process, the above public authorities establish the reasons for the deviations and violations found, as well as make proposals for the elimination and improvement of the contractual system.

The following types of control are distinguished:

- interdepartmental control
- community control
- control by special regulatory authorities

The interdepartmental control is performed by the state authorities, the central and local public administration authorities, the municipal bodies, the management authorities of the public financial funds. Community control is exercised by citizens, associations of legal persons or public associations.

The institutional system of public procurement includes not only the Public Procurement Agency, the Court of Accounts, the National Council Competition Council, but also the Ministry of Finance, the State Treasury, the Financial Inspection, the National Anticorruption Center.

Therefore, the automated public procurement information system operating in the Republic of Moldova allows: saving more money for customers, increasing procurement volumes, systematizing procurement procedures, controlling not only the process of placing orders, but also the actions of suppliers and customers in the stages of concluding and executing contracts, it fully regulates the relations of all participants at all stages of the procurement process, which allows us to call the automated information system an efficient financial instrument in the public procurement system.

It should be noted that a significant disadvantage that hinders the efficient development of the public procurement system in the Republic of Moldova is the many ways in which customers and suppliers can circumvent the law and influence the outcome of the procurement procedure. One of the main imperfections is insufficient attention to the quality of the goods provided, which allows participants to give up the supply of low-quality goods.

Based on the results of an anonymous survey employees of government agencies and employees of private companies in order to continuously improve the procurement legislation, it is necessary to highlight the following directions for the development of the public procurement system of the Republic of Moldova:

- regulate and streamline anti-dumping measures in more detail;
- to take into account the specifics of the purchased goods industry (works, services) when establishing the maximum amount of an advance, as well as to regulate the practice of advance payments;
- standardization of calculation methods, monitoring the formation of initial (optimal) contract prices;

The optimization of the national public procurement system directly influences the development of the economy of the Republic of Moldova.

First of all, the national public procurement system ensures the practical fulfillment of the state's obligations to the population. These obligations are stated in government programs and, in order to fulfill them, it will inevitably be necessary to purchase the necessary goods, works or services. The public procurement system requires you to specify the purpose for which they are made before implementing them. On the other hand, it becomes possible to see where public funds are directed. And after implementing them, it allows you to compare with similar purchases made by private companies in the market and provide an objective assessment of the effectiveness of purchases.

Second, the public procurement system is an effective mechanism for the development of national private economic entities and state authorities.

Analyzing the report The report on the activity in the field of public procurement carried out during 2019, prepared by AAP we can see: during 2019 by the contracting authorities through SIA RSAP (MTender) ensuring the transparency of open public tenders, 2,229 announcements were published participation, of which:

- 451 announces - for the purchase of services.
- 594 announces - for the purchase of works and
- 1,184 announces - for the purchase of goods [4];

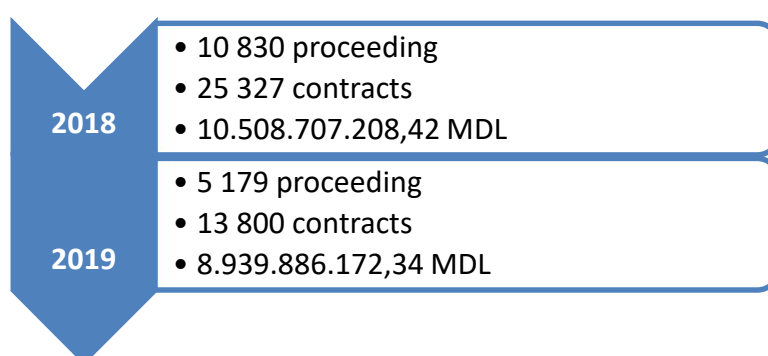
Table 1

**Public auction by object of procurement**

<b>594</b>	Construction works
<b>306</b>	Food
<b>94</b>	Transport equipment and auxiliary products to transportation
<b>99</b>	Oil, coal and petroleum products
<b>117</b>	Medical equipment
<b>89</b>	Pharmaceuticals products and reagents

Source: Developed by the authors based on the Report on the activity in the field of Public Procurements carried out during 2019 [Bratt et al., 2013, p. 11]

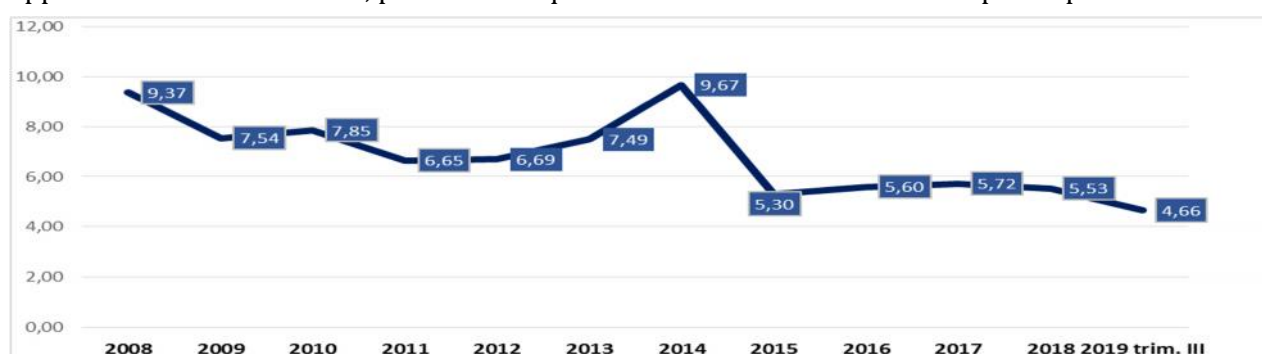
During 2019, 13,800 additional contracts and agreements were concluded by the contracting authorities as a result of public procurement procedures, compared to 2018 with 11,527 less [Uzoma Chikwere et al., 2019].



**Figure 1 Aggregation of the results of 2019 and comparative analysis with the results of 2018**

Source: Developed by the authors based on the Report on the activity in the field of Public Procurements carried out during 2019 [Uzoma Chikwere et al., 2019, p. 11]

This decrease in public procurement contacts from 25327 to 13,800 units in 2019 compared to 2018, in the volume of 10508.71 million. MDL in 2018 and 8939.88 million. MDL in 2019 is explained by the fact that in Law 131/2015 were introduced the amendments regarding the increase of the application thresholds. Thus, part of the acquisitions or turned into low value public procurements.



**Figure 2 Share of Public Procurements in Gross Domestic Product (%)**

Source: Developed by the authors based on the Report on the activity in the field of public procurement carried out during 2019 [Uzoma Chikwere et al., 2019, p. 19]

The value of public contracts concluded by the Public Procurement Agency (AAP) in 2018 and 2019 was 10,508,707,208.42 MDL and 8,939,886,172.34 MDL, representing approximately 5.53 and 4.66% of GDP. Therefore, about 5% of GDP is allocated through the public procurement market and acts as a powerful instrument of economic policy. At the same time, the public procurement system



makes it possible to optimize the issue of competition, when the only criterion is price and the only acceptable method of procurement is tendering. The economic space has a more complex form and the aim is to provide equal conditions for the development of all types of economic entities. And the conditions for the development of a large monopoly are different from those for small businesses. Therefore, it becomes possible to move to a more complex development model, which takes into account factors such as the distribution of labor resources and territorial development. Thus, the public procurement system creates a fair economic space, in which there are opportunities for the development of all economic entities.

The public procurement system has an extraordinary anti-corruption potential. Corruption occurs when a provider seeks unfair terms, such as overvaluation. State and municipal authorities make approximately 25,327 and 13,800 purchases annually according to data from 2018 and 2019. The essential reduction of non-transparent or suspicious purchases will increase confidence in the state's activities on the market. And this will contribute to the development of private initiative and to the growth of an entrepreneurial spirit, which is so necessary in the Republic of Moldova.

The public procurement system must be efficient. Its effectiveness depends on the trust of the participants. But trust comes when a number of conditions are met.

The most important of these is the confidence that the system fulfills the functions for which it was created. When using the public procurement system, trust results from knowing its structure and respecting the principle that the attempt to "counterfeit" will inevitably result not only in the form of fines but also high risks of publicity. Another condition is the susceptibility of the system to improvements, the ability to correct the identified deficiencies.

Confidence in the system will arise if those for whom it was created are directly involved in the process of improving it. And since budgetary resources are taxpayers' funds, it is not so much civil servants that should improve the allocation mechanism, but people with the confidence of the population.

## CONCLUSIONS

In order to improve the public procurement system, it is necessary to systematically and persistently eliminate the shortcomings identified by the participants in the public procurement process, in order to react significantly to gaps in legislation.

It is also necessary to have the most complete information about violations in the implementation of public procurement. It doesn't matter how the information goes. From this point of view, the existence of a public portal, which offers the possibility to post information about a procurement event that may lead to a violation of the public interest, is the best solution to this problem.

First, the information obtained must be carefully verified, recorded, classified and systematized.

Experts should determine in a timely manner whether the event occurred as a result of imperfect laws and procedures or was the result of non-compliance by officials.

Infringements resulting from non-compliance with the established rules are intended for investigations by other public authorities. If experts conclude that the influence of the "human factor" is obvious, the information should be promptly redirected to the authorized control authorities.

If the reason is in the shortcomings of the current rules, then the experts must determine the reason and propose a way to eliminate them. The task of public authorities is to analyze them carefully and, if they agree, to introduce them into legislation.

Work on improving public procurement legislation and improving the funding mechanism in this area should continue, be systemic, and should aim to increase the efficiency of budgetary expenditure by closing gaps in the practical implementation of public procurement procedures.

Optimizing funding and improving the efficiency of the public procurement process must be achieved through the transparency of information, the correction of gaps in national legislation and the absence of political influence. Creating relationships between the ethical behavior of officials, the efficiency of control and the implementation of modern information systems, will create an optimal system for financing public procurement and will improve the distribution of GDP in the Republic of Moldova.

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*Note: The article is a component part of the Research Project 20.80009.7007.15*

## ARTICLE HISTORY

Received 24 December 2020

Accepted 5 Mai 2021

## A SECOND CHANCE FOR ENTREPRENEURS IN THE REPUBLIC OF MOLDOVA: CHALLENGES AND SOLUTIONS

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**DOI:** <https://doi.org/10.36004/nier.es.2021.1-04>

**JEL Classification:** G33, L26, L38, O20, O29,

**CZU:** 334.72(478)

### ABSTRACT

The relevance of offering a second chance is determined not only by the need to mitigate the consequences of business failure and motivate the entrepreneur to continue his entrepreneurial activity, but also by the impact on the country's economy, as business closure leads to job losses, a worsening of the financial possibilities of the national and local budgets, reduction of competition and other negative trends in the internal market. The importance of these issues has increased significantly in the context of the COVID-19 pandemic, leading to significant deterioration of the Moldovan business environment.

The aim of the paper is to identify the barriers and needs of entrepreneurs, who face financial or other difficulties, are in a state of insolvency, have gone through restructuring/bankruptcy proceedings and would like to benefit from a second chance in Moldova. The research methodology is based on the analysis of legislative acts in the field; statistical data analysis; the results of 16 semi-structured interviews with entrepreneurs on elucidating the factors that favor and hinder the entrepreneurial activity, related to obtaining a second chance in business. The interviews were conducted between April and August 2018.

The research results showed that both internal factors (insufficient financial resources, knowledge of crisis management, mismanagement, insufficient staff qualification, including the entrepreneurial skills / experience of the owners, the lack of people with certain professions) and external (related to insolvency legislation, limited information on the possibilities that can be used in case of failure) are determining for taking a second chance.

**Keywords:** second chance, entrepreneurship, bankruptcy, business failure

Relevanța oferirii celei de-a doua șanse este determinată nu doar de necesitatea atenuării consecințelor eșecului în afaceri și motivării antreprenorilor să-și continue activitatea antreprenorială ci, de asemenea, de impactul asupra economiei, deoarece închiderea întreprinderilor conduce la reducerea locurilor de muncă, înrăutățirea posibilităților financiare ale bugetelor naționale și locale, reducerea concurenței și la alte tendințe negative pe piața internă. Importanța acestor probleme a crescut semnificativ în contextul pandemiei COVID-19, ducând la deteriorarea semnificativă a mediului de afaceri moldovenesc.

Scopul cercetării este de a identifica barierele și necesitățile antreprenorilor, care se confruntă cu dificultăți financiare sau alte probleme cu caracter nefinanciar, sau se află în stare de insolvabilitate, sau au trecut prin procedurile de restructurare sau faliment și ar dori să beneficieze în mod rapid de a doua șansă. Metodologia de cercetare se bazează pe analiza actelor legislative în domeniu; analiza datelor statistice; rezultatele a 16 interviuri semi structurate cu antreprenorii privind elucidarea factorilor, care favorizează și împiedică activitatea antreprenorială, legate de obținerea unei a doua șanse în afaceri. Interviurile au fost realizate în perioada aprilie-august 2018.

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*Rezultatele cercetării au arătat că atât factorii de ordin intern (insuficiența resurselor financiare, a cunoștințelor în gestionarea crizelor, management defectuos, insuficiența calificării personalului, inclusiv a abilităților/experienței antreprenoriale a proprietarilor, lipsa persoanelor cu anumite profesii, etc), cât și de ordin extern (ce țin de legislația privind insolabilitatea, informații limitate privind posibilitățile care pot fi utilizate în caz de eșec, etc) în diferite situații sunt determinanți pentru a beneficia de o a doua șansă.*

**Cuvinte cheie:** a doua șansă, antreprenoriat, faliment, eșec în afaceri

Актуальность предоставления второго шанса определяется не только необходимостью смягчения последствий неудач в бизнесе для частных предпринимателей и их мотивацией к продолжению предпринимательской деятельности, но также и влиянием на экономику страны в целом, поскольку закрытие предприятий малого и среднего бизнеса приводит к резкому сокращению рабочих мест, существенному ухудшению финансовых возможностей национального и местных бюджетов, неминуемому снижению конкуренции и другим негативным тенденциям на внутреннем рынке. Важность указанных проблем особенно возросла в условиях актуальной пандемии КОВИД-19, которое привело к существенному ухудшению бизнес-среды в Республике Молдова.

Целью исследования является выявление препятствий и потребностей предпринимателей частного бизнеса, которые сталкиваются с определенными финансовыми трудностями или другими нефинансовыми проблемами, либо находятся в состоянии несостоятельности, либо прошли процедуру реструктуризации или банкротства и хотели бы быстро получить второй шанс в Республике Молдова. Методология исследования основана на анализе национальных законодательных актов в данной области; анализе статистических данных; результатах 16 углубленных полуструктурированных интервью с предпринимателями по выявлению факторов, способствующих и препятствующих предпринимательской деятельности, связанных с получением второго шанса в бизнесе. Интервью проводились в период с апреля по август 2018 года.

Результаты исследования показали, что, как внутренние факторы (недостаточные финансовые ресурсы, узкие знания в области антикризисного управления, плохое управление, недостаточная квалификация персонала, в том числе предпринимательские навыки/опыт собственников, отсутствие людей с определенными профессиями, и т. д.), так и внешние факторы (связанные с законодательством о несостоятельности, ограниченная информация о возможностях, которые могут быть использованы предпринимателями в случае неудачи в бизнесе и т. д.) в разных ситуациях могут иметь решающее значение для быстрого получения второго шанса в бизнесе.

**Ключевые слова:** второй шанс, предпринимательство, банкротство, неудача в бизнесе

## INTRODUCTION

Giving entrepreneurs a second chance in business is a relatively new idea. In Europe, in practical terms, this idea was for the first time proposed for examination about 13 years ago. The importance of this issue is reflected in the EU framework document, which sets out the main priorities for supporting the SMEs sector - the Small Business Act for Europe. Principle II of the Small Business Act states that Member States ensure that „honest entrepreneurs who have faced bankruptcy quickly get a second chance”. The importance of supporting the second chance in European countries was also reflected in the following document, aimed at the entrepreneurship and SMEs development, approved by the European Commission - the Action Plan “Entrepreneurship 2020” (2013). Measures to create an environment in which entrepreneurs can grow include removing barriers, as „bankruptcy proceedings and giving a second chance to honest entrepreneurs”. In the context of the Association Agreement between the Republic of Moldova and the European Union, the Government of the Republic of Moldova has made similar commitments to comply with the principles and mechanisms for supporting SMEs, provided in the “Small Business Act” for Europe.

It is currently confirmed by statistics and some research that giving a second chance to "honest" entrepreneurs is important not only for the business environment, but also for the society. The need to pay special attention to this issue is conditioned by a number of premises, such as:

1) Bankruptcy in practice is rarely associated with dishonesty. Studies conducted in the EU show that only 1 in 20 bankruptcies involves fraud (5%). In the EU, 200,000 companies go bankrupt every year, resulting

in the loss of 1.7 million jobs. Thus, the problem proves to be important not only for entrepreneurs, but also for the socio-economic development of states, regions;

) Overcoming business failure makes entrepreneurs stronger. In particular, different research confirms the increased efficiency of the entrepreneurs' businesses, who previously had and overcame a negative insolvency experience, compared to other businesses.

Creating a business environment conducive to growth and economic viability is a long-standing goal of policy makers. However, the crucial roles of effective bankruptcy law and, in particular, of a culture that accepts entrepreneurial failure have been given insufficient attention in the process of creating a favorable entrepreneurial environment.

In the Republic of Moldova until recently, the measures regarding the second chance for entrepreneurs and small and medium-sized enterprises, whose businesses have gone bankrupt, have remained outside the legal framework. However, in recent years, a number of concepts and procedures have been clarified in the Insolvency Law, which can potentially contribute to the improvement of the enterprises activities in a crisis situation. Although the legal framework does not in any way prevent bankruptcy business owners from starting new businesses, in reality they face major problems, especially in accessing financial resources and participating in public procurement. They face such a phenomenon as stigma, which inhibits them and prevents them from restarting a new business. For example, in 2015, the Organization for Economic Co-operation and Development, evaluating the implementation of the Small Business Act, had surveyed 310 SMEs in the Republic of Moldova and over 50% of respondents indicated that it is „very difficult” to start a new business after a previous failure, and that the access to finance represent the main obstacle for them (OECD et al., 2015).

The relevance of this study is due to the fact that knowing the barriers and needs of entrepreneurs who have failed and want to benefit from a second chance aims, first of all, to mitigate the consequences of business failure for the entrepreneurs and motivate them to continue their entrepreneurial activity in the pre-existing business or a new one. Based on the scientific publications and statistical data analysis, as well as in-depth interviews with entrepreneurs, the authors revealed the specifics of the local entrepreneurs' activity, who face financial difficulties or other non-financial problems, are in a state of insolvency, have gone through restructuring or bankruptcy procedures and would like to benefit quickly from a second chance. The generalization of the interviews results allowed to identify and analyze the main constraints and the need of this group of entrepreneurs who would like to benefit from a second chance in the Republic of Moldova.

## LITERATURE REVIEW

In the scientific literature there is not a common definition accepted by the most of scientists, which would reflect the various processes related to business failure, which represent an obstacle both in researching the topic and in solving the practical problems. Usually, several notions are used in scientific papers and policy documents to characterize business failure: business difficulty, inability to pay, insolvency and bankruptcy. Business difficulties (financial and non-financial) are reflected in the worsening of financial and economic indicators, although the company is still able to meet its financial obligations to creditors. The concepts of inability to pay, insolvency and bankruptcy are differently defined, but all means that the debt of a legal person exceeds its assets, respectively, it is not possible to meet its financial obligations (at least in time). At the same time, the inability to pay is not related to court proceedings, and bankruptcy and insolvency are always achieved through a court decision. Also, insolvency can be overcome by restructuring the business, without leading to its bankruptcy.

Researchers focus on various theoretical and practical aspects of offering businesses a second chance. Many of the studies indicate an increasing importance of the need to offer a second chance for honest entrepreneurs. For instance, according to Stam, Audretsch and Meijaard, entrepreneurs who start a second business are more successful and can survive longer than small businesses; they grow faster and employ more workers (Stam et al., 2006). Thus, a failure in entrepreneurial activity should not prohibit any future entrepreneurial activity, but rather should be seen as an opportunity for lifelong learning and improvement.



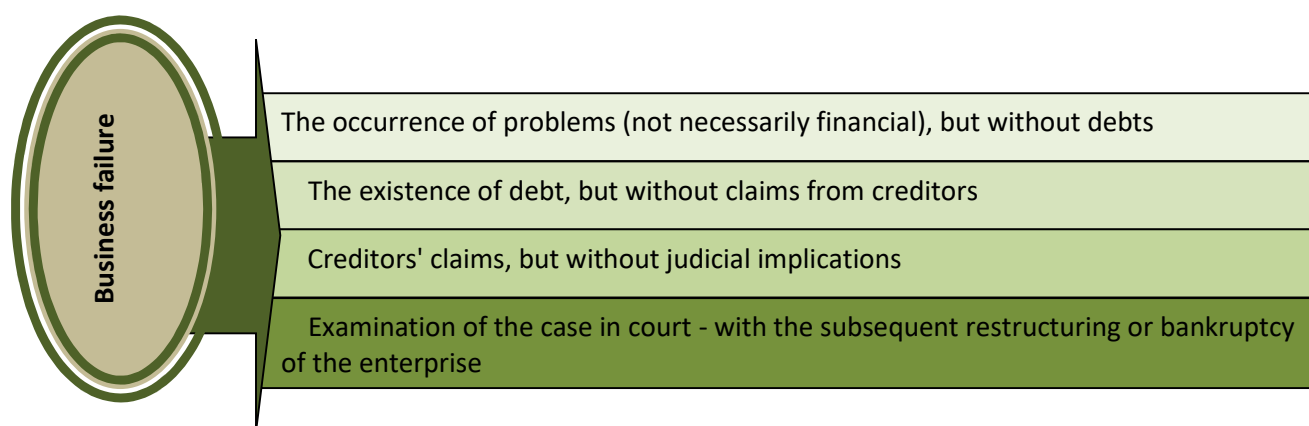
According to some empirical studies, bankruptcy laws that are more friendly to entrepreneurs (in terms of the possibility of obtaining discharge) lead to higher levels of entrepreneurship through a greater number of potential entrepreneurs. A more forgiving bankruptcy law provides partial insurance against the consequences of failure and reduces the risk tolerance threshold for entrepreneurs who are more reluctant to take risks (Armour and Cumming, 2008). At the same time, there is empirical evidence that risk reduction attracts entrepreneurs with higher education, previous experience and, in general, more qualified. And this, in turn, results in the formation of high-performing companies (Eberhart et al., 2012).

There are several barriers that limit the second chance. For example, some researchers note that business success or failure depends on internal or external circumstances. Internal factors can refer to managerial incompetence, overconfidence or excessive risk taking (Hayward et al., 2006). External causes can be related to inadequate economic circumstances, government policies or lack of financial resources (Liao et al., 2008). Also, offering a second chance is limited by lengthy and costly bankruptcy procedures. Faster processes for honest entrepreneurs are therefore important, given that according to research there is a relationship between the length of insolvency procedures and the loss of the company value (*Doing Business*, f.a., 2019).

Many concepts and approaches argued in scientific research find practical implementation in the European countries policy. In particular, in European policy documents referring to the second chance 10 years ago (including in the SBA for Europe), the notion of bankruptcy was mainly used. In recent years, however, in the European Commission Recommendations and Regulations, the notion of insolvency is more and more common. Moreover, in the text of these documents is recommended to support enterprises in different stages of business failure (the occurrence of problems, but without debts; existence of debts, but without claims from creditors; creditors' claims, but without legal implications; examination of the case in the court). It should be emphasized that attention is paid not only to financial problems, but also to other problems of the enterprises (of a non-financial nature), which can lead to difficulties in the debt recovery.

In the Republic of Moldova, in the scientific literature, there are separately developed the issues of the SME support policy assessment (Aculai et al., f.a., 2018), various aspects of the problems faced by SMEs (Levitskaia et al., 2015), anti-crisis management and the stages of the organization's bankruptcy (Burlacu, f.a., 2009), the assessment of the bankruptcy risk of domestic companies (Bancila & Mihalachi, f.a., 2012). However, the research gap lies in the fact that the study of the entrepreneurs' challenges, which face financial difficulties or other non-financial problems, are in a state of insolvency, have gone through restructuring or bankruptcy procedures and would like to quickly benefit from a second chance in the Republic of Moldova, is poorly reflected in the national scientific literature. In fact, the study from which this article is based is the first national study in this direction.

In the present study, a second chance for entrepreneurs is examined in a fairly broad context, not limited to the bankrupt companies. So, the whole period is actually subject of the analysis, related to the failure in business - the occurrence of problems (not necessarily financial), but without debts; the existence of debt, but without claims from creditors; creditors' claims, but without judicial implications; examination of the case in court - with the subsequent restructuring or bankruptcy of the enterprise (Figure 1).



**Fig.1 The context of business failure to offer entrepreneurs a second chance**

*Source: elaborated by authors*

Thus, this paper contributes to the literature on entrepreneurship in Moldova by empirically investigating the specifics of the activity of local entrepreneurs, who face a business failure and would like to benefit from a second chance, based on interviews with entrepreneurs.

#### DATA SOURCES AND METHODS

The data for research in the present article was obtained in the framework of several research projects carried out at the National Institute for Economic Research of Moldova with the active participation of the authors. The following methods were used in this paper: analysis and generalization of the specialized literature, analytical materials, legislative acts and policy documents, which ensure the regulation of entrepreneurship and support for entrepreneurs. The primary data for the entrepreneurs' activity analysis, who have faced financial / non-financial difficulties and intend to restructure their business or set up a new one, was obtained using the in-depth semi-structured interview method, given that the research of this entrepreneurs group in the Republic Moldova is at the initial stage (until now, no studies of these groups of entrepreneurs were carried out in the Republic of Moldova). The purpose of the interviews - to identify the circumstances (factors), which favor and hinder the entrepreneurial activity, related to obtaining a second chance in business. In total 16 interviews were conducted, with the participation of the authors. The interviews were conducted between April and August 2018. The survey was conducted with the following groups of small entrepreneurs (owners / co-owners and top managers), whose business is facing financial difficulties or other non-financial problems, are in a state of insolvency, have gone through restructuring bankruptcy procedures and would like to quickly benefit from a second chance. All respondents hold key positions in the companies, being (co-) owners and/or employees/managers of the company, so that they are well acquainted with the situation in the company, which is discussed in the interviews.

The main notions used in the study - enterprise in financial difficulty, inability to pay, insolvency, bankruptcy- are stated in the local legislation as follows:

) enterprise in financial difficulty - enterprise whose potential of managerial and economic viability is in a decreasing dynamic, but whose holder executes or is able to execute the due obligations;

) inability to pay - the debtor's financial situation characterized by his inability to execute his due pecuniary obligations, including fiscal obligations. Failure to pay is usually presumed if the debtor has ceased to make payments;

) insolvency - the financial situation of the debtor characterized by the inability to honor its payment obligations, ascertained by a court order;

) bankruptcy procedure - the collective and equal insolvency procedure, which is applied to the debtor in order to liquidate his patrimony to cover its debts.

## RESEARCH RESULTS AND DISCUSSIONS

***Insolvency law, main public institutions and implemented projects.*** The main document, which regulates the insolvency procedure in the Republic of Moldova, is the Insolvency Law, adopted in 2012, most recently amended by the Law No. 141 of 16.07.2020. The gravity of the problem is explained by the fact that during the independence period in the country were elaborated 4 laws in this field, respectively, in 1992, 1996, 2001 and 2012, in each of them later were introduced significant changes. In the process of the legislation developing, not only the procedures related to the recovery of corporate debts were concretized and completed, but also the key notions were modified. In particular, instead of the notion of bankruptcy in the law of 2001, the notion of insolvency was introduced, which is considered to be “something more forgiving and easier to bear” for entrepreneurs.

The most recent amendments to the Insolvency Law concern the extrajudicial restructuring of the companies, the streamlining of the financial circuit and the access to finance of economic agents in respect of which the insolvency procedure was initiated, including by regulating the possibility of post-initiation financing, maximizing the recovery rate of creditors' claims.

Analyzing the currently in force Insolvency Law from the second chance point of view, it is worth mentioning that the law provides for two restructuring procedures (Chapter VI, art. 182 - 226). One is the general procedure and the other is the accelerated restructuring procedure. The accelerated restructuring procedure can be applied to the financially distressed company and aims to protect the company, providing the opportunity to continue the activity, keep jobs and cover debts by implementing a concrete plan.

The main institution, which regulates all aspects of the SME sector development in the Republic of Moldova is the Ministry of Economy and Infrastructure. At the same time, the state policy in the field of enterprises' insolvency and bankruptcy is carried out by the Ministry of Justice.

At the same time, some modest steps are being taken to facilitate the access to second chance for entrepreneurs. Thus, starting with July 2018, the government agency the Organization for SMEs development (ODIMM) started an international project co-financed from European Union funds: “Accepting failure to facilitate the access to second chance for entrepreneurs in the Danube region - Danube Chance 2.0” (within the Transnational Program Danube 2014-2020). The project duration - until 30.06.2021. This is the first project in the Republic of Moldova, focused on entrepreneurs in difficulty, in a state of insolvency or bankruptcy and who would like to start a new business.

***Analysis of the importance of the phenomenon based on quantitative data.*** Based on the available data (of the State Tax Service, the Public Services Agency and the National Bureau of Statistics) was identified the number of the problematic enterprises, which are facing difficulties in recovery debt, or which are already in a state of bankruptcy.

✓ ***The data of the State Tax Service*** reflects the number of economic agents declared insolvent. Starting with 2013, the number of economic agents declared in a state of insolvency shows a constant growth trend. In particular, a significant increase was registered starting with 2017, when their number exceeded the cumulative number of agents declared insolvent in the period 2013-2016 (by 4.6 times). Over the next 3 years (2017-2019) the number of economic agents declared insolvent continues to increase. Thus, in 2019 the number of economic agents declared in a state of insolvency reached the maximum registered in the analyzed period, constituting 11183 economic agents, increasing by 24.3% compared to the previous year. The significant increase in the number of economic operators declared insolvent is explained, first of all, by the simplification of the liquidation procedure.

Table 1.

**Number of economic agents declared insolvent, period 2013 - 2019**

Year	Q I	Q II	Q III	Q IV	Total per year	Average number of employees in a company, pers.	Average number of employees in enterprises declared insolvent, pers.
2013	41	64	45	63	213	10.1	2151
2014	83	95	72	124	374	9.9	3703
2015	112	124	103	120	459	10	4590
2016	161	186	125	201	673	9.8	6595
2017	1783	1931	2088	2161	7963	9.7	77241
2018	1996	2126	2318	2559	8999	9.6	86390
2019	2546	2690	2866	3081	11183	9.7	108475

Source: authors' calculation based on the data of the State Tax Service of the Republic of Moldova and the National Bureau of Statistics

Considering that on average 9.7 employees were working in a company in the Republic of Moldova in 2019, the liquidation of insolvent enterprises only in 2019 may lead to the reduction of 108,475 jobs. Using the data of the National Bureau of Statistics, which shows that the average number of employees in 2019 was 552,113 persons, we identify the share of jobs, which can be liquidated in connection with the closure of enterprises declared insolvent - this is 19.6%. Given the trend in 2019 and the negative effects of the Covid-19 pandemic crisis, we assume that the reduction in jobs this year may be even more significant.

✓ The State Register of Legal Entities and Individual Entrepreneurs keeps records of all enterprises that have been registered and deregistered. The data of the State Register show that during 2015-2016 there was a net growth of enterprises (calculated as the difference between registered and deregistered enterprises), and during 2017-2019 this indicator had a negative value. Moreover, in the last 3 years this negative trend has progressed: in 2017 the monthly reduction in the number of enterprises was -178 units, and in 2019 - 336 units. There are several factors that explain this trend (in particular, the simplification of the business liquidation procedure; a more constructive approach of the potential entrepreneurs on starting their own business), however, the data show the existence of certain problems faced by domestic entrepreneurs.

Table 2

**Number of registered and deregistered enterprises from the State Register of legal entities and individual entrepreneurs in the years 2015-2019**

Indicators	2015		2016		2017		2018		2019	
	Total	Average per month	Total	Average per month	Total	Average per month	Total	Average per month	Total	Average per month
Registered enterprises, un.	5985	499	5673	473	6406	534	5751	479	6136	511
Deregistered enterprises, un.	3905	325	4055	338	8540	712	8895	741	10166	847
Net growth	2080	173	1618	135	-2134	-178	-3144	-262	-4030	-336

Source: authors' calculation based on the data of the Public Services Agency

✓ Position of the Republic of Moldova in the international ranking Doing business (on indicators, which refer to insolvency). According to the World Bank Doing Business Report, ed.2020, the Republic of Moldova ranked 67th in the "Solving Insolvency" indicator (out of 190 countries included in the ranking), marking a worsening in the ranking with 9 positions (2014-2020) (*Doing Business*, f.a., 2019).

According to this ranking, the insolvency procedure in the Republic of Moldova lasts on average 2.8 years, and the costs related to the insolvency procedure constitute 15.0% of the value of the debtor's patrimony, which is above the average in Eastern European and Central Asian countries (respectively, 2.3 years and 13.1%) and significantly more than in OECD countries (1.7 years and 9.3%).

In order to characterize the legislation on insolvency / bankruptcy in the ranking is used the *Strength of insolvency framework index*, which represents the sum of points assigned to the country for the commencement of proceedings index, management of debtor's assets index, reorganization proceedings index and creditor participation index. The value of the *Strength of insolvency framework index* for the Republic of Moldova is 12.0 points out of 16 possible, or 75%. At the same time, the insolvency framework does not provide for the possibility of the debtor obtaining credit after the beginning of insolvency proceedings: the country obtaining 0 points on this indicator, which means that the enterprise ceases to exist after the completion of the insolvency process.

***The barriers faced by small entrepreneurs, oriented in obtaining a second chance in business.***

For a deeper investigation of the circumstances (factors), which favor and hinder the entrepreneurial activity, related to obtaining a second chance in business, the interview method was used.

In the process of interviewing, a second chance means if the company: (1) is in financial or non-financial difficulty, which poses a threat to paying the debts, or (2) the company is unable to honor its financial obligations (3) the situation created is not related to fraud, then (4) the entrepreneur should have a real opportunity to restart his activities relatively quickly and not too difficult or to create a new business.

The generalization of the interviews results with the entrepreneurs allowed to identify the following barriers, faced by the small entrepreneurs, oriented towards obtaining the second chance in business:

1. Acute insufficiency of financial resources at the enterprise / entrepreneur. The entrepreneurs explained this problem by the following:

    ) Decrease in sales, conditioned by the change of the goods market conjuncture. For example, the emergence of new competitors in the market, the change in the consumer demand and preferences for the good of the respondents' businesses;

    ) Increased expenditures, first of all, increased payments for utilities and rent;

    ) Non-compliance with the financial obligations by customers;

    ) Deficiencies of the state policy to support entrepreneurship;

    ) State policy at macro-level (high level of migration, change in exchange rate, corruption, etc.)

2. Long and costly bankruptcy procedures, provided by the insolvency legislation;

3. Limited information about the possibilities an entrepreneur, whose business is in a difficult situation (legal norms, support from institutions, etc.) can use;

4. Insufficient training and experience of persons, who have to solve the problems of creditors and entrepreneurs / enterprises at the stage of insolvency (mediators, consultants, bankruptcy administrators, etc.);

5. Insufficient institutions, interested and with the potential to support entrepreneurs that face financial or other problems in business;

6. The stress of entrepreneurs, who face insolvency or bankruptcy, lack of self-confidence, which is intensified by the distrust from people (both business partners and family members);

7. Staff difficulties, largely caused by:

    ) Insufficient qualification of employees (workers and specialists) or even lack of people with certain professions and qualifications. Consequently, the employment of people with inadequate qualifications leads to poor quality of work, low discipline, high staff turnover, collective conflicts, etc.



) Insufficiency of professional qualification and entrepreneurial skills/experience of owners, managers. For example: the owner of the restaurant mentioned that *"he started a business he did not know. It was first necessary to study about the activity related to restaurants."*

8. Unqualified resolution of general issues related to the enterprise management, such as:

) Contradictions between business owners;  
 ) The main owner and manager had other obligations, working as an employee;  
 ) The goals of business development were not well thought out; management methods and styles were used inefficiently;

) The company was simultaneously involved in several projects, which did not have the necessary financial support;

) The owners of the company were not ready for the risks, or the risks were not taken seriously, or no measures were developed to overcome them;

) Low attention is paid to some management directions, in particular: business planning, including financial planning, price formation was incorrect - prices for products were reduced, no advertising policy, the production control, marketing and supply management were insufficient.

Regarding the success of the new business, after the previous failure in business, the respondents expressed different points of view, including that the new business is in some cases more successful compared to the previous one. One of the respondents clearly mentioned that "the new business differs a lot, in a better sense, from the previous one: it has only one type of activity and a small number of employees. The respondent, being owner and director, has all the advantages in making strategic decisions, while in the previous business there was no mutual understanding between owners and administrators."

At the same time, during the interviews, the entrepreneurs expressed the need for various state support measures to quickly get a second chance. These referred primarily to changes in the legislation and judicial practices related to the bankruptcy procedure, as well as to the financial and institutional support of entrepreneurs to get a second chance. In addition, entrepreneurs paid attention to the general problems of SME development in the Republic of Moldova. In particular, it was proposed:

A. As part of the amendments to the legislation on entrepreneurship and legal practices related to bankruptcy procedures:

) To reduce the duration and complexity of legal procedure related to the closure of the business (in the absence of company debts). This does not require additional financial resources, as it depends largely on the level of bureaucracy.

B. Improving the financial support. Extension of the state support measures, intended for newly established enterprises, including enterprises, which get a second chance. It is reasonable to implement these measures in the framework of the SME support programs. In particular:

) to extend the state support under special/target programs for all Moldovan SME, including those operating in Chisinau (given that 64% of domestic economic agents operate in the capital). Currently, support under special programs is intended primarily for businesses from the rural areas.

) As possible state support measures for SME in the crisis situations, was proposed: 1) to reduce the rent payment (if the owner of the area is the state) or to compensate a part of the rent payment, which is very high at the moment; 2) postponement of the tax payment for the equipment and tools purchase necessary for the business development. For example, the respondent ordered a computer program abroad to develop mail delivery models. The cost of the program was \$ 9,000, the tax was \$ 2,000. The respondent refused to pay such a fee and had to go to Moscow alone to bring the program, significantly reducing the purchasing cost.

C. Within the institutional support. Any opportunities for institutional support of the second chance were enthusiastically supported by respondents, considering that improving the institutions activity is the most possible support form for entrepreneurs. In particular, it was proposed:

) Development of institutions that provide services to entrepreneurs:  
 o at the stage of identifying new complicated problems in the business - by providing assistance in the restructuring process, in order to keep the company and the jobs. According to the respondents

*“these services must be provided by public institutions, free of charge, given the state's interest in protecting jobs and paying taxes”;*

- willing to set up a new business or restart the previous activity after a forced cessation of activity or bankruptcy.

- ) Extending the process of informing entrepreneurs how to overcome the business problems.

- ) Assistance of professional psychologists in organizing counseling, to reduce the impact of stigmatization of the “bankrupt”. Organizing the training of entrepreneurs in the field of risk management, crisis management, staff development; delegation of responsibilities; providing psychological support. The respondents mention that *“it must be free and include rural areas”*.

- ) Development of methodological instructions for entrepreneurs on early prevention of crisis situations, insolvency management, bankruptcy.

- ) Dissemination in society of information about the existence of the right to failure in any activity.

The generalization of the interviews results with the entrepreneurs and the legislation analysis allowed to identify a range of directions to support the second chance, the main ones being the following:

- ) *Improving the legislation and the control over its implementation; introducing changes in the policy documents.* In particular, it is proposed: (a) to include in the aim of the Insolvency Law, in line with the interests of creditors, also - where possible, giving the debtor-entrepreneur the chance to recover it business; (b) to add in the Law on Small and Medium-sized Enterprises, in particular, to the list of the target groups supporting SMEs, the group of entrepreneurs, who may benefit from the second chance.

- ) *Facilitating the access to funding sources.* In particular, during and after the financial crisis, the following forms of financial support for entrepreneurs are important: (i) reducing the debt burden for entrepreneurs, who have got a second chance (lower rates for unpaid debts); (ii) the possibility to obtain a loan after the initiation of the insolvency process, in particular, within the special programs; (iii) ensuring the access to state contracts for “honest” bankrupt entrepreneurs; (iv) providing facilities to entrepreneurs for payments, offered to consultations of lawyers, financiers, accountants and other insolvency specialists, whose services are usually quite expensive.

- ) *Improving the training of entrepreneurs; providing advisory and information services.* In particular: (1) training of entrepreneurs regarding the activity in difficult conditions, in particular, training courses on risk management, crisis management; personnel management; financial management; (2) training and advisory assistance of business specialists in overcoming crisis issues; (3) organizing mentoring and coaching activities to help those who want to get a second chance; (4) informing entrepreneurs from the SME sector about the possibility of using the restructuring procedure to overcome a business crisis situation; (5) developing and maintaining the website, which places the information necessary for the second chance.

- ) *Changing the activity of institutions, aimed at giving SMEs a second chance.* In order to support SMEs in overcoming financial insolvency, it is appropriate for the state to initiate or create specialized support institutions, or to assign new functions to existing public institutions. Certain functions of granting a second chance to entrepreneurs in the Republic of Moldova are performed by persons with liberal professions (mediators, bankruptcy administrators) and their professional associations, whose activities are regulated by the Ministry of Justice. It is very important to provide assistance to companies in identifying difficulties at the initial stage of their emergence. In particular, as early warning systems could be the tax authorities, commercial banks, credit bureaus.

- ) *Changing the attitude in society about entrepreneurs, who have suffered a failure in business, in order to improve the public image through education and media.* In this context, it is relevant to disseminate information in society: (a) about the right to fail in any activity, especially in the field of business, characterized by a high degree of risk; (b) the success stories of entrepreneurs who have overcome crisis situations; (c) in a broader context - about improving the image of entrepreneurs.

## CONCLUSIONS

Giving entrepreneurs a second chance is not limited to companies that have gone bankrupt, but is examined in a broader context in the politics of European countries. In particular, these are companies that are in financial difficulty or are facing non-financial difficulties; who have faced insolvency, have gone through restructuring or bankruptcy procedures.

In order to develop a policy to support the second chance in business, it is rational to identify the barriers that small entrepreneurs face, which can lead the company to bankruptcy. The constraints of the local entrepreneurs, who have suffered a failure in business and would like to quickly benefit from a second chance in the Republic of Moldova are characterized by the following: (a) acute shortage of financial resources in the enterprise; (b) long and costly bankruptcy procedures; (c) limited information on the possibilities an entrepreneur whose business is in a difficult situation can use; (d) inadequate training and experience of specialists who have to deal with business difficulties (mediators, consultants, bankruptcy administrators, etc.); (e) the insufficient level of training of entrepreneurs in the field of business, in which insufficient attention is paid to issues related to the risk management; the crisis management, the human resources management, the financial management, etc.); (f) insufficient institutions, interested in supporting entrepreneurs, facing financial or other business problems; (g) stress of entrepreneurs, facing insolvency or bankruptcy procedures, lack of self-confidence, which is intensified by the distrust of people.

In order to give entrepreneurs a second chance, it is relevant to use a wide range of support directions, the main ones being the following: (1) improving the legislation and controlling its implementation; (2) facilitating the access to funding sources; (3) improving the entrepreneurial training of persons involved in business and improving the professional qualification of other participants of the insolvency process; (4) changing the attitude in society towards entrepreneurs, who have suffered a failure in business, in order to improve the public image through education and media.

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#### ARTICLE HISTORY

Received 05 December 2020

Accepted 06 May 2021

**PRIVATE CONSUMPTION IN THE EUROPEAN UNION: A COMPARATIVE STUDY****Nicoleta ONOFREI, PhD student <sup>1</sup>**

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**DOI:** <https://doi.org/10.36004/nier.es.2021.1-05>**JEL Classification:** D10, E21, E25, Z13.**CZU:** 330.567.28(4)**ABSTRACT**

The aim of this paper is to study consumption of households from an economic and cultural perspective in the European Union with 28 Member States during the period 2010-2019. For this purpose, we compared the Eastern European countries, dominated by rapid economic growth and development with the Western European countries, which represent the most developed countries in the EU-28. From this perspective, we proposed a multidimensional analysis of consumption that includes macroeconomic indicators of households' wealth, which strongly influence their consumption together with an overview on expenditure by consumption purpose. Moreover, we have also considered Hofstede's cultural dimension theory based initially on four cultural dimensions (power distance, individualism versus collectivism, masculinity versus femininity, and uncertainty avoidance) to observe the impact national culture plays on households' consumption in Eastern and Western European countries tracking the historical changes of these countries. Our methodological approach consisted in descriptive and inferential statistics based on the selected economic and cultural indicators. Pearson's product-moment correlations were calculated to assess the correlations between the variables. Our analysis shows that the level of wealth is lower in Eastern European countries compared to Western Europe, which influences significantly the private consumption in these countries. Moreover, the systematic differences of national culture between Eastern and Western Europe influence strongly the private consumption of their population. Results of this paper indicate that in Eastern European countries the highest share of expenditure is allocated to primary needs such as food, non-alcoholic beverages, alcoholic beverages and cigarettes to the detriment of health, education, recreation and culture.

**Keywords:** households' consumption, European Union, income, national culture, Hofstede's theory

Scopul prezentei lucrări este de a studia consumul gospodăriilor din perspectivă economică și culturală în Uniunea Europeană cu 28 de state membre în perioada 2010-2019. În acest sens, am comparat țările din Europa de Est, dominate de creștere și dezvoltare economică rapidă, cu țările din Europa de Vest, care reprezintă țările cele mai dezvoltate din UE-28. Din această perspectivă, am propus o analiză multidimensională a consumului care include indicatori macroeconomici ai avuției

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gospodăriilor, care influențează puternic consumul acestora, precum și o imagine de ansamblu asupra cheltuielilor în funcție de scopul consumului. În plus, am luat în considerare, de asemenea, teoria dimensiunii culturale a lui Hofstede bazată inițial pe patru dimensiuni culturale (distanța față de putere, individualismul versus colectivismul, masculinitatea versus feminitatea și evitarea incertitudinii) pentru a observa impactul pe care cultura națională îl are asupra consumului gospodăriilor în țările din Europa de Est și de Vest, urmărind schimbările istorice din aceste țări. Abordarea metodologică a studiului a constat în statistici descriptive și inferențiale bazate pe indicatorii economici și culturali selectați. Metoda Pearson a fost aplicată pentru a evalua corelațiile dintre variabile. Analiza noastră arată că nivelul de bunăstare este mai scăzut în țările din Europa de Est în comparație cu Europa de Vest, ceea ce influențează în mod semnificativ consumul privat din aceste țări. În plus, diferențele sistematice de cultură națională dintre Europa de Est și Europa de Vest influențează puternic consumul privat al populației lor. Rezultatele acestui studiu indică faptul că, în țările din Europa de Est, cea mai mare parte a cheltuielilor este alocată nevoilor primare, cum ar fi alimentele, băuturile nealcoolice, băuturile alcoolice și țigările, în detrimentul sănătății, educației, recreerii și culturii.

**Cuvinte cheie:** consumul gospodăriilor, Uniunea Europeană, venit, cultura națională, Teoria lui Hofstede

Целью данной статьи является изучение потребления домашних хозяйств с экономической и культурной точки зрения в Европейском Союзе с 28 государствами-членами в период 2010-2019 гг. В связи с этим мы сравнили страны Восточной Европы, в которых преобладают высокие темпы экономического роста и развития, со странами Западной Европы, которые являются наиболее развитыми странами в ЕС-28. С этой точки зрения мы предложили многомерный анализ потребления, который включает макроэкономические показатели благосостояния домашних хозяйств, которые сильно влияют на их потребление, а также обзор расходов по целям потребления. Кроме того, мы также рассмотрели теорию культурного измерения Хофстеде, первоначально основанную на четырех культурных измерениях (дистанция от власти, индивидуализм против коллективизма, мужественность против женственности и избегание неопределенности) для определения влияния национальной культуры на потребление домашних хозяйств в странах Восточной и Западной Европы, в контексте исторических изменений в этих странах. Методологический подход исследования состоял из описательной и выведенной статистики на основе отобранных экономических и культурных показателей. Для оценки корреляции между показателями применялся метод Пирсона. Наш анализ показывает, что уровень благосостояния в странах Восточной Европы ниже, чем в странах Западной Европы, что существенно влияет на частное потребление в этих странах. Кроме того, систематические различия в национальной культуре между Восточной и Западной Европой сильно влияют на частное потребление их населения. Результаты этого исследования показывают, что в странах Восточной Европы большая часть расходов направляется на удовлетворение основных потребностей, таких как продукты питания, безалкогольные напитки, алкогольные напитки и сигареты, в ущерб здоровью, образованию, отдыху и культуре.

**Ключевые слова:** потребление домашних хозяйств, Европейский союз, доходы, национальная культура, Теория Хофстеде

## INTRODUCTION

Our society is called a consumerist society as the level of consumption of goods and services nowadays has never been seen in the history of humanity (Matsuyama 2002:5-7). The gradual transition towards consumerism started after and it has triggered progress in all areas of activity, which lead to a lifestyle of individuals inclined towards wealth.

Private consumption represents the household's consumption of goods and services. The households' consumption accounts for around 50% of EU-28 Gross Domestic Product (GDP) compared to around 20% for government consumption (Eurostat, 2019). The assignation of financial resources towards private consumption implies a reduction of the personal savings, and, in some cases even indebtedness of individuals and households. Households' income determines the level of their consumption and the category of goods and services towards which they decide allocate their budget.

The private consumption is very limited in those households in which the income does not cover the expenses of their basic needs. According to Engel's law, the wealthier households allocate a smaller share of their budget for food, which is a basic need, assigning their resources to more sophisticated needs.

Households' consumption in the European Union is still divergent triggering numerous differences between countries. Factors that drive households' consumption are triggered by economic features such as disposable income and individual consumption, and socio-cultural characteristics such as habits and cultures. In this paper, we have considered Hofstede's cultural dimension theory based initially on four cultural dimensions (power distance, individualism versus collectivism, masculinity versus femininity and uncertainty avoidance) to observe the impact national culture has on households' consumption in EU-28 Member States during 2010-2019. For this purpose, we have drawn statistical comparisons between the Western European countries, the most developed countries in the EU-28 and Eastern European countries, developing countries, which joined the EU after 2004.

This paper is structured in five parts. The first part contains the introduction, which indicates the research question. The second part of the paper covers the literature review of economic and cultural influences of households' consumption in the European Union. The third part of the study describes the research methodology including the data sources. The fourth part of the paper presents the results and discussions derived from the study. Finally, the fifth part shows the conclusions of the study.

### LITERATURE REVIEW

Some authors define consumption as "spending for survival or enjoyment as opposite to providing for future production" (Black 1997:84). Recent research (Sadik-Zada & Loewenstein 2018:196–204) reveals the direct relationship between disposable income and consumption. Other authors argue that income effects show differences in the spending patterns of affluent households rise (Chai et al. 2015:423–440) and that changes in household wealth impact on consumption (Jawadi et al. 2017:849). Furthermore, consumption is shaped by the interaction between the national context and individual lifestyle preferences (Thøgersen 2017:16–25). Moreover, households' consumption is a complex process, which represents the result of social, cultural and economic influences (Zukin & Maguire 2004:174). Other authors (Schor 2002:3–4) indicate that motivations of consumption are social, these deriving from the need to keep pace with the level of consumption promoted by the society rather than with objective individual needs. Some authors (Firat et al. 2013:199) conclude that culture is one of the most important factors affecting attitudes, behaviors and lifestyles of households' consumption.

If we consider the socio-economic context of the countries in the European Union, we can distinguish two different societies: Western Europe and Eastern Europe. On one hand, the socio-economic evolution of Eastern European countries produced by the collapse of the communist regime triggered a significant change in the political regime. This implied a major transition from the planned economy towards a market economy (Lipton et al. 1990:6–79). On the other hand, countries from the Western Europe are more economically developed having an individualistic culture, whereas Eastern European countries are developing at a rapid pace being more traditional (Trentmann 2004:378). Some authors indicate the differences in the structure of households' consumption appeared due to different levels of socio-economic development in different countries along with historical, geographical and cultural factors (Kozera et al. 2013:293–303). For some categories of consumption such as clothing, footwear, miscellaneous goods and services Eastern European countries before joining the EU spent less than Western European countries (Arnotte 1999:1–8). Some authors (Yıldırım et al. 2016:42–51) consider that culture shapes purchases decisions of individuals. Moreover, other authors point out the role of cultural differences on individual consumption behaviors (De Mooij 2017:444–456) identifying the national culture as critical factor (Nair & Little 2016:178). Differences in households' consumption between the Western and the Eastern European countries are more visible in the experience of operating in the market economy, the demand for basic goods and the level of saturation, which are in the detriment of the latter ones (Szwacka-Mokrzycka 2017:169–178). Recent research (Michail 2020:979–994) indicates that household consumption patterns in the European Union are more convergent in the Eurozone than outside it. Moreover, cultural values in some countries have restrained the spread of consumerism (Roach et al. 2019:17). In addition, some studies include the effects of national culture on household's consumption taking into consideration Hofstede's cultural dimensions theory. From this

perspective, low power distance countries have a higher tendency to change (Matusitz & Musambira 2013:42–60), whereas consumers with low levels of uncertainty avoidance are prone to take more risks (Hwa-Froelich & Vigil 2004:107-118).

### RESEARCH METHODOLOGY

The aim of this paper is to analyze the households' consumption in the European Union and to identify some economic and social variables that influence consumption. In our analysis we refer to the period 2010-2019 based on the data availability of the indicators analyzed. In this paper, we have used descriptive statistics to correlate economic indicators such as the Adjusted gross disposable income of households per capita, the Actual Individual Consumption and Households' expenditure by consumption purpose with the cultural factors based on Hofstede's initial model of national culture. Both economic indicators used in this paper are expressed in Purchasing Power Standards (PPS) to include the price level differences across the countries subject to our analysis.

Adjusted gross disposable income of households per capita reflects "the purchasing power of households and their ability to invest in goods and services or save for the future" (Eurostat, 2019). This indicator includes the flows of services households receive free of charge from governments (e.g. education, health, etc.). In this paper, we used this indicator as it reflects the disposable income of households available for consumption and/or savings.

Actual Individual Consumption (AIC) measures all the goods and services consumed by households including the services provided by government or non-profit organizations (e.g. education, health, etc.). This indicator is preferred in comparative studies as indicator of households' material welfare. In this paper, we focus only on households' consumption, therefore we have excluded from our analysis the services provided by government or non-profit organizations.

Households' expenditure by consumption purpose depicts the allocation of income aggregated at the national level to the main categories of spending such as food & non-alcoholic beverages, clothing & footwear, housing, health, education, recreation and culture.

From the side of cultural factors that influence consumption, we relied on Hofstede's model of national culture (Hofstede 1980:15–41) that initially comprised four dimensions: power distance, individualism versus collectivism, masculinity versus femininity and uncertainty avoidance.

Power distance index (PDI) reflects the way in which a society reacts to inequalities among its members. A high power distance index is characteristic for societies in which people accept differences and hierarchical order, while in countries with a low power distance people with less power strive to minimize the inequalities in the distribution of power.

Individualism versus collectivism (IDV) shows whether the members of a society are inclined to act only for their own welfare and for their families (high index values) or on the contrary it is a society in which members of different groups help each other selflessly.

Masculinity versus femininity (MAS) differentiates between societies oriented towards achievement, heroism, material rewards for success (high values correspond to masculinity) and those in which cooperation and modesty are appreciated values (low values correspond to femininity).

Uncertainty avoidance index (UAI) reflects how uncomfortable are the members of a society with ambiguity and uncertainty. Societies with a high UAI are more intolerant and respect rigid codes of behavior, while those with a low UAI have a more relaxed attitude and accept more easily uncertain situations.

In our analysis we verified the following hypotheses:

H1: Actual Individual Consumption is positively correlated with the Adjusted gross disposable income of households per capita.

H2: Households' expenditure by consumption purpose is positively correlated with the Adjusted gross disposable income of households per capita. .

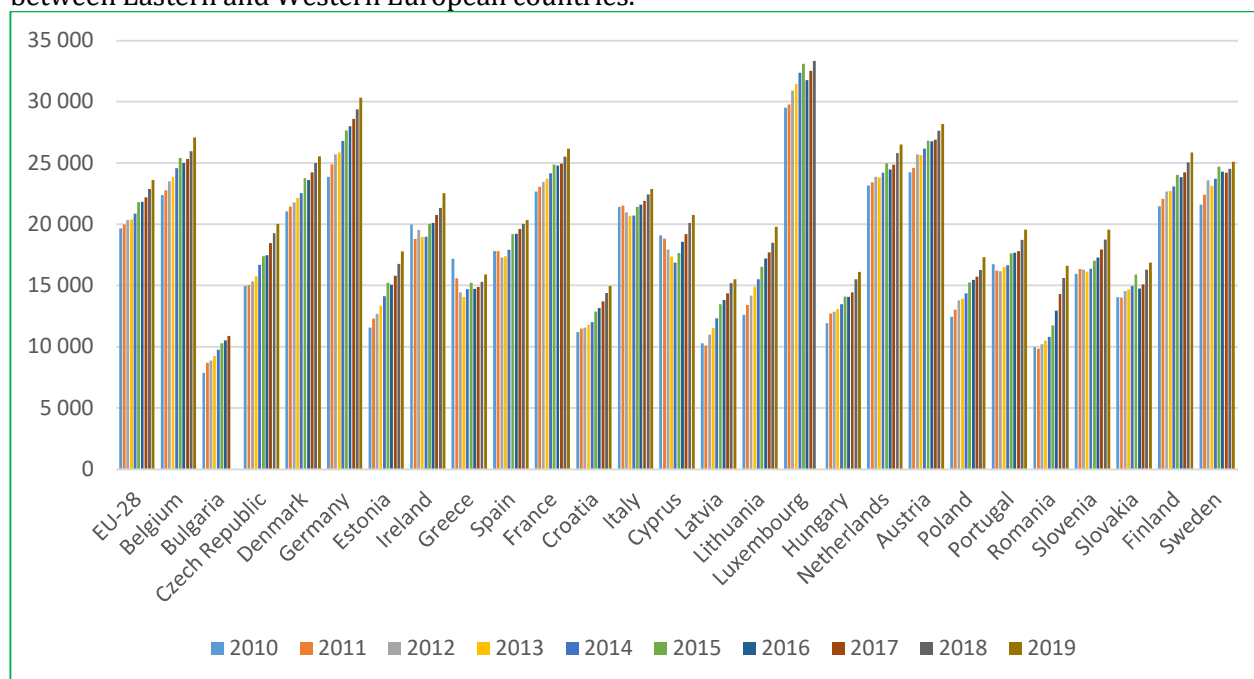
H3: Actual Individual Consumption is positively correlated with the Hofstede's 4 dimensions of national culture.

H4: Households' expenditure by consumption purpose is correlated with the Hofstede's 4 dimensions of national culture.

The statistical approach applied to verify these hypotheses is the Pearson's product-moment correlation analysis. Moreover, the results and discussions derived from our analysis are presented in section 4 of this paper.

## RESULTS AND DISCUSSIONS

The total gross disposable income of households in EU-28 amounted to EUR 9 781 billion in 2018 (Eurostat, 2019). Figure 1 reflects the evolution of the Adjusted gross household disposable income per capita in EU-28 during the period 2010-2019 (data for Malta and UK was not available). In this paper, we used the data converted in purchasing power standards (PPS), which allowed us to draw an accurate comparison between all the EU-28 Member States. The mean Adjusted gross household disposable income per capita in EU-28 had an upward movement during the whole period analyzed, increasing from 19 650 PPS (2010) to 23 599 PPS (2019). However, major differences can be observed between the Member States from Eastern and Western Europe. The major difference is between Luxembourg and Bulgaria, the countries with the highest and respectively lowest value in terms of Adjusted gross income per capita. In 2010, Luxembourg exceeded almost 4 times the Adjusted gross disposable income per capita compared to Bulgaria. In 2019, the country that has exceeded the EU-28 average was Germany (+28,5 %), followed by Austria (+19,4 %), Belgium (+14,8 %), Netherlands (+12,3 %), France (+10,8 %), Finland, Sweden and Denmark (less than 10 %) (data for Luxembourg was not available for 2019, but in 2018 it registered 41,2 % more than the EU-28 average). At the opposite pole, we find the Eastern European countries as eight countries recorded values of 20 % or more below the EU-28 average (data for Bulgaria was not available, but in 2017, the most recent available year, it registered 46,1 % of the EU-28 average). The lowest values of adjusted gross disposable income of households per capita in 2019 were registered in Croatia (63,4% of the EU-28 average), Latvia (65,8%), Greece (67,4%), Hungary (68,2%), Romania (70,4%), Slovakia (71,5%), Poland (73,3%), and Estonia (75,4%). The analysis of the adjusted gross disposable income of households per capita expressed in PPS indicates clearly the significant differences in income between the Eastern and Western Europe. The year 2019 marks the 15 years period after the accession of the Eastern European countries to the EU back in 2004. This means that even after 15 years of economic convergence, there are still significant imbalances in income between Eastern and Western European countries.

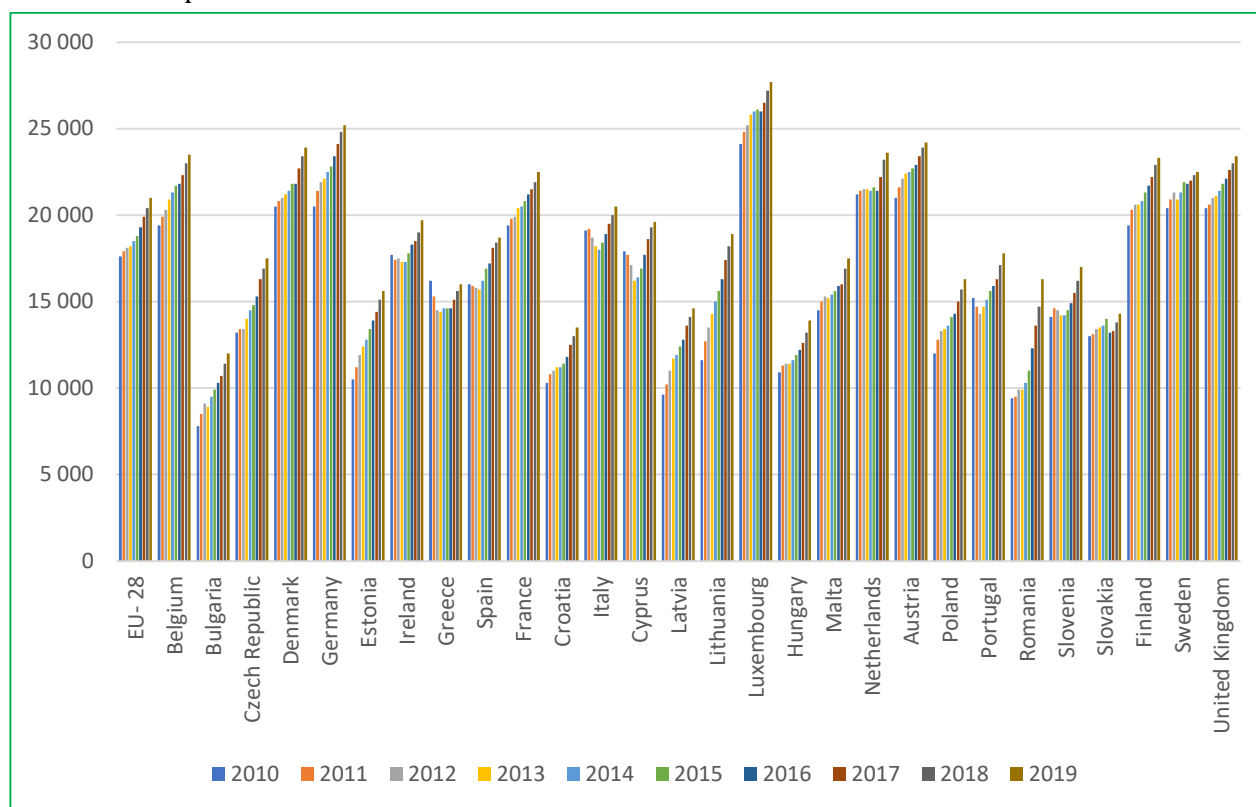


**Figure 1:** Adjusted gross disposable income of households per capita in PPS

Source: Authors' contribution based on Eurostat data (2010-2019)

The evolution of the Actual Individual Consumption (AIC) is analyzed in this paper as an indicator for the material welfare of households at the European Union level for the period 2010-2019 (Figure 2). As observed in Figure 1, in Figure 2 we remark a similar pattern in households' welfare with significant differences between the Eastern and Western European countries. The mean AIC for EU-28 increased from 17 600 PPS (2010) to 21 000 PPS (2019). The countries that exceed the EU-28 AIC average are Luxembourg (+31,9 %), Germany (+20 %), Austria (+15,2 %), Denmark (+13,8 %), Netherlands (+12,4 %), United Kingdom (+11,4%) followed by Finland (+11 %) and France (+7,1 %). The countries with the lowest AIC in EU are Bulgaria (-42,9 % from the EU-28 mean), Croatia (-35,7 %), Hungary (-33,8 %), Slovakia (-31,9 %), Latvia (-35,5 %) followed by Estonia, Greece, Poland and Romania with less than 30 % below the EU-28 AIC average. Slovenia, Czech Republic, Malta, and Portugal registered values of AIC with 20 % below the EU-28 average, while Spain, Ireland, Italy, Cyprus and Lithuania had values less than 10 % below the EU-28 mean.

The analysis of Figures 1 and 2 indicate that Eastern European countries position themselves lower on both economic indicators used in this study compared to the Western European countries. The differences in the welfare of households between the EU-28 Member States reveal challenges that developing countries from Eastern Europe strive to attain in order to reach the development level of Western European countries.



**Figure 2:** Actual Individual Consumption (Real expenditure per capita in PPS)

Source: Authors' contribution based on Eurostat data (2010-2019)

Table 1 reveals the evolution of households' expenditure by consumption purpose in function of geographical zone, Western Europe (WE) and Eastern Europe (EE) during the period 2010-2019. We observe major differences between Western and Eastern European countries as regards the distribution of households' expenditure to different categories of consumption. Eastern European countries spent much more money on Food & alcoholic beverages, Alcoholic beverages, tobacco & narcotics and Communications than Western countries, and less on Housing, water, electricity, gas & other fuels, Recreation & culture and Restaurants & hotels. The differences on categories of consumption such as Education, Clothing & footwear, Health and Transport are insignificant for both Western and Eastern European countries.



Table 1

**Households' expenditure by consumption purpose (share of total=100)**

	Region	2010	2011	2012	2013	2014	2015	2016	2017	2018
<b>Food and non-alcoholic beverages</b>	WE	11.7	11.7	11.9	12	11.9	11.8	11.8	11.9	11.5
	EE	18.2	18	18.5	18.6	18.6	18.4	18.3	18.1	18
<b>Alcoholic beverages, tobacco &amp; narcotics</b>	WE	4	4.2	4.2	4.2	4	4.1	4.1	4	4
	EE	7	6.8	6.7	6.7	6.6	6.5	6.4	6.2	6.2
<b>Clothing &amp; footwear</b>	WE	5	4.9	4.9	5	5	5	4.9	4.8	4.7
	EE	4.4	4.3	4.2	4.2	4.4	4.5	4.6	4.6	4.6
<b>Housing, water, electricity, gas &amp; other fuels</b>	WE	22.9	22.9	23.4	23.7	23.6	23.6	23.5	23.2	23.3
	EE	21.5	21.8	21.8	21	20.9	21	20.3	20	20
<b>Furnishings, household equipment &amp; routine household maintenance</b>	WE	5.8	5.6	5.5	5.4	5.4	5.5	5.5	5.5	6
	EE	5	4.9	4.8	4.7	4.7	4.7	5	5	5.2
<b>Health</b>	WE	3.7	3.8	3.9	3.9	3.9	4	4	4	4
	EE	4	4	3.9	4	4.2	4.3	4.3	4.4	4.4
<b>Transport</b>	WE	12.9	13.2	13	12.7	12.7	12.5	12	12.6	12.9
	EE	11.9	12.1	12.2	12.1	12.2	12.1	12	12.2	12.3
<b>Communications</b>	WE	2.6	2.6	2.5	2.5	2.4	2.4	2.3	2.3	2.3
	EE	3.6	3.4	3.4	3.4	3	3.3	3.3	3.2	3.1
<b>Recreation &amp; culture</b>	WE	9	9.1	9	8.8	8.8	8.8	8.8	8.8	8.8
	EE	7.5	7.4	7.4	7.4	7.5	7.6	7.7	7.9	8.2
<b>Education</b>	WE	1	1	1	1.1	1	1.1	1.1	1.1	1
	EE	1.3	1.4	1.4	1.4	1	1	1.3	1.3	1.2
<b>Restaurants &amp; hotels</b>	WE	9	9.1	9.1	9.3	9	9.6	9.9	10.1	10.2
	EE	7	6.9	7.2	7.4	7.6	7.9	8.2	8.5	8
<b>Miscellaneous goods &amp; services</b>	WE	11.3	11.2	11	11	11.2	11	11.3	11.2	11.3
	EE	8.1	8	8	8.1	8.1	8	8.2	8	8.4

Source: Authors' contribution based on Eurostat data (2010-2019)

In this paper, we considered the hypothesis following which the AIC and the distribution of households' expenditure across different categories of consumption is not only influenced by the economic factors, but also by national cultural dimensions. For this purpose, we correlated the Actual Individual Consumption and Households' expenditure by consumption purpose with the Adjusted gross disposable income, and with the 4 dimensions of national culture proposed initially by Hofstede. The results of the correlation tests (Table 2) show that AIC is positively correlated with Adjusted gross disposable income of households per capita (p-value<0.0001) and IDV (p-value<0.01), and negatively correlated with PDI (p-value<0.001) and UAI (p-value=0.05). The correlation between AIC and MAS is not statistically significant. Thus, countries with higher income per capita and with individualistic population register higher values on AIC. On the contrary, countries in which people accept inequalities between their members and avoid uncertainty, have lower values on AIC.

Regarding the correlations with households' expenditure by consumption purposes we observed that the Adjusted gross disposable income of households per capita is positively correlated with Furnishings, household equipment and routine household maintenance (p-value<0.01), Miscellaneous goods and services (p-value<0.0001), and, negatively correlated with Food and non-alcoholic beverages (p-value<0.0001), Alcoholic beverages, tobacco and narcotics (p-value<0.05), Communications (p-value<0.0001), and Education (p-value<0.05). PDI is positively correlated with Food and non-alcoholic beverages (p-value<0.01), Communications (p-value<0.01), and negatively correlated with Recreation and culture (p-value<0.05). These findings suggest that in societies in which people accept inequalities between their members, less money will be spent on recreational and cultural activities and more money on Food and non-alcoholic beverages and Communications. If we consider that people with less power have also lower levels of income, then these results are relevant and intuitive. Individualism versus collectivism is positively correlated with Housing, water, electricity, gas and other fuels (p-value<0.05), Recreation and culture (p-value<0.05), Miscellaneous goods and services (p-value<0.05) and negatively correlated with Food and non-alcoholic beverages (p-value=0.01) and Communications (p-value<0.01). Masculinity versus femininity index is not significantly correlated with any of the variables included in the analysis. In societies in which people have a high level of uncertainty avoidance, more is spent on Food and non-alcoholic beverages (p<0.05), Health (p<0.05), and less on Housing, water, electricity, gas and other fuels (p-value=0.01) and Recreation and culture (p-value<0.001).

**Table 2**

**Pearson's product-moment correlations between AIC, households' expenditure by consumption purpose and Adjusted gross disposable income per capita and Hofstede's 4 dimensions of national culture**

	Adjusted gross disposable income per capita	Power distance index (PDI)	Individualism versus collectivism (IDV)	Masculinity versus femininity (MAS)	Uncertainty avoidance index (UAI)
Actual individual consumption (AIC)	0.9898214 **** p-value < 2.2e-16	-0.5972491 *** p-value = 0.00162	0.5279604 ** p-value = 0.006675	-0.06675845 p-value = 0.7512	-0.3834227 * p-value = 0.05849
Food and non-alcoholic beverages	-0.8203692 **** p-value = 5.146e-07	0.5679182 ** p-value = 0.003063	-0.4773361 ** p-value = 0.01583	-0.1084955 p-value = 0.6057	0.393135 * p-value = 0.05188
Alcoholic beverages, tobacco and narcotics	-0.4375898 * p-value = 0.0287	0.1672928 p-value = 0.4241	-0.0673258 p-value = 0.7492	0.06006066 p-value = 0.7755	0.07276739 p-value = 0.7296

Clothing and footwear	0.3066982 p-value = 0.1359	-0.3622259 p-value = 0.07517	0.1586611 p-value = 0.4487	-0.2323645 p-value = 0.2637	-0.03563647 p-value = 0.8657
Housing, water, electricity, gas and other fuels	0.5186466 p-value = 0.007901	-0.08051141 p-value = 0.702	0.4103231 * p-value = 0.04162	0.1398564 p-value = 0.5049	-0.4795802 ** p-value = 0.01527
Furnishings, household equipment and routine household maintenance	0.5376524 ** p-value = 0.005573	-0.2293347 p-value = 0.2701	0.35585 p-value = 0.08084	0.1973647 p-value = 0.3443	-0.2591889 p-value = 0.2109
Health	-0.2549813 p-value = 0.2187	0.2173657 p-value = 0.2966	-0.1872141 p-value = 0.3702	0.002146365 p-value = 0.9919	0.4569065 * p-value = 0.02167
Transport	0.1538905 p-value = 0.4627	-0.3145666 p-value = 0.1256	-0.07707822 p-value = 0.7142	-0.2883868 p-value = 0.1621	0.1578673 p-value = 0.451
Communications	-0.7351082 **** p-value = 2.843e-05	0.5035237 ** p-value = 0.01029	-0.4769184 ** p-value = 0.01593	0.04081415 p-value = 0.8464	0.2687174 p-value = 0.194
Recreation and culture	0.3611103 p-value = 0.07614	-0.3895767 * p-value = 0.05423	0.4114046 * p-value = 0.04103	-0.2512522 p-value = 0.2257	-0.6127655 *** p-value = 0.001128
Education	-0.4289208 * p-value = 0.0324	0.2681378 p-value = 0.195	-0.3321518 p-value = 0.1048	0.3510357 p-value = 0.08533	0.1576021 p-value = 0.4518
Restaurants and hotels	0.0008428659 p-value = 0.9968	-0.1872007 p-value = 0.3702	-0.2055235 p-value = 0.3243	0.199351 p-value = 0.3394	0.1152958 p-value = 0.5831
Miscellaneous goods and services	0.7805442 **** p-value = 4.171e-06	-0.3206204 p-value = 0.1181	0.4982304 ** p-value = 0.01125	0.01389205 p-value = 0.9475	-0.1378836 p-value = 0.511

Source: Calculated by the authors based on Eurostat data (2010-2019)

## CONCLUSIONS

In this paper, we analyzed the households' consumption in the European Union with 28 Member States during the period 2010-2019 from an economic and cultural perspective. In the first part of our analysis, we described the evolution of two macroeconomic indicators, the Adjusted gross disposable income of households per capita and the Actual Individual Consumption per capita. The results show that the population from the Eastern Europe is less wealthy than the population from the Western countries, since they recorded lower values on both economic indicators. The countries with the lowest Adjusted gross disposable income per capita are Bulgaria, Estonia, Poland, Slovakia, Romania and

Hungary, while the countries with the highest values on this indicator are Luxembourg, Germany, Austria, Belgium and Netherlands. The EU-28 average of the Actual Individual Consumption increased significantly during the period analyzed from 17600 PPS per capita in 2010 to 21 000 PPS per capita in 2019. The countries with the lowest AIC are the Eastern European countries, namely Bulgaria, Croatia, Hungary, Slovakia and Latvia. At the opposite pole, there are the Western European countries, such as Luxembourg, Germany, Austria, Denmark and Netherlands. Regarding the household expenditure by consumption purpose, we observed that Eastern European countries households allocate higher shares of their total households' expenditure to the basic categories of consumption such as food, alcoholic beverages, tobacco in the detriment of education, recreational and cultural activities. The population living in the Western Europe allocate higher shares of their budget than the population living in the Eastern Europe for categories of consumption such as Housing, water, electricity, gas & other fuels, Clothing and footwear, Recreation and culture, Restaurants and hotels. We hypothesized that the differences in consumption are also related with the cultural differences between the two groups of countries, Western Europe and Eastern Europe.

In the second part of our analysis, we verified four hypotheses regarding the correlation between the Actual Individual Consumption and Households' expenditure by consumption purpose on one side and the Adjusted gross disposable income and Hofstede's 4 cultural dimensions on the other side. We used the cultural dimensions in our analysis since they also influence consumption besides the economic factors. According to the correlation tests, the first hypothesis is accepted, since we obtained a positive correlation between the Adjusted gross disposable income and the Actual Individual Consumption. The second hypothesis is only partially accepted because only some categories of consumption expenditures are correlated with the Adjusted gross disposable income. The third hypothesis is also partially accepted: 3 dimensions of 4 are correlated with AIC (Power distance index, Individualism versus collectivism, and Uncertainty avoidance index. The fourth hypothesis is only partially true, as in the previous case, Hofstede's dimensions are correlated only with some categories of consumption expenditures.

Our study creates the grounds for future research of this topic, since the relation between culture & consumption is complex in nature and it deserves to be substantiated empirically. Therefore, for future research, we propose to apply more advanced methodology for statistical analysis, such as the structural equation modelling that will allow assessing not only the correlation but also the causation between various variables.

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## ARTICLE HISTORY

Received 19 February 2021

Accepted 06 May 2021



**ENTREPRENEURIAL ECOSYSTEM IN THE REPUBLIC OF MOLDOVA:  
THE ROLE OF GOVERNMENT POLICY**

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**DOI:** <https://doi.org/10.36004/nier.es.2021.1-06>

**JEL Classification:** F2, F68, K2, L26, L38, M2, O20, O29, O44

**UDC:** 338.22:334.722(478)

**ABSTRACT**

The article presents and analyses the entrepreneurial ecosystem in the Republic of Moldova, as a solution for an integrated approach to the problems of entrepreneurs. Entrepreneurial ecosystems represent a set of interdependent actors and coordinated factors so as to increase the productivity of SMEs. The paper includes: (I) investigating the literature on entrepreneurial ecosystems; (II) analysis of the role of public policies in creating and supporting entrepreneurial ecosystems; (III) finalizing the components of the entrepreneurial ecosystem in the Republic of Moldova and performing their evaluation through the prism of international rankings. The aim of this research is to elucidate the role of entrepreneurial policies with a holistic approach to the creation of the entrepreneurial ecosystem. The key challenge for the authorities is to identify the pillars that contribute to the development of an ecosystem. However, the existence of a large number of entrepreneurial support programs and projects does not necessarily lead to a qualitative increase in the number of enterprises. The results of the research showed that the authorities promote policies to support the business environment with a fragmented approach and an emphasis on increasing quantitative indicators. At the same time, the analysis of the components of the entrepreneurial ecosystem in the Republic of Moldova, through international rankings, indicates the deterioration of the business environment conditions. The research methodology is based on the analysis of policy documents on SME support and data provided by reports of international organizations (World Bank, World Economic Forum, Organization for Economic Cooperation and Development, etc.).

**Keywords:** entrepreneurial ecosystem, public policies, international ranking, analysis.

Articolul prezintă și analizează ecosistemul antreprenorial din Republica Moldova, drept soluție pentru o abordare integrată a problemelor antreprenorilor. Ecosistemele antreprenoriale reprezintă un set de actori interdependenți și factori coordonați astfel încât să sporească productivitatea întreprinderilor mici și mijlocii într-un anumit teritoriu. Lucrarea include: (I) investigarea literaturii de specialitate privind ecosistemele antreprenoriale; (II) analiza rolului politicilor publice în crearea și susținerea ecosistemelor antreprenoriale; (III) definitivarea componentelor ecosistemului antreprenorial din Republica Moldova și efectuarea evaluării acestora prin prisma clasamentelor internaționale. Scopul prezentei cercetări este de a elucida rolul politicilor antreprenoriale cu abordare holistică la crearea ecosistemului antreprenorial din Republica Moldova. Provocarea cheie pentru autorități care încearcă să abordeze politicile privind ecosistemele antreprenoriale rezidă în identificarea pârghiilor, pilonilor care contribuie la dezvoltarea unui ecosistem și direcționarea eforturilor întru crearea / consolidarea acestora. Or, existența unui număr mare de programe și proiecte de suport antreprenorial nu neapărat duc la creșterea calitativă a numărului de întreprinderi dintr-o zonă geografică. Rezultatele cercetării au arătat că autoritățile promovează politici de susținere a mediului de afaceri cu abordare fragmentară și accent pe creșterea indicatorilor cantitativi. Totodată, analiza componentelor ecosistemului antreprenorial din Republica Moldova, prin prisma clasamentelor internaționale, indică deteriorarea condițiilor mediului de afaceri și implicit existența unui șir de impedimente cu care se confruntă antreprenorii. Metodologia cercetării se bazează pe analiza documentelor de politici privind susținerea IMM-urilor și a datelor oferite de rapoartele organizațiilor internaționale (Banca Mondială, Forumul Economic Mondial, Organizația pentru Cooperare și Dezvoltare Economică, etc.), privind nivelul de dezvoltare economică a țării, mediului de afaceri, capitalului uman etc.

**Cuvinte-cheie:** ecosistem antreprenorial, politici publice, clasamente internaționale, analiză.

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*В статье представлена и проанализирована предпринимательская экосистема в Республике Молдова, как решение для комплексного подхода к проблемам предпринимателей. Предпринимательские экосистемы – совокупность взаимозависимых субъектов и координированных факторов, направленных на повышение производительности малых и средних предприятий на определенной территории. Работа включает: (I) исследование литературы по предпринимательским экосистемам; (II) анализ роли государственной политики в создании и поддержке предпринимательских экосистем; (III) доработка компонентов предпринимательской экосистемы в Республике Молдова и выполнение их оценки через призму международных рейтингов. Цель данного исследования – выяснить роль предпринимательской политики с целостным подходом к созданию предпринимательской экосистемы в Республике Молдова. Основная задача властей, пытающихся реализовать политику предпринимательской экосистемы, состоит в том, чтобы определить компоненты, которые способствуют развитию экосистемы, и направить усилия на их укрепление. Наличие большого количества программ и проектов поддержки предпринимательства не обязательно ведет к качественному увеличению количества предприятий в географическом районе. Результаты исследования показали, что власти продвигают политику поддержки деловой среды с фрагментарным подходом и акцентом на увеличение количественных показателей. В то же время, анализ компонентов предпринимательской экосистемы в Республике Молдова через призму международных рейтингов указывает на ухудшение условий деловой среды и косвенно на наличие ряда препятствий, с которыми сталкиваются предприниматели. Методология исследования основана на анализе программных документов по поддержке МСП и данных отчетов международных организаций (Всемирного банка, Всемирного экономического форума, Организации экономического сотрудничества и развития и др.) об уровне экономического развития страны, окружающей среды, бизнес, человеческий капитал и др.*

**Ключевые слова:** предпринимательская экосистема, государственная политика, международные рейтинги, анализ.

## INTRODUCTION

There is a global recognition of the fact that the development of successful small and medium-sized enterprises is one of the main prerequisites for the prosperity of local economies. Creating a sustainable and competitive entrepreneurial ecosystem is at the heart of efforts to increase incomes and well-being in regional economies. Despite the relative novelty of the entrepreneurial ecosystem concept, it rapidly caught the attention of authorities, international organizations, business environment and academia. A distinguished feature of the entrepreneurial ecosystem is the environment in which the company/firm operates. However, the company's activity is directly and undoubtedly influenced by external environmental factors, such as: access to finance and knowledge, the market, authorities and the regulatory framework, support and consulting services, competitors, culture, etc. The entrepreneurial ecosystem can be described as a generic context aimed at promoting entrepreneurship in a region. Therefore, it consists of a horizontal network (customers and suppliers) and a vertical network (competitors and partners). It also includes organizations that support entrepreneurs: public or private financing agencies (banks, business angels, venture capital, etc.); support infrastructure (business incubators, consultants, etc.); research organizations (research centers, laboratories, etc.); and consortia of enterprises (active enterprises, associations and unions, etc.) (Theodoraki & Messegheem, 2017, p. 56). Another eloquent definition of entrepreneurial ecosystems, which also refers to the concept of sustainability, states that they are an interconnected group by actors from a certain geographical area, committed to sustainable development by providing support and facilitating new viable projects (Cohen, 2006, p. 3). Ecosystems are most often treated as a set of interconnected entrepreneurial actors (both potential and existing), entrepreneurial organizations (firms, venture capitalists, business angels and banks), institutions (universities, public sector agencies and financial institutions) and entrepreneurial processes (for example, business growth rate, number of high-growth firms, etc.) that work together formally and informally to increase performance in the local business environment (Mason & Brown, 2013, p. 9). At the same time, the isolated existence of actors is not enough to ensure a functioning ecosystem, as Stam argues, entrepreneurial networks, leadership, finance services, talent, knowledge and support are at the heart

of the ecosystem, but in addition to the presence of these elements, the interaction between them is important to determine the success of the ecosystem (Stam, 2015, p. 1766).

Although there is no unanimously accepted definition for the notion of entrepreneurial ecosystem, the literature studied allows us to point out the following common features of this concept:

- A delineated geographical area;
- A set of elements/actors of the ecosystem;
- Interaction/collaboration between elements;
- Development, performance, economic rise.

Research on entrepreneurial ecosystems has evolved and there is relevant previous work on clusters, industrial districts and innovation clusters. (Roundy, 2016) Most studies have focused on large urban areas, such as Silicon Valley, Boston, Washington DC, and Boulder Colorado (Feldman et al., 2005) and more recently Chicago, Pittsburgh, and Richmond (Harper-Anderson, 2018). The mentioned research focused on the attributes of entrepreneurial ecosystems, focusing on different components, how they interact and what aspects allow for the growth and development of ecosystems. Most studies that address the subject analyze the evolution and process by which an ecosystem was created in a particular locality or focus on conceptual ideas (Feldman, 2014). Research in the field has been criticized for focusing mainly on successful ecosystems in urban environments, but also for listing the attributes of the ecosystem without considering the causality and stages through which ecosystems could develop (Roundy, 2016). There are also disagreements in the literature about the exact role of certain attributes, some for example – show that universities are extremely important, while others claim that they are less conclusive. The role of public policy in supporting and creating entrepreneurial ecosystems is also unclear (Feld, 2012). The concept of entrepreneurial ecosystem has captured the attention of the authorities largely due to the fact that it is associated with the increase in the number of jobs and companies with high development potential (Mason and Brown, 2014).

The key challenge for authorities trying to address entrepreneurial ecosystem policies is to identify the levers, pillars that contribute to the development of an ecosystem and direct efforts to create/strengthen them. At the same time, it should be pointed out that the existence of a large number of programs and projects to support entrepreneurship does not necessarily lead to a qualitative increase in the number of enterprises in a geographical area. Respectively, the emphasis should be on the conditions under which companies operate or on creating a business-friendly ecosystem. The aim of this paper is to critically examine the role of public policies with a holistic approach in the formation of entrepreneurial ecosystems in the Republic of Moldova.

## LITERATURE REVIEW

### **Synthesizing theoretical approaches to the entrepreneurial ecosystem and the role of government policy**

The process of creating and developing the entrepreneurial ecosystem is a relatively new one, which has, in a short time, gained the attention of governments, development agencies, researchers and academia. Organizations and institutions such as: the World Bank, the World Economic Forum, Babson College or the Organization for Economic Cooperation and Development, etc. approached the multilateral concept, presenting definitions, components and tools for assessing the entrepreneurial ecosystem.

The concept of the entrepreneurial ecosystem encompasses the interconnection of social, political, economic and cultural components, which contribute to the creation and growth of innovative companies with major development potential. As originally defined by Dubini, ecosystems (or as she calls them, environments) are characterized by the presence of family businesses and examples of success, diverse economies, strong business infrastructure, access to finance, entrepreneurial culture and public policies that stimulates the creation of added value (Dubini, 1989). What distinguishes the concept from other approaches to economic policies is that the entrepreneurial ecosystem assigns the central role in creating the system to the entrepreneur. The entrepreneur is the one who constantly faces impediments, seeks solutions, identifies opportunities, he is the one who best perceives the environment in which he operates and its shortcomings. This "privatization" of entrepreneurship policy diminishes the role of government compared to traditional policy approaches - thus, the role of the state remains just as important, except that its prerogative becomes the creation of conditions adapted to the needs of the ecosystem. (Feld, 2012)

Along with the key role of entrepreneurs in ecosystem development, the latest research in the field offers key components, the interaction between elements, access to the necessary resources, but also the role of authorities in these systems. Feld offers nine attributes designed to create a thriving entrepreneurial ecosystem: leadership, infrastructure, support networks and services, partnership building events, government support, cooperation between large companies and SMEs with high growth potential, financial resources (Table 1).

Table 1

Nine attributes of a successful start-up community

Attribute	Description
<b>Leadership</b>	Strong group of entrepreneurs who are visible, accessible and committed to the region becoming a great place to start and grow a company.
<b>Intermediaries</b>	Many well-respected mentors and advisors giving back across all stages, sectors, demographics and geographies as well as a solid presence of effective, visible, well-integrated accelerators and incubators.
<b>Network density</b>	Deep, well-connected community of start-ups and entrepreneurs along with engaged and visible investors, advisors, mentors and supporters. Optimally, these people and organizations cut across sectors, demographics and culture engagement. Everyone must be willing to give back to their community.
<b>Government</b>	Strong government support for and understanding of start-ups to economic growth. Additionally, supportive policies should be in place covering economic development, tax and investment vehicles.
<b>Talent</b>	Broad, deep talent pool for all levels of employees in all sectors and areas of expertise. Universities are an excellent resource for start-up talent and should be well connected to community.
<b>Support services</b>	Professional services (legal, accounting, real estate, insurance and consulting) are integrated, accessible, effective and appropriately priced.
<b>Engagement</b>	Large number of events for entrepreneurs and community to connect, with highly visible and authentic participants (e.g. meet-ups, pitch days, start-up weekends, boot camps, hackathons and competitions).
<b>Companies</b>	Large companies that are the anchor of a city should create specific departments and programs to encourage cooperation with high-growth start-ups.
<b>Capital</b>	Strong, dense and supportive community of venture capitalists, angels, seed investors and other forms of financing should be available, visible and accessible across sectors, demographics and geography.

Source: Feld (2012, pp. 186-187).

The entrepreneurial ecosystem is a complex mechanism, as described by Feld (Table 1), which includes the physical support infrastructure (clusters, business incubators, institutions, financiers, large companies, universities, etc.); support services (consulting, partnerships, access to finance, investors, meetings and communication, etc.); human resources (talents, successful entrepreneurs, experts, etc.). The element that defines a start-up community is the realization of the connection, interaction and a continuous connection between actors involved in the ecosystem. So, to have a functioning entrepreneurial ecosystem it is not enough to have talented people, institutions and support and consulting services, businesses and companies. It is imperative to ensure cooperation, to catalyze the process of connection between stakeholders, so the process includes the creation of the community, but also its growth.

Isenberg of Babson College has written a series of articles on the concept of the entrepreneurial ecosystem. He argues that there is no exact formula for creating the ecosystem, but the authorities must follow the following nine principles for creating it: 1. Do not try to imitate the Silicon Valley model; 2. Create the ecosystem considering the conditions of the local environment; 3. Involve the business environment from the start; 4. Identify new ways of financing; 5. Do not overload the clusters; facilitate the organic/natural development of ecosystems, accept ambitious projects; 6. Favor businesses with high development potential; 7. Involve entrepreneurs in decision-making within



companies and institutions; 8. Continuously address cultural change; 9. Reform the legal, bureaucratic and regulatory framework (Isenberg, 2010). At the same time, Isenberg proposes six distinct areas of the entrepreneurial ecosystem: politics, finance, culture, support, human capital and markets (Isenberg, 2011). These six areas are largely found in the paper prepared by the World Economic Forum (Table 2).

Table 2

### Entrepreneurial ecosystem pillars and their components

Pillar	Components
<b>Accessible markets</b>	Domestic market: large/medium/small companies as customers and governments as customer. Foreign market: large/medium/small companies as customers and governments as customer.
<b>Human capital/workforce</b>	Management talent, technical talent, entrepreneurial company experience, outsourcing availability and access to immigrant workforce.
<b>Funding &amp; finance</b>	Friends and family, angel investors, private equity, venture capital and access to debt.
<b>Support systems/mentors</b>	Mentors/advisors, professional services, incubators/accelerators and networks of entrepreneurial peers.
<b>Government &amp; regulatory framework</b>	Ease of starting a business, tax incentives, business-friendly legislation/policies, access to basic infrastructure, access to telecommunications/broadband and access to transport.
<b>Education &amp; training</b>	Available workforce with pre-university education, available workforce with university education and those with entrepreneurship-specific training.
<b>Major universities as catalysts</b>	Promoting a culture of respect for entrepreneurship, playing a key role in idea-formation for new companies and playing a key role in providing graduates to new companies.
<b>Cultural support</b>	Tolerance for risk and failure, preference for self-employment, success stories/role models, research culture, positive image of entrepreneurship and celebration of innovation.

Source: (*Doing Business*, f.a.2013,pp.6-7).

The pillars proposed by the World Economic Forum for a successful ecosystem focus on the presence of key factors (resources), such as human capital, finance and services; formal (government and regulatory framework) and informal (cultural support) institutions that allow entrepreneurs access to internal and external markets. The model of the entrepreneurial ecosystem proposed by the World Economic Forum emphasizes the creation of the entrepreneurial culture and the positive image of the businessman, the promotion of talents, of qualified human resources. In addition to access to finance, support from the authorities and the existence of accessible markets, there is a need to create a culture that promotes entrepreneurial values.

### DATA SOURCES AND USED METHODS

The research methodology is based on the critical analysis of public policy documents on SME support and data provided by reports of international organizations (World Bank, World Economic Forum, Organization for Economic Co-operation and Development, etc.) on the country's level of economic development, its business environment, human capital, etc.

### THE RESULTS OF OWN RESEARCH AND DISCUSSIONS

#### *Traits of the existing legal framework, oriented on the development and support of the business environment in the Republic of Moldova.*

Inspired by international research and international good practice, which confirms the importance of entrepreneurial development for sustainable economic growth, the authorities implement policies and programs to support the small and medium-sized enterprise (SME) sector. So far, these policies are mainly aimed at increasing the number of enterprises and quantitative indicators on their activity, being mainly aimed at providing support in the form of funding and



training for narrowly selected segments of entrepreneurs, such as: emigrants, young people, women, etc. (Table 3) The main authority empowered to implement projects and programs on SME development is the Organization for the Development of the Small and Medium Enterprises Sector (ODIMM). ODIMM is a public, non-commercial, non-profit institution created by Government Decision no. 538 of May 17, 2007, which operates in coordination with the Ministry of Economy and with other central and local authorities, business associations, business support providers and SMEs.

Table 3

**Projects aimed at the development of target groups of entrepreneurs**

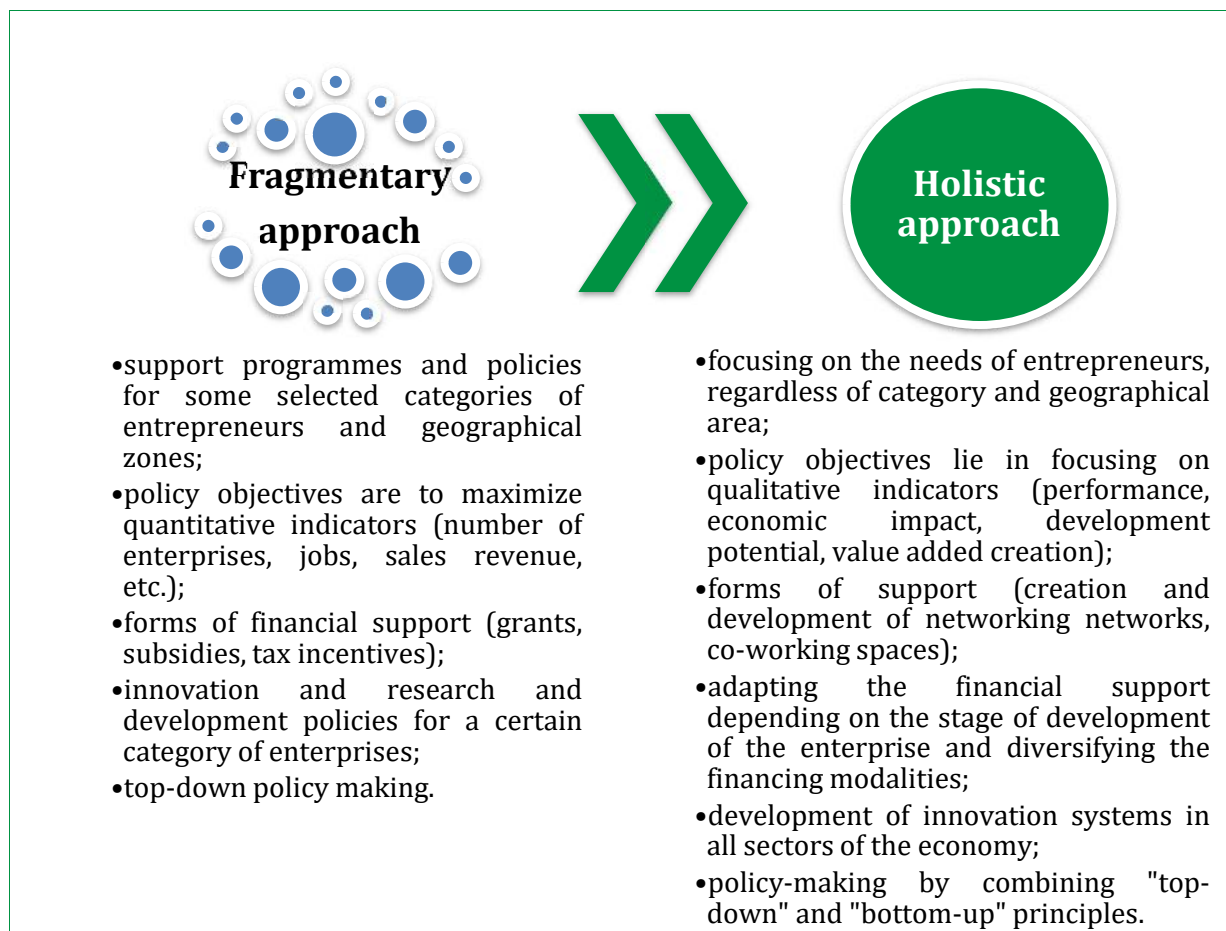
Target group	Project/program
<b>Emigrants</b>	"PARE 1 + 1" Program for attracting remittances in the economy
<b>Youth</b>	"Start for Youth – a sustainable business at your home" National program
	"Joint Opportunities in Business for Youth" (JOBS4Youth) Project
	„Lead your way to business" Project
	National program for youth economic empowerment (PNAET)
<b>Women</b>	"Women in business" National pilot-program
	"Business Academy for Women" (BAW) Project

Source: Developed by author

The development and support of the business environment in the Republic of Moldova is a priority for the authorities, being stipulated in the National Development Strategy "Moldova 2020": 8 solutions for economic growth and poverty reduction; Strategy for the development of the small and medium enterprises sector for the years 2012–2020; National strategy for attracting investments and promoting exports for the years 2016–2020. These strategic documents address the evolution of the business environment from a quantitative and less qualitative perspective, thus the successful implementation of the Small and Medium Enterprise Sector Development Strategy for 2012–2020 (GD of the Republic of Moldova on the approval of the Small Business Development Strategy and medium-sized enterprises for the years 2012–2020 No. 685 of 13.09.2012), was to contribute to: increasing the number of SMEs to 25 per 1000 inhabitants, increasing the number of employees in the sector, increasing the sector's contribution to GDP and increasing the SME contribution in total exports. "Traditional" government entrepreneurial policies, as classified by Mason and Brown, address the development of a particular type of enterprise or a distinct geographical area (Mason & Brown, 2013). Many of the initiatives and programs of the Government of the Republic of Moldova are addressed to rural businesses and economically disadvantaged areas. Business incubators were created, financing programs, training and support for the rural environment were developed. However, these initiatives have a low impact on regional economic development and do not help reduce regional disparities, the largest share, over 65% of businesses are created and operate in Chisinau, generating over 70% of sales revenues in the country and approx. 94% of the income tax on entrepreneurial activity. Entrepreneurs do not create businesses because support and consulting services are available, rather these services are requested as a result of the existence and activity of entrepreneurs. Although these services are urgently needed, they are not enough to rapidly develop the economy of a region or country (Lichtenstein & Lyons, 2001).

"Traditional" policies usually aim to increase the number of enterprises, but do not focus on the quality or potential of these companies (Figure 1).

A different set of policies is needed than those aimed at setting up businesses in general. Simply focusing policy efforts on increasing the number of new businesses has little effect, as very few companies subsequently have the potential to develop and create added value. The financial resources provided by the state through support programs are aimed at stimulating certain categories of entrepreneurs, such as: young people, women, exporters, etc.; or to the development of certain sectors: production, information technologies, agriculture, etc. This fragmented approach in developing support policies and programs only partially meets the needs of entrepreneurs.



**Figure 1. Types of entrepreneurial policy approach**

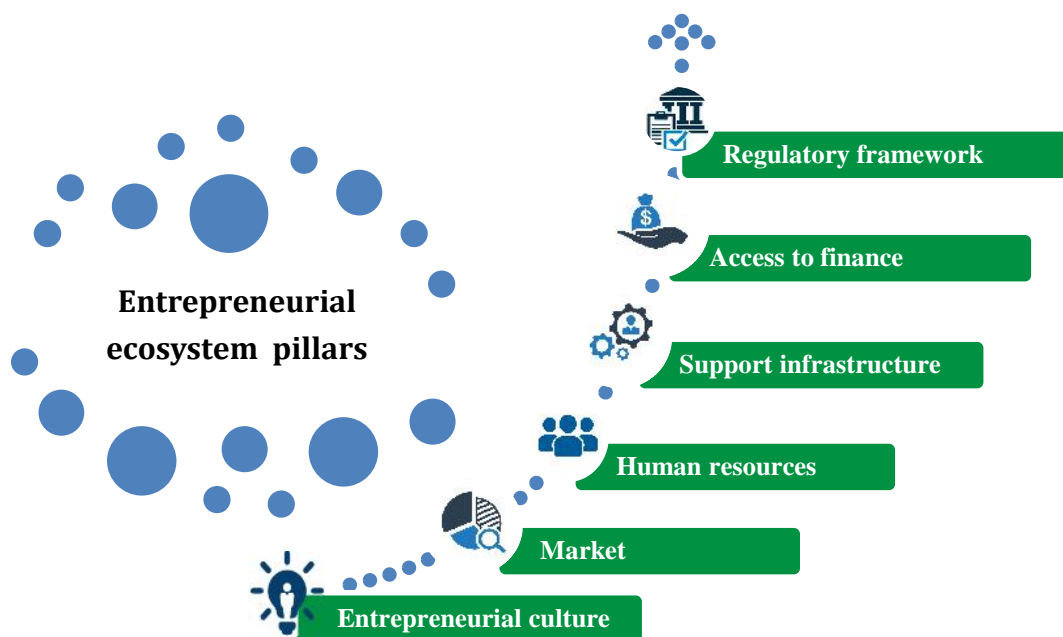
*Source: Developed by author.*

At the same time, it is not clear whether the successful development of business in certain regions is due to state-sponsored policies or other favorable environmental factors and what these factors are. What is certain is the need to treat the business environment in the Republic of Moldova from a new perspective, the introduction of a complex, comprehensive and integrated approach, which can be ensured by creating an entrepreneurial ecosystem that meets the real needs and problems entrepreneurs face daily. This new approach to business policy-making places little emphasis on maximizing quantitative indicators, giving priority to business quality and viability by creating a system, an environment in which businesses thrive. The objective of ecosystem policies, with a holistic approach, focuses on improving the environment in which companies operate. This is a challenging goal, since it is not clear how the authorities can intervene to create entrepreneurial ecosystems and how they can adapt the support provided to meet the diverse needs of entrepreneurs.

***Presentation of the entrepreneurial ecosystem in the Republic of Moldova based on the analysis of international rankings.***

The synthesis of the specialized literature offers us a vision on the approaches and elements that form an entrepreneurial ecosystem. It should be noted that there is no universal approach, or specific elements that can be applied to develop one ecosystem or another. Each region, country or locality must create its own model and address the specific problems of entrepreneurs in that geographical area.

Thus, following the analysis of the literature, we aimed to create a model of the entrepreneurial ecosystem in the Republic of Moldova, adapted to the needs of local enterprises and in accordance with the priorities of public policy documents in the entrepreneurial field (figure 2).



**Figure 1. Pillars of the entrepreneurial ecosystem in the Republic of Moldova**

*Source: Developed by author.*

Six main pillars have been determined, which characterize and underlie the entrepreneurial ecosystem in the Republic of Moldova. These components are: (1) the regulatory framework; (2) access to finance; (3) support infrastructure; (4) human resources; (5) the market; (6) entrepreneurial culture.

Identifying the components of the ecosystem is a first step in quantifying a vision of the directions in which measures should be taken for the efficiency and development of SMEs. The second stage of the research aims to conduct an assessment of the current ecosystem in the Republic of Moldova, using the method of analyzing the results of international rankings, conducted by organizations such as: World Bank, World Economic Forum, Babson College or Organization for Economic Cooperation and Development, etc. Following the evaluation, we will be able to determine the degree of development of the ecosystem and elaborate a set of principles, which will be the basis for the elaboration of public policies oriented towards the creation of the entrepreneurial ecosystem.

The central role in ensuring the functionality and viability of the entrepreneurial ecosystem belongs to the authorities, through the elaboration and appropriate adjustment of the regulatory framework. The state is the one that has the levers, mechanisms and tools able to majorly influence entrepreneurial activity. Despite the efforts of the authorities, international rankings show us the modest performance of entrepreneurial policies and programs. According to the "Doing Business" report, conducted annually by the World Bank, the business environment in the Republic of Moldova in 2019 has worsened compared to 2018, decreasing by 3 positions in the ranking. The most significant deterioration was recorded for the indicators: "management of building permits" and "execution of contracts" (-7 positions each) (*Doing Business*, f.a.2019).

Moldova's economic freedom score is 62.0 in the "Economic Freedom Index", making its economy the 87th freest in 2020. Its overall score increased by 2.9 points compared to 2019, with improved scores for government integrity and government spending. Moldova ranks 40th among the 45 countries in the European region, and its overall score is well below the regional average and approximately equal to the world average.

"The Global Innovation Index", published by Cornell University, INSEAD (European Institute of Business Administration) and WIPO (World Intellectual Property Organization), in partnership with other organizations and institutions, provides detailed metrics on the performance of innovation in 126 countries. In 2019, compared to 2018, the Republic of Moldova registers a decrease of 10 positions in the ranking, being by far a country that actively applies innovations in economic fields (*Dutta et al., 2019*).

The second component, *access to finance*, continues to be a major impediment for entrepreneurs in the Republic of Moldova, including in surveys conducted among entrepreneurs in the country. International rankings tell us about this unfortunate aspect that creates problems in the development of the business environment. In the “*Doing Business*” report, the indicator on the ease of obtaining loans is decreasing by two positions, falling from 42nd place in 2018 to 44th place in 2019 (*Doing Business*, f.a.). “*The Global Innovation Index*” report indicates a decrease by 10 positions in 2018, 79th place, compared to 2017, 89th place, in terms of obtaining loans (Dutta et al., 2019).

The support infrastructure in the Republic of Moldova is gaining an increasing role in the development of the entrepreneurial ecosystem. This priority is included in the Small and Medium Enterprise Sector Development Strategy for 2012-2020, creating business incubators, innovative incubators, business hubs, clusters and business support centers. Their role and mission is to inform, train, facilitate access to finance, offer spaces at preferential prices, etc. Authorities are focusing on creating support infrastructure in regions, especially in economically disadvantaged ones. The problem is that there is a risk of these infrastructure objects not achieving their purpose if there is no demand for the services they provide. The low demand is determined by various reasons: migration of the population to urban areas; immigration; low level of trust in state institutions; lack of social, economic and other perspectives; and so on. For these reasons, there is a need to address problems in an integrated way and to offer complex solutions, which aim in particular at creating favorable economic and social conditions for the population.

Staff is the only resource in a company that has the ability to increase its value over time, unlike all other resources, which wear out if not physically, then morally. (Pavalachi, 2011) As in the case personnel of an enterprise, the human capital of a country is its actual and real value. *The Human Development Index*, developed by the United Nations Development Program, was created to emphasize that people and their capabilities should be the key criteria for assessing a country's development, not just quantitative growth. Within this ranking, the Republic of Moldova ranks 107th out of 189 countries in 2019, aiming at achieving the key dimensions of human development: a long and healthy life, education and income level. The Republic of Moldova has improved its position in the ranking, climbing to the 107th place in 2019, compared to 2018, when it held the 112th place. (UNDP, 2020)

The social, economic and political context directly influences entrepreneurship, while social values and personal characteristics have an indirect influence but are still no less important. Culture and, specifically, social norms and positive attitudes towards entrepreneurship, have been recognized as a key component of entrepreneurial ecosystems (Isenberg, 2011). Entrepreneurial culture does not occur by chance, it is cultivated, developed and promoted by academia, authorities, international organizations and civil society. It is important to present entrepreneurial activity in a positive light, giving it the appropriate status. At the same time, we need to encourage initiatives and identify the reasons for starting a business, in order to meet the expectations of entrepreneurs.

The last pillar of the entrepreneurial ecosystem is the market. It is difficult to imagine the existence of a competitive and developed economy without a functioning sales market and without healthy connections with foreign sales markets. In this regard, too, there are shortcomings, which must be removed in order for entrepreneurs to market their services and products at competitive prices on both the local and international markets. The “Global Competitiveness” report indicates the low level of market development, 111th place out of 141 countries, in 2019 (Schwab, 2019).

The components of the entrepreneurial ecosystem in the Republic of Moldova assessed in terms of international rankings reflect a modest development and low efficiency of public instruments/policies aimed at improving and developing small and medium enterprises. Authorities need to be aware that the development of some regions and the stagnation of others have their origins in the level of development of the ecosystem. The same support instruments, public policies and development programs applied in two different regions create a different impact.

Therefore, public policies aimed at developing a functioning entrepreneurial ecosystem must be based on the following distinct principles (Mason & Brown, 2013):

1. Each ecosystem needs a different approach, adapted to the needs of local businesses. There is no universal model of entrepreneurial ecosystems.
2. The entrepreneurial ecosystem should result from economic areas, which are already successful.

Which means stimulating industries with proven capabilities and viability over time, that create added value, innovation and smart specialization;

3. The development of public policies aimed at the growth and development of the entrepreneurial ecosystem will ensure the combination of "bottom-up" and "top-down" principles;

4. Government initiatives need to have an integrated approach, as isolated support for specific groups of entrepreneurs tends to be ineffective in the long run. Encouraging more people to create start-ups is likely to have a low impact, if many of them are registered in areas with low economic growth, such as most rural areas in the Republic of Moldova. The introduction of entrepreneurship education will be ineffective if graduates move to more favorable business environments, usually migrating or roaming to urban areas. Each component of the entrepreneurial ecosystem is equally important, therefore if one of them is missing or not addressed properly, the development of the ecosystem will be negatively influenced. Consequently, the implementation of entrepreneurial policy must be holistic;

5. The approach to public policies must be constantly evolving and adapting, as entrepreneurial ecosystems are naturally complex, dynamic and must grow, develop organically, and their evolution cannot be accelerated by direct intervention. Therefore, the forms of state support will be in line with the level of maturity of the ecosystem. For example, at the emergent stage of the ecosystem, the emphasis can be on supporting business start-ups, but as the ecosystem matures, the needs of companies change, with support services needed to develop processes, train and improve human resources, support internationalization. and access to financial resources;

6. It is important to recognize the distinction between SMEs and entrepreneurial policies. SME development policies have a selective and fragmented approach, focusing on increasing the number of start-ups. Entrepreneurial policy, on the other hand, focuses on supporting businesses with high growth potential, i.e. on increasing qualitative indicators;

#### ***Practical recommendations for adjusting the entrepreneurial policy in the Republic of Moldova***

The Republic of Moldova is making modest progress in developing a sustainable and inclusive entrepreneurial ecosystem. As a result, the authorities must continue their efforts to create an environment in which the number of companies can grow, but above all to focus on companies with accelerated growth potential, in order to increase their quality as well. As mentioned above, it is necessary to approach entrepreneurial policies holistically and to target those elements of the ecosystem, which reflect a marked deterioration. The analysis based on the international rankings of the national business ecosystem shows shortcomings in the following chapters, to which we propose a set of recommendations:

##### *I. Increasing access to finance*

- Adoption of the draft law regulating risk capital, which has been inactive since 2015;
- Increasing the access to financing of enterprises with increased potential for growth and internationalization, disregarding the field of activity;
- Stimulating the use by the financing institutions of the guarantees offered by the Credit Guarantee Fund and implicitly reducing the burden for entrepreneurs on the need to pledge their own assets.

##### *II. Promoting the development of entrepreneurial culture*

- Inclusion of the European Competence Framework in the field of entrepreneurship in the 2019-2020 curricular reform plans;
- Promoting the examples of success and talents, as well as the positive profile of the entrepreneur in society;
- Approaching the option to become an entrepreneur for students of all higher education institutions in the Republic of Moldova.

##### *III. Development of business environment support infrastructure at national level*

- Currently the public organization responsible for the implementation of programs and projects in the field of entrepreneurial development is the Organization for the Development of Small and Medium Enterprises (ODIMM), based in Chisinau. We recommend opening an ODIMM branch in the north and south of the country in order to more easily and efficiently meet the needs of entrepreneurs in those areas and create entrepreneurial ecosystems in areas.

- Continuing to support development: clusters, business hubs, business incubators and co-working spaces.



## CONCLUSIONS

The creation and development of the entrepreneurial ecosystem in the Republic of Moldova is not an easy task, given that the assessment of ecosystem components shows a deterioration of business conditions and the existence of various problems: limited access to finance, population emigration, small market, accentuated regional disparity, etc. The authorities, with the support of external development partners, are making continuous efforts to improve the conditions of the business environment and stimulate the creation of as many enterprises as possible throughout the country. Despite these efforts, for the most part, over 65% of businesses are created and operate in Chisinau, which shows that businesses are created and operate successfully not due to state support. Beyond support, there are other stimulating and motivating conditions that determine people to start a business, and these conditions are determined by the presence of the entrepreneurial ecosystem. The existence of functional elements of the ecosystem that stimulate and encourage companies to operate. The entrepreneurial ecosystem approach introduces a new vision, the role of the external business environment being very important and of a major influence on the business activity.

The aim of this research is to elucidate the role of entrepreneurial policies with a holistic approach to the creation of the entrepreneurial ecosystem. Public policies need to be reoriented from quantitative growth of enterprises to qualitative growth. SMEs with high growth potential are the ones that create: innovations, added value, but also competitive products / services on the national and international market. The integrated approach to entrepreneurial policies especially encourages companies with high growth potential. They do not distinguish between types of business, being supported by companies from all sectors of the economy. The support provided focuses on connecting entrepreneurs with institutions and organizations that will directly contribute to their growth and development. The approach to entrepreneurial policies must be holistic, but not focused on business categories or narrow segments of entrepreneurs. The overall aim of the policies will be to ensure a fertile environment and facilitate the connection between SMEs and other components of the entrepreneurial ecosystem, in order to facilitate innovation, access to information and financing.

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#### ARTICLE HISTORY

Received 22 June 2020

Accepted 05 November 2020

**ASSESSMENT OF UNCERTAINTY WHILE SELECTING THE OPERATIONAL STRATEGY BY THE INDUSTRIAL ENTERPRISES IN ROMANIA**

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**DOI:** <https://doi.org/10.36004/nier.es.2021.1-07>

**JEL Classification:** D18, D81, L60, L61, L65, L66, L74

**UDC:** 005.53(498)

**ABSTRACT**

*In conditions of uncertainty, an enterprise should have a rational basis for making decisions, which would enable the comparison of different alternatives and the choice of the most suitable action for achieving its objectives. Some researchers consider that uncertainty is generated either by insufficient knowledge about the nature of phenomena and processes or by the lack of information about these phenomena and processes. The author considers that these interpretations need to be completed by clarifying the motives which cause uncertainty. The following types of environment can be distinguished which could be considered as sources of uncertainty: socio-economic; scientific and technical; political and juridical; the sales partners' environment; the environment of the seller; the competitors' environment; the consumers' environment; the investments environment. The aim of the present paper is to determine the degree of influence (markedness) of each type of uncertainty upon the decisions made while selecting the operational strategy by the industrial enterprise. The research has been carried out at 29 enterprises from different industrial fields from Romania: metallurgical industry, production of basic pharmaceuticals and pharmaceutical preparations, construction materials industry, food-processing industry, manufacture of chemical substances and products. The management teams of those companies have taken part in the survey. The research is based on the data processing and analysis obtained from 256 questionnaires. The survey carried out within the industrial enterprises has shown that the uncertainty from the consumption environment has the biggest impact upon the operational decisions of the companies. The uncertainty from the internal, political, juridical, scientific and technical environment is being analyzed to a lesser extent. The lowest domain of uncertainty is characteristic for the chemical industry and the highest for the industry of manufacture of basic pharmaceuticals and pharmaceutical preparations.*

**Key words:** uncertainty, decision making, operational strategy, information, fuzzy variable

*În condiții de incertitudine, o întreprindere trebuie să aibă o bază rațională pentru luarea deciziilor, care să permită compararea diferitor alternative și alegerea celei mai potrivite acțiuni pentru atingerea obiectivelor sale. Unii savanți consideră că incertitudinea este generată fie de cunoașterea insuficientă a naturii fenomenelor și proceselor, fie de lipsa de informații despre aceste fenomene și procese. Autorul consideră ca aceste interpretări au nevoie de completare, concretizând cauzele care generează incertitudinea. Se disting următoarele tipuri de medii, care pot fi considerate surse de incertitudine: socio-economic; științific și tehnic; politic și juridic; mediul partenerilor de vânzări; mediul vânzătorului; mediul concurenților; mediul consumatorilor; mediului investițional. Scopul acestei lucrări este de a determina gradul de influență (evidență) al fiecărui tip de incertitudine asupra deciziilor luate la selectarea strategiei operaționale de către întreprindere industrială. Cercetarea a fost realizată în 29 de întreprinderi din diferite ramuri industriale din România: industria metalurgică, fabricarea produselor farmaceutice de bază și a preparatelor farmaceutice, industria materialelor de construcție, industria alimentară, fabricarea substanțelor și a produselor chimice. În sondaj au participat echipele manageriale ale acestor companii. Studiul se bazează pe procesarea și analiza datelor obținute din 256 de chestionare. Sondajul realizat în cadrul întreprinderilor industriale a arătat că cel mai mare impact asupra deciziilor operaționale ale companiilor îl are incertitudinea generată în mediul de consum. Într-o mai mică măsură, se analizează incertitudinea mediului intern, politic, juridic, științific și*

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*tehnic. Cel mai mic domeniu de incertitudine este caracteristic industriei chimice și cel mai mare pentru industria de fabricarea produselor farmaceutice de bază și a preparatelor farmaceutice.*

**Cuvinte-cheie:** *incertitudine, luarea deciziilor, strategia operațională, informații, variabile fuzzy*

*В условиях неопределенности у предприятия должна быть рациональная основа для принятия решений, позволяющая сравнивать различные альтернативы и выбирать наиболее подходящие действия для достижения своих целей. Некоторые исследователи считают, что неопределенность порождается либо недостаточными знаниями о природе явлений и процессов, либо недостатком информации об этих явлениях и процессах. Автор считает, что эти интерпретации необходимо дополнить выяснением мотивов, вызывающих неопределенность. Можно выделить следующие типы окружающей среды, которые можно рассматривать как источники неопределенности: социально-экономическая; научно-техническая; политическая и юридическая среда, среда торговых партнеров; окружение продавца; окружение конкурентов; окружающая среда потребителей; инвестиционная среда. Целью данной статьи является определение степени влияния (выраженности) каждого типа неопределенности на решения, принимаемые при выборе производственной стратегии промышленным предприятием. Исследования проводились на 29 предприятиях из различных областей промышленности Румынии: металлургической промышленности, производство основных фармацевтических препаратов и фармацевтических препаратов, производство строительных материалов, пищевой промышленности, производство химических веществ и продуктов. В опросе приняли участие руководители этих компаний. Исследование основано на обработке и анализе данных 256 анкет. Опрос, проведенный на промышленных предприятиях, показал, что наибольшее влияние на операционные решения компаний оказывает неопределенность со стороны среды потребления. Неопределенность внутренней, политической, юридической, научно-технической среды анализируется в меньшей степени. Самая низкая область неопределенности характерна для химической промышленности, а самая высокая - для отрасли производства основных фармацевтических препаратов и фармацевтических препаратов.*

**Ключевые слова:** *неопределенность, принятие решений, операционная стратегия, информация, нечеткая переменная*

## INTRODUCTION

The changes that are taking place in the domestic and international environment related to the orientation of economy towards modernization and developing innovations, increase of uncertainty for the market processes, modification of the business relations and interpenetration of economies, generate different problems in the management of operation activities of the industrial enterprises. Thus, the industrial enterprises represent complex diffused systems, whose efficiency relies essentially on the quality of management of the operational system. One of the most important conditions for the prosperity of the Romanian economy constitutes the high efficiency of the production processes which involves the rational utilization of resources, improvement of operational processes, strategic planning of the operational activity taking into account the factors of uncertainty, improvement of quality and product competitiveness. The technological and productive development is often overshadowed by the new scientific tendencies, but namely the operational activity constitutes the basis without which it is impossible to rationalize and build an efficient economic structure.

Modifications of the socio-economic life related to modernization and technocracy, which have started in the second half of the XX century, have undoubtedly had an impact upon the production relations. Managerial decisions are being taken in every economic system, including the industrial one. The new circumstances for making decisions which constantly appear, lead to the emergence of several alternatives for development and significantly complicate the development of the operational strategy.

The uncertainty and risk could be regarded as interdisciplinary phenomena. At the same time, the uncertainty and risk, as a rule, are taken into consideration in the context of analysis of

the decision making processes. In conditions of uncertainty and risk, an enterprise should have a rational basis for making decisions, which would enable comparing different alternatives and choosing the most suitable action in order to achieve its objectives.

The impossibility of performing an accurate forecast of events characterizes most of the strategic problems of the enterprise, especially, according to some authors, the uncertainty in the modern world becomes increasingly differentiated and its range becomes broader.

### THE DEGREE OF THE TOPIC'S SCIENTIFIC RESEARCH IN SCIENTIFIC LITERATURE

Reflections regarding uncertainty persist among the economists from different eras. Thus, J.M. Keynes operates with the term „uncertainty”, describing the probability of how much a family would spend or save, or what interest would some investments bring in fixed assets (Keynes et al., 2009). He distinguishes in the uncertain knowledge what is veridical known and what is possible. It is important the fact that J.M. Keynes highlighted the subjectivity of planning the probability of emergence for some events in the future, based on the patterns discovered in the past. In other words, planning the degree of uncertainty is difficult.

According to the explanatory dictionary of the Romanian language, the concept of „uncertainty” means a doubtful, unsure, unexplored thing [3]. According to linguists, the interest towards the phenomenon of uncertainty is due to the fact that this is one of the basic principles of human logic. The uncertainty in philosophical papers is regarded as a subjective and objective characteristic of a human being. From the subjective point of view, the uncertainty is an attribute not of a situation, but of a subject who takes decisions. However, from a more general perspective, the uncertainty is independent having an objective character in relation to the business, economy and society altogether.

In the dictionary of economic terms, uncertainty is treated as a lack of information, a total or partial absence of information, ignorance. In general, the economic interpretation of uncertainty does not contradict the linguistic and social language. At the same time, it would be necessary to have a thorough analysis of opinions of this phenomenon in business.

George Cristian Maior pointed out that uncertainty in the socio-economic field is a social form of movement of matter, which includes at the genetic level, forms of organization which are characterized by a high degree of variability and uncertainty. As we can see, he suggested that the tendency of growth for the instability is conditioned by the role of the subjective factor – the presence of crises or a transition period. Nevertheless, it would be more correct to identify an objective representation of uncertainty.

For instance, Jonathan Fields notices the fact that the degree of development is an inherent phenomenon of the internal movement in order to overcome the conflict (uncertainty) at a new order (Fields, 2012, p.21). Thus, it is obvious that the uncertainty is an objective attribute existent in any functional socio-economic system. Regarding the uncertainty in the socio-economic environment, we could add the opinion of the researcher Zamfir Cătălin, who mentions that the peculiar nature of the uncertainty of the social processes is determined by the subjective factor to the causal multilateral and multifactorial relations, the main statistics, the uncertainty of many social laws and regularities and consequently, in the social field the distinction between certainty and uncertainty is more conditioned and more relative than in the study of the natural phenomena (Zamfir, 2005, p.32). Moreover, in the analyzed definitions, the informational aspect prevails for the preconditions of uncertainty. This fact is confirmed by the interpretation of Ms. Doltu Theodora, for whom the uncertainty represents a situation in which the information about the probable future events are completely or partially absent, a situation which cannot be evaluated (Doltu, 2006, p.15).

As mentioned above, the phenomenon of uncertainty has been extensively studied in the economic theory and represents a separate orientation for research. Uncertainty is an important factor in the economic relations, which dictates the need to use different methods of prognosis and reduction of risk degree. Risks systematization enables developing the necessary management tools. Many of the classifications are excessively detailed, in our opinion, while it is extremely important to take into consideration only those risks which lead to the loss of the planned



revenues. It must be taken into account that the uncertainty increases exponentially, in proportion with the elimination of the assumed time event. Consequently, the selection of an operational strategy related to a lengthy period of time requires a more thorough examination of the uncertainty factor.

Under the influence of the dynamic transformations which have taken place in the post-industrial economy, the uncertainty of the external environment has also modified, while the independent and discreet changes which are not interconnected began to transform into systemic ones. Thus, in a continuous flow some economic constraints occur, respectively the reduction of costs, optimization of consumption, increase of the degree of complexity of products, new technologies, globalization, communication, increase of the volume of sales, opening of new emerging markets, absence of specialized work force, which have contributed so that the industrial environment would react and search for solutions in order to solve the above mentioned problems. Every new transformation leads to the change of the remaining components of the economic relations. As Khana R.B. remarked, the average duration of the life cycle of goods has decreased in comparison with the middle of the 20<sup>th</sup> century, from three to four decades down to three to five years.

### SOURCES FOR THE USED DATA AND METHODS

The following methods were applied in our research: the analytical method, comparison, deduction, induction; experimental methods: questionnaires, discussion, observation, quantitative and qualitative interpretation of experimental results.

The research was carried out in Romania, Bucharest region and Constanta county in the December 2018 – April 2019 period. 29 manufacturing enterprises have been researched within the following industries:

- Metallurgical industry: LAROMET SA, GRANTMETAL SA, FINE METAL SRL, STEEL INTERNATIONAL CENTER SRL, DOOSAN IMGB SA;
- Production of basic pharmaceuticals and pharmaceutical preparations: SC HOFIGAL EXPORT-IMPORT SA ANTIBIOTICE SA TIS FARMACEUTIC SA, LABORMED ALVOGEN SA, CRIDA PHARM SRL, MAGISTRA C&C SRL;
- Construction materials industry: WIENERBERGER SISTEME DE CĂRĂMIZI SRL, DALCOR SRL, LAFARGE CIMENT (ROMÂNIA) SA, OMCO SRL, C & B GLASS SOLUTIONS SRL, SOCERAM SA, FERCO CAPITAL SA;
- Food-processing industry: STAR FOODS E.M. SRL, PROD COM MARCO T.16 SRL, INTERSNACK ROMANIA SRL, ELIDOR SRL, PLAFAR SA, TIP TOP FOOD INDUSTRY SRL;
- Manufacture of chemical substances and products: CHIMTITAN SRL, INTERSTAR CHIM SA, A & G PRODEXIM SRL, VOLA COLOR PROD SRL, SANTO RAPHAEL SRL.

5-10 questionnaires had been distributed within each enterprise for their managerial team. 256 questionnaires had been processed overall. Every manager had evaluated through the questionnaire the degree of influence of uncertainty, which appears in one of the following environments: social-economic, scientific-technical, political-juridical, distribution partners, the suppliers' environment, the medium of competitors, consumers, internal and investment environment. The evaluation was carried out on a scale of 10 points: 1 point – a weak influence, 10 points – a strong influence.

### THE RESULTS OF OUR RESEARCH AND DISCUSSION

In order to identify the main sources of uncertainty through the perspective of the business environment, we have analyzed the existent opinions regarding their nature. Some researchers such as (McConnell, 2016), "From its origins in Newtonian physics, potential theory has developed into a major field of mathematical research. This book provides a comprehensive treatment of classical potential theory: it covers harmonic and subharmonic functions, maximum principles, polynomial expansions, Green functions, potentials and capacity, the Dirichlet problem and boundary integral representations. The first six chapters deal concretely with the basic theory, and include exercises. The final three chapters are more advanced and treat topological ideas specifically created for potential theory, such as the fine topology, the

Martin boundary and minimal thinness. The presentation is largely self-contained and is accessible to graduate students, the only prerequisites being a reasonable grounding in analysis and several variables calculus, and a first course in measure theory. The book will prove an essential reference to all those with an interest in potential theory and its applications.", - (Armitage & Gardiner, 2001) claim that the uncertainty is generated either by the insufficient knowledge of the nature of phenomena and processes, or by the lack of information about these phenomena and processes. The author believes that these interpretations need to be completed, by clarifying the causes which generate uncertainty. In this context, the following types of environment can be distinguished, that could be considered sources of uncertainty:

- socio-economic environment, in which the macro-factors of uncertainty are likely to manifest, dictating a certain development of the markets and regions, in which the enterprise is carrying out economic activities (macroeconomic indicators dynamic, legislative amendments, political transformations);

- scientific and technical environment, revolutionary modifications which could lead to significant operational changes at the level of the enterprise;

- political and juridical environment, which is the source of the legislative acts that dictate the political conditions for business management and regulations in force;

- environment of the distribution partners, conditioned by the activities of partners of the enterprise, the economic activity, financial situation, all of which have a direct impact upon their capacity to meet their obligations.

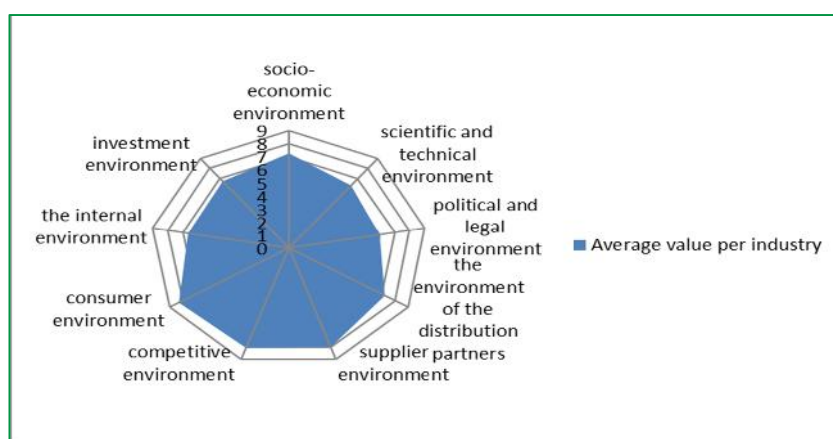
- environment of the supply partners, which reflects the future moves of the suppliers, including those that are expressed in the modification of the supply terms;

- competitive environment, including the change of the competitors' degree of influence and behavior

- consumers' environment, on which relies the state, dimension, dynamic and stability of the demand;

- internal environment, which could be considered as a source of conflict that leads to disturbances; the team work which increases the efficiency of the system in which the human and technical factors are closely intertwined and could produce some unforeseen results expressed in the level of product quality. The degree of awareness regarding the state of all these environments relies on the organization of work within the enterprise.

A study of the industrial enterprises management was carried out within the framework of this research. This study was undertaken in order to determine the degree of influence (markedness) of each type of uncertainty upon the decisions made when an operational strategy is being selected. The general evaluation through the calculation of the average of the indicated points by the representatives of all the interviewed enterprises is presented in Figure 1.



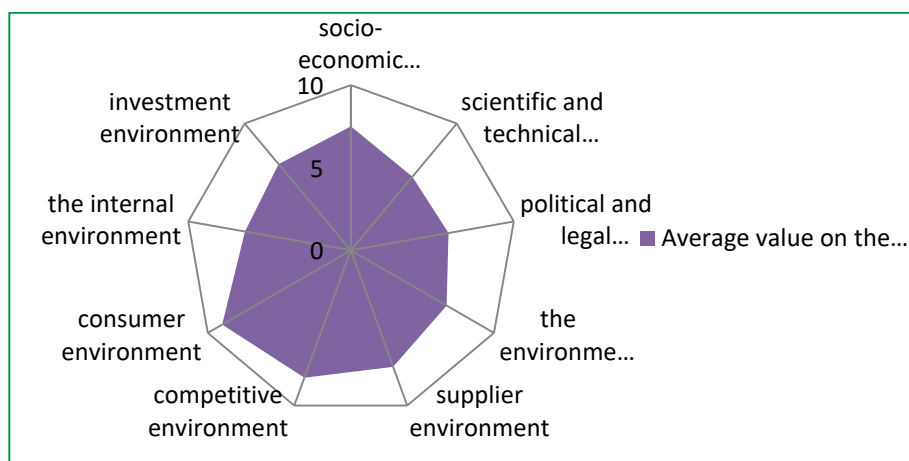
**Figure 1. Evaluation of the influence of different types of uncertainty upon the decision making process regarding the operational strategy for the industry**

*Source: Elaborated by the author*

As it can be noticed, the biggest impact upon the operational decisions of an enterprise are caused by the uncertainties generated by the consumers' environment.

At the same time, the uncertainty of the internal, political, juridical, scientific and technical environment are being analyzed to a lesser extent. In other words, it could be asserted that the entrepreneurs' trust in the stability the organizational staff, managerial, technological stability and other components of their enterprise's activities, could conceal certain „traps” of inefficiency.

The generalized evaluation of the impact of different types of uncertainties upon the decision making process regarding the operational strategy for the metallurgical industry is shown in Figure 2.

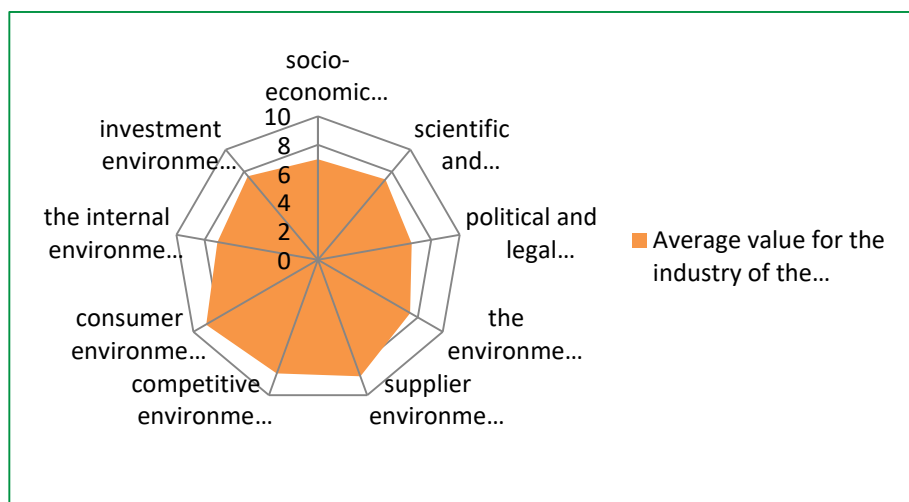


**Figure 2. The impact of different types of uncertainties upon the decision making process regarding the operational strategy for the metallurgical industry**

*Source: Elaborated by the author*

The data from Figure 2 show us that for the metallurgical industry the biggest impact upon the decision making process related to the operational strategy belongs to the consumers and competitors' environment.

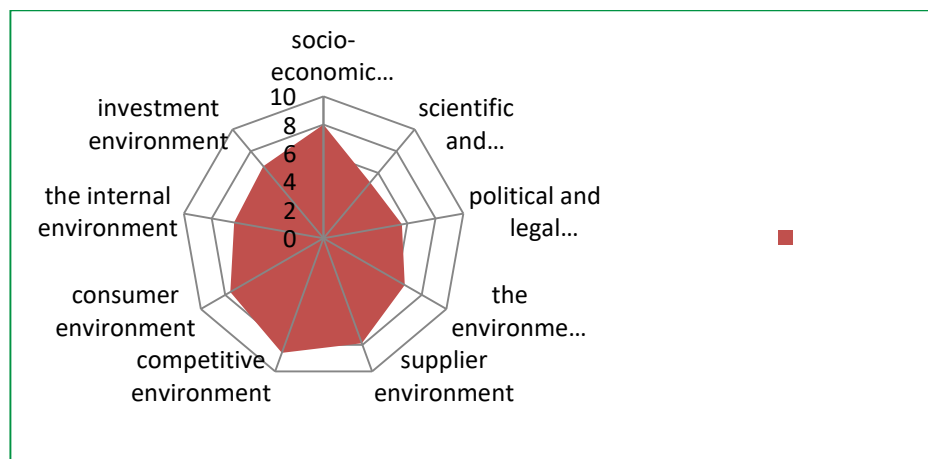
The generalized evaluation of the influence of different types of uncertainties upon the decision making process related to the operational strategy for the production of basic pharmaceuticals and pharmaceutical preparations is shown in Figure 3. Here we can notice that the environment of consumers, competition and the environment of the suppliers exercise a major influence upon these industries.



**Figure 3. The influence of different types of uncertainty upon the decision making process related to the operational strategy for the industry of the production of basic pharmaceuticals and pharmaceutical preparations**

*Source: Elaborated by the author*

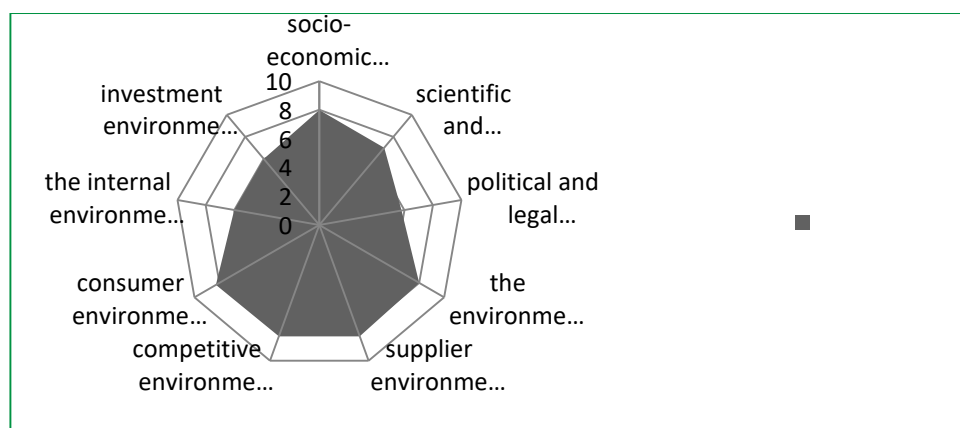
A general evaluation of the impact of different types of uncertainty upon the decision making process regarding the operational strategy for the construction materials industry is shown in Figure 4. The industry of construction materials is influenced in its operational activity mostly by the factors of the socio-economic environment, by competitors and suppliers.



**Figure 4. The impact of different types of uncertainty upon the decision making process regarding the operational strategy for the industry of construction materials**

*Source: Elaborated by the author*

The generalized evaluation of the influence of different types of uncertainty upon the decision making process regarding the operational strategy for the food-processing industry is presented in Figure 5.

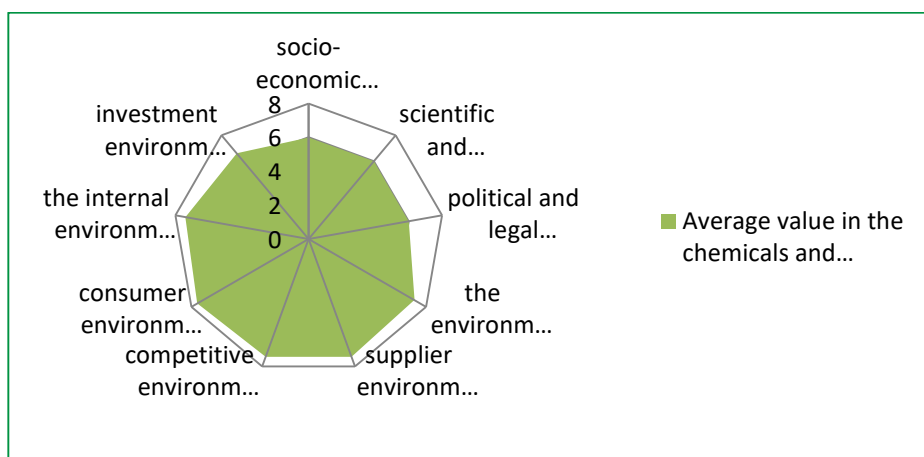


**Figure 5. The influence of different types of uncertainty upon the decision making process regarding the operational strategy for the food-processing industry**

*Source: Elaborated by the author*

We can notice in Figure 5 that the decision making process regarding the operational activity of the food-processing enterprises is influenced by the consumers' environment, environment of the competitors, environment of the supply partners and socio-economic environment.

A generalized evaluation of the impact of different types of uncertainty upon the decision making process regarding the operational strategy for the industry of chemical substances and products is provided in Figure 6, where we could readily notice that for this industry the internal environment, environment of consumers, competitors, environment of suppliers and the one of distribution partners matters the most.



**Figure 6. The impact of different types of uncertainty upon the decision making process regarding the operational strategy for the industry of chemical substances and products**

*Source: Elaborated by the author*

It can be noticed that the smaller the surface of the figure in the diagram is the less enterprises from the analyzed industry (Figures 1-6) feel the uncertainty in making the decisions regarding the operational strategy. It seems that the smallest field of uncertainty is characteristic for the industry of chemical substances and products and the largest - for the industry of the production of basic pharmaceuticals and pharmaceutical preparations.

Further on, we are going to proceed by introducing briefly the economic aspects of development for the pharmaceutical industry, in order to find the considerable sources of uncertainty, which occur in an environment of administrative decision making. Subsequently, we are going to proceed to the description of uncertainty measurement method.

As we know in Romania, the industry of pharmaceuticals is one of the most profitable, holding a special place in the Romanian economy. In the medical field there is a need of more flexibility as much regarding the medical programs, health ones, as more cooperation at the director plan carried out by the agents from tourism.

At present, the pharmaceutical industry from Romania is sufficiently developed to face the challenges [1]. In the 2000s, the majority of pharmaceutical factories have entered the circuit of multinationals, which have not shut them down, but on the contrary, competed in investing in technical refurbishment, development, export. However, due to the lack of a national drug strategy for the period of 2010-2014, Romania has lost the production of 40% from the production volume of drugs, a national institute in the field was closed, a private producer was closed and not even a single portfolio investment was brought to Romania.

However, in 2015, the Government adopted the National Strategy for Competitiveness 2015-2020, where the pharmaceutical industry represents a strategic direction for Romania. Despite the fact that at present there are different fiscal barriers, problems of price calculation, regulation, economic diplomacy, legislative desynchronization, which continue to affect the interest for development of the industry, according to the statistical data in 2016 in Romania there were 158 officially registered manufacturers of drugs and pharmaceutical preparations and over 6700 wholesalers and retailers. At present, drugs worth about 350 million euro are being exported. Therefore, the development of this industry should be systemic and it should be designated as a strategic economic domain of national interest (Armitage & Gardiner, 2001).

The pharmaceutical industry from Romania is a low-risk sector (as the economic theory suggests), playing a role in reducing the scale of the business cycle. This conclusion has been reached through dividing the economy of Romania in three risk categories (high risk, average risk and low risk), depending on sensitivity of the activity of an economic sector during a business cycle. On the other hand, the small contribution of pharmaceutical industry to the total added value does not enable this leverage to generate major positive results. By creating conditions for a strong development of the pharmaceutical industry from Romania would also support the shock-absorbers with counter-cyclical effect of the economy overall.

In modern economy, at the same time with the increase of the information flow, there is an objective need for continuous growth of employees' skills, an increase of the number of modernization projects, which would reduce the consumption of work force and materials, development of industrial marketing tools and increasing the operational efficiency. The pharmaceutical industry needs flexibility like no other industry, which would



make possible a rapid reconstruction. Nowadays, 15% from the trade deficit of Romania is caused by the pharmaceutical industry, which imports annually drugs in an amount worth more than 8 billion lei, but manages to export an amount worth less than 1 billion. And all this under the conditions in which the Romanian pharmaceutical enterprises are paying duties and taxes to the Romanian state as much as are paying all the other providers of services and goods who are activating in the health domain all taken together [71]. One of the main opportunities for increasing the flexibility consists in a more complete utilization of modern computerized technology. A positive evolution consists in attracting portfolio investments in the pharmaceutical industry from Romania which would allow the concentration of financial resources to implement new developments taking into consideration market requirements in optimal terms.

Further on we will proceed to describe the model of uncertainty assessment. The main result of the evaluation is the value of damages that could occur within an enterprise in the case of exposure to diverse factors. At the same time, this interpretation, as we can perceive it, does not completely reflect the essence of the concept of "uncertainty". As it has been mentioned above, the uncertainty is associated with a lack of information, but the uncertain events could not only have a negative result, but a positive one, as well. Proceeding so, we are supposing that the probability of a positive result and a negative one could be different. There exist all the preconditions to divide the uncertainty into positive and negative. In order to attribute a situation in which the operational strategy is being developed to one or another variant of uncertainty, it is necessary to analyze all the possible consequences which could appear in the uncertainty environments and to study the possible results and the probability of their emergence. At the same time, as a result we understand in this case the degree of reaching the established objectives in the operational strategy.

Below we are going to present the stages of the evaluation methodology of uncertainty:

1. Finding out the situations of uncertainty in the environments of activity of the enterprise, which appear during the implementation of the operational strategy.

2. Defining a group of experts for the evaluation of consequences from the occurrence of each group of risk

3. Evaluation of every situation of uncertainty from the point of view of consequences and the probability of their occurrence. Assessing the risk degree of the operational strategy (the uncertainty of the environment for its implementation) in our opinion, could be achieved with the help of the expert system in the form of fuzzy variables, (Mora-Camino & Nunes Cosenza, 2018, Hammer et al., 2016, p.87). This methodology takes into consideration the damages and benefits which could result from the action of one or another factor of uncertainty or risk. Every expert should present his opinion regarding the consequences of the impact of a certain type of risk upon the enterprise in the form of a fuzzy number and more specifically they should indicate:

1) lower limit of the interval ( $m_i$ ), in which the expected result of the risk (uncertainty) of the operational activity would be localized;

2) upper limit of the interval ( $n_i$ ), in which the expected result of the risk of the operational activity would be localized;

3) the most probable limit of the interval ( $p_i$ ), in which the expected result of the risk of the operational activity would be localized;

4) upper most probable limit of the interval ( $q_i$ ), in which the expected result of the risk of the operational activity would be localized;

5) the degree of trust in their evaluation ( $h_i$ ).

Moreover, every opinion of the experts could be represented as a fuzzy number  $A_i = (\underline{m}_i; \underline{n}_i; \alpha_i; \beta_i; h_i)$  where  $\alpha_i = p_i - \underline{m}_i$ ,  $\beta_i = \underline{n}_i - q_i$ ; The total evaluation of the predictions made by the experts is determined according to the formula (Mora-Camino & Nunes Cosenza, 2018, p.27):

$$A_1 + A_2 + A_3 + A_4 + A_5 + A_6 + A_7 = \left( \left( \sum m_i - \sum \alpha_i + \alpha \right); \left( \sum n_i + \sum \beta_i - \beta \right); \alpha; \beta; h \right)$$

$$\left( \left( \sum m_i - \sum \alpha_i + \alpha \right); \left( \sum n_i + \sum \beta_i - \beta \right); \alpha; \beta; h \right) , \dots$$

$$\alpha = h * \sum \alpha_i / h_i, \quad \beta = h * \sum \beta_i / h_i, \quad h = \min\{h_i\}$$

where

$$\alpha = h * \sum \alpha_i / h_i, \quad \beta = h * \sum \beta_i / h_i, \quad h = \min\{h_i\}$$

The result of the evaluation can be found out by calculating the arithmetic mean of experts' judgement:  $\sum A_i / k \sum A_i / k$ , where k is the number of experts who are participating in the survey.

4. The calculation of the mean value of the result (R) for all the types of risk (uncertainty) is possible through the formula:

$$R = \sum_{j=1}^t h_j \cdot R_j$$

Where:  $h_j$  – the degree of trust of the group of experts regarding the factor j of uncertainty;  $R_j$  – the result of the evaluation of the group of experts regarding the factor j of uncertainty; t – is the number of experts.

The result of the evaluation would enable determining the degree of effect / damages caused by the appearance of the risk (uncertainty), which could be a preliminary measure for determining the need for implementing an operational strategy.

The approval of this method is proposed to be implemented at the pharmaceutical enterprise SC HOFIGAL EXPORT-IMPORT SA, because as the analysis has shown, managers from the respective industry feel a significant impact of uncertainty while making managerial decisions. For every of the environments above mentioned, the uncertainty factors have been defined with the help of a questionnaire by the consultants of the enterprise (Table 1).

**Table 1.**

**Defining the Uncertainty Factors**

No.	Environment	Negative uncertainty factors	Positive uncertainty factors
1	Socio-economic environment	1.1. Increase in prices (inflation)	1.2. Reduction of the transport charges
2	Scientific-technical environment	2.1. Development of substitutable products	2.2. Emergence of new energy saving technology
3	Politico-juridical environment	3.1. Increase of fiscal pressure	3.2. Implementation of a new program for drugs production
4	Environment of the business partners	4.1. Infringing the rhythm (schedule) of selling	4.2. Reduction of intermediary margins
5	Environment of suppliers	5.1. Inopportune delivery	5.2. Reduction of cost of stock
6	Environment of competitors	6.1. Prices decrease and switching of a part of customers to the competitors	6.2. Prices increase and customers switch from competitors to the targeted enterprise
7	Consumers' environment	7.1. Decrease of customers' revenues	7.2 Receiving subsidies for development
8	Internal environment	8.1. Increase of the rate of wastage	8.2. Increasing labor productivity, due to an improvement of team spirit
9	Investments environment	9.1. Decrease of the amount of portfolio investments in the pharmaceutical enterprises	9.2. Increase of investment attractiveness of pharmaceutical enterprises

Source: Elaborated by the author

An example of calculation which uses the positive uncertainty factor no. 5.2 is presented below (tables 2,3, 4)

**Table 2.**

**The results of surveying the group of experts regarding the uncertainty factor 5.2 -  
Reduction of cost of stock (Positive uncertainty)**

Expert number	The interval in which the probable effect to the action of the factor no. 1, would be found out, thousands RON		The most probable interval in which the effect caused by the action of factor no. 1, would be found out, thousands RON		The degree of uncertainty
	$\underline{m}_i$	$\underline{n}_i$	$p_i$	$q_i$	$h_i$
1	255	300	275	280	0,9
2	500	600	510	580	1
3	1200	1500	1300	1400	0,8
4	750	900	800	900	0,95
5	620	650	630	640	0,9
6	800	1000	850	950	0,85
7	700	900	750	850	0,85
8	300	500	350	400	0,9
9	450	650	500	600	0,85
10	500	800	650	700	0,95

Source: Elaborated by the author

Respectively, if a situation of negative uncertainty occurs (for example, damage caused by the stopping of the manufacturing process because of a delayed delivery of raw materials), then the results of the evaluation would be negative.

**Table 3.**

**Representing the experts' in the form of fuzzy variables**

Expert number	$\underline{m}_i$	$\underline{n}_i$	$\alpha_i$	$\beta_i$	$h_i$
1	255	300	20	20	0,9
2	500	600	10	20	1
3	1200	1500	100	100	0,8
4	750	900	50	0	0,95
5	620	650	10	10	0,9
6	800	1000	50	50	0,85
7	700	900	50	50	0,85
8	300	500	50	100	0,9
9	450	650	50	50	0,85
10	500	800	150	100	0,95

Source: Elaborated by the author

The calculation for the factor No. 5.2. are made in table 4 below.

**Table 4.**

**The Results of the calculation for the factor Nr. 5.2.**

Indicators	m	n	h	$\alpha$	$\beta$
Total evaluation	6024	7843	<b>0,8</b>	489	457
Mean result	602	784	<b>0,8</b>	49	46
The most probable interval of the result				<b>651</b>	<b>739</b>
The mean size of the result according to the factor No.5.2., thousands RON					<b>695</b>

Source: Elaborated by the author

After the presentation of all the processed data from the experts' questionnaires, the total evaluation of uncertainty could be calculated for the chosen operational strategy:

$$R = 4235,2 - 3752,4 = 482,8 \text{ mii Ron}$$

We point out that in general, uncertainty within which a decision of operational strategy is being made, could be recognized as positive. This evaluation enables the comparison of several variants of operational strategy from the point of view of expressing uncertainty.

## CONCLUSIONS

Summarizing the performed evaluation, we could assert that the uncertainty is a flexible characteristic, while a more stable basis of the operational activity is the potential of manufacture of the enterprise.

The research of the category of “uncertainty” in relation with the “risk” category has demonstrated the ambiguity of their interpretation and has revealed the necessity to distinguish between these categories. We have come to the conclusion that uncertainty is a measurable value through the expert method of evaluation and this one enables a favorable result, being mainly a characteristic of the external environment, an objective phenomenon and a condition for the existence of the business. While risk is a measurable value through empirical data, this implies an unfavorable result, being mainly a characteristic of the internal environment representing a subjective phenomenon dictated by somebody’s wish.

Uncertainty in the modern business seems to be an important factor in the economic relations, dictating the need to use different prognosis methods and reduction of the risk degree. The following types of environment which could be considered sources of uncertainty could be distinguished: socio-economic; scientific and technical; political and juridical, environment of sales partners, environment of the seller, environment of competitors, environment of consumers and internal environment. As a result of interviewing the management team, through the survey carried out within industrial enterprises, it has been noted that the biggest impact upon the operational decisions of the companies is produced by the uncertainty generated within the consumption environment. The uncertainty from the internal, political, juridical, scientific and technical environment is analyzed to a lesser extent. The lowest degree of uncertainty is characteristic for the chemical industry and the highest for the industry of basic pharmaceuticals and pharmaceutical preparations.

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## ARTICLE HISTORY

Received 18 May 2020

Accepted 19 January 2021

## YOUTH ATTITUDES TOWARDS GENDER ROLES WITHIN FAMILY

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DOI: <https://doi.org/10.36004/nier.es.2021.1-08>

JEL Clasification: J13, J19, J16

CZU: 330.567.28(4)

**ABSTRACT**

Young people are leaders of change in any society; therefore, studying their attitude towards gender roles in the family is of particular interest in predicting changes in their behaviour and identifying the policy measures needed to achieve sustainable progress in gender equality.

The study aimed to research the attitude of youth towards gender roles in the family to determine the influence of the levels of education, gender and other characteristics on gender preferences in relations - traditional or egalitarian. It is based on data from a sociological survey of youth in Chisinau, conducted in 2019 on a representative sample (N = 506).

The theoretical basis of the study was the multiple equilibrium theory (Esping-Andersen et al., 2013). The study results showed that the perception of young people regarding the essential qualities of men and women is still under the pressure of stereotypes and corresponds to the intermediate balance model characteristic of the transition from traditional roles based on the division of labour to modern egalitarian ones. This circumstance implies an equal division of responsibilities and family roles between women and men. On the one hand, youth tend to an egalitarian type of marriage and family relationships, and on the other, they adhere to traditional views of family roles. Although there are some differences in attitudes towards gender roles within the family between natives of Chisinau and young people from other localities, they are still not so pronounced. Youth with higher education are more likely to prefer an egalitarian distribution of gender roles than youth with a lower level of education. Girls more often than boys strive for gender equality in the family. However, in some aspects, such as the responsibility of men for the family's financial support, the importance of the material situation of a partner, they more often express traditional views.

**Keywords:** gender role attitudes, youth, sociological survey

Tinerii sunt lideri ai schimbării în orice societate, prin urmare, studierea atitudinii lor față de rolurile de gen în familie prezintă un interes deosebit din punctul de vedere al prognozării schimbărilor în comportamentul lor, precum și identificării măsurilor politice necesare pentru a obține progrese durabile în domeniul egalității de gen.

Scopul cercetării constă în studierea atitudinilor tinerilor față de rolurile de gen în familie, determinarea influenței nivelului de educație, genului și altor caracteristici asupra preferințelor în relațiile de gen – tip tradițional sau egalitar. Studiul se bazează pe datele dintr-un sondaj sociologic al tinerilor din Chișinău, realizat în 2019 pe un eșantion reprezentativ (N = 506).

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*Baza teoretică a studiului a constituit teoria echilibrului multiplu (Esping-Andersen et al., 2013). Rezultatele studiului au arătat că percepția tinerilor asupra calităților de bază ale bărbaților și femeilor este încă sub presiunea stereotipurilor și corespunde modelului de echilibru intermediar, caracteristic etapei de tranziție de la rolurile tradiționale la cele egalitare moderne, care presupun o împărțire egală a responsabilităților și rolurilor familiale între femei și bărbați. Tinerii, pe de o parte, tind spre un tip egalitar de căsătorie și relații de familie, iar pe de altă parte, ei aderă la viziunile tradiționale ale rolurilor familiale. Deși există unele diferențe în atitudinile față de rolurile de gen în familie între originarii din Chișinău și tinerii din alte localități, aceștia nu sunt pronunțate. Tinerii cu studii superioare mai frecvent preferă o distribuție egalitară a rolurilor de gen comparativ cu tinerii cu un nivel de educație mai scăzut. Fetele mai des decât băieții se pronunță pentru egalitatea de gen în familie, deși, în anumite aspecte, cum ar fi responsabilitatea bărbaților pentru sprijinul financiar al familiei, importanța situației materiale a partener, mai des exprimă viziunile tradiționale.*

**Cuvinte cheie:** atitudini față de rolurile de gen, tineret, studiu sociologic

*Молодые люди являются лидерами изменений в любом обществе, поэтому изучение их отношения к гендерным ролям в семье представляет особый интерес с точки зрения прогнозирования изменений в их поведении, а также определения мер политики, необходимых для достижения устойчивого прогресса в области гендерного равенства.*

*Цель исследования заключалась в изучении отношения молодежи к гендерным ролям в семье, определении влияния уровня образования, пола и других характеристик на гендерные предпочтения отношений – традиционных или эгалитарных. Исследование основывается на данных социологического опроса молодежи г. Кишинева, проведенного в 2019 г. на репрезентативной выборке (N=506).*

*Теоретической основой исследования послужила теория множественного равновесия (Esping-Andersen et al., 2013). Результаты исследования показали, что восприятие молодыми людьми основных качеств мужчин и женщин все еще находится под давлением стереотипов и соответствует промежуточной модели баланса, характерной для этапа перехода от традиционных ролей, основанных на гендерном разделении труда, к современным эгалитарным, предполагающим равное распределение обязанностей и семейных ролей между женщинами и мужчинами. Молодые люди, с одной стороны, стремятся к эгалитарному типу брака и семейных отношений, а с другой – придерживаются традиционных взглядов на семейные роли. Хотя между уроженцами Кишинева и молодежью из других населенных пунктов наблюдаются некоторые различия в отношении к гендерным ролям в семье, они все же не столь ярко выражены. Молодые люди с высшим образованием, чаще отдают предпочтение эгалитарному распределению гендерных ролей, чем молодые люди с более низким уровнем образования. Девушки чаще, чем парни стремятся к гендерному равенству в семье, однако, по некоторым аспектам, таким как ответственность мужчин за финансовое обеспечение семьи, значимость материального положения партнера, чаще выражают традиционные взгляды.*

**Ключевые слова:** гендерно-ролевые установки, молодежь, социологический опрос

## INTRODUCTION

Despite the progress achieved and the increased attention of decision-makers to gender equality, this goal remains largely unfulfilled in the Republic of Moldova, as in other countries of the Eastern European region. It is now widely recognized that gender equality requires more than equal opportunities and equal access to institutions, the adoption of regulations that ensure equal opportunities for women and men. Achieving gender equality requires changing social values and attitudes towards gender roles in both public and private domain.

The transformation of the family, as well as the change in the demographic behavior of the population, are largely determined by the change in the status of women and men in society, representations and attitudes towards gender roles. Currently, family and marriage can no longer be described by a well-defined set of roles, which are negotiated daily, built through the interaction of partners at the micro level and influenced by macro structures in the political and economic sphere. Gender relations, attitudes and related values became more fluid, changing dynamically according to

economic, cultural and institutional transformations. Researches show that for a long time new family patterns and evolving gender roles are interlinked (Goldscheider et al., 2015; Kolpashnikova et al., 2020; Oláh et al., 2021).

Gender roles depend on the attitudes and perceptions that are formed in youth during the socialization period, facilitating the formation of stereotypes that will determine the behaviour of individuals in adult life. Today, many European countries managed to make significant progress in ensuring gender equality in various social areas, including family life. Thus, more and more couples are characterized by a more uniform distribution of family obligations, increasing the participation of fathers in activities related to childcare and education, as well as increasing the participation rate of women in the labour market. Despite regional differences in the decline of traditional gender roles and the rise of egalitarian attitudes, there are important differences between different social groups (people with a higher level of education, less religious people, unmarried people to a greater extent support egalitarian attitudes towards gender roles). At the same time, research shows that differences are larger between societies than between groups within a society.

It would seem that with the increasing level of education of women and their participation in employment, husbands and wives will less and less define the roles of women in the traditional way, but more research shows that traditional gender roles persist in both spheres: professional and family (Ashwin & Isupova, 2018; Kalabikhina, 2017). Women's experiences reflect the gender contract that prescribes the specific roles and obligations of women and men. In this context, we notice the existence of a double perspective conflict. On the one hand, men recognize women's rights and abilities of self-fulfilment, including in their families, but on the other hand, they do not want to take on some of the roles of serving family members and educating children, traditionally considered a prerogative of women. As a result, gender relations within the family have not undergone major changes, causing inconsistencies between levels of gender equity in the public and private spheres, this phenomenon being designated as an "incomplete gender revolution" (Gerson & Esping-Andersen, 2010). However, researchers emphasize that the family is a dynamic entity, characterized by increasing complexity in terms of decision-making processes and the organization of family life, which are under the influence of macro structures in the political and economic spheres. The new role of women is increasingly incorporated into more dimensions of economic independence and supportive responsibilities that until recently belonged to men (Oláh et al., 2018).

Young people are the leaders of change in any society, so studying, but especially monitoring, their attitudes towards gender roles in the family is of particular interest in terms of predicting changes in their behaviours, as well as policy measures needed to achieve sustainable progress in the field of gender equality. Based on these, the purpose of the research was the analysis of young people's representations of gender roles in the family and their determinants factors.

Given the importance of gender representations for demographic dynamics, marital behaviour, family formation and childbearing, the research focused on issues related to marriage and family. We focused on the main family roles that are traditionally assigned to men and women: decision-making, material family maintenance, household chores, and childcare. The attitudes of young people regarding the most important qualities attributed to men and women, as well as regarding the takeover of the husband's name after marriage by women were also studied.

Questions about gender roles were asked both from the perspective of traditional representations (e.g., "the husband must work and provide material for the family, and the wife should take care of the household and children") and others as egalitarian (e.g., "Both spouses must work and share their family responsibilities equally").

## RESEARCH DATA AND METHODS

The current study is based on the "Attitude of young people towards family and marriage" sociological research conducted in 2019 by the Centre for Demographic Research in Chisinau, the capital of the Republic of Moldova. The sample volume constituted 506 respondents, being representative according to sex and age, the confidence interval being 95%. Youth aged between 20 and 35, who had never been married, were the ones interviewed.

Chisinau was selected for research, considering that about 25% of the total population of the country is concentrated here, especially the youth population, including youth from different localities of the Republic of Moldova, settled in the capital to pursue professional studies or find a job, or for a permanent residence. In the sample, those originating from the Chisinau municipality represented 42%, while youth from other localities represent 58%.

### THEORETICAL FRAMEWORK OF RESEARCH

"Gender roles are the behaviors men and women exhibit in the private and public realm. They are the sociocultural expectations that apply to individuals on the basis of their assignment to a sex category (male or female)", (Tong, 2012). Attitudes toward gender roles have been identified as predictors of individuals' behaviour and decisions (Davis & Greenstein, 2009), that is, people use their gender identity as a personal standard to assess and guide their behaviour. Gender roles create behavioural sexual differences, given that people react to the expectations of others and act on their own gender identities that involve hormonal and neural mechanisms (Wood & Eagly, 2012).

Attitudes towards gender roles are multidimensional, involving the balance of power in the private and public spheres (Constantin & Voicu, 2015). A distinction is made between the cultural incompatibility of role that refers to general culture, norms and values regarding the role of women in society and the structural incompatibility that characterizes real possibilities available to women, as well as the constraints they face when trying to seize these opportunities. The structural factors of the gender relations system determine institutional opportunities within which the reproduction of role behaviour takes place. Social differentiation in different spheres of social life is perceived as a set of objective prescriptions and is implemented in mechanisms of interaction and socialization through institutions such as family, school, immediate environment, media and employment, politics, etc. (Темкина & Здравомыслова, 2000).

According to traditional perceptions of gender roles, women are assigned a role of housewife and main educator of children, probably due to their reproductive role and/or position in the family, this role also finding expression in the public sphere by the fact that in many countries, women work in the fields of care and education. At the same time men are assigned the role of head of the household and the main breadwinner of the family, while in the public sphere they have more opportunities for career advancement and function.

Gender stereotypes about family roles and professional roles are the most common stereotypes that prescribe the behaviour of men and women. Most often, for women, the main social roles are family roles (mother, wife), for men - professional roles (worker, family supporter). Men are usually judged by their professional success, and women by the presence and state of family and children. Modern perceptions of gender roles suggest an alternative perspective, emphasizing that individuals' behaviour should not be determined solely by their gender, and that there should be more equal relationships between men and women.

While researching youth attitudes on gender roles in the family we based our study on the theoretical concept of the *multiple equilibrium* (Esping-Andersen et al., 2013) aimed at transforming gender roles and their impact on the family, through the interaction between family-related behaviour and changes in the social roles of women and men reflected in their gender responsibilities for economic security and family care. There are three types of balance: *traditional*, *egalitarian* and *"unstable"*. The theory holds that stable balances are based on strong regulatory compliance and produce more equitable results. In contrast, unstable equilibria are likely to exhibit unfair behaviour. Equal balance is characterized by homogeneity and gender equity in the division of labour. The erosion of traditional specialization and the spread of egalitarian values is associated with the prevalence of "unstable equilibrium" behaviour, due to structural factors that prevent the achievement of definitive progress in this field (the transition from the traditional to the egalitarian model).

## LITERATURE REVIEW

Researchers conclude that the attitudes of the younger generation change faster than those of older generations, they more often argue that it is beneficial for both sexes to achieve higher qualifications and good careers and that childcare should be a common responsibility of men and women. However, they often still choose the educational and occupational path typical of the gender, as a result, their behaviour has a traditional connotation (Tinklin et al., 2005).

A study based on data from 36 countries shows that young people show a higher level of equal attitudes in countries with higher levels of gender equality, but young women in all countries have more equal attitudes towards gender roles than young men (Dotti Sani & Quaranta, 2017).

"Gender role changes are closely intertwined with the de-standardization of family biographies leading to a growing diversity of relationships over the life course as well as increasingly complex family compositions and household structures" (Oláh et al., 2021). Each stage in the course of family life shapes gender roles, and diverse political and cultural contexts facilitate or hinder family and gender role transitions (Oláh et al., 2021).

Gender differences in attitudes towards gender roles are smaller in more traditional societies, where both women and men accept more traditional roles because economic development is slower, while the lower diffusion of materialistic values places gender equality on a secondary plan. In contrast, in social contexts where gender equality is more advanced, differences in attitudes are more pronounced since women, especially the young ones, are more likely to act in their own interests and have gender equality attitudes (Inglehart & Norris, 2003), and the more egalitarian a society becomes, the weaker gender roles are (Tong, 2012).

The study on changes in the sexual behaviour between 2000 and 2017 of students in Italy, one of the European countries where traditional norms have a significant impact on the family sphere, showed important changes in women's premarital and family behaviour, becoming much more liberal, and double standards on sexual behaviour between women and men have decreased significantly (Minello et al., 2020).

The highest level of gender equality has been achieved in northern European countries, both in the public and private spheres. On the other hand, traditionalist attitudes and practices are considered a specific phenomenon for Eastern European countries. Russian researchers, have, based on data from sociological research for the past three decades, concluded that for women career development and high-level education are seen as secondary priorities, while those related to family creation and the birth of normative children take the lead. During this period, the situation has not changed for the better, on the contrary, it has worsened, supporting discriminatory practices on the labour market and undermining the economic situation of women (Кочергина, 2018).

Research in Hungary has shown that the attitudes of higher education students towards gender roles are not necessarily modern. They are more pronounced at the declarative level, but not behaviourally (Fényes, 2014).

In Romania, existing studies demonstrate the rooting and persistence of traditional attitudes towards gender roles (Gökçel et al., 2014), "gender discrimination is perceived both in the economic field (in terms of employment and pay conditions), but also in the political and social ones" (Tudorel et al., 2006). Women in urban areas more frequently report discrimination. An accomplished woman in life is considered the one who successfully fulfils all the roles associated with her status: mother, housewife and professional. A man's achievements in life are not as much about family as they are about professional success and the level of income he can reach (*Roluri de gen și statusuri în viața de familie și în muncă*, 2013).

National studies show that traditional cultural standards regarding femininity and masculinity are becoming an objective obstacle in the effective socialization of the young generation (Bodrug-Lungu, 2007). The prevalence of traditional patriarchal norms characterizes the cultural context of gender relations. Such representations that the roles of men in society are mainly related to professional self-affirmation and that of women with family and children are widespread. Contemporary stereotypes of gender roles within the family are inconsistent and contradictory, presenting a conglomeration of traditional and egalitarian perceptions (Gagauz, 2012).



The high prevalence of stereotypes, perceptions, norms and traditional gender roles contributes to the persistence of gender discrimination. Traditional gender roles are usually assigned to women and girls in the private and unpaid domestic sphere, while men and boys are paid to work in the public sphere. A total of 90.5% among men and 81.5% among women consider that for a woman the most important thing is to take care of the house and cook for the family (Cheianu-Andrei et al., 2015). Almost 58.3% of respondents support at least one gender stereotype (either they agree that men are mainly responsible for making money or that decisions should be made mainly by one sex, i.e. men), and 21.2% of respondents support both gender stereotypes. A comparison of surveys from 2006 and 2016 shows no significant changes in perceptions of gender roles over the past ten years (*Gender Barometer*, f.a.).

Based on the analysis of literature, the following hypotheses were formulated: 1) it was assumed that young people from Chisinau will have more egalitarian attitudes regarding gender roles in the family, than young people from other localities of the country; 2) young people with higher education identify more frequently with modern gender roles, than young people with a lower level of education; 3) young women more often than men will have more modern egalitarian attitudes about gender roles.

### MAIN RESULTS

According to the research results, both young girls and boys have symmetrical representations on the importance of certain qualities for women and men. Thus, in men, study participants respect such qualities as intellect, responsibility, ability to earn money, desire to succeed, the capacity to "cope with difficulties and resourcefulness". More than two-thirds of the respondents mentioned these qualities. In women, the most important qualities are considered intellect, fidelity, responsibility and resourcefulness, being an attentive and caring housewife. It is observed that for both women and men there are similar qualities as being resourceful and able to cope with difficulties, this fact being determined by multiple economic difficulties faced by the population of the Republic of Moldova and the need to overcome various crises such as low income or job loss, self-employment, etc., respectively, the ability of individuals/couples to cope with these challenges. It should be noted that respondents mentioned these qualities for both sexes with a different level of education, which signals the awareness of young people of the challenges of modern changing society and the importance of having skills to combat the negative impact of the external environment, stress, various crises and life difficulties.

Women with higher education want to see such qualities in men as intellect, responsibility and ability to cope with difficulties, while those with a lower level of education appreciate a more caring attitude, loyalty and the ability to manage. Men with higher education consider intellect, easy-going character and fidelity as the most important qualities in women.

It was found that young people pay more attention to physical attractiveness. Both women and men consider this characteristic "very important" for women, both in the opinion of men (63.7%), but especially in the opinion of women (69.8%). Such attitudes are explained by the fact that women are to a greater extent under the influence of sociocultural representations that idealize female attractiveness; moreover, physical attractiveness has a higher value in the mass consciousness of women than men (Варлашкина & Козубенко, 2010), and the wide promotion of beauty and youth in the media, fuels these representations.

The physical attractiveness of men and its significance is also a trait appreciated by both sexes. About a third (32.8%) of the girls and 36.9% of men interviewed consider the physical attractiveness of men "very important", especially an athletic physique, to be an expression of masculinity. Studies in the field show that masculinity in the representations of women is perceived as the power and ability to defend a woman, and in those of men - as a quality that attracts the attention of women (Варлашкина & Козубенко, 2010).

A discrepancy in the respondents' opinions is observed in attributing the importance of qualities such as fidelity. If for women this characteristic is supposed to be important in the opinion of 86% of the interviewed girls and 86.9% of the interviewed boys, then the fidelity of the men is viewed differently. A good part of the interviewed girls (91.8%) consider that being faithful is very important for a man, while only 68.1% of the interviewed young men mentioned this quality. Thus, young men show a more liberal attitude towards men's sexual behaviour, reflecting social attitudes, which are harsher on women's



infidelity and more tolerant of men's infidelity. According to other research, young people and men often appreciate their own infidelity positively, being intolerant of female infidelity (Кочеткова, 2017). However, recent studies show an increasing importance of sexual fidelity in the context of the transformation of the marital compartment and the spread of cohabitation among young people. The idea that would reflect a dual regime is becoming more widespread - "when someone is alone, they are allowed to have more than one partner, but when they are in an emotional relationship, sexual fidelity is a social norm" (Minello et al., 2020).

Gender symmetry about some important qualities persists when it comes to the economic skills of men and women, and the sharing of responsibilities for the material security of families. Thus, women's ability to earn money is not appreciated, which is associated with maintaining the man's traditional role as the main breadwinner, which involves the regular and full employment of men in the labour market and the irregular or flexible employment of women. This fact confirms the specificity of traditional representations on gender roles, according to which not only men (76.3%) consider that the material insurance of the family is their duty, but also women expect this role to be fulfilled by men (73.2%). Opinions of respondents do not differ significantly depending on the environment of origin, being specific for the natives from other localities and the natives from Chisinau. About two-thirds of respondents (both men and women) believe (agree or partially agree) that "the husband's job is to make money, and the wife's job is to run the household and take care of the family." which demonstrates the persistence of stereotypes about the traditional division of family roles.

However, many respondents consider that "both spouses must work and share their family responsibilities equally". 63.4% of the interviewed men and 70.3% of the women "agreeing" with this statement, while 31.1% of the men and 27.5% of the women "partially agree". A large part of the young interviewees supports the opinion that "spouses must agree on the order and role that everyone has in the family": 66.5% of men and 73.6% of women agreed with this statement, 30.2% of men and 22.8% of women having "partially agreed" (and the rest refraining from answers).

The analysis of the agreement scale averages with statements/attitudes regarding the main responsibilities within the family shows that both men and women share modern role attitudes, the median for three statements out of the four being higher than 2.5 (Table 1). Gender differences are small, women showing their modern attitudes to a greater extent. However, young people, especially men, also partially agree with traditional attitudes towards gender roles in the family. The highest degree of persistence of the traditional role is found concerning the responsibility of the husband to ensure financial cover to the family, the average scale showing that young people, both men and women, agree with this statement.

Table 1

**Attitudes towards gender roles in the family, average scale of agreement (3- agree, 2 - partially agree, 1 - disagree)**

	Men	Women
<b>Traditional attitudes</b>		
In marriage, all decisions must be made by the spouses together	2.84	2.88
Spouses need to agree on the order and roles they each have in the family	2.65	2.71
Both spouses must work and share their family responsibilities equally	2.61	2.68
The modern woman should work and make a career	2.28	2.46
<b>Modern attitudes</b>		
The husband must work and provide material wealth for the family, and the wife must take care of the household and the children.	2.2	1.75
For women, family responsibilities should be at the forefront	2.45	2.16
Caring for children is the main task of women	2.51	2.23
Providing for the family financially is the main task of men	2.85	2.74

Concluding the ideas set out above, we note that, on the one hand, men are given a higher priority in terms of liability for the material security of the family, which is contradictory at first sight if we consider the high degree of participation of women in economic activity, but also absolutely explicable if we refer to the difference between the salaries of women and men. The pay gap, discriminatory labour market practices, and reduced opportunities to combine professional and family roles determine that men continue to be the main breadwinners of the family (Gagauz, 2021).

Application of the logistics model (*Table 2*) for the analysis of role attitudes within the family demonstrates that they depend, to some extent, on the respondents' level of education. Both men and women with higher education rarely support the idea that "the husband should work and the wife should take care of the family, household and children", but as they get older, young people show more conservatism, more often supporting a strict distribution of family roles. Girls support the view that "modern women should work and pursue a career" to a greater extent than boys. But as young adults, their preferences also change and they are more likely to agree that "for a woman, family responsibilities should come first".

**Table 2**

**The influence of the respondents' socio-demographic characteristics on gender role attitudes (N=506)**

Statement	Sex	Age	Education levels	Originally from Chisinau municipality
	B (Std. error)	B (Std. error)	B (Std. error)	B (Std. error)
The husband must work and the wife must take care of the household and children	.441*** (.06)	-.115** (.04)	.313*** (.07)	-.020 (.06)
A modern woman has to work and make a career	-.155*** (.05)	.070* (.04)	.012 (.06)	.045 (.05)
For a woman, family responsibilities should come first	.280*** (.05)	.014 (.04)	.225*** (.07)	.073 (.06)

Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ ; (two-tailed).

Young people support the maintenance of traditional gender roles, with similar reasoning. Thus, girls and boys consider that it is more natural for women to take care of the household and children, given the fact that they are more able to take responsibility for the house and children than men. The reasoning about the role of men as primary caregivers was mainly based on conventional social reasoning like the fact that men can get better jobs and earn more than women, and this role is a responsibility of men. Thus, in their representations on gender roles, young people rely on social stereotypes about the "natural roles" of women and men, as well as on some reasoning about social barriers that women face on the labour market. All this allows us to conclude that a lasting justification for maintaining the traditional division of roles persists, at least in the current socio-economic conditions.

An important question is the distribution of power in the family and leadership. Among young people, there are different ideas on this subject - both traditionalist, patriarchal and more modern ones, involving equality of partners. A considerable part of the respondents (38.2%) consider that the man should be head of the family, and the proportion of those who gave preference to women is insignificant (up to 6%). At the same time, over half of the respondents selected the "both (husband and wife) equally" answer option. The patriarchal idea that a family needs a leader and it should be the husband is much more popular among men (48.7%) than among women (29%). Women are more likely to support the idea that "both are equal" than men, thus demonstrating the longing to have equalitarian relationships in the family.

Traditional representations of the husband as the head of the family are more specific to those from rural areas - 47.2% against 29.3% of the total number of respondents from Chisinau, as well as young people with a low level of education (52.3%). Among young people with higher education, the

share of those who believe that power in the family should belong to "both spouses equally" is higher - 57.8% of men and 63.8% of women.

However, despite the frequent identification of young people with traditional representations regarding the distribution of power in the family, most of the young people interviewed believe that "in marriage, all decisions must be made by spouses together" 84.7% of men and 88.5% of women agreeing with this statement, with 14% of men and 10.8% of women having partially agreed.

An aspect of patriarchal origin preserved and of high significance is the tradition that women should take the surname of the husband when they marry, this being a symbol of family and marriage even in countries with a high level of gender equality, despite the fact that it comes from the times, when women had few legal rights and were perceived as the property of their husbands. The religious origin of this custom signifies the spiritual unity of the family, the secular one - the legal unity, given the fact that married women could not own property, which after marriage passed to husbands. At the same time, this habit also reflected the position of the woman in society as well as the superior position of the husband/man.

Recent studies demonstrate the links between the common traditions of marriage and the dynamics of gender power. It has been found that not only women face stereotypes when they break the tradition, keeping their own names after marriage, but also men whose wives break the family name tradition, as they are considered less powerful (Robnett et al., 2018).

As in most countries, the Family Code of the Republic of Moldova stipulates that "at the conclusion of the marriage, the spouses, may, of their own will, choose the surname of one of them or a compound formed by connecting the names of both as a common family name or each of them keeps their name. of the family she wore until marriage or connects the family name of the other spouse to her own family name". Despite this fact, nowadays, in most cases, women take their husband's name after marriage. The attitudes of young people on this subject are asymmetric in terms of gender. Men interviewed (63.6%) believe that "the wife should take the name of the husband" and only 30% of girls support this idea. A relatively high proportion of respondents consider that this is optional, "depending on the circumstances and according to the desire of the partners" - 29.7% of men and 58.7% of women. Respondents who claim that the husband is the head of the family more often consider the need for the woman to change her name in marriage. Thus, for a significant part of the young interviewees, the takeover by the wife of the husband's name is a symbol of male leadership in the family.

The transformation of gender representations bears, to a large extent, the imprint of socio-economic conditions and opportunities for women to achieve economic independence. In the Republic of Moldova, the last decades have been marked by numerous socio-economic crises, poverty, and low living standards, which are still a problem for many families. At the same time, in young people, it motivates the postponement of marriage and family formation after graduation and gaining an acceptable lifestyle level.

The distribution of power in the family depends on the income of the spouses and the contribution of each in the common family budget. Young people support the idea that the formation of the family budget is a responsibility of both spouses, with over 88% of respondents agreeing with this statement (over 86% of men and 90% of women). This confirms the orientation of young people towards the family model with both spouses employed, which allows ensuring a decent standard of living for the family and children and the high orientations of women for participation in the labour market.

Given that the study was conducted among young people who were married, they were asked if the material situation of the partner is important to them. The obtained results show that this aspect has a certain impact in choosing the life partner. Thus, 23.8% of the men and 39.5% of the women interviewed said that for them the material situation of the partner is "very important" and "important", about 48% of the respondents of both sexes consider that it is "not the most important thing" and only 19.6% of men and 9.7% of women answered, "not at all important" (the rest of the respondents had a hard time answering this question). These results reflect, to some extent, that some young people, especially women, support the stereotypes of old, when the older husband, accumulating property and human capital, already had income to support the family, thus being able to and allows her to get married. For a woman, usually of a younger age, youth and health were considered her most valued capital, her fate related to household chores and childbirth. At the same time, these

representations correlate with young people's responses to men's higher responsibility for the family's financial well-being. Official statistics show that after the birth of a child, men remain the main breadwinners of the family, while a high percentage of women unemployed women unemployed before childcare leave receive a minimal allowance, which does not meet the needs of the mother and child. Thus, young women being insecure in their financial stability in connection with a child's birth want to see material support in the future husband. Respectively, for young girls the financial well-being of the partner may be more important than for young men.

The study showed that young people face several problems in achieving financial independence due to unemployment, reduced employment opportunities and low wages, only 16.5% of respondents stating that they are "fully financially insured", while 42.9% "do not always meet the necessary expenses" and 35.4% "depend on their parents". Even among youth aged 30-34, about 22% "could not cope without the help of parents." Women more often than men have stated that they are materially dependent on either their parents or their partner.

Table 3

#### Self-assessment by youth of their financial situation

	I am financially insured, I have enough for everything I need	I do what I have to do, even though I can't always afford it	Without the help of my parents, I wouldn't be able to do it	My partner supports me	Other situation	Total
Men	17.2	48.1	32.6	1.7	0.4	100
Women	16.0	38.7	37.5	6.3	1.5	100
Total	16.5	43	35.3	4.2	1	100

### CONCLUSIONS

Research results show that young people's perceptions of the basic qualities of men and women are still under the pressure of stereotypes, constituting an intermediate model of transition from traditional roles, based on the division of labour, to modern egalitarian ones, which involve equal sharing of women family responsibilities and roles.

Although gender stereotypes persist in the family, they are not already prevalent, with both sexes likely to share material family and household responsibilities, especially those related to raising and caring for children. To the extent that women will enjoy more opportunities for self-affirmation in the professional sphere and the conditions that will allow both parents to combine successfully professional and family roles, these differences will diminish.

Although there were some differences between young people from Chisinau and those from other localities in attitudes about gender roles in the family, they are not so pronounced, given that young people from other localities become rapidly integrated into the urban environment during their studies and employment, assimilating the way of life, values and representations of urban youth.

Young people with higher education more often give preference to the equal distribution of gender roles in the family compared to young people with a lower level of education. Girls more often than boys advocate for a fair relationship, although in some respects, such as the responsibility of men for the financial support of the family, the importance of the material situation of the partner, expresses rather traditional views.

Given the high degree of aspirations of young women for professional activity and career advancement and reduced opportunities to combine professional and family roles we can predict that this discrepancy will continue to be a barrier to achieving this goal, helping to preserve the traditional gender relations.

The study's conclusions fall within the theory of multiple equilibrium (Esping-Andersen et al., 2013), especially the intermediate type, specific for countries in transition from the traditional type of gender relations to the modern one. The question is how long this transition will last, given that

structural and institutional factors are changing slowly, being a barrier to real progress in the field of gender equality in the economic and social sphere.

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## ARTICLE HISTORY

Received 04 April 2021

Accepted 20 May 2021

## SOCIAL COHESION IN THE REPUBLIC OF MOLDOVA: REALITIES AND PERSPECTIVES

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DOI: <https://doi.org/10.36004/nier.es.2021.1-09>

JEL Classification: A13, A14, C31, H80, I3, I31

UDC::316.7(478)

## ABSTRACT

Strengthening social cohesion is one of the main directions of the Moldova 2030 strategy. At the same time, the Association Agreement between the Republic of Moldova and the EU stipulates social inclusion, poverty reduction, social cohesion, sustainable development and improving the quality of life as social policy priorities. This article analyzes the theoretical approaches of the concept of social cohesion and presents the results of sociological research on social cohesion in the Republic of Moldova conducted in 2020. The sample includes 1202 respondents and is representative by place of residence (urban / rural), sex, age, level of education. The qualitative study included interviews with 90 experts, representatives of local public authorities, NGOs and the private sector and 3 focus groups. The research was carried out within the project "Training and strengthening social cohesion in the Republic of Moldova in the context of rapprochement with the European Union". As key aspects of social cohesion were analyzed: self-identification of the degree of belonging of Moldovan citizens to the Republic of Moldova, perceptions of solidarity with other citizens, social trust, participation and inclusion of citizens in political, social and economic processes. The research results showed that the level of cohesion and social solidarity in the Republic of Moldova is quite low. The COVID-19 pandemic has deepened social distancing, uncertainty about the future, poverty and the marginalization of certain groups of the population and has further contributed to lowering the level of social cohesion.

**Key words:** social cohesion, social inclusion, social trust, solidarity.

Consolidarea coeziunii sociale este una dintre direcțiile principale ale strategiei Moldova 2030. În același timp, acordul de Asociere dintre Republica Moldova și UE stipulează incluziunea socială, reducerea sărăciei, coeziunea socială, dezvoltarea durabilă și îmbunătățirea calității vieții drept priorități ale politicilor sociale. Acest articol analizează abordările teoretice ale conceptului de coeziune socială și prezintă rezultatele cercetărilor sociologice privind coeziunea socială în Republica Moldova realizate în anul 2020. Eșantionul include 1202 de respondenți și este reprezentativ în funcție de locul de reședință (urban / rural), sex, vârstă, nivel de educație. Studiul calitativ a cuprins interviuri cu 90 de experți, reprezentanți ai autorităților publice locale, ONG-urilor și sectorului privat și 3 focus grupuri. Cercetările au fost realizate în cadrul proiectului „Formarea și consolidarea coeziunii sociale în Republica Moldova în contextul apropierei cu Uniunea Europeană”. Ca aspecte cheie ale coeziunii sociale au fost analizate: autoidentificarea gradului de apartenență a cetățenilor moldoveni cu statul Republica Moldova, percepțiile privind solidaritatea față de ceilalți cetățeni, încrederea socială, participarea și incluziunea cetățenilor în procesele politice, sociale și economice din țară. Rezultatele cercetării au arătat că nivelul de coeziune și solidaritate socială în Republica Moldova este destul de redus. Pandemia COVID-19 a aprofundat distanțarea socială, neîncredere în ziua de mâine, sărăcia și marginalizarea anumitor grupuri de populație și a contribuit și mai mult la scăderea nivelului de coeziune socială.

**Cuvinte-cheie:** coeziune socială, incluziune socială, încredere socială, solidaritate.

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*Укрепление социальной сплоченности является одним из основных направлений стратегии «Молдова 2030». В то же время Соглашение об ассоциации между Республикой Молдова и ЕС предусматривает повышение социальной интеграции, сокращение бедности, укрепление социальной сплоченности, устойчивое развитие и повышение качества жизни как основные приоритеты социальной политики. В статье анализируются теоретические подходы в определении концепции социальной сплоченности и представлены результаты социологических исследований социальной сплоченности в Республике Молдова, проведенных в 2020 году. Выборка включает 1202 респондента и репрезентативна в зависимости от места жительства (город / село), пола, возраста и уровня образования респондентов. Качественное исследование включало интервью с 90 экспертами, представителями местных органов власти, НПО и частного сектора, а также с 3 фокус-группами. Исследования проводились в рамках проекта «Формирование и укрепление социальной сплоченности в Республике Молдова в контексте сближения с Европейским Союзом». В качестве ключевых аспектов социальной сплоченности были проанализированы: самоопределение степени принадлежности молдавских граждан к государству Республика Молдова, восприятие солидарности с другими гражданами, социальное доверие, участие и включенность в политические, социальные и экономические процессы. Результаты исследования показали, что уровень сплоченности и социальной солидарности в Республике Молдова довольно низкий. Пандемия COVID-19 усилила социальное дистанцирование, неуверенность в завтрашнем дне, бедность и маргинализацию определенных групп населения, а также способствовала снижению уровня социальной сплоченности.*

**Ключевые слова:** социальная сплоченность, социальная интеграция, социальное доверие, солидарность.

## INTRODUCTION

In 2000, Social cohesion became one of the priorities set by the European Commission in terms of social policy at European Union level. Strengthening social cohesion is one of the main directions of the Moldova 2030 strategy. The Association Agreement between the Republic of Moldova and the EU also stipulates social inclusion, poverty reduction, social cohesion, sustainable development and improving the quality of life as priorities of social policy.

In this article we aim to study social cohesion in the Republic of Moldova from the perspective of self-assessing the degree of Moldovan citizens' belonging to the Republic of Moldova, perceptions of solidarity with other citizens, social trust, participation and inclusion of citizens in the country's political, social and economic processes.

## THEORETICAL APPROACHES REGARDING THE SOCIAL COHESION CONCEPT

Literature does not present a single and well-defined notion of social cohesion, which is interpreted according to the discipline of study. In the Dictionary of Sociology, the notion of cohesion is defined from a social perspective, denotes the characteristics of this phenomenon and highlights the positive and negative sides of the phenomenon from the perspectives of the individual and the group. The development of the social cohesion concept was based on sociological and psychological research with reference to the dynamics of social groups. We mention the research of crowd psychology by Gustav le Bon (1896), which determines the influence of the crowd on the behavior of the individual; the studies of Emil Durkheim (1897) on the phenomenon of suicide, according to which it is concluded that the suicide rate in various communities depends on their degree of solidarity; the experimental research of Iacob Moreno (1934) on the dynamics of the development of relationships in groups and their influence on the behavior of individuals; Leon Festinger's studies that led to the formalization of the theory of group cohesion, according to which cohesion is a key phenomenon of the continuity of membership, the cement that unites the members of a group and maintains the relations between them. Considerable contribution to the development of the notion of social cohesion has also been made by research on social networks (Jenson et al., 1998).

In her work on mapping social cohesion, Jane Jenson defines social cohesion as a continuous process of developing a human community with shared values, shared challenges and equal opportunities, which is based on trust, hope and reciprocity. At the same time, the researcher identifies five basic dimensions for measuring social cohesion, namely: belonging/isolation,

inclusion/exclusion, participation/non-involvement (Dimeglio et al., 2012).

These dimensions allow the measurement of the phenomenon of social cohesion from several perspectives on a scale from total rejection to total inclusion. Thus, for example, group membership can be measured from total isolation to total inclusion of respondents at the level of groups, communities, society. In the case of inclusion/exclusion, we can measure the phenomenon from total social exclusion to inclusion in certain areas or even the inclusion of social groups at the community and society level.

Paul Bernardt develops Jenson's approach. He proposes measuring social cohesion from two perspectives: social spheres (economic, political, social, cultural) and social relations (at the level of attitudes and behaviors). Bernardt proposes 6 dimensions for measuring social cohesion: insertion/exclusion, legitimation/non-legitimation, recognition/rejection, equality/inequality, participation/passivity, affiliation/isolation.

Bernardt considers social cohesion as a quasi-concept, a hybrid mental construction developed by political games, which is based on the analysis of data in certain contexts. This construction is natural to remain indefinite in order to be adapted to the needs of political action (Dimeglio et al., 2012). Thus, the multidimensional analysis of social cohesion based on socio-psychological approaches at the level of social spheres and at the level of attitudes and behaviors is introduced. At the same time, a new aspect is introduced for the research of equality/inequality, ensuring comprehensive measurement.

Andy Green and Jan Germen Janmaat analyze social cohesion from the perspective of social institutions, attitudes and behaviors. Thus, they mention that *social cohesion includes certain societal characteristics related to attitudes and behaviors as well as certain social institutions and mechanisms*. With reference to social institutions and mechanisms, they include the following: risk-sharing and social protection mechanisms (state based on social welfare); redistribution mechanisms (such as taxes) to ensure equal and fair opportunities; and conflict resolution mechanisms (Green and Janmaat, 2011). Thus, social cohesion is defined more from the perspective of common values and ensuring social solidarity based on equity, equality, tolerance and behavior in accordance with the law. Social cohesion is analyzed more from the perspective of respecting living together in order to ensure people's rights and maintain society in a sustainable way.

O'Conner defines social cohesion from the perspective of values, differences, associations and networks, adding the category of infrastructure here. He considers that social cohesion covers three categories of issues: *values, identity, culture that define a certain community; differences and divisions: inequalities and inequities, cultural diversity, geographical divisions; associations and networks, infrastructure* (Noll, 2009).

According to Chan and others, social cohesion is a state that refers to the interactions between members of society vertically and horizontally. These interactions are based on attitudes and norms that include trust, a sense of belonging and a willingness to participate and help, as well as their behavioral manifestations. They propose a definition based more on the need to operationalize the phenomenon and consider that *members of a community show cohesion if three conditions are met cumulatively*:

1. *they trust, help and cooperate with other members of the community;*
2. *they share a common identity or a sense of belonging to the community;*
3. *the subjective feelings made explicit in (1) and (2) are objectively manifested in their behavior* (Chan et al., 2006).

In the context of measuring stability and reconciliation in countries with stagnant conflict, the SCORE index ([www.scoreforpeace.org](http://www.scoreforpeace.org)) is used, which measures two preconditions for peace and society: social cohesion between groups and reconciliation. According to him, social cohesion is measured on the basis of three indicators: 1) trust in institutions, 2) human security and 3) satisfaction with life. Reconciliation is measured on the basis of indicators: negative stereotypes, anxiety within the group, social distance, social dangers, active discrimination and positive feelings.

Measuring social cohesion in pandemic situations requires new dimensions and indicators that should be researched. Of particular interest in this context are studies of social cohesion in exceptional situations caused by natural or social calamities, which show that people show a greater degree of cooperation when they are in survival situations (Calo-Blanco et al., 2017) and that social cohesion contributes to reducing the perception of risk and fear, while trust in social support increases the degree of involvement in problem solving (Babcicky and Seebauer, 2020).



In the Republic of Moldova, the phenomenon of social cohesion has been researched from several perspectives. In one of the first works (Negură et al., f.a.), the methodological framework for assessing social exclusion in Moldova was developed and it was concluded that there is an intrinsic link between social exclusion and social cohesion, in a cohesive society, the level of exclusion social being lower and vice versa. The research is based on the definition of social cohesion proposed by the Council of Europe according to which it means the capacity of society to ensure the well-being of all its members by minimizing economic, social, political disparities and avoiding the marginalization of people. Social cohesion would therefore require the ability of all to participate in economic life, benefiting from opportunities for development and social welfare. The analysis of social cohesion from the quality of life perspective identified five vulnerable groups in the Republic of Moldova: people with disabilities, children and families with many children, people with low incomes, youth, elderly and families of migrant workers.

Researchers Negură P., Mocanu V., Potoroacă M. analyze social cohesion from the perspective of social quality theory. Social cohesion is presented as an expression of the nature of social relations based on belonging, solidarity, trust, shared values and norms. The research results demonstrate the low degree of trust of the population in institutions and peers. Although the spirit of self-help exists in Moldovan society, social solidarity is also appreciated by respondents at a low level. At the same time, the sense of belonging of the respondents to their country and culture is quite high (Negură et al., f.a.).

### MAIN COMPONENTS OF SOCIAL COHESION

Social cohesion is a multifaceted phenomenon that depends on certain social contexts and is very difficult to measure with the same categorical apparatus. Most research on social cohesion, in particular that carried out by the OECD, the Council of Europe and the European Commission, uses the following as its basic dimensions: social welfare, social capital and social mobility.

Social welfare is analyzed as a complex phenomenon, in a comprehensive logical framework, which is based on three aspects: material living conditions, quality of life and sustainability, or conditions that must be respected to preserve social welfare for other generations. Social welfare is analyzed both at the objective (concrete level of material living conditions) and subjective level, or at the level of perceptions, feelings, such as the degree of well-being satisfaction or the degree of security/insecurity. In the case of material conditions, researchers usually analyze the following dimensions: 1) income and consumption, 2) work and wages, 3) housing. Quality of life includes the following indicators: 1) health, 2) work and rest, 3) education and skills, 4) civic engagement and governance, 5) social connections, 6) personal security, 7) subjective well-being. Health is very important in terms of value, but it is also an important factor and a condition for employment. Equally, employment is important from the perspective of personal self-affirmation and family well-being. Social connections are important for personal security and for the social valorization of individuals. An environment where people feel personally secure is very important for a beautiful and safe life. So practically all these dimensions together are important for ensuring social well-being and a high quality of life.

Measuring social welfare in OECD countries has highlighted certain trends in social cohesion, as follows. Income inequality continues to be very high in some countries, with high incomes mostly concentrated in the upper strata. There are many health disparities in social groups with different income levels, due in large part to different lifestyles. Women have a longer average life expectancy than men, but they report a lower level of health and a higher level of disability. The distribution of family obligations continues to be gender inequitable, so men work more hours at work and women work more hours at home without being paid. The elderly, the poor and the low-educated have far fewer social support networks than other population groups. People living in big cities and men are more likely to be victims of crime than other population groups. Poor, well-educated people and young people are less involved in politics than other population groups. These differences are also very big depending on the country's level of development. Thus inequality is higher in underdeveloped countries compared to other countries. The level of development of countries should be considered when measuring social cohesion (OECD, 2011).

Social capital is the second aspect considered important by researchers for measuring social cohesion. In the literature there are two approaches in measuring social capital: 1) from the perspective of the frequency of relationships and the possibility of obtaining social capital (information, ideas, support) from other individuals and other groups and 2) from the perspective of nature and fence



involvement in various civil society networks and organizations. The World Bank measures social capital through 6 dimensions: 1) Groups and networks (involves the degree of belonging to different groups and networks, including civil society parties and organizations, and the degree of offering/receiving information, ideas, support); 2) Trust and solidarity (trust in institutions, neighbors and foreigners); 3) collective action and cooperation (if it happens in the community and how the members of the community cooperate in solving common community problems). This dimension also includes perceptions of collective action. In turn, the OECD has identified several perspectives from which social capital can be measured: 1) personal relationships (network structure and associated behaviors to maintain relationships), 2) support from social networks (emotional, financial, material, intellectual resources to who have access to network members), 3) civic involvement (activities and networks through which people contribute to community life, 4) trust and cooperative norms (trust, social norms and shared values). Social mobility is the third dimension most frequently involved in measuring social cohesion. From the OECD perspective, social mobility is perceived as intergenerational mobility between parents and children or grandchildren and as intra-generational mobility during the life of individuals. Intergenerational mobility analyzes the status of the individual from the perspective of income, occupation, health, education comparative with his parents. Intra-generational mobility analyzes how incomes and occupational status of individuals have changed over a lifetime. So mobility shows how the quality of life, occupational status, education, health, etc. have changed during the life of individuals and compared to their parents. High social mobility means that regardless of status, everyone has opportunities and chances to progress in their career or life (OECD, 2018).

### RESEARCH METHODOLOGY

The results of the quantitative and qualitative sociological investigations carried out within the "Formation and consolidation of social cohesion in the Republic of Moldova in the context of the approach to the European Union" project in 2020 were used as empirical material.

The applied research tools were: the analysis of statistical data presented by the NBS, sociological survey administered by face-to-face and online interviews on a sample of 1202 people. The general population research sample consisted of 1202 randomly selected people. The sample is representative depending on the environment of residence, sex, age, level of education. Thus, depending on the environment of residence, 59% of people from rural areas and 41% from people from urban areas were surveyed. Depending on gender, 52% women and 48% men were surveyed. Depending on age, the respondents are divided as follows: ages 18-24 - 13%, ages 25-29 - 14%, ages 30-39 - 20 %, ages 40-49 - 24%, ages 50-64 - 18%, ages 65+ - 11%. Depending on the studies, respondents may be distributed as follows: primary/secondary education - 17%, secondary/high school - 24%, professional technical/vocational studies - 34%, higher/postgraduate - 30%.

The qualitative research included the interview with 90 experts, representatives of local public authorities, NGOs and the private sector and was conducted between May 8-26, 2020, while the quantitative one between July 18 and August 23, 2020

Prior to conducting basic field research, social cohesion research indicators were piloted into three focus groups to see to what extent they fit the situation in Moldova and to identify possible new indicators specific to the social context in our country. Thus, a total of 31 people participated in focus groups. In these focus groups we focused in particular on the following aspects: social solidarity, manifestation of cohesion at community level, belonging to social groups, inclusion and participation, trust in institutions and individuals.

### MAIN RESULTS

**Solidarity and social cohesion.** Most focus group participants understand the notion of solidarity as follows: *be united, help each other, be equal, listen to each other*. Although most of them understand the importance of solidarity and social cohesion, about 2/3 of the participants mentioned that in their locality the degree of solidarity and social cohesion is quite low. *Each in his own nest, his own yard. We're not very friendly like that - woman, age 50, rural.*

Most often people help each other only if they are related. Most people lack initiative. If it is necessary to solve a community problem, for example to clean a well, people only organize if the initiative comes from the mayor or local councilmen. In the conditions when someone would need help, then he would address first of all the relatives, then he would address the mayor's office.

Focus group participants also agreed that the richer people are, the less supportive and needy they are. If they needed help, they would address poorer people, since they are more open. - *Less wealthy people are kinder. They have the same hardships and understand more easily. The rich live in another world and don't understand each other* - woman, 30.

When asked to what extent they would help strangers, the vast majority mentioned that they would rather be vigilant and that they would rather get to know the person than let them into the house or help them. Some mentioned that they had cases when they received strangers in the yard, served them with food and wine, but preferred that they not enter their house. - *I can give you an example. A year or two ago, a stranger came on a motorcycle and came into my yard. I see he speaks German. He points at my house ... I say no, I won't let him in... Yes, I received him, gave him, I gave him a bottle of wine. He explained to me that he wanted to pitch his tent. Yes I will help you. But I won't let you in the house. I apologize, but... I mean, I was scared. It depends on the help needed. Otherwise, if something happened to him, I think I would help him, even if he's a foreigner* - Man, 45, rural.

Many people mentioned that the degree of solidarity and cohesion is low in their communities because people are divided, most often, by political interest. Namely, politicians, from the focus group participants' perspective, made the local populations argue, hate each other. *Society is dispersed by parties, by interests ... in our community, and throughout the republic. It was the goal of politicians to disperse them. Once the party is gone, the main expert changes, no matter how good he is. It doesn't matter. Another one comes, even if he is much weaker, more uneducated than the other one. This, unfortunately, is the truth*, Man, age 40, urban.

Others mentioned that people are more divided on ethnic grounds and that until the citizens of this country, regardless of whether they are Moldovans, Romanians, Russians, etc., understand that they must respect the country's people, its history and language we cannot hope for cohesion and solidarity. For some of the participants, the union with Romania would be a solution. - *Moldovan society is divided only because of our rulers who, for some reason, lean out towards the Russians who pay them 800 thousand Euros per month to maintain their parties, and of course they will try as much as possible to destroy this country and turn it into a bridgehead for the Russians. So we should unite, take them down, form a provisional government that would negotiate for the union with Romania. I think this would be the only way out of the swamp we are in.* - Man, 55, rural.

**Belonging to social groups.** The vast majority of participants in focus groups mentioned that they are proud of their locality, even if the infrastructure is not very developed, they have many good people, the land is very fertile and they have a lot of greenery around.

If they go abroad, they are proud to be from the Republic of Moldova. There is one thing that they regret, namely that although the country is beautiful, the leaders at the helm of the country do not know how to lead and do not think about the country and the people who live here, but more about their own good. *No matter how good it would be elsewhere, it's not good here. Our country is always different. We simply do not have a leadership, which should lead us properly. If we were to have good leadership, we would be supportive. I stayed in Canada for a month this summer and saw very beautiful things, but I still missed this place* - Woman, aged 60, urban.

Some mentioned that they have children abroad and they also say that they are from the Republic of Moldova because Moldovans are much more appreciated than other peoples in other countries for their kindness and diligence. - *Let's put it this way, I have children who went abroad, for them it is more proud to say that you are from the Republic of Moldova, than from Romania. Because they don't really love Romanians, they don't like them abroad, they consider them thieves.* - Man, 60, rural - *I was in Germany for a while and saw a similar situation. The attitude towards Moldovans is more positive than towards other nationalities.* - Man, age 45, rural.

When asked about what qualities must a good citizen of the Republic of Moldova possess, the participants in the focus groups mentioned the following: *cult, smart, honest, not to be a thief, not to be corrupt, to love their country and not to criticize it, to love the people and to care for the people, to have moral values, to be altruistic, to actively participate in community activities, to be people with verticality.*

**Trust in people and institutions.** When asked if they generally trust people, the absolute majority mentioned that they would rather not trust them, because people are different and they change very easily depending on the circumstances. *Now people are two-faced. Even if we take the elections ... people go after everyone, they are unpredictable. Man can do anything, what he does not expect he can do. They go with the flow, they agree with everyone. Man is not specific. For example, he has an option, he doesn't have his option, anyone can fool him. A good part is like that. Woman, 45, rural.*

Respondents show the greatest confidence in their family members, colleagues and neighbors. With reference to social institutions, the participants in the focus groups mentioned that they have more trust in the church and the mayor's office, and less trust in the Government, Parliament, Police, trade unions. - *Church is the place where persons alleviate their needs, problems, which they have with society, with family. Not trusting today's politics, they find comfort there. Second, where do people go to share their trouble? Local council. His hen got stolen, he goes to the local council, he was insulted, has no wood, he goes to the local council. Not trusting others, people limit themselves to family, church, local council hall - that's my opinion. Man, 60, rural.*

Thus, with reference to the church and its role in the community, respondents mentioned that it has an educational role, of consolidating the society, and the priest must be a model of behavior for the village. Although they trust the church, some participants in focus groups mentioned that in some localities the church has become involved in politics, which is not a good thing at all. - *The church became politically involved; this is the worst thing that may happen in a state. The church must have its place. It belongs to the spiritual, not the material. Man, 60, urban.*

Other respondents mentioned that the behaviors of priests often leave much to be desired: they do business at church instead of helping poor people, they are not interested in the problems of the parishioners. It is for these reasons that some people have lost faith in the church today. - *I want to tell you that a priest should know more about the villagers. My mother is 89 and she goes to church every Sunday, if she doesn't go there for two or three Sundays, if I were a priest, I would come and ask her why did she not come for two or three days? Maybe you're sick, maybe you need something ... Woman, 50, rural - These fees, these candles. Well, if I went to church with a candle from home, he doesn't have the right to force me to buy a candle from church, that's not a place of business. You don't go there to do business; you go there to pray. - Man, 50, urban*

When asked if they trust the army, some respondents gave a positive answer, because the army has an educational purpose, while others said that in general Moldova should not have an army, because it is a small country that tries to assure everyone that it is neutral. In addition, many young people avoid the army - they rather go to colleges, universities, or even work abroad to escape the army. Youth from vulnerable families, who have nowhere to go, usually enlist in the army.

With reference to the police, most mentioned that they do not trust because the police do not do their job, often do not register applications, it is very difficult in rural areas to find a police officer when you need one. *Before, the police did their job. When there was a district policeman in every local council. Now we don't have a local policeman. Folks come once a month to write a complaint, they don't discuss, they take the requests and hide them, not all of them are registered. Man, 60, rural.*

The unions, in the vision of the participants in the focus groups, lost their responsibilities, they are more involved at indication of government officials, or in the best case in the organization of some festive events. For these reasons, the vast majority of people do not trust this institution and would never turn to trade unions for solutions. *What does an agricultural union do? It unites farmers, defends rights, goes to the ministry of agriculture, goes to the marketplaces, raises the masses ... In our unions there are a bunch of people throwing some rubles back for a tea, a celebration. Before, no employee could be fired until the union agreed. Regardless, the president of the country may say anything ... the union is a neutral body, they meet, they put things on the table after the elections, not their personal interests... this is how this was seen. They give notice. And even when bosses exceed their duties, for which they also find a suitable article, he goes to court and get defense. That is the mission of a union. They go to court and get defense... we thought the leader had exceeded his duties. Man, 56, rural*

Focus groups participants mentioned they have the least trust in Parliament and Government. These structures do not fulfill their mission, they do not take care of the country and the people. *People have chronic distrust in leadership. Many of those in charge were taught by our teachers. They're from our*

country. The education process begins in the family; it begins in school. When they gather, they discuss less about the interest of the state with personal, group interests predominating. It means we won't get over this handicap soon. We did not have political traditions, political parties in the true sense of the word, for the political elite to be chiseled. - Man, 57, urban.

With reference to trust in parties, focus group participants mentioned that they do not trust a party either, because they do not have political values and goals, party members frequently change from one party to another for money. People also mentioned that a new political class is needed to make changes at the societal level.

**Diversity and tolerance.** People in communities have a rather low spirit of tolerance, especially towards Muslims and refugees from other countries. They consider that the Republic of Moldova still invests too much in refugees. Many of them mentioned that although they know that in other countries refugees are helped by the population, they personally are not sure they would help refugees. - *Especially when a man of another faith comes to our society, he first of all cannot integrate. No one will tolerate him imposing his rules of the game. I don't think our Moldovans will give in and let him do his will. That is my opinion.* - Man, 47, rural - *We still have enough refugees, and they are paid and have pardons in all respects. The native population does not have such privileges. I know the place where refugees live in Moldova, and they have so many conditions there that an ordinary man who works every day does not have and neither does he have the rights that refugees have.* Man, 56, urban.

**Perspectives for the future.** When asked about the prospects of their community, most respondents were very pessimistic, noting that they have the example of other localities, where people migrate en-masse and that if the situation in the country remains the same, all villages, including theirs, will become deserted. Some mentioned that they still hope for more educated Moldovans to return from abroad and develop the country's economy and localities, as the Italians, or other peoples, once did. - *The Moldovans will return in any case. Like with Italy, for example, in 1959 they went to America, came back with capital, opened hotels, and things went pretty well.* - Man, 47, rural.

Research on social cohesion in social welfare, social capital and social mobility dimensions showed that the level of cohesion and social solidarity in Moldova is quite low. The COVID-19 pandemic deepened social distancing, fears, poverty and marginalization of certain population groups and further contributed to lowering the level of social cohesion.

### **SOCIAL COHESION FROM THE SOCIAL WELFARE STANDPOINT**

The socio-economic security of Moldova's population is quite low. Extreme and absolute poverty levels, although in slight decline in recent years, remain quite high. The impoverishment of the population is fueled by limited jobs, a high consumer price index and high rate of inflation. Poverty continues to affect the rural population the most, large families and many children, children and the elderly. Although the average monthly income of the population continued to increase, in the context of rising consumer prices and inflation, they continue to be insufficient to ensure a decent living of more than 2/3 of the country's population. Access to various quality community services (water, sewerage, district heating, etc.) is low, especially in rural areas, low-income families, families with many children and elderly families. In the context of the pandemic, the socio-economic situation of marginalized families has worsened further, due to the loss of jobs and the emergence of new expenses - protective materials against COVID or even medicine in cases of illness; the need to provide children with computers or internet to learn online; increased housing maintenance costs due to the transfer of the workplace to the home, etc. At the same time the very low involvement of the authorities in supporting these families is worth mentioning. In the context of the above, more than half of the country's population is not satisfied with their lives in general. The share of dissatisfied people is higher in rural areas, in age groups 50+, in the environment of people with low education, those not employed, people with low incomes.

### **SOCIAL COHESION AND SOCIAL CAPITAL**

The analysis of the respondents' degree of participation in politics and community life shows that the vast majority of the population is practically not involved in the community political or social life. Election participation is the only political and civic activity involving over 2/3 of the population. The share of more active people in political and social life is higher among those who work in the public sector, are



party or NGO members. The fiscal morale of the population is rather at the level of attitudes and beliefs regarding payment of salary taxes, and less in relation to informal payments, about 1/3 of those surveyed having offered informal payments in the last 12 months.

In general, the population has a high level of trust only in family members, friends, co-workers and neighbors; the level of trust in institutions remains quite low. Compared to different institutions, the population has more trust in the Church, the media, the mayor's office and the Presidency and less trust in Justice, the Prosecutor's Office, political parties, Parliament and Government. The level of trust in most people, as well as in strangers is very low, people considering that they have to be very vigilant with them. Regarding media, respondents have more trust in the media in the EU and Romania and less trust in the media of Moldova and Russia. The frequency of media consumption is quite high among the population, the most important source of information being considered television, and the most credible the Internet.

The analysis of the identity and group membership of the population shows that most respondents are proud of being citizens of Moldova, although many of them do not associate this feeling with the greater possibility of assertion, a perfect place for raising children, or for living and working and about 60% are oriented to leave the country in the near future. This feeling of pride is rather explained by the unconditional love for the place where they were born, raised and educated and of belonging to the nation. Most respondents continue to identify themselves as residents of their city/village and a citizen of Moldova, and less so as a citizen of Europe or a citizen of the planet. At the same time, a large part of the population identifies itself with the ethnic group to which it belongs and only 16% consider themselves simply citizens of Moldova.

The analysis of the social distance between respondents and different marginalized groups of population or ethnic groups highlighted the fact that the smallest social distance is between respondents and Moldovans, Romanians, Russians, who are perceived as close social groups, who may be part of family members, colleagues, neighbors. The social distance index is moderate and shows tolerance towards the following groups: Jews, people with physical and mental disabilities, Roma, immigrants, HIV + persons, persons of color, former detainees, Muslims, homeless persons. Respondents acknowledge that these groups may live in their community, or even in the country, but also want them less as family members, neighbors, colleagues, friends. The index of social distance between respondents and drug users and homosexuals denotes isolation; thus, the respondents would like these groups to leave the country.

### **SOCIAL COHESION FROM THE SOCIAL MOBILITY PERSPECTIVE**

Social groups with high social status are in all cases characterized by the following: high level of education, high share of urban population, high occupational status, and vice versa - groups with low social status include people with low education, from rural areas, with low occupational status.

Education is one of the basic factors leading to intra-generational social mobility. The higher the level of education, the more likely the possibility to advance on the social scale. And vice-versa, a low level of education decreases opportunities to increase social status.

In the case of extreme groups (with the highest and lowest status) inter-generational occupational mobility is the highest: with a descending or ascending specific. In the case of groups of highly and medium qualified specialists, the share of those who maintained the occupational status of their fathers was 56% and 67%.

With regard to the standard of living of the respondents compared to that of the parents, in the groups with higher social status the share of respondents who mentioned that they have a better/much better life compared to their parents gradually increases and respectively the share of those who consider that they have a worse/much worse life than their parents. The same trend was observed in the perspective of children's living standards: in the groups with higher social status, the share of respondents who believe that their children will have a better life than them and vice-versa is higher.

### **PRIORITY DIRECTIONS TO CONSOLIDATE SOCIAL COHESION**

Increasing the population's social well-being, and in particular disadvantaged groups (rural persons, persons with disabilities, youth, the elderly), through sustainable economic development, supporting small agricultural producers, creating fair employment opportunities, equitable distribution of income and the reduction of economic inequalities, the vocational guidance of youth in line with their



interests and the needs of the labor market, increasing people's access to physical infrastructure, public utilities and living conditions.

Developing the sense of social responsibility of entrepreneurs to create inclusive work environments in line with the needs of employees. Develop incentives for employers, including taxation, to invest more in creating good working conditions, including those adapted to the needs of people with disabilities, and in developing human resources.

Ensuring equitable and free access to education services for all children, including disadvantaged groups - children with disabilities, from socio-economically vulnerable families, from rural areas, Roma, minor parents, providing the necessary support according to individual needs and ensuring a friendly, protective and inclusive school environment. Focusing the education system on person-centered education in order to develop such skills and competencies as critical and creative thinking, collaboration, flexibility, information technology, entrepreneurship, which will help them make decisions, solve problems and communicate effectively.

Ensuring the right of the population, especially marginalized groups, to quality social assistance and protection by strengthening capacity and developing innovative tools for data collection and benefit allocation, development of the network of care, rehabilitation, retraining and quality provision depending on needs.

Ensuring equitable access to quality health services, including for marginalized groups, by developing an efficient and flexible health insurance system, access to efficient, quality and affordable basic medicines and a high level of information to the public about their right to health; and medical services from which he may benefit, including on the basis of medical insurance.

Development and implementation of development policies at local and national level from the perspective of addressing human rights by making public decisions based on evidence of their impact on the population, especially marginalized groups, involvement of the population in decision making, ensuring a clear, efficient and inclusive implementation mechanism and monitoring decisions taken.

Ensuring safe, inclusive, non-discriminatory and equitable community and social environments for all population groups, including the marginalized, by integrating the principles of equality and non-discrimination into all development policies and practices, involving marginalized groups in decision-making and monitoring policy implementation, implementation of communication campaigns focused on accepting differences and diversity and promoting a tolerant attitude.

Developing the spirit of cohesion and social solidarity at local and national level by stimulating and ensuring a governance in partnership with the citizens and assuming concrete responsibilities for community development. Developing effective partnerships between authorities and civil society for the social inclusion of vulnerable groups.

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#### ARTICLE HISTORY

Received 18 January 2021

Accepted 26 May 2021

**DEVELOPMENT OF REGIONAL LABOUR MARKETS IN CONDITIONS OF  
DECENTRALIZATION****Lidiia TKACHENKO<sup>1</sup>****PhD in Economics, Senior Researcher****M.V. Ptukha Institute of Demography and Social Research  
of the National Academy of Sciences of Ukraine, Ukraine****DOI: <https://doi.org/10.36004/nier.es.2020.2-10>****JEL Classification: H70, J21, J68, R58****CZU: 331.5****ABSTRACT**

*The decentralization reform in Ukraine began in 2014 and is aimed at implementing the provisions of the European Charter of Local Self-Government, which provides for the redistribution of powers, resources and responsibilities on the basis of subsidiarity. Currently, local governments are endowed with powers and instruments of influence on enterprises located on their territory, but employment and labour market policies remains the prerogative of the central government. For a comparative analysis of the development of regional labour markets in the context of decentralization, labour force survey indicators are more appropriate, since they reflect the actual policy results from the perspective of households. For the 2015–2019 period in most regions of Ukraine, there was an increase in the level of employment and a decrease in the level of unemployment; at the same time, the gender gap in employment has increased in 16 of 25 regions; the sectoral structure of employment continues to stagnate. Some regions have significantly increased the coverage of public works, but this may indicate not the activity of territorial communities, but the lack of stable employment opportunities. Local self-government bodies should play a key role in the formation and implementation of local employment and the labour market policies, their interaction with the state employment service requiring a corresponding transformation.*

**Keywords:** labour market, regional development, local government, labour market policy, employment, unemployment, public works.

*Reforma descentralizării din Ucraina a început în 2014 și are drept scop punerea în aplicare a prevederilor Cartei europene a autonomiei locale, care prevede redistribuirea competențelor, resurselor și responsabilităților pe baza subsidiarității. În prezent, guvernele locale sunt dotate cu puteri și instrumente de influență asupra întreprinderilor situate pe teritoriul lor, însă politicile de ocupare a forței de muncă și de piață a muncii rămân a fi o prerogativă a guvernului central. Pentru o analiză comparativă a dezvoltării piețelor muncii regionale în contextul descentralizării, indicatorii anchetei privind forța de muncă sunt mai adecvați, întrucât reflectă rezultatele actuale ale politicii din perspectiva gospodăriilor. Pentru perioada 2015–2019 în majoritatea regiunilor din Ucraina, a existat o creștere a nivelului de ocupare și o scădere a nivelului de șomaj; în același timp, diferența de gen în ocuparea forței de muncă a crescut în 16 din 25 de regiuni; structura sectorială a ocupării forței de muncă continuă să stagneze. În unele regiuni a crescut semnificativ încadrarea în lucrărilor publice, dar acest lucru indică mai degrabă activitatea comunităților teritoriale și lipsa unor oportunități de angajare stabile. Organismele locale de auto-guvernare ar trebui să joace un rol cheie în formarea și implementarea politicilor de ocupare a forței de muncă locale și a pieței forței de muncă, interacțiunea lor cu serviciul de ocupare a forței de muncă de stat necesitând o transformare semnificativă.*

**Cuvinte cheie:** piața muncii, dezvoltare regională, administrația locală, politica pieței muncii, ocuparea forței de muncă, șomaj, lucrări publice.

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*Реформа децентрализации в Украине началась в 2014 г. и направлена на имплементацию положений Европейской хартии местного самоуправления, которая предусматривает перераспределение полномочий, ресурсов и ответственности по принципу субсидиарности. Сейчас органы местного самоуправления уже наделены полномочиями и инструментами воздействия на предприятия, расположенные на их территории, но политика занятости и рынка труда остается прерогативой центральных органов власти. Для сравнительного анализа развития региональных рынков труда в условиях децентрализации более приемлемы показатели обследования рабочей силы, поскольку они отражают фактические результаты политики с позиции домохозяйств. За период 2015–2019 гг. в большинстве регионов Украины наблюдались рост уровня занятости и снижение уровня безработицы; в то же время в 16 из 25 регионов увеличился гендерный разрыв по уровню занятости; секторальная структура занятости продолжает стагнировать. Некоторые регионы значительно нарастили охват общественными работами, однако это может свидетельствовать не об активности территориальных единиц, а об отсутствии возможностей стабильного трудоустройства. Органы местного самоуправления должны играть ключевую роль в формировании и реализации локальной политики занятости и рынка труда, соответствующей трансформации требует их взаимодействие с государственной службой занятости.*

**Ключевые слова:** рынок труда, региональное развитие, местное самоуправление, политика рынка труда, занятость, безработица, общественные работы.

## INTRODUCTION

Decentralization is one of the key European integration reforms, launched in 2014 after the Association Agreement between Ukraine and the EU was signed. The reform is aimed at implementing the provisions of the European Charter of Local Self-Government and involves the transfer of a significant part of powers, resources and responsibility from central executive authorities to local self-government bodies that are in close proximity to the inhabitants of a territory. The redistribution of functions based on the principle of subsidiarity should provide residents with mechanisms and tools to influence local authorities and participate in decision-making. At the basic level, the institution of local self-government is that of united territorial communities ("hromady"), which are then combined into larger ones (hereinafter referred to as "hromady"). In 2014–2019 the formation and unification of the hromady proceeded on a voluntary basis, beginning with 2020 - according to long-term plans approved by the government.

One way or the other, decentralization, encompasses all spheres of activity and politics, changing the balance of power and priorities in markets and in society. The labour market is at the intersection of economic, demographic and social factors; therefore, the impact of decentralization requires analysis and improvement of regional employment and the labour market policies.

## LITERATURE REVIEW

The experience of the hromada formation and activity is the focus of research by Ukrainian scientists and analysts. The attention of specialists in the field of labour economics and social economics is focused, first of all, on identifying new risks for the development of regional labour markets associated with decentralization. Such risks are most often called by the following factors (Benovska, 2019; Libanova, 2017; Romanyuk, 2019):

- ❖ the formation and unification of hromady is often formal in nature, without initiative and without a vision on new opportunities for local economic and social development;
- ❖ the behaviour of hromady is dominated by a consumerist approach, they are much more focused on receiving subsidies and subventions from higher-level budgets than on increasing economic activity on their territory;
- ❖ socio-economic disproportions are aggravated not only between regions but also within regions and districts; in particular, the concentration of economic activity in large cities is accelerating, while, at the same time there is a decline and desolation in small towns and villages;

- ❖ the structural imbalance between supply and demand in local labour markets is growing, as a result of which unemployment increasingly exists in parallel with a shortage of personnel;
- ❖ the intensity of all types of labour migrations is increasing, starting with daily commuting and ending with long foreign ones; migrant workers travel is becoming a routine employment model;
- ❖ enterprises and individuals - entrepreneurs are increasingly choosing a place of registration based on the favourable conditions of local taxation, as a result of which the asymmetry between the fiscal and social aspects of the policy is growing;
- ❖ in the formation of policy, a clear "top-down" administrative vertical line is preserved, which determines a formal-declarative approach to the development of local development programs, measures for their implementation and monitoring of performance.

A survey of territorial hromady of four regions of the Carpathian area (Kravciv & Instytut Rehional'nych Doslidžen', 2013), conducted in November 2018, showed that only 11% of hromady developed a program or action plan in employment. Some of them used the old employment programs, which were adopted even before the formation of the hromada without considering the new conditions. Even those hromady that developed their own employment program or plan did not consider the real data on the available labour potential. Among surveyed hromady, 2/3 did not have data on the age composition of the population, 1/3 did not have information on the number of officially employed persons, 1/5 did not know the number of locally registered individuals-entrepreneurs. Most often, the activity of hromady on labour market issues was limited to a rather formal interaction with the local state employment centre (72% of the surveyed communities), 56% of communities taking part in the organization of public works. At the same time, almost all communities noted that limited opportunities for official employment on their territory constitute a problem for community development.

An important area of research is also the improvement of tools for measuring and assessing the dynamics of regional labour markets. Most often the following indicators are taken for comparative analysis: the employment rate, the unemployment rate, the rates of accepting and quitting of regular staff at enterprises, the scale of underemployment and informal employment, employment in harmful conditions and industrial injuries, the size of the average monthly wage of regular staff of enterprises and the declared salary in vacancies, performance indicators of the state employment service, including the number and structure of vacancies, the number of registered unemployed per vacancy (Bilyk & Filipchuk, 2019; Шаульська & Кримова, f.a.). The quarterly monitoring of regional socio-economic development (Ministry of communities and territories development of Ukraine 2020) contains 60 indicators in 12 areas, including the "labour market efficiency" block of four indicators: the unemployment rate according to the ILO methodology, the level of employment, the real wage index and the amount of wage arrears as a percentage of the wages fund.

A review of research shows that in Ukraine, in the context of decentralization, employment is viewed primarily as a component of the financial solvency of the local budget and the investment attractiveness of the territory, whereas issues of employment and unemployment are viewed as part of the state employment service activity. The social role of employment and the role of communities in employment policy are greatly underestimated.

The EU's regional policy aims at cohesion and harmonize development, and it is on this basis that it allows to combine job creation, competitive business, economic growth, sustainable development and improving the quality of life for people from all regions, cities and rural areas. Cohesion policy involves supporting local development initiatives and empowering local governments to manage funds (*EU Budget*, 2018). Thanks to this approach, employment and labour market policies is strongly represented at all management levels.

In countries with a high level of local decentralization (Poland, Belgium, Denmark, the Netherlands, Spain), the public employment service is part of regional self-government bodies and does not belong to the governmental executive vertical. This makes it possible to bring the labour market policy as close as possible to local conditions and needs, to establish specific local tasks and target groups. The disadvantage of fully decentralizing public employment services is represented



by the difficulty to obtain integrated information on the provision of consulting services and active labour market policy measures across the country as a whole (European Commission. Directorate General for Employment, Social Affairs and Inclusion. & ICON INSTITUT., 2016).

In countries where the public employment service is an autonomous public institution (France, Austria, Germany, Greece, Finland), there is also a tendency towards the decentralization of activities at local level. For example, in Germany, the 2003 reform at the local level created public employment agencies (that serve applicants with an unemployment duration of less than one year) and public job centres (that serve long-term unemployed), which closely interact with municipalities. This decentralization of functions and management allowed for a personalized, customer-centric approach, which reduced the average duration of unemployment and increased customer satisfaction for both job-seekers and employers (Finn et al., f.a.).

In countries where the public employment service is a centralized structure subordinate to the ministry (Ireland, UK) or government (Hungary, Sweden), there is also a tendency to deepen cooperation with local authorities. For example, the UK initiated the expansion of the standard service package with additional services (jobcentre plus), which facilitate a quick return to work thanks to the established local funds and tools. Cooperation also takes the form of joining the efforts of the public employment service with local social services to develop joint programs and deliver services tailored to the local situation and needs.

### DATA AND METHODS

The situation on the labour market depends on the intersection of many factors, therefore, it is not possible to separately measure exclusively the impact of decentralization. Based on the objectives of the analysis, preference is given to indicators that characterize the social role of employment and, at least at the legislative level, provide for the significant participation and responsibility of local governments for employment and labour market policies.

The current national legislation refers to the powers of local self-government bodies as general administrative measures (preparation of programs for socio-economic development, etc.) (Verkhovna Rada of Ukraine 1997). Although local governments are endowed with powers and instruments of influence on enterprises located on their territory, comprehensive regional policy, employment and labour market policies remain the prerogative of the state and central executive authorities. Regional development strategies, territorial and local employment programs are fully subordinated to the main directions and principles of state policy, local state administrations are responsible for their development and implementation (Verkhovna Rada of Ukraine 2012 and 2015). Local self-government bodies in these processes have rather a coordinating and supportive role, being mentioned last in the list of entities responsible for implementation.

The only labour market policy measure where local governments play a significant role are public works, which by definition are a type of socially useful paid work in the interests of a territorial community. The practical involvement of local governments in organizing public works was facilitated by the establishment, in 2013, of the principle of parity of their funding from local budgets and funds from the Fund of Compulsory State Social Insurance against of unemployment (Cabinet of Ministers of Ukraine 2013). This prompted the territorial employment centres, which are strictly subordinate to the central vertical of power, to establish a more effective interaction with local authorities. In the crisis conditions of 2015, the requirement for parity funding was cancelled, since the lack of funds from local budgets called into question the conduct of public works, but, at least, the tradition of complicity was established.

Taking into account the existing distribution of powers, the data of the state employment service and other administrative data rather characterize the activities of the central executive authorities in the implementation of national policy. An exception here is the information on public works, the organization and financing of which are carried out with the active participation of local governments.

For a comparative analysis of the development of regional labour markets, data from labour force surveys are much more informative, since they reflect not indicators of activity, but the actual results of socio-economic policy in a given region, and this information is obtained from households, that is, directly from participants on the labour market. The capabilities of this source also have limitations. First, the

survey methodology is clearly regulated and assumes a fairly standard set of statistical indicators. Secondly, when analysing in a regional context, the problem of data reliability arises. In particular, data on the unemployment rate in almost all regions have an error estimate of more than 10%, which limits their use for quantitative analysis (State Statistics Service of Ukraine 2020).

Some researchers offer integral indices that allow synthesizing the content of a set of indicators and ranking regions by the value of the index and sub-indices (Bobukh & Shchehel, 2019). However, for operational monitoring and management decisions, one still needs to focus on the initial values of the indicators, and there should not be many of these indicators. Considering existing sources of regular and reliable data, developments of national researchers and foreign experience (Eurostat, 2019) of socio-economic analysis of regional development, this work uses indicators such as those from table 1.

**Table 1**

**List of indicators for a comparative analysis of the regional labour markets development in the context of decentralization**

Indicator name, measurement unit	Definition or formula for calculating an indicator	Data source
Employment rate,%	Share of employed persons in total population aged 15–70	Labour force research
Unemployment rate, %	Share of unemployed persons in labour force aged 15–70	Labour force research
Employment gender gap, percentage points	Difference between employment rates of women and men	Labour force research
Sectoral employment structure	Share of employed persons by sectors of economy based on National Classifier for Economic Activities KVED-2010 (analogue of NACE Rev.2)	Labour force research
Coverage of unemployed with public works,%	Share of registered unemployed persons who were involved in public works during the year	State employment centre

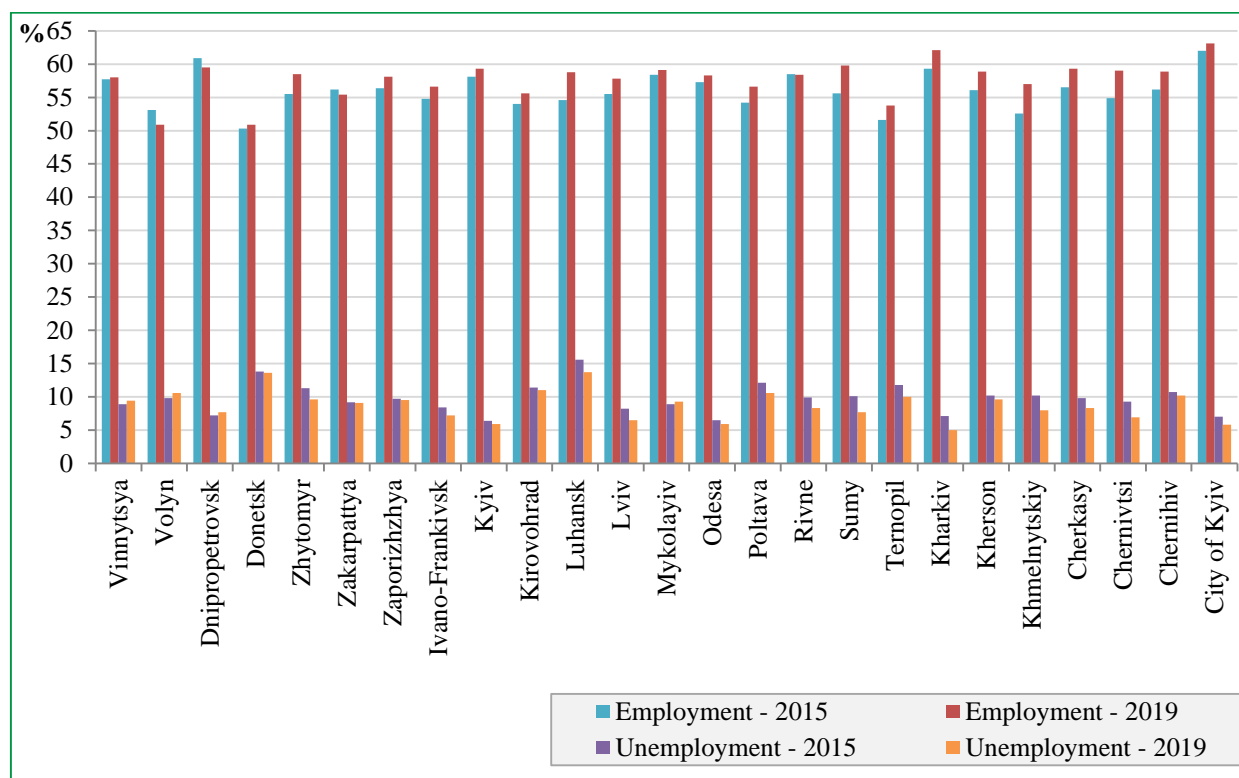
*Source: Own compilation.*

The base year for comparison is 2015, when the implementation of decentralization began. The last reporting year for which a complete set of statistical indicators is available is 2019. In addition, in 2019, the first stage of decentralization was completed, in which territorial communities were formed and united on a voluntary basis. The dynamics of regional indicators and interregional differentiation for 2015–2019 allow you to assess the scale and consistency of changes at the stage of hromada formation.

## RESEARCH RESULTS AND DISCUSSIONS

**Employment rate and unemployment rate** characterize the implementation of the labour supply, reflecting the regional potential for economic growth and the availability of the labour market. Employment opportunities and a choice of jobs are the key to the social well-being of the region's residents. On the contrary, a high unemployment rate can be an indicator of depressed areas.

In 2015–2019 in the regions of Ukraine, there was a heterogeneous dynamic of the levels of employment and unemployment, which may be, among other things, a consequence of the decentralization process. In most regions, there was an increase in employment, most significantly in the Khmelnytskyi, Luhansk, Sumy, Chernivtsi (more than +4 percentage points in each region) and Zhytomyr (+3 percentage points) regions. At the same time, employment decreased in the Volyn (-2.2 percentage points), Dnipropetrovsk (-1.4), Zakarpattia (-0.8) regions (Fig. 1)



**Figure 1. Employment and unemployment rates of population aged 15-70 by regions of Ukraine in 2015 and 2019, %**

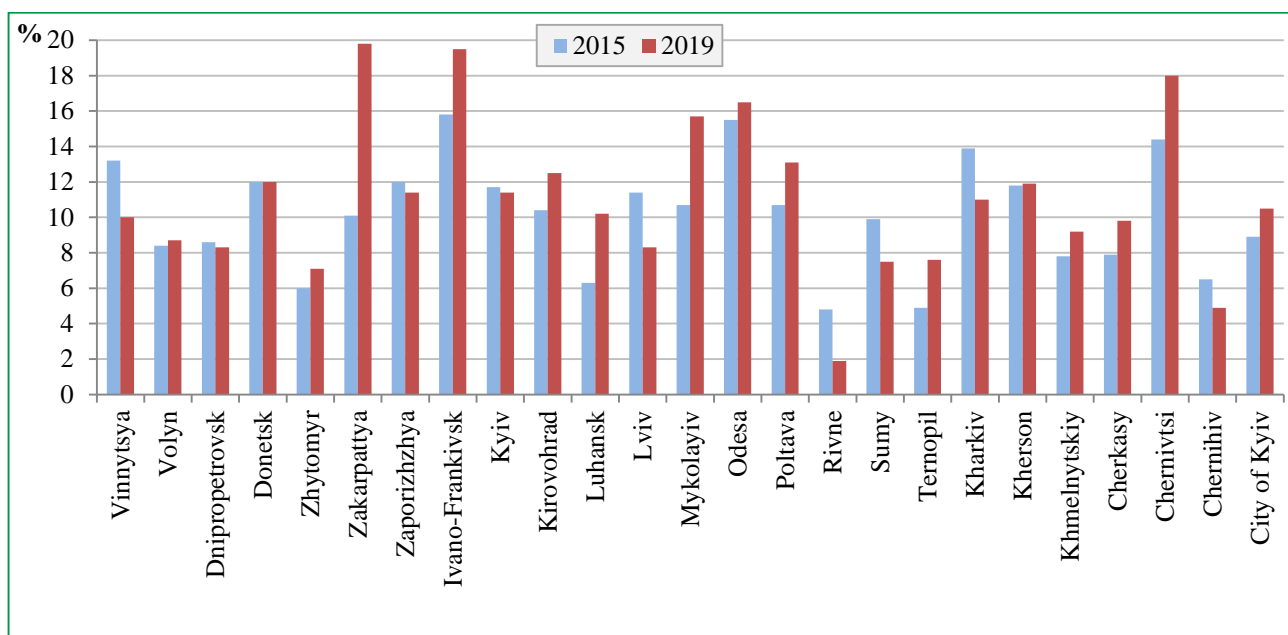
Source: Based on data from State Statistics Service of Ukraine 2020.

The unemployment rate grew, although insignificantly, in four regions - Volyn, Vinnytsya, Dnipropetrovsk and Mykolayiv. Moreover, in the Volyn and Dnipropetrovsk regions, the increase in unemployment occurred against the background of a decrease in employment. The greatest success in reducing the unemployment rate was achieved by the Sumy, Chernivtsi, Khmelnytskyi, Kharkiv regions (a decrease of more than 2 percentage points). It should be noted that Zhytomyr, Khmelnytskyi, Volyn, Dnipropetrovsk regions were leaders in the rating of regions in terms of the hromada formation rate (*Моніторинг процесу децентралізації*, f.a.), but this was reflected in the levels of employment and unemployment in very different ways.

In general, there is a logical pattern that the most significant decrease in the unemployment rate occurred in regions where there was a significant increase in the employment rate, while in regions with a higher level of employment, there is a lower unemployment rate.

**Employment gender gap** characterizes the situation with the equality of opportunities for women and men in the labour market. In virtually all countries of the world, the employment rate for men is higher than the one for women, as women bear a greater burden of maternal and family responsibilities. Therefore, when analysing this indicator, the main attention is paid to the direction of the trend (with the right policy, the gender gap should be reduced), as well as interregional comparison.

For 2015–2019 in 16 out of 25 regions of Ukraine, the gender gap in terms of employment increased (Fig. 2). The largest growth occurred in the Zakarpattya region (twice), the Mykolayiv and Luhansk regions (by half in each), Ivano-Frankivsk and Chernivtsi regions (by a quarter in each). As a result, in 2019, the Zakarpattya, Ivano-Frankivsk and Chernivtsi regions became “leaders” in terms of the size of the gender gap (almost 20 percentage points). The largest reduction in the gender gap in terms of employment took place in Rivne, Lviv, Vinnytsya, Kharkiv regions.



**Figure 2. Gender gap in the employment rate of the population aged 15-70 by regions of Ukraine in 2015 and 2019, %**

*Source: Based on State Statistics Service of Ukraine 2020.*

Interregional differentiation of the gender gap in terms of employment may be associated not only with the lack of jobs for women or the specifics of the sectoral structure of employment (spread of informal employment, labour migration, etc.), but also with the (in) accessibility of early childhood development infrastructure.

**Sectorial employment structure** characterizes the level of productivity and conditions of employment, for example, the opportunity to have a stable job with official registration, decent wages and a social package.

The industry sector provides predominantly stable, qualified, formal wage employment with wages significantly higher than the national average. Disadvantages of employment in this sector usually include tight working hours and risks of harmful working conditions. In Ukraine, industrial centres located mainly in the eastern regions - Dnipropetrovsk, Donetsk, Zaporizhzhya, Kharkiv, Luhansk, as well as Kiev and Poltava regions have formed historically. The share of industrial employment in these regions is over 15%. The smallest specific weight (less than 10%) is occupied by the industrial sector in the structure of employment in the Odesa, Kherson, Ternopil regions and the city of Kiev (table 2).

The business services sector includes three types of economic activities: information and telecommunications (section J), professional, scientific and technical activities (section M), activities in the field of administrative and support services (section N according to NACE-2010). This sector is highly innovative, capable of providing high quality employment with motivation to learn (High-Level Group on Business Services 2014). However, in Ukraine, hired labour in this sector is often disguised as self-employment in the status of individuals - entrepreneurs, or is carried out in atypical conditions (freelancing, etc.). As a consequence, employment flexibility translates into weak social protection. In terms of the structural share of employment in the business services sector, the city of Kyiv is by far the leader (over 20%), which is explained by the status of the capital. Among the regions, a significant percentage of employment in the business services sector comes to Kyiv, Kharkiv, Dnipropetrovsk regions (7-9%). This sector is least represented in the Zakarpattia and Chernivtsi regions (less than 3%).

Table 2

**Share of employment in selected sectors of economy by regions of Ukraine in 2015 and 2019, %**

Sector→	Industry		Business Services		Public services	
Sections of NACE <sup>1</sup> →	B+C+D+E		J+M+N		O+P+Q+R	
Regions	2015	2019	2015	2019	2015	2019
Vinnitsya	11	11	4	3	23	21
Volyn	13	14	3	3	26	25
Dnipropetrovsk	25	24	6	7	19	18
Donetsk	33	26	5	5	19	19
Zhytomyr	14	15	5	4	26	23
Zakarpattia	11	11	2	2	21	20
Zaporizhzhya	22	22	5	5	21	18
Ivano-Frankivsk	12	12	4	3	22	20
Kyiv	18	18	9	9	26	23
Kirovohrad	13	13	3	4	24	22
Luhansk	31	19	4	5	19	18
Lviv	14	15	6	6	25	22
Mykolayiv	13	13	3	3	21	20
Odesa	8	8	6	6	23	21
Poltava	18	17	4	4	23	20
Rivne	13	13	4	3	23	21
Sumy	16	14	4	4	23	21
Ternopil	9	9	3	3	26	22
Kharkiv	19	19	7	7	21	19
Kherson	9	9	4	3	24	21
Khmelnyskiy	12	12	3	3	25	22
Cherkasy	14	14	4	4	21	19
Chernivtsi	10	11	3	3	22	19
Chernihiv	12	12	4	4	25	24
City of Kyiv	8	8	20	21	23	22

Source: Based on State Statistics Service of Ukraine 2020.

The public services sector includes economic activities dominated by budgetary and non-profit institutions that provide services such as: public administration and defence; compulsory social insurance (section O), education (section P), health and social assistance (section Q), arts, sports, entertainment and recreation (section R according to NACE-2010). These services are provided to the population directly at the local level and play a key role in human development opportunities. As a field of employment, this sector usually provides a stable job with formalization and a full package of social protection. At the same time, the level of wages in the public sector of the social sphere remains almost the lowest of all types of economic activity. Since government or sectoral policies play an important role in the public services sector, regional differentiation in the share of employment in this sector is less pronounced. The regions with a predominance of the population of large cities have the lowest share, where it is possible to use the public infrastructure network more efficiently due to the density of settlement.

In 2015–2019 structural shifts in the sectors of industry and business services are almost imperceptible, while the share of employment in the public services sector has decreased in all

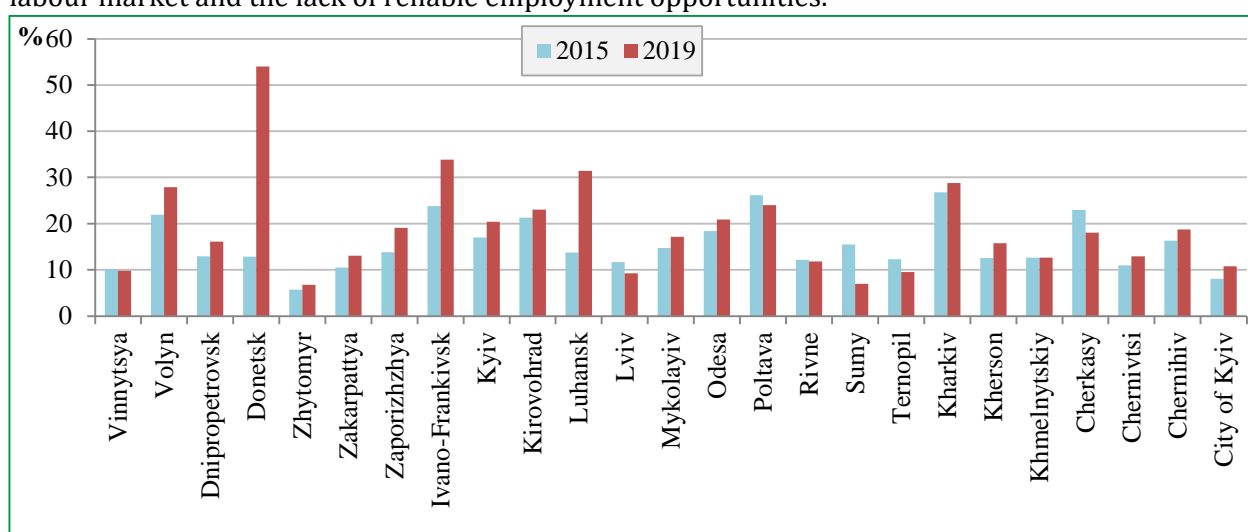
<sup>1</sup> NACE – Classifier of Economic Activities



regions by 1-3 percentage points, which is a consequence of government reforms to "optimize" the infrastructure network.

**Coverage of unemployed with public works** characterizes the level of cooperation between local governments and the state employment service. It should be remembered that public works are a temporary form of employment and do not solve the problem of finding a suitable job and stable employment. This is why most EU countries do not practice public works at all, with the exception of Greece, Ireland, Italy and new member states (Anna Manoudi 2014).

For the period 2015–2019 the level of coverage of registered unemployed with public works decreased in five regions (Sumy, Cherkasy, Lviv, Poltava, Ternopil), in three it remained unchanged (Vinnytsya, Rivne and Khmelnytskyi), in other regions, there was an increase (Fig. 3). The most rapid growth was observed in Donetsk (from 13% in 2015 to 54% in 2019) and Luhansk (from 14% to 31%) regions, which have a high unemployment rate. This means that the interpretation of this indicator is rather contradictory. On the one hand, the high coverage of public works testifies to the active position of local self-government bodies, on the other hand, to the unfavourable situation in the labour market and the lack of reliable employment opportunities.



**Figure 3. Coverage of registered unemployed persons with public services by regions of Ukraine in 2015 and 2019, as % of total registered unemployed**

Source: Based on the website of the "State Employment Center of Ukraine". URL: <https://www.dcz.gov.ua/storinka/vidkryti-dani>

Summarizing the analysis of the indicators, it should be noted that with the start of the decentralization reform, not so much time has passed for its advantages to become obvious in such a delicate and multifactorial substance as the labour market. Nevertheless, it is safe to say that several regions have been able to significantly improve their performance. And these are not only regions that previously demonstrated success (Kharkiv, Kyiv regions), but also regions that were considered economically depressed for a long time - Sumy, Cherkasy, Zhytomyr regions.

## CONCLUSIONS

Study results make it possible to substantiate the following new directions of regional development policy:

- ❖ to expand the powers of local self-government bodies in the formation and implementation of employment and labour market policies, in particular, transfer the local employment policy to the list of their own powers and delegate powers to participate in the implementation of the national employment and labour market policy;
- ❖ to adapt the organizational and managerial model of the state employment service to the conditions of decentralization, to provide for more flexibility and freedom in the formation of local target programs and instruments of active labour market policy, for example, for vocational training

and integration of vulnerable groups of the population with the involvement of resources of territorial communities;

❖ to supplement the directions of local employment policy with new target groups. Since depopulation takes place in Ukraine and the working-age population is rapidly declining, pension reform measures, such as raising the retirement age, limiting early retirement, and linking the age of granting a pension to the criteria for the length of service, become a source of maintaining the labour force. This means that local employment and labour market policies need to be oriented not only towards young people, as is the case now, but also to older people.

Further research is needed in the direction of improving the system of development indicators and developing an institutional model for regulating regional labour markets in the context of decentralization.

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## ARTICLE HISTORY

Received 01 april 2020

Accepted 20 may 2021

**REGULATIONS**  
**of publication scientific articles in**  
**„Economy and Sociology” journal,**  
**category B+, indexed in international databases**

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**TECHNICAL INSTRUCTIONS****The article structure:**

**TITLE** of article: *English, Romanian, Russian*

**THE DATA ON AUTHOR/AUTHORS:** *Name Surname, scientific degree, scientific title, institution (without abbreviations), in: English, Romanian and Russian with a footnote at the first page of the article: ©Name Surname (author), e-mail.*

**THE ABSTRACT** will contain actuality, aim of the research, main methods of researching, and the most relevant obtained results from the research in *English, Romanian and Russian*.

**KEYWORDS:** *6-8 keywords in English, Romanian and Russian.*

**JEL Classification** (Journal of Economic Literature Classification System: <https://www.aeaweb.org/econlit/jelCodes.php>)

**Articles should be structured in the following sections:**

1. **INTRODUCTION** (the argumentation of the actuality of the research/research problem)
2. **LITERATURE REVIEW**
3. **DATA SOURCES AND USED METHODS**
4. **THE RESULTS OF OWN RESEARCH AND DISCUSSIONS**
5. **CONCLUSIONS**
6. **REFERENCES:** *up to 30 sources*

**Typing rules**

) The form of basic text: A4 (edges: 20x20x20x20 mm); Times New Roman; 12pt; line spacing – 1,5, left-right alignment, the paragraph 10 mm

) The article title (centered, in capitals, 12pt.)

) The author of the article (right alignment, bold, italic), the last name of the author with capitals, 12pt.

) The abstract (left-right alignment, italic, paragraph 10 mm, 12pt. (250 words))

) Keywords (left-right alignment, italic, paragraph 10 mm, 12pt.)

) JEL Classification (right alignment, bold, italic, 12pt.)

) The work will contain 10-15 pages (from 25 to 40 thousands signs)

) Graphic elements (tables and figures) must be elaborated by author, have high quality (color), will be placed, directly, after concerned reference in the text. All the elements, mandatory, shall be accompanied by name and order number (above the table, below the figure), source and, as needed, additional information: note, legend (underneath the element).

) Bibliographic references are placed at the end of the article (Name, surname initial, title, editor, year, pages, ISSN). In the text shall be indicated bibliographical references, which include the name of the author and the year the publication was published (i.e., (Kessel, 2010), (Hinde, 1998; Pullum, 2004), (Eurostat, 2015). The reference page must be indicated by a colon (Rachkov, 2011:213).

**Ethic statement**

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**Bun de tipar: 25.12.2020. Tirajul 100 ex.**  
**Coli editoriale: 14,40. Com. 5.**  
**Serviciul Editorial al INCE, 2020**

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