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BUSINESS REGISTRATIONS AND BANKRUPTCY IN THE EU REGION AND ROMANIA DURING COVID-19 PANDEMIC

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Abstract: *In early 2020, the outbreak and geographical spread of Sars-Cov2 infections made the World Health Organization (WHO) declare the Covid-19 pandemic, and this was automatically meaning calls made to all countries to urge measures taken on all activity sectors from healthcare to economy (Meunier, 2022). Then many economic activities came to be slowed down or even stopped in most world countries. In the cases where activity could be postponed many enterprizes were temporarily closed in order to comply with social distancing measures; other enterprizes proceeded to the online activity variant, where such alternative proved possible. One of the results of this was the digital technology's opportunity to reach control and make activities keep on during the Covid-19 crisis. It was this way that countries with existing online registration systems for companies proved able to support business as such - i.e., basically, through maintaining this system, the pandemic specific restrictions' impact could at least be alleviate (ibidem).*

Keywords: *enterprises, registrations, bankruptcy, European Union, Romania*

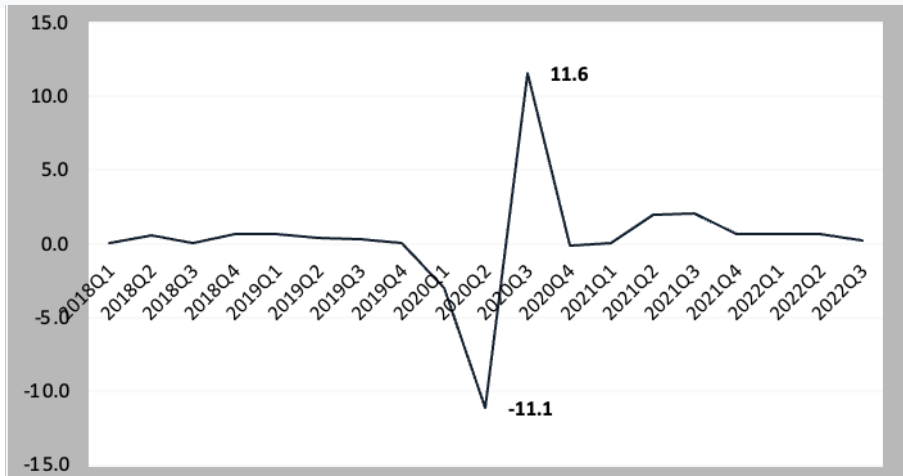
Jel Classification: *M2, M10, M13, M21*

1. Introduction

The EU member countries were making no exception to the worldwide shock felt immediately after the lockdown procedure done in this crisis context. The whole EU's GDP dropped by 3.3% in the first 2020 quarter(Q1/2020), as compared to its previous one (Q4/2019), and then by 11.4% in the second quarter(Q2/2020), as also compared to its previous (Q1/2020), according to Eurostat (2020a,b) as seen in Figure 1. Then, lifting restrictions and their

temporarily attached measures got able to let the same region's GDP finally grow in the next third 2020 quarter(Q3/2020) by 11.3%, in the same order of comparing to its precedent (Q2/2020), that actually may be among the highest recoveries since early 1995 (Eurostat, 2020c).

Figure 1. The EU: Overall GDP in its quarterly growth, as compared to previous quarter



Source: Eurostat-overall GDP [namq_10_gdp]

While existing firms' activities temporarily stopped, the new registrations were also delayed by authorities. Actually, *registration of new firms* is taken as particularly important to the business environment: (i) new firms come up in a likely healthy business environment; (ii) once new firms registered, they get expected as the source of economic growth, new employment and technical innovation in the near future (OECD, 2021). In context, some of the annual data on new registrations are supposed to say about the same on economic activities as well, while quarterly data seem even more precise on the temporary decrease of activities.

Another important indicator for the business environment assessment and belonging to the same category with the new firms' registrations one – i.e. as being basically expressed by individual firms - is the *bankruptcy declarations index*. Or, this last is equally to be mentioned as having been stopped from registering, as for another measure taken by governments during the pandemic interval in order to help firms to overpass specific difficulties related to. In fact, in some countries the bankruptcy administrative procedure documents deposition saw itself postponed, as the government's reaction, coupled with

the financial help offered instead to those firms. Firms were so supported for continuing their activities.

2. Methodology and data

2.1 The business entries' and bankruptcies' registration. Notions and statistical measuring in the EU

The *Eurostat* defines a firm's or another economic activity unit's *registration* as part of an ensemble administrative procedure of measuring the entering business option of potential entrepreneurs. The Eurostat's data for firms' registration are both quarterly and annual. The previous category ones express by percentages in order to facilitate inter-countries comparisons; the latter are aimed to reflect the full individual enterprise's birth – i.e. together with all working units that do belong to.

The business registration procedure is an important process through which the company is legally recognized and can carry out the activity for which it was registered. Once the company can carry out its activity, it will be able to buy actions, to conclude contracts and to legally protect the company and shareholders. Last but not least, the company registration procedure is done to comply with the legislation and fiscal regulations in force on the respective date.

Registrations – i.e. all of them as a whole – are supposed to make real-time information on the whole business environment. The individual firm's registration, as in detail, isn't yet its full birth in all cases – i.e. its activity deployed might not be always for sure. The activity started, people employees, profit earned and all the rest might be delayed in time from the firm's registration, the same as even the firm's real birth.

Bankruptcy is the legal procedure by which a company that cannot pay its debts can be exempted from paying part of them and can be reorganized or liquidated. The objective of the bankruptcy procedure is to enable those who own these companies to fairly distribute the debtor's assets among his creditors. If the company can be saved or the economic activity is viable - its debts can be restructured (usually with the consent of the creditors). This procedure aims to protect the company and preserve jobs. If the economic activity cannot be saved, the commercial company must be liquidated (EU justice, 2022).

Bankruptcy declarations are equally quarterly published (Eurostat, 2022) and this for measuring a(nother) early general feeling against the existing business environment. Also, similarly to registrations – i.e., not being the real firms' activity birth –, bankruptcy declarations aren't necessarily the same thing

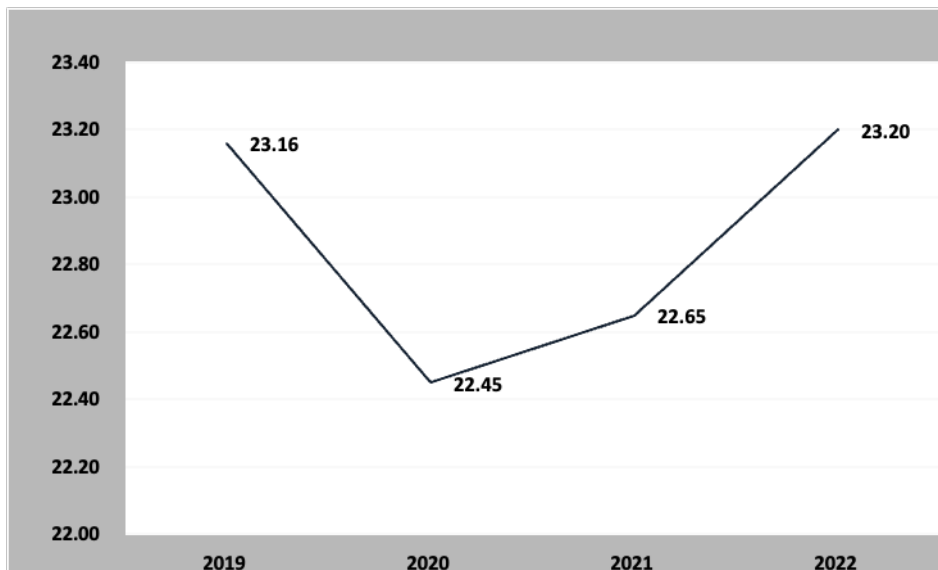
with the firms' death – i.e. they are some kind of just provisional procedural approaches of particular circumstances. Besides, this declaration's referring to a legal unit might also include just part of a firm or company – i.e., the enterprise's death might actually associate to just the whole of it. In fact, the firm's bankruptcy and respectively death might come in different moments. Death comes when the entire activity of the enterprise has been dissolved. Bankruptcy, on the other hand, might be followed not by death, in all cases, but the enterprise may equally recover through restructuring. Moreover, law that rules bankruptcy is different in different countries, here including the EU member States' group – i.e., this is for the obvious and deep difference appeared in the Eurostat statistics between quarterly (bankruptcy declarations filled and deposited) and annual data (enterprises' death confirmed).

2.2 The EU's non-financial sector: micro-enterprises, small and medium size enterprises, large enterprises

An *enterprise* is any entity deploying economic activities, independently from its law status – i.e., in the European Commission's view. Enterprises do classify as micro-, small and medium size (SME) and large, according to some criteria issued by the European Commission (EC) for: (i) number of people here employed and (ii) turnover (balance sheet numbers, in other cases, as alternative). At the 2019 year-end, there were 23.2 million non-financial business entities in the EU area, of which 99.81% SMEs and only 0.19% companies with more than 250 employees. Dominant in their number actually were enterprises with less than 9 employees, i.e., 93.03% of the total, 21.5 million enterprises. Micro-enterprises and SMEs together keep about half (48.4%) of the whole labour employed of the non-financial sector and make about one-third (35.3%) of total value-added of the EU area. There were also 43 thousand large(big) enterprises (with more than 250 employees) in the EU in the same 2019 as for the same non-financial sector (Eurostat, 2021) and these were keeping also about one-third (35.6%) of total people employed of this sector and making 47.6% of value-added in the EU economic area.

For the 2022 year end, a number of 23.2 million enterprises was estimated (Clark, 2021) as pretty close to that of 2019 while passing through all dramatic dynamics and influences of the recent Covid-19 pandemic (See Figure 2).

Figure 2. The EU: Total number of enterprizes of the nonfinancial sector (millions)



Source: Eurostat - TIN00145__custom_3373959

3. Analysis and discussions

3.1 Firms' registration in the EU

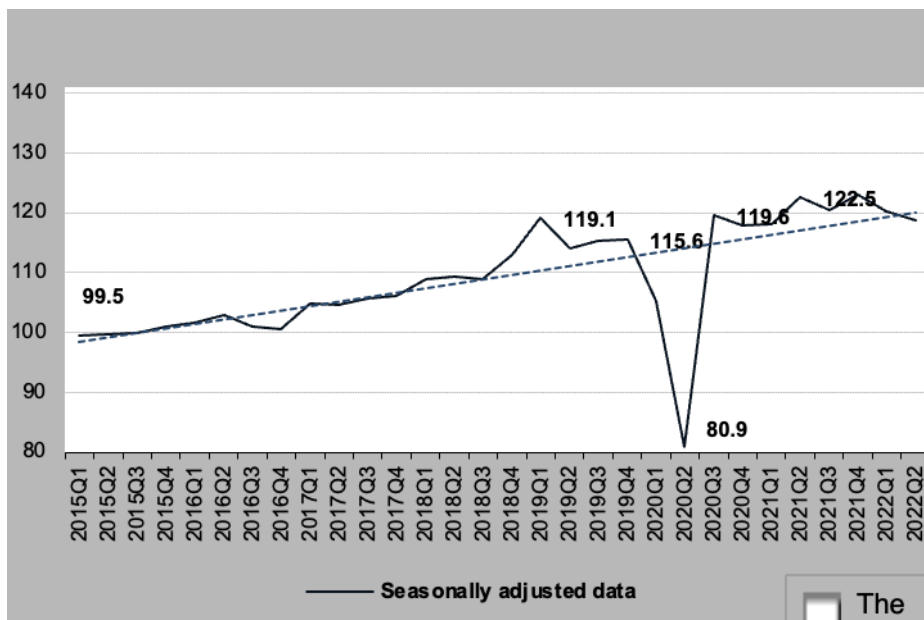
The European statistics on registrations and bankruptcy declarations do refer to the 2015-2020 years interval on the basis of member States' voluntary reporting. Then, since the first quarter of the next 2021 the *European Business Statistics (EBS) Regulation* (Eurostat, 2022a,b) made these reports mandatory for EU member States. It was this way that quarterly data of firms' registrations and bankruptcy declarations made such informations real time ones, on the business environment's demography and for the help of research – i.e., it came to be better than for the traditional statistics case. Or, the usefulness of these new quarterly statistics proved obvious punctually in 2020, when critical information was needed on the Covid-19 pandemic's economic effects for decision makers, here including the European Central Bank. See below two approaches based on the *Eurostat's* available data:

(a) data basing on 2015= 100;

(b) both registrations and bankruptcy declarations in each quarter, as compared to the previous quarter (%).

As for the above (a) approach, data show an upward trend of registrations for the 2015-2019 interval, then a decrease in 2020 due to the Covid crisis' impact on firms' activities. Then, easy to explain the first two 2020 quarters' lack of registrations, i.e., temporary closure or just the absence of authorities responsible during pandemic, facts delaying such formalities. The lowest firms' registration number came for Q2/2020, when -20%, then in the next Q3/2020 it rose to +20%, both as compared to the basic 2015 year average. Since Q3/2020 to the present day new firms' registration came back to the previous pre-pandemic levels and even overpassed them, as seen in Figure 3. Also note that, according to the Eurostat methodology, data here provided are supposed to be seasonally adjusted and were calculated based on an average of the quarters of 2015.

Figure 3. The EU*: firms'/working units' registration by quarters between Q1/2015 and Q2/2022 (2015=100)



* EU member countries with available data.

Source: the Eurostat/ seasonally adjusted data

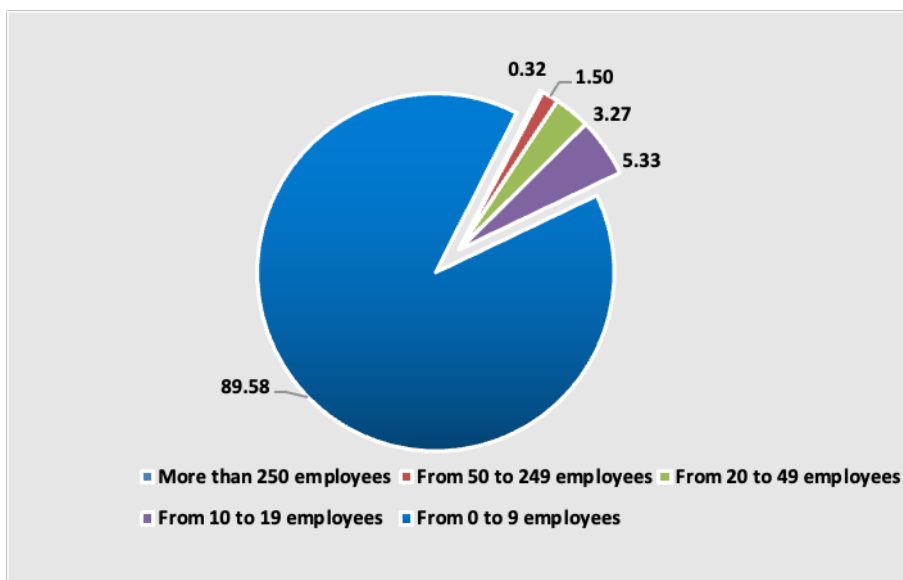
Then there comes the above (b) approach, by which the pandemic shock, then recovery from, are obviously better described – i.e., through percentage changings in registrations from one quarter to the next.

For the EU region (actually, without the Czech Republic, Cyprus, Latvia, Hungary, Austria, Finland and Sweden, with missing data) the most abrupt drops of registrations came up in Q1/2020, as compared to its previous Q4/2019 (-9%), and even more then, in Q2/2020, as compared to its previous Q1/2020 (-23%). For this last Q2/2020, against Q1/2020, the highest registrations' drops were in: Ireland (-44%), Spain (-43%), Portugal (-38.8%), Croatia (-35%), Italy and Luxembourg (-31% both).

3.2 Firms' registration in Romania

There were about 516 thousand enterprizes of nonfinancial sector in Romania at the 2019 year-end. These were 2.23% of the total of nonfinancial enterprises in the EU region. Most of these Romanian enterprises were the SME category (99.68%), the rest (0.32%) was filled by large over 250 employee enterprises. The special under 9 employee enterprises category is 89.5% of total (see Figure 4).

Figure 4. Romania: Enterprizes of the nonfinancial sector, according to the number of employees in 2019 (%)



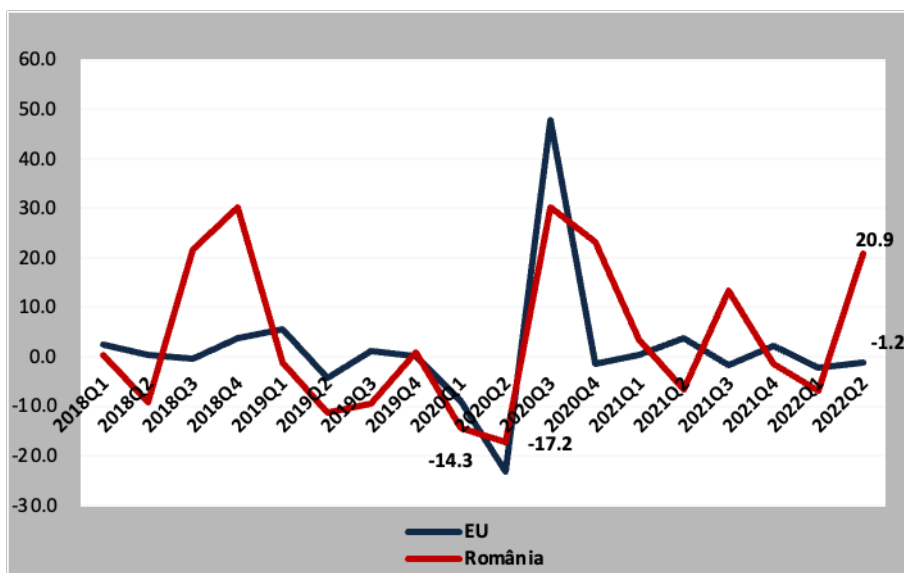
Source: Eurostat / Seasonally adjusted data

Lowering number of registrations in 2020 went also through Romania, at the same with the whole EU region. The entrepreneurs' appetite for business proved equally here affected by pandemic, its effects and related lockdown

days. Similarly to facts in the EU area, here the registrations' dropping started in Q1/2020 by -14%, as compared to the previous Q4/2019 – i.e., recall that in the EU the same dropping was only -9%, as compared to the same previous quarter –, then in Q2/2020 by -17%, as compared to Q1/2020 – i.e., this time below the EU average of -23%. The next two Q3 and Q4 of the same 2020 in Romania then came to be similar evolving picture with that of the EU region (Figure 5). According to Eurostat, in the next 2021 firms' registration figures fluctuated from one quarter to another, without a clear trend while, though, those negative results of pandemic never came back.

Here equally considering the most recent data, in the Q2/2022 end the registrations have risen by 20.9%, in the same order of comparing to the previous Q1/2022, and this was correspondingly the highest dynamic in the EU region. Besides, Romania seems to belong to the small group of EU member countries in which these registrations do follow an upward trend (see Figure 6), followed by far by Portugal (+7.7%), Slovakia (+6.7%), Slovenia (+4.6%), Croatia (+3.4%) and Bulgaria (+2.6%). All these countries in the group then recorded rises in registrations in the next Q2/2022, as compared to Q1/2022.

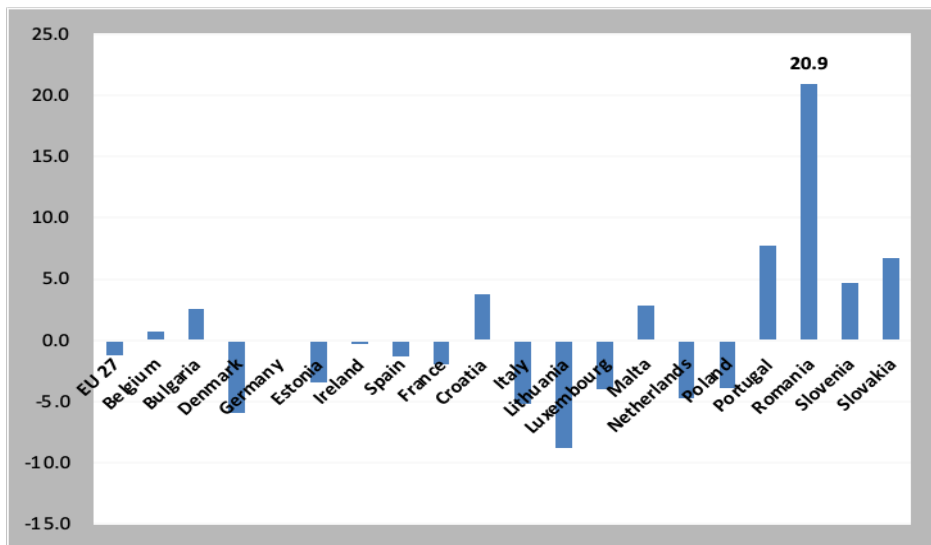
Figure 5. The EU & Romania: New firms' & working units' registration (%), as compared to the previous quarter period



Source: the Eurostat/ seasonally adjusted data

The rest of the EU member countries with such data reported actually recorded decreases in the firms' registration within the (-9%) and (-0.3%) interval. The lowest number of registrations in Q2/2022, as compared to its previous Q1/2022, were in Lithuania (-8.8%), Denmark (-5.9%), Netherlands (-4.7%), Luxembourg (-4%) and Poland (-3.9%).

Figure 6. EU: New firms'/working units' registration by country (%) ; Q2/2022, as compared to previous Q1/2022



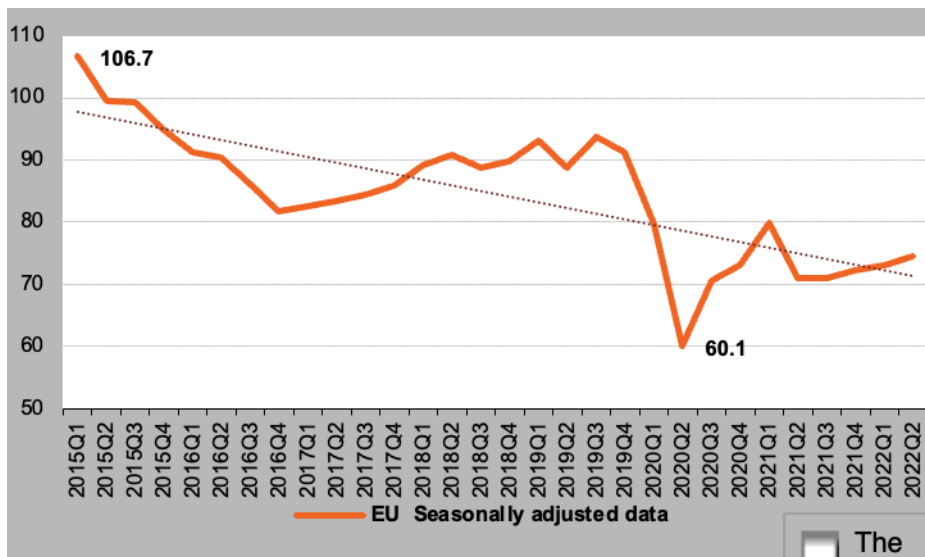
Source: the Eurostat/ seasonally adjusted data

3.3 Bankruptcy declarations in the EU and Romania

As for the nonfinancial enterprises' bankruptcies, a decreasing trend is to be seen for the whole EU along the 2015-2022 interval – i.e., while, on the contrary, some increase was supposed to be expected for the pandemic period. In context, recall from above that most EU member governments decided to delay administrative procedures related to bankruptcy and, instead, to financially support those firms to continue their activities.

In their decreasing trend of filing, the bankruptcy declarations in the EU were the lowest number in Q2/2020, -40%, as compared to those of 2015 – i.e. this was the imposed lockdown moment in the Covid-19 pandemic; registrations were downward sloping as well at that time (see Figure 7).

Figure 7. The EU: Bankruptcy declarations, as percentage of those in 2015



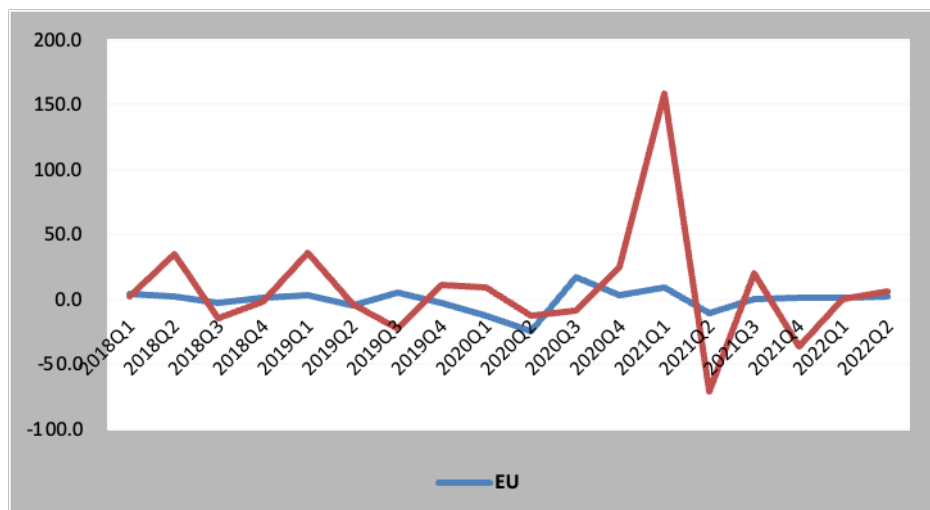
Source: the Eurostat/ seasonally adjusted data

According to the given procedure – i.e., applied to the previous quarters, as well – in Q2/2020, as compared to Q1/2020, bankruptcy declarations went down to their lowest level – i.e., -24%, as seen the Figure 8.

The same number of such declarations varies on individual EU member countries, as caused by law particularities and available government funding for business environment. But this government protection support for its home business environment came to be concomitant and concentrated nearly all over the region when the pandemic started and then went over in Q1 and Q2/2020 – i.e., and this might be enough for explaining what happened on the ground with bankruptcies and their specific declarations.

In Romania, on the other hand, the pandemic crisis' start met rather delayed measures taken by the authorities, who then made the home business environment suffer – i.e., a lot of firms (economic operators) saw themselves forced to stop their activities, be it even partly. In fact, the existing at that time and formerly ruled procedures for firm's insolvency was maintained up to May, 2020 – i.e., no more than 30 days from the *de facto* firm's insolvency.

Figure 8. EU & Romania : Bankruptcy declarations, in percentages, as compared to the previous quarter



Source: Eurostat / Seasonally adjusted data

Then, on the 13th of May the Romanian Parliament voted on Law No 55/2020 related to “measures of preventing and fighting the Covid-19 pandemic’s effects”. This newly coming Law focused on both: (i) firms facing new financial problems during pandemic – e.g., on liquidities, on debts rising – and (ii) firms with such pre-existing problems at that time (i.e., since previously of the pandemic), both of these with the same insolvency type perspectives. Even the latter category of firms so was allowed to delay their declarations’ deposition up to 30 days after the alert period, as officially declared. The direct effects of such an authority reaction’s delay naturally lead to the declarations filing delay itself towards the 2020 year-end.

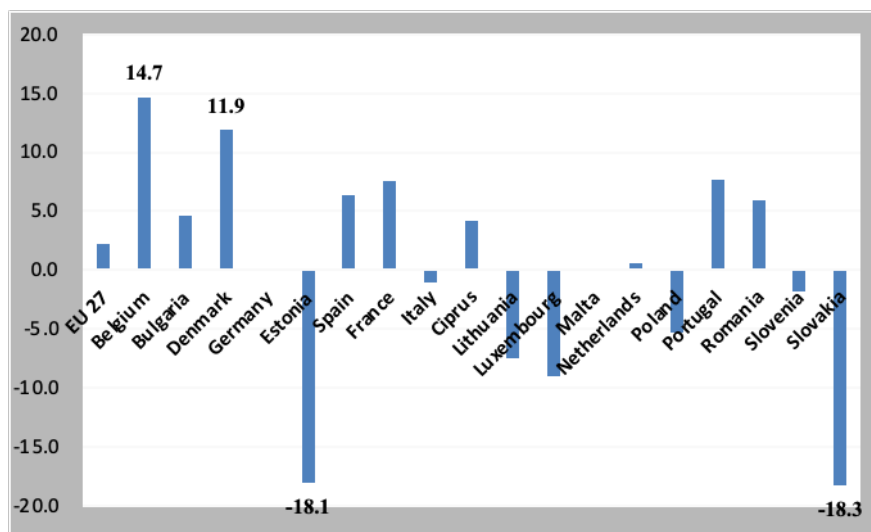
Indirectly, Romania was facing at that Q3/2020 time the highest bankruptcy index – i.e. as compared to the previous Q2/2020 – in the whole EU (+158%). And from this on, this index fluctuated between -70% (Q2/2021) and +5.9% (Q2/2022) without any trend actually reached.

But Romania was not such a unique case in context. Then, in Q3/2020 similarly abrupt increases of this index, as related to the previous Q2/2020, did come in other EU member countries: Cyprus(+175%), Italy(+160%) and Spain(+78%). Similarly for the next Q4/2020, as related to Q3/2020, in: Malta (+266%) and again in Cyprus(+257%). And similarly for the next following Q1/2021, as compared to Q4/2020, in Denmark(+186%) and Romania again (+158%).

Briefly, bankruptcies resulted from both the pandemic and its afferent lockdown, and restrictions were delayed only. And this happened in many countries. Actually, those bankruptcies might even have been stopped, but measures taken by governments proved insufficient – i.e. to cover specific losses due to the same pandemic impact -- too much delayed and/or not existing across the EU region – i.e. so directly causing those bankruptcies.

As one of the epilogues of pandemic, the most recent Eurostat data do show bankruptcies in the EU area growing by 2.2% in Q2/2022, as related to Q1/2022. In this quarter the highest bankruptcy growing percentages went to Belgium (+14) and Denmark (+11.9%); the opposite – i.e. highest decreases of bankruptcies – was for Slovakia (-18.3%) and Estonia (-18.1%), as seen in Figure 9.

Figure 9. The EU: Bankruptcy declarations in EU member countries, Q2/Q1 2022 (%)



Source: Eurostat / Seasonally adjusted data

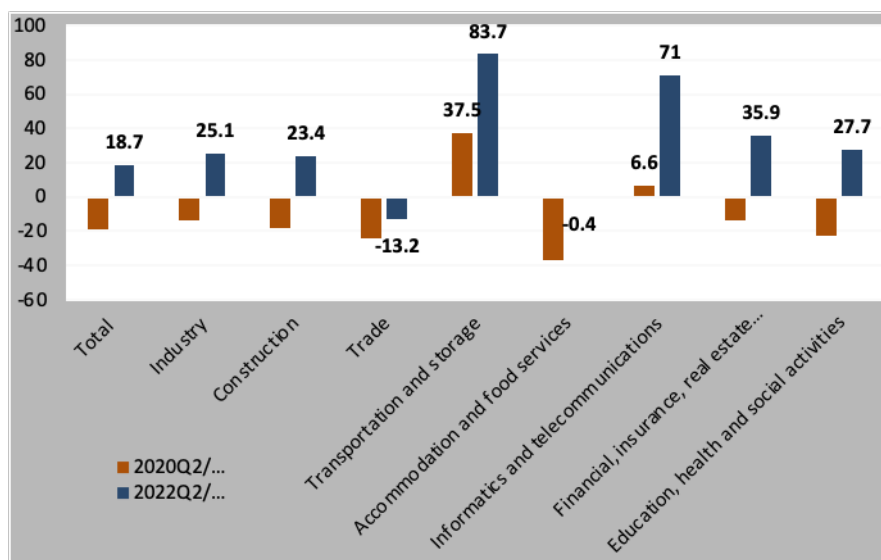
3.4 Firms' registration seen on individual economic activities in the EU area

Recall from above that the newly registered firms in the EU area came to their lowest level (on the basis of the 2015 average throughout the year) in Q2/2020 (i.e., -20%). Or, this was the direct result of happenings in sectors like: „accommodation and food services” – i.e., -37.2%, as also related to 2015 (=100) year average –, „trade” – i.e., -24%, in the same terms –, „education, healthcare and social services” – i.e., -22.6%, in the same terms – and „industry

and construction s” – i.e., -20%, in the same terms. However, let us not omit the opposite part of this picture coming in: ”transportation and storage” – i.e., +37.5%, in the same terms – and „computing and communications” – i.e., +6.6%, in the same terms.

Returning to the present moment, according to the latest data, in quarter 2 2022 there was a return to the pre-pandemic level of the number of the quarterly new companies registered in the sectors of the EU economy, with the exception of the “*trade*” and *accommodation and food services* sectors which at the end of Q2 2022 are still below the level of 2015 (Figure 10).

Figure 10. The EU: Firms’ registration on individual economic activities compared to 2015 year average (%)



Source: Eurostat / Seasonally adjusted data

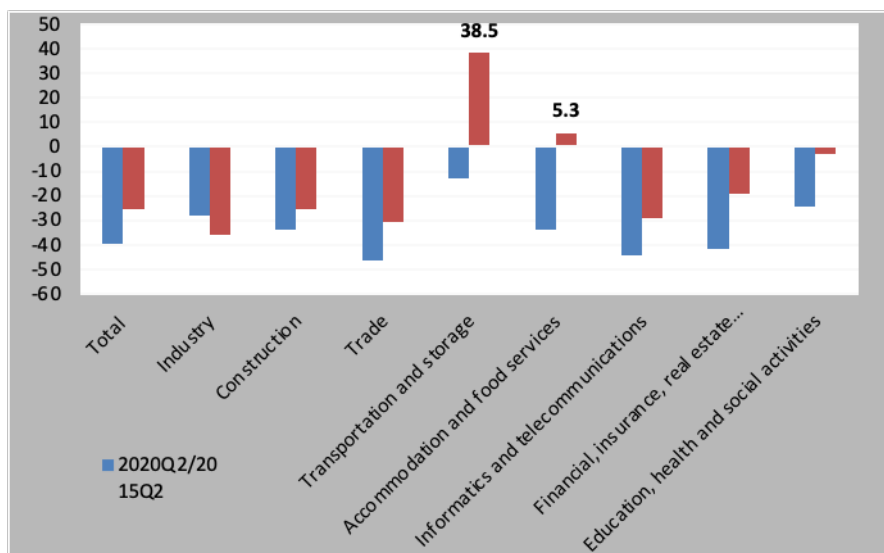
3.5 Firms’ bankruptcy declarations seen on individual economic activities in the EU area

The number of bankruptcy declarations’ evolving along the (whole) 2015-2022 years interval did follow decreasing trends in all economic sectors in the EU member countries. Interesting is that the pandemic, instead of embarrassing this, did the contrary – i.e., in the same sense of lowering bankruptcies. Here, at the same as in the registrations case, recall from above, here including Figure 4, the supporting measures taken by governments that caused the -40% difference of declarations in Q2/2020, as compared to the 2015

year average. Or, this overall percentage came from: “trade” – i.e., -46.5%, as related to the 2015(=100) year average –, „computing and communications” – i.e., -44.4%, as in the same terms –, „financial, insurance, real estate activities” and “professional and support services” – i.e., -41% on average, as in the same terms –, “constructions” and “accommodation and food services” – i.e., -34% on average, as in the same terms -- and finally “industry”, “education, health-care and social services” and “transportation and storage” – i.e., between -28% and -13% on averages, as in the same terms.

And back to the present here for the last time, see in Q2/2022 the come-back to the pre-pandemic levels on the bankruptcies side, as similarly to the ones of registrations, except for “transportation and storage” and „accommodation and food services”, in which bankruptcies started rising by 38.5% and 5.3% respectively, as related to the 2015 year average. See Figure 11.

Figure 11. The EU: Firms’ bankruptcy declarations, on individual economic compared to 2015 year average (%)



Source: Eurostat / Seasonally adjusted data

4. Conclusions

In both theory and historical facts, recessions associate with firms’ insolvencies and bankruptcies. *Insolvency* – i.e., *de facto* financial state of an enterprise unable of repaying debts in due time – and *bankruptcy* – i.e., the official firm’s declaration about impossibility of repaying debts to creditors

– are phenomena that soared during crises. When global financial crisis, insolvencies are likely to multiply, while, however, in this recent pandemic crisis – i.e., be it more profound and not only financial or economic – things appeared a little different(ly) – insolvencies and bankruptcies didn't rise as immediately, as in ordinary financial crisis context. Actually, bankruptcies and insolvencies seemed rather stable amounts during this crisis (Claeys et. al., 2021).

As a response to the Covid-19 crisis, governments preferred to support the companies' activities and to take exceptional as well as temporary legal measures to prevent bankruptcies. For instance, in Germany, France and Spain, the firms' obligation to declare insolvency in limited while after such facts occurred has been temporarily suspended – i.e., such a special kind of measures then came to be lifted at the end of the emergency state declared. Economic blockages provoked by the cessation of activities during the pandemic specific restrictions hit equally sectors/enterprises that had been viable/performing before the crisis and for which risk factor was rather missing at that time. Besides, virulence and rapidity with which the pandemic spread and the measures (that had to be) urgently taken made it extremely difficult to distinguish between viable enterprises in difficulty and non-viable ones. Measures taken in order to avoid the liquidation of viable firms also created opportunities to survive for the other category of firms, the non-viable ones. Inefficiency of financial and the other resources' allocation – i.e. to less productive enterprises and activities – did contribute to slowing down the economic growth (Claeys et. al., 2021).

On the other hand, too early stopping the government support wouldn't be desirable, in its turn, due to the same risk of condemning the “good” stuff to be just “sorted out”. Firms closed mean at least: workers licenced, jobs lost, consumption shortage and, for the national budget, less revenue from wage taxes and more unemployment benefits to pay for. Here recall from the above text Romania's case (and not only) for just delaying bankruptcies due to the pandemic crisis to the 2020 year end. Despite those weaknesses in measures taken, the country proved capable of some economic recovery in Q3/2020, be it a partial one, but remarkable in sectors where it was recorded.

As for the firms' registration in some of the EU member countries during the pandemic period, this equally saw itself forced to delay to Q3/2020, so proving that the same pandemic crisis stayed far from being able to “kill” the entrepreneurial spirit. Then, at present (i.e., in 2022) the registrations' recovery is real, but still timid in the EU region – i.e. there still are member countries with registrations' decreasing (i.e. between 0.3% and even 9%), as delayed from that pandemic time.

Finally, Romania is the country-case with the highest rising firms' registration pace in Q2/2022, as compared to Q1/2022, in the region, here adding its trend of increase as such that stays common to just a few numbers of EU member countries.

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THE IMPACT OF COVID-19 ON THE LABOR MARKET IN ROMANIA – QUARTERLY ANALYSIS 2019-2021

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Abstract: *The spread of infections with the new coronavirus COVID-19 at such an alert rate that left its mark on all of humanity in the first part of 2020 has practically placed the economies and labor markets around the world in a state of expedite. The interruption of global supply chains, the dramatic decrease in commercial activities, the discouragement of demand, the reduction of working time, the blocking of some sectors of activity in the economy of each country led to the establishment of a strong recession. Starting from the effects of the measures to limit and prevent the spread of COVID-19 on the labor market - of the nature of the work organization system at the micro level, the measures to adjust the policies subordinated to the management of the workforce, etc. - the short-term effects were identified and estimated, medium and long from the perspective of work continuity and efficiency but also of economic and social inequalities and inequities. This paper analyzes the main indicators of the labor market, starting from the analysis of the phenomenon from the pre-pandemic period (year 2019), then extending the analysis of this phenomenon for the period 2020-2021.*

Keywords: *Labor market, quarterly analysis, COVID-19 pandemic*

JEL Classification: *E24, F66, J10, J21*

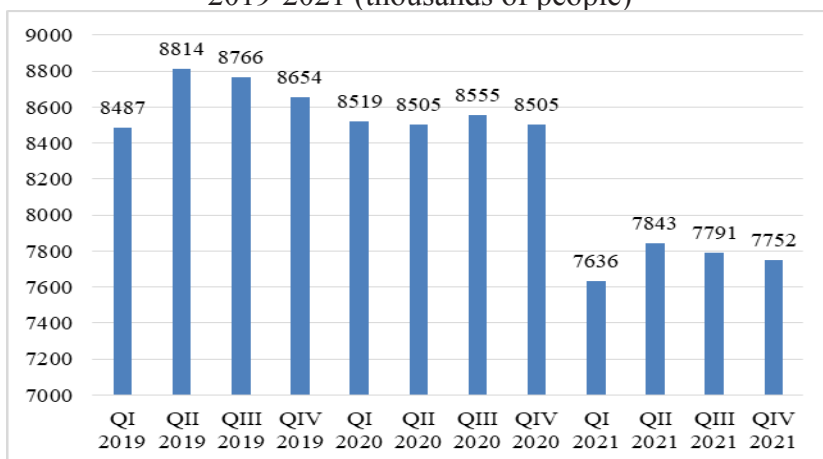
The effects of the Covid-19 pandemic on the labor market appeared at the end of the first quarter of 2020, with the establishment of the state of emergency in the country (starting on March 17, 2020). The Covid-19 pandemic continued to affect the labor market in the following quarters as well. The biggest effects

were recorded in the second quarter of 2020, when every fourth employed person declared that the pandemic affected their relationship with the labor market. At the same time, in the following quarters of the year, the effects of the crisis caused by COVID-19 decreased in intensity and were much less felt.

In 2020, the number of the employed population decreased by 4.4% compared to 2019. Decreases in employment occurred in all quarters of last year compared to 2019. At the same time, the largest decreases were recorded in the quarters where the effects of the pandemic were most felt on the labor market, respectively, in the second quarter (-8.8% or 80 thousand fewer people) and in the third quarter (-5.1% or 46 thousand fewer). In quarters I and IV, the reduction in the number of those employed was relatively lower - by 2.7% in quarter I and by 0.5% in quarter IV, respectively, compared to the corresponding period of the previous year (Figure 1).

However, the biggest effects were felt in 2021, with the first quarter of 2021 registering the biggest decrease (by -10.4% compared to the same period of the previous year). In the following quarters, i.e. quarters II, III and IV of 2021, the decrease was between 7.8% and 8.9%, compared to the same period of the previous year. If reporting is done at Half Year 2019, the declines are much larger exceeding 11 percentage points for each of the 4 quarters.

Figure 1. Evolution of the number of the employed population by quarters 2019-2021 (thousands of people)



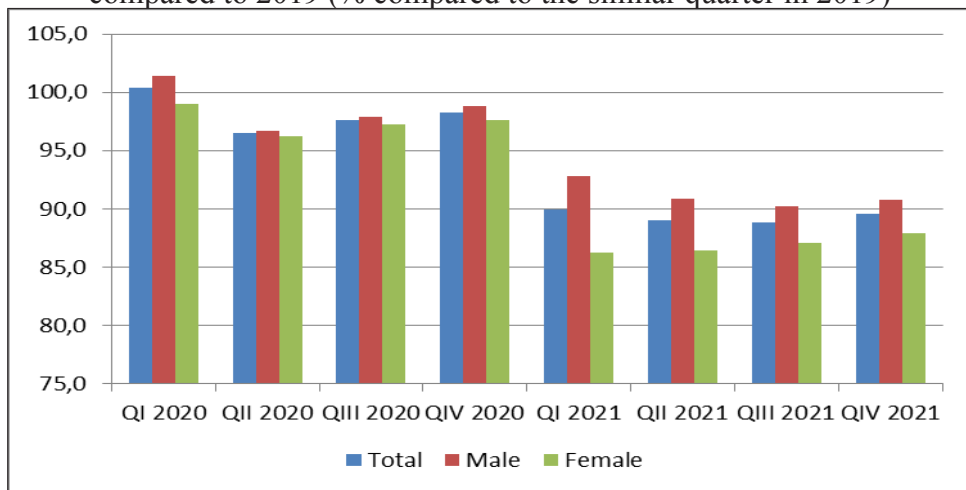
Source: <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>

The gender distribution reveals more pronounced declines in female employment in 2020 compared to 2019 compared to male employment, and not necessarily in the same quarters. Thus, in the second quarter of 2020, the number of employed women decreased by 10% and in the third quarter

by 8.2% compared to the respective quarters of 2019, while the number of employed men increased by 1.4% in the first quarter of 2020 after which recorded decreases of 3.3% in the second quarter, 2.2% in the third quarter and 1.3% in the fourth quarter (Figure 2).

The same trend, but much more pronounced, was maintained in 2021 as well. The biggest decrease was recorded in the first quarter of 2021 when the number of the employed female population decreased by 13% compared to the same period of the previous year and by 13.8% compared to from the similar period of 2019, while the number of the employed population among men decreased by 8.5% compared to the similar period of 2020 and by 7.2% compared to the similar period of 2019.

Figure 2. Evolution of the employed population by gender and quarter compared to 2019 (% compared to the similar quarter in 2019)

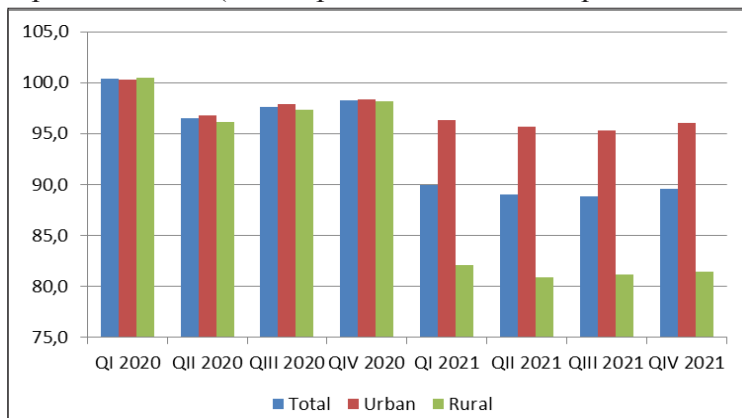


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The analysis of employment by quarter according to the areas of residence shows that, in the urban environment, there were much more pronounced decreases compared to the rural environment, especially in the II trimesters (by 13.6% less in the urban area and by 4.7% in the rural area) and III (by 8.0% less in urban areas and by 2.7% in rural areas) of 2020 compared to the respective quarters of 2019 (Figure 3).

As with the other analyzed indicators, the decrease was much more pronounced in 2021 than in 2020. The biggest decrease was registered in the first quarter of 2021 (by 4.0% less in urban and by 18.4% in rural, being the largest decrease recorded).

Figure 3. Evolution of the employed population by average and by quarter compared to 2019 (% compared to the similar quarter of 2019)

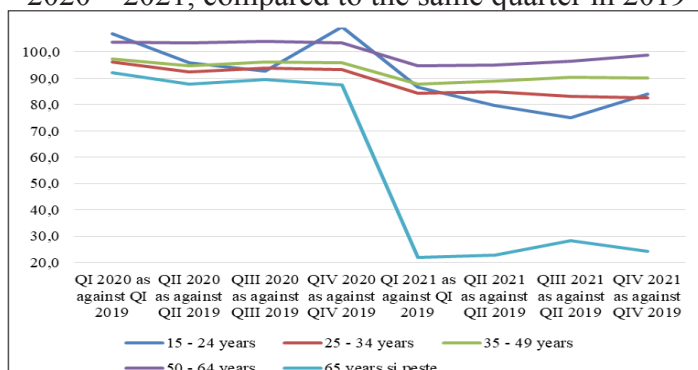


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The breakdown by quarter by age group reveals that significant reductions in the number of those employed were notified among young people aged 15-24: by 6% in quarter II and by 4.3% less in quarter III 2020 compared to the respective quarters of 2019. At the same time, the decrease in the number of the employed population per quarter in 2020, compared to 2019, also occurred among the adult population (Figure 4 and Table 1).

The sharpest decrease occurred among young people aged 15-24 throughout 2021: by 10% less in the first quarter, by 16.5% in the second quarter, by 21.3% less in the third quarter and by 16.3% in the fourth quarter of 2021 compared to the respective quarters of 2019. Decreases, but less pronounced, were also recorded among young people aged 25-34: by 11.8% less in the first quarter, by 11.5 % in Q2, 13% less in Q3 and 13.5% in Q4 2021 compared to the respective quarters of 2019.

Figure 4. Evolution of the employed population by age group in quarters 2020 – 2021, compared to the same quarter in 2019



Source: <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>

Table 1. Evolution of the employed population by age group in quarters 2020 – 2021, compared to the same quarter in 2019

	QI 2020 as against QI 2019	QII 2020 as against QII 2019	QIII 2020 as against QIII 2019	QIV 2020 as against QIV 2019	QI 2021 as against QI 2019	QII 2021 as against QII 2019	QIII 2021 as against QIII 2019	QIV 2021 as against QIV 2019
15 - 24 years	102.2	94.0	95.7	102.7	90.0	83.5	78.7	83.7
25 - 34 years	98.7	94.6	95.1	95.3	88.2	88.5	87.0	86.5
35 - 49 years	98.5	95.2	97.0	96.9	90.7	90.7	91.8	91.7
50 - 64 years	105.4	102.0	101.8	102.6	97.5	95.4	94.5	96.4
65 years and over	94.6	87.6	91.0	92.6	29.4	30.1	35.9	33.5
Total	100.4	96.5	97.6	98.3	90.0	89.0	88.9	89.6

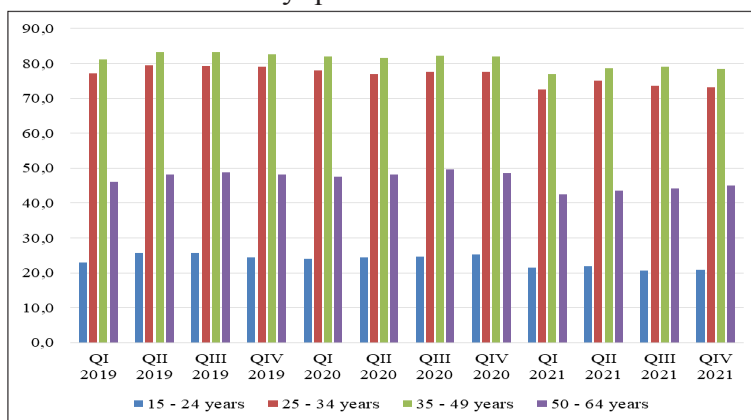
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The analysis of employment by age groups according to sex highlights the fact that the largest decrease in employment occurred among women aged 15-24 in the second quarter of 2020 (-39.4% compared to the second quarter of 2019), in while for men aged 15-24, significant decreases (of -27.6% and -26.1%) were recorded in the first and second quarters of 2020. It should be noted that the number of employed women decreased in all four quarters of 2020 and in the 25-54 and 55-64 age groups. Whereas for men, the reduction in the number of those employed was recorded among adults aged 25-54, and among those aged 55-64 the number of employed was practically at the level of 2019.

Compared to 2019, in 2020 the employment rate recorded decreases both in total and in the distribution by gender and residential areas, especially in quarters II and III, less in quarter I, and in quarter IV the value of this indicator it was approximately at the level of the previous year. At the same time, women and the urban environment were more affected by the decrease in the employment rate compared to men and the rural environment. Thus, the employment rate for women decreased by 3.3 pp in the second quarter (for men, respectively, by 3.2 pp) and by 2.3 pp in the third quarter (for men, respectively, by 1.1 pp). In the urban environment, the reduction was the most significant, by 5.6 pp in the II quarter (in the rural environment, respectively, by 1.6 pp) and by 3.8 pp in the III quarter (in the rural environment, respectively, by 0, 4 pp).

The distribution of the employment rate by age groups reveals a more significant decrease in it for people aged 15-24: by 3.4 pp in the first quarter and by 5.7 pp in the second quarter of 2020 compared to the respective periods in 2019. A reduction of 3.4 pp was recorded for people aged 25-54 in the second trimester (Figure 5).

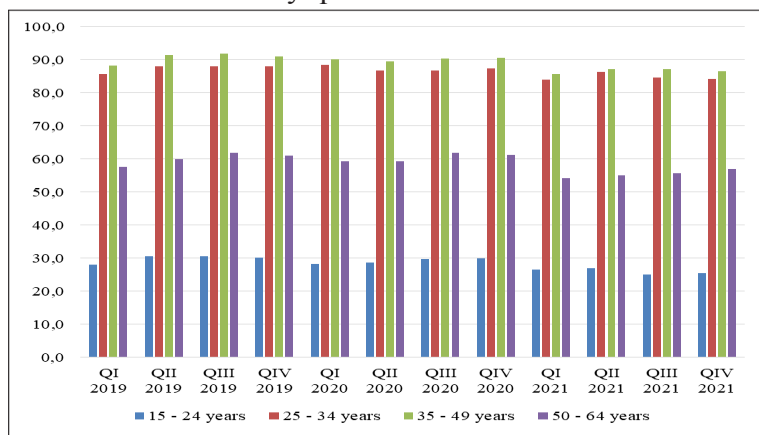
Figure 5. Evolution of the employment rate by age group and by quarters 2019-2021



Source: <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>

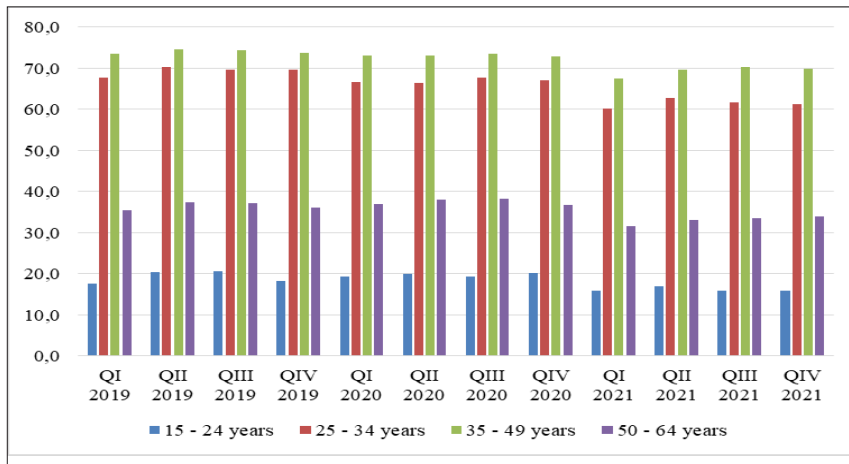
The analysis of the evolution of the employment rate by age groups and sexes highlights a greater reduction for both women and men aged 15-24 in the second quarter (by 6.4 pp for women and by 5.0 pp in men). Similarly, the level of this indicator decreased more in the second trimester for both sexes aged 25-54 (by 3.1 pp for women and by 3.7 pp for men, respectively) (Figure 6, Figure 7).

Figure 6. Evolution of the employment rate by age group (male) and by quarters 2019-2021



Source: <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>

Figure 7. Evolution of the employment rate by age group (female) and by quarters 2019-2021



Source: <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>

Unlike the countries of the European Union (EU-27), the employment rate for the population aged 15-64 in Romania recorded significantly lower values, both in total and in the distribution by gender. Thus, in 2020, the estimated value of the indicator for women in the EU-27 countries was higher than the value of the indicator at the national level by 17-22 pp and, respectively, for men - by 22-26 pp. Likewise, in the EU countries -27 the employment rate is much less seasonally influenced, compared to Romania, where the share of the agricultural sector was on average 21% in 2020 compared to 4.3% in EU countries.

Conclusions

The restrictive measures, also imposed in Romania, were unevenly felt on economic branches, due to the nature of the activity they have a greater or lesser degree of contagion, respectively, being more or less available to them options to adjust the activity to the preventive measures. The hotel and catering sector, tourism, cultural-artistic activities, some branches of the manufacturing industry, construction or real estate were immediately affected. There was also a group of activities that, involved in the sanitary and economic management of the crisis, did not significantly restrict the activity, as there were also activities that found opportunities for development in the current context.

After a month and a half from the establishment of the state of emergency, but more strongly after two months, economic activities gradually

resumed, the last ones to resume activity being the very first and most severely restricted. The breakdown of Romanian employment indicators tends to outline a greater risk of reduced activity in areas with lower wage levels, with a lower presence of wage employment, as well as an uneven regional impact. The smallest impact on incomes and employment tends to be felt in the Bucharest-Ilfov region, which has the most favorable employment profile and the lowest risk of poverty.

International practices indicate the concern of European states to protect the incomes of the most vulnerable, by expanding eligibility or by increasing the minimum related to the benefits granted. At the same time, the expectation is emerging that those less affected by the crisis will contribute to the effort to overcome the difficult situation, by exempting them from some facilities, respectively formulating new payment obligations. As a trend, social-fiscal and payment obligations have been maintained, but postponed or re-scheduled, with pre-existing compliant tax behavior being a condition of eligibility for current facilities or allowances. In this way, the concern for keeping under control the inequalities in the incomes of the population and at the same time for the control of the ratio (if not the balance) between expenses and budget revenues is profiled.

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ADVANCED METHODS OF INCLUDING CLASSES AND OBJECTS IN APPLICATION MODULES SPECIFIC TO BUSINESS ECONOMIC SYSTEMS

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Abstract: *The paper presents the advanced methods of including classes and objects in application modules specific to business economic systems. Current systems supported by economic applications are based on modules that define economic flows and are built using interconnected classes and objects to facilitate data exchange. The interfaces specific to classes and objects represent the templates that expose the variables and methods used inside economic applications, thus providing flexibility and efficiency within the modules specific to economic flows. The development of any economic, financial or banking activity cannot be imagined without the use of a strong informational support that ensures the competitive advantage in relation to the other competitors on the market. Information technology offers not only the informational support necessary to run the business in conditions of efficiency, but also solutions for rethinking the way to organize your business in order to maintain competitiveness. Optimizing applications through rewriting means fundamental rethinking and radical redesign of business processes to achieve substantial improvements in terms of costs, quality, decision making speed. This rethinking of the way of doing business is influenced and also finds answers in new IT solutions. The impact of economic applications on the company is felt not only from the external environment but also from within the company. Any organization (company, bank, etc.) assumes the existence of five interdependent elements (components) such as organizational structure, business management and processes, information technology, organization strategy and employees and the culture of the organization. Rethinking the business and adapting the economic applications requires a considerable effort, which supposes the decomposition of modules into classes and objects, the redesign of interfaces and the restoration of functional dependencies for specific business data.*

Keywords: *classes and objects for business, advanced interfaces for classes, data from external environment, rewriting business applications, business conditions of efficiency, information technology in applications, organization strategy*

JEL Classification: C23, C26, C38, C55, C81, C87

1. Introduction

The redesign of economic applications means the fundamental rethinking and radical redesign of business processes to obtain substantial improvements in terms of costs, quality, and decision-making speed. This rethinking of the way of doing business is influenced and also finds answers in new IT solutions. The way of doing business within any company is changing (fig 1.1) due to the combined action of the following factors: globalization, high level competition, information has become a key resource, the virtual work space and even the performance of the activity under the conditions of the virtual company, electronic commerce and the existence within the company of personnel specialized in data processing and analysis such as knowledge workers.

Components specific to each organization must be in a state of equilibrium and this state will be maintained as long as there are no significant changes in the external environment or in any of the components. The computer applications component knows a special dynamic. This causes qualitative changes in the other components. The dynamics of the IT component is also felt at the level of the organization's strategy, providing specific means and tools for the analysis and substantiation of the strategy. An economic system represents a set of elements, interdependent components, between which a dynamic interaction is established, based on predetermined rules, with the aim of achieving a certain objective. The dynamic interaction between the elements materializes in the flows established between them, flows involving the existing resources (Tirmizi 2022; Foote 2022).

The system of economic IT applications represents the technical-organizational set of data collection, transmission, storage and processing in order to obtain the necessary information for the decision-making process. The informational subsystem is interposed between the decisional subsystem and the operational subsystem with the aim of providing the necessary information to the managerial staff, representing at the same time a means of communication between the other two subsystems. The information subsystem should not only be seen as an interface between the operating system and the management system, but also as the connecting element between the company's internal environment and its external environment that is economic, financial, banking environment. The main purpose of the information system is to provide each

user, depending on his responsibilities and duties, with all the necessary information (Knight 2022; Ghosh 2022).

The computer system of economic applications represents a part of the information system that allows the collection, transmission, storage, data processing and dissemination of information thus obtained through the use of information technology means and personnel specialized in automatic data processing (Sieja 2020; Karimi 2020).

2. Optimizing economic application systems through redesign and decomposition into interconnected modules

The economic application system includes: the set of internal and external, formal or informal information used within the company, as well as the data that was the basis for obtaining them; the software necessary for data processing and information dissemination within the organization; procedures and techniques for obtaining (based on primary data) and disseminating information; the hardware platform required for data processing and information dissipation; staff specialized in data collection, transmission, storage and processing.

The economic application system system is structured in such a way as to meet the requirements of different groups of users:

- Management of factors at the level of strategic, tactical and operative management;
- the personnel involved in the data collection and processing process;
- The staff involved in the process of scientific research and the design of new products and manufacturing technologies.

Along with the definition of the business strategy, it is necessary to define the IT system strategy and this because:

- The information system supports the managers, through the information provided, in the management and control of the activity in order to achieve the strategic objectives of the organization;
- Economic application systems are open and flexible, constantly adapting to the requirements imposed by the dynamic environment in which the company operates;
- Promoting IT solutions supports the organization in business consolidation and development (eg: electronic commerce, e-banking, etc.);
- The computer system provides the necessary information to control the fulfillment and adaptation of the operational and strategic plans of the organization;
- The organization must know and control the risks related to the implementation of new technologies and the adaptation of the IT system to the new requirements;

- Establishing some standards at the level of the IT system that are meant to specify the characteristics and hard and soft performances of the components to be purchased and which methodologies are to be used in the development of the system.

Within the computer system of a company we find: the computer subsystem of accounting, the computer subsystem regarding stock management, the computer subsystem regarding the records of deliveries, etc. Within the computer system of a bank we find: the computer subsystem of accounting, the computer subsystem regarding current account operations, the computer subsystems regarding the management of banking products and services offered to customers such as deposits, loans, certificates of deposit, etc.), the computer subsystem regarding payment operations through cards and so on.

Interorganizational subsystems designed to ensure information flows between:

- Organization and its partners such as suppliers, customers, bank and so on. Ex: e-banking, electronic commerce, etc. a “Mother Company” and its organizational subdivisions.

- Systems intended for management (MSS - Management Support Systems) have the role of providing information with the aim of supporting and assisting managers in making decisions and include (Korab 2019; Khan 2022).

- Systems intended for current management (MIS - Management Information Systems): are computer systems with the role of providing managers with the information necessary to monitor and control business processes as well as to anticipate future performances.

- Decision Support Systems (DSS – Decision Support Systems): represent interactive IT systems with the role of assisting managers (strategic plan) in solving semi-structured problems using specialized models and databases on well-defined problems for this purpose.

- Executive information systems (EIS – Executive Information Systems): represent information systems designed to provide: fast and selective access to internal and external company data, information on the critical success factors determining the achievement of strategic objectives, calculation facilities and special graphic representations .

Systems intended for the operational level that include:

- Systems intended for office activity (OAS - Office Automation Systems): they are used mainly by the people involved in the data processing process (officials, secretaries, accountants, etc.) but also by managers, their role being to collect, process, store and transmit information using IT means. This category includes specialized software for: text processing, communication (electronic mail, voice mail, etc.), collaborative work (Electronic Meeting Systems, Collaborative Work Systems, Teleconferencing), image processing

(Electronic Document Management, graphics processors, multimedia systems), office activity management (electronic diaries, accessories, etc.).

- Transaction Processing Systems (TPS – Transaction Processing Systems): they are specialized in retrieving, storing and processing data corresponding to daily transactions, routinely ensuring the current updating of the database: they are characterized by the repetitive nature of the processing and their reduced complexity, the large volume of processed data; are intended for the current activities carried out in the functional departments of the organization; they are used by operative staff from the functional departments.

Process Control Systems:

- Systems intended for knowledge management (KWS – Knowledge Work Systems): allow the creation, promotion and integration of new technologies and knowledge in the company. The users of these systems are either engineers and designers (who use CAD - Computer Aided Design applications, for the design of new products), or other specialists - analysts and economic, financial, legal advisors, they being creators of knowledge-generating information.

The virtual work group concept: the promotion of new IT solutions, (the Internet), allows the participation in the work group of some people geographically placed in different locations or participating with solutions within the project at different times.

Groupware or collaboration software represents the specialized software for carrying out the activity within a virtual work group. Groupware uses the communication facilities offered by the organization's intranet, thus creating the possibility of parallel work and interactivity between group members (Korab 2019; Foote 2022).

Analyzing the structure of the global IT system of an organization, it can be made the following classifications related to its components:

By coverage area:

- Economic application subsystems covering distinct areas, defined according to functional criteria within the organization:

- Accounting subsystem
o Production subsystem
o Research subsystem
o Commercial subsystem

- Human resources subsystem

Ex: Within the computer system of a company we find: the computer subsystem of accounting, the computer subsystem regarding stock management, the computer subsystem regarding the records of deliveries, etc.

Within the computer system of a bank we find: the computer subsystem of accounting, the computer subsystem regarding current account operations, the computer subsystems regarding the management of banking products and services offered to customers (deposits, loans, certificates of deposit, etc.), the

computer subsystem regarding payment operations through cards and so on (Knight 2022; Tirmizi 2022).

Interorganizational subsystems designed to ensure information flows between:

- Organization and its partners (suppliers, customers, bank, etc.).

Ex: e-banking, electronic commerce, etc. a “Mother Company” and its organizational subdivisions.

Depending on the nature of the supported activities:

- Systems intended for management (MSS - Management Support Systems) have the role of providing information with the aim of supporting and assisting managers in making decisions and include.

- Systems intended for current management (MIS - Management Information Systems): are computer systems with the role of providing managers with the information necessary to monitor and control business processes as well as to anticipate future performances.

- Decision Support Systems (DSS – Decision Support Systems): represent interactive IT systems with the role of assisting managers (strategic plan) in solving semi-structured problems using for this purpose models and specialized databases on well-defined problems.

- Executive information systems (EIS – Executive Information Systems): represent information systems designed to provide: fast and selective access to internal and external company data, information on the critical success factors determining the achievement of strategic objectives, calculation facilities and special graphic representations.

3. Usage of data sets in application modules

For example in the cartesian product of n sets. The sets below are given and their cartesian product is required.

$$A_1 = \{1, 2, 3, \dots, k_1\}$$

$$A_2 = \{1, 2, 3, \dots, k_2\}$$

.....

$$A_n = \{1, 2, 3, \dots, k_n\}$$

$$\text{Example: } A_1 = \{1, 2\}$$

$$A_2 = \{1, 2, 3\}$$

$$A_3 = \{1, 2, 3\}$$

$$A_1 \times A_2 \times A_3 = \{(1, 1, 1), (1, 1, 2), (1, 1, 3), (1, 2, 1), (1, 2, 2), (1, 2, 3), (1, 3, 1), (1, 3, 2), (1, 3, 3), (2, 1, 1), (2, 1, 2), (2, 1, 3), (2, 2, 1), (2, 2, 2), (2, 2, 3), (2, 3, 1), (2, 3, 2), (2, 3, 3)\}.$$

For the solution, the ST stack and a vector A containing the numbers k_1, k_2, \dots, k_n are used. We use the backtracking method, slightly modified for the following reasons:

a) Any element at level k of the stack is valid, which is why the valid procedure does nothing but assign the value TRUE to the variable ev .

b) The upper limit on level k of the stack is given by $A(k)$.

The design of the algorithm results from the following:

The algorithm presented here is like backtracking logic. The question makes sense because the return mechanism is absent. This algorithm is also backtracking, but “degenerate”.

```
Private Sub Algorithm1()
    Dim a As vector
    cit_n "n=", n
    cit_data "a", n, a
    pattern " the multitudes are : ", n, a
    back_prod_cart
End Sub

Sub cit_n(mes As String, nnn As Integer)
    Do
        nnn = InputBox(mess, y)
    Loop Until n > 0 And n < 100
End Sub

Sub cit_data(mes As String, n As Integer, a As vector)
    For i = 1 To n
        a.v(i) = InputBox(mes + "(" + Str$(i) + ")=", y)
    Next
End Sub

Sub pattern(mes As String, n As Integer, a As vector)
    string = ""
    For i = 1 To n
        sir = sir + Str$(a.v(i)) + ", "
    Next
    MsgBox mes + " " + string
End Sub

Sub back_prod_cart()
    Dim k As Integer
    k = 1
    init k, st
    While k > 0
        Do
            sucesor_prod am_suc, st, k
            If am_suc = True Then
                valid_prod ev, st, k
            End If
        Loop
    Loop
End Sub
```

```

    End If
    Loop Until (Not am_suc) Or (am_suc And ev)
    If am_suc Then
        If solution(k) Then
            pattern_r
        Else
            k = k + 1
            init k, st
        End If
    Else
        k = k - 1
    End If
Wend
End Sub

Sub valid_prod(ev As Boolean, st As stack, k As Integer)
    ev = True
End Sub
Solution function(k As Integer) As Boolean
    If k = n Then
        solution = True
    Else
        solution = False
    End If
End Function

Sub sucesor_prod(am_suc As Boolean, st As stack, k As Integer)
    If st.ss(k) < a.v(k) Then
        am_juice = True
        st.ss(k) = st.ss(k) + 1
    Else
        am_juice = False
    End If
End Sub
Sub init(k As Integer, st As Stack)
    st.ss(k) = 0
End Sub

```

Data that are present in sets of data may be used with special algorithms that follow the logic backtracking. Using data from datasets in application modules requires complex processing to retrieve, sort, or apply various arithmetic operations. Their integration into application objects specific to object-oriented programming requires additional efforts to create specific data structures and use them optimally and easily (Khan 2022; Foote 2022).

4. Conclusions

In many economic organizations there are systems for processing transactions that are specialized in retrieving, storing and processing data corresponding

to daily, routine transactions ensuring the current updating of the database: it is characterized by the repetitive nature of the processing and their reduced complexity, the large volume of processed data ; are intended for the current activities carried out in the functional departments of the organization; they are used by operative staff from the functional departments. On the other hand, there are systems designed for knowledge management that allow the creation, promotion and integration of new technologies and knowledge in the company. The users of these systems are either engineers and designers (who use design applications - for the design of new products), or other specialists - analysts and economic, financial, legal advisers, they being creators of knowledge-generating information (Khan 2022; Tirmizi 2022). The existing data in an economic organization make the connection between the two systems, and the encapsulation helps to transmit knowledge, but also the use of predefined templates as inputs for various modules. The level of knowledge must be adapted to the requirements of users who use real data from the economy of the external environment which is in constant change and adaptation.

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NEW PERSPECTIVES FOR IMPROVING THE QUALITY OF AUDIT MANAGEMENT

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Abstract: *The audit mission is, first of all, depending of the quality management standards developed at the level of each audit entity (private or public sector). This is a reality, internationally recognized. In this area, the IAASB addresses an ever-evolving and increasingly complex audit ecosystem, including the growing expectations of any interesting party and the need for proactive and adaptable quality management systems. This article makes an comparative analyze for the actual changes on the international audit quality approaches - the international standard on quality management ISQM 1 “Quality management for firms conducting audits and reviews of financial statements, as well as other assurance and related services missions” that will replace the current international standard on quality control ISQC 1 “Quality control for firms conducting audits and reviews of financial statements, as well as other assurance missions and related services”. The results are a likely image of the necessary steps to be taken in the near future for all the entities involved in audit area, especially for a good understanding and implementation of the regulations.*

Keywords: *audit, risk-based approach, quality management standards, control quality, IAASB*

JEL Classification: *F62 O50*

Introduction

It is our day’s reality that, beginning with December 2022, the international standard on quality management ISQM 1 “Quality management for firms conducting audits and reviews of financial statements, as well as other assurance

and related services missions” will replace the current international standard on quality control ISQC 1 “Quality control for firms conducting audits and reviews of financial statements, as well as other assurance missions and related services”.

In accordance with the new requirements of ISQM 1, a fundamental change was made by **replacing the concept of quality control with that of quality management**. The concept of quality control has been replaced by that of quality management, which will be conducted **on the risk-based approach**.

The risk-based approach provides a flexible system for the audit entity to adapt to the unique circumstances it faces and to deal with the tasks itself, which in certain situations goes far beyond the linear approach traditionally used so far. This will enable audit entities of all types and sizes to apply the ISQM 1 standard.

Our research is an empirical investigation to establish whether the new harmonization in the field of auditing determine the performance of the audit engagement in the context of the current requirements of professional quality standards. At the same time, the aim of the study is to express the opinion regarding the advantages and disadvantages of these developments at the stage of harmonizing the auditor profession with international practices.

For this purpose, the normative acts in the field, the good international practices in the exercise of the auditor profession were investigated, aiming to highlight the role of reforms in ensuring the quality of services in this field. The scientific investigations carried out in this direction of research aim to identify and propose solutions regarding the facilitation of the implementation process of the new legislative provisions.

The actual stage of knowledge

Three new and revised standards strengthen and modernize the audit entity’s approach to quality management:

- **ISQM 1** “Quality management for firms performing audits and reviews of financial statements, as well as other assurance engagements and related services”;
- **ISQM 2** “Evaluation of the quality of engagement”;
- **ISA 220 (Revised)** “Quality management for an audit of financial statements”.

The standards take effect on December 15, 2022. They will replace the current IAASB standards, namely International Standard on Quality Control ISQC 1 and International Standard on Auditing ISA 220.

ISQM 1, Quality Management for Firms Performing Audits or Reviews of Financial Statements or Other Assurance or Related Services Engagements, replaces the current IAASB standard, International Standard on Quality Control (ISQC) 1, which addresses quality control systems within companies.

According to ISQM 1, firms are required to design a quality management system to manage the quality of the assignments they perform. The International Standard on Quality Management ISQM 2 is a new standard and was designed to assess the quality of completed audit engagements. Assessing the quality of audit missions is an indispensable part of the quality management process.

The transition to the new standards will bring significant transformations for audit entities, and the addition of new elements relevant to modern realities will develop important aspects such as IT and human resources.

Methodology of research

We intend to analyze a fundamental research using the comparative method. In this drive, we highlight the most important changes of the quality standards and put them in a logical structure worth to facilitate an efficient implementation in time.

Since 2013, the IAASB has undertaken a very difficult undertaking to review and update the requirements of the standards taking into account the results of a large number of studies, public discussions, forums. The results obtained in all these years have shown that audit practice needs improvement.

The components of the audit quality management system at the level of an audit entity are, in principle, the same in present as in the past:

Table no. 1. The components of the quality assurance system in accordance with the provisions of international professional auditing standards

International Standards	The basics of quality assurance for entities of audit
Control - ISQC 1 Quality control for firms conducting audits and reviews of financial statements, as well as other assurance missions and related services	Management responsibilities regarding quality within the company: <ul style="list-style-type: none"> • Human resources • The relevant ethics provisions; • Acceptance and continuation of relations with clients and specific missions; • Carrying out missions; • Monitoring.
Management Quality - ISQM 1. Quality Management for Firms Performing Audits or Reviews of Financial Statements or Other Assurance or Related Services Engagements	Governance and management: <ul style="list-style-type: none"> • Risk assessment; • Resources; • Information and communication; • Deficiency monitoring and correction process; • Responsibility of the audit entity when using the networks; • Professional ethics requirements; • Quality of audit missions.

Source: adapted by the author according ISQM 1 and ISQC 1

ISQM 1 replaces ISQC 1, which addresses quality control for firms performing audits and reviews of financial statements and other assurance engagements and related services.

Results of the study

Compared to the previous ISQC 1, the new ISQM 1 standard does not expose only a set of elements, but an integral system that explains their essence and connection. This is a broader and deeper approach that enables the improvement of the quality control system at the level of the audit entity as a whole.

1. **Governance and management** is one of the most important concepts of the new standard, due to the fact that in many recent corporate scandals, the root cause has been precisely the lack of responsibility at the level of organizational management and its advisors. Now there is a special emphasis on corporate culture, which of course sets the tone for leadership and extends it further to all organizational levels. The corporate culture implies an awareness of the activity of auditors in the public interest and the correlation of quality with the strategic decisions of the audit entity.
2. **A risk-based approach as a basis**, thanks to which the quality management system has to become more proactive and flexible, taking into account the unique characteristics of each audit entity, individually. Risk assessment, in the vision of the new audit quality management system, covers **three main components**:

- Determining the quality objectives that the audit entity wants to achieve during the audit missions;
- Identifying and assessing quality risks: “what can go wrong?” with the achievement of these established quality objectives;
- Developing and implementing responses, developing control procedures in response to assessed quality risks.

We found that some quality objectives are already defined in ISQM 1, but additional ones may be required if necessary to meet all the requirements of the standard (as circumstances may be different for each audit entity).

ISQM 1 provides a sample of completed assignments for the exercise of quality controls. This selection procedure will take into account how significant the audited entities are in terms of public interest, as well as determining when to conduct a quality audit, taking into account the level of risk.

However, the determination of a suitable person to conduct such checks, as well as the maintenance of relevant documentation, are not covered by ISQM 1, but by another standard, namely ISQM 2.

IAASB first released ISQM 1 “Quality management for firms performing audits and reviews of financial statements and other assurance engagements and related services” implementation guidance, ISQM 2 “Evaluation of engagement quality”, International Standard on Auditing ISA 220 (Revised) “Quality management for an audit of financial statements”, from which the following aspects are resulted:

Table no.2. Problematic aspects addressed by ISQM 2 and how to solve them

Provisions related to quality assessment of audit engagements	Situations and cases of application
Mandatory controls of the quality of audit missions	<ul style="list-style-type: none"> • Companies listed on the stock exchange; • Cases imposed by law; • Missions with quality risks
Selection of the person responsible for assessment of the quality of the audit engagement	<ul style="list-style-type: none"> • Significant issues regarding professional conduct; • Significant judgments; • Responsibility for quality management and assurance.

Source: adapted made by the author according the requirements of ISQM 2 „Engagement Quality Reviews”

Following its revision, ISA 220 (Revised) “Quality Management for an Audit of Financial Statements” more clearly assigns responsibility for managing and ensuring the desired quality of the audit to the engagement partners. This implies, in particular, his active participation in the audit throughout its duration.

ISA 220 (Revised) is certainly not a new standard, but it is revised and addresses the quality of audit engagements, meaning that it is scoped to quality at the level of a separate engagement. This standard will be applied by mission team leaders or their leaders. It should be noted that ISA 200 (Revised) has many connections with the provisions of ISQM 1. The latter provides the necessary framework for audit quality assurance at the engagement level, and ISA 200 (Revised) requires management partners to be appropriately guided by these frameworks. At the same time, taking into account modern trends, it was concluded that in accordance with the new international standards on quality management, **not only human, but also technological and intellectual resources are needed as indispensable elements of a quality management system.** As a result, the key concepts of **mission partner** and **mission team** were redefined in terms of assumed responsibilities. Thus, the mission partner is responsible for ensuring that resources are adequate and sufficient for the mission.

In the current version of the revised standard, the importance of forming an appropriate culture is emphasized not only at the level of the audit entity, but also within the separate audit team mission, which all its members are obliged to follow. This involves, in particular, maintaining an appropriate level of professional

skepticism. Under current conditions, as required by ISA 220 (Revised) the engagement partner must also oversee the conduct of the engagement and determine the direction of the engagement, which includes consideration of the nature of the engagement, its circumstances and available resources.

The following table shows in concrete terms the form of the concordance amendments and the correlative amendments brought to ISRE 2400 (Revised), Engagements to Review Historical Financial Statements, other IAASB standards, as a result of the new and revised quality management standards:

Table no.3 Concordance amendments and the correlative amendments brought to ISRE 2400 (Revised) by ISQM 1 and ISQM 2

See:	Final regulation for other IAASB standards (from October 2021)
ISRE 2400,	International Standard on Review Engagements (ISRE) 2400 (revised October 2021), Engagements to review historical financial statements, should be read in conjunction with the Preface to the international regulations on quality management, auditing, review, other assurance and related services, as following:
ISRE 2400, point 4	<p>Relation with ISQM 1: Quality management systems, policies or procedures are the responsibility of the firm. ISQM 1 applies to firms from the perspective of a firm's engagements to review financial statements (see points A3A5). ISQM 1 deals with the firm's responsibilities to design, implement and operate a quality management system for assurance engagements, including review engagements. ISQM 1 also addresses the firm's responsibility to establish policies or procedures that deal with engagements that must be subject to an engagement quality review. ISQM 2 deals with the designation and eligibility of the engagement quality reviewer and the conduct and documentation of the engagement quality review.</p> <p>A quality management system deals with the following eight components:</p> <ul style="list-style-type: none"> • The risk assessment process within the company; • Governance and management; • Relevant ethics provisions; • Accepting and continuing customer relationships and specific assignments; • Carrying out missions; • Resources; • Information and communication; and • Monitoring and remediation process. <p>Firms or national provisions may use different terminology or frameworks to describe the components of their quality management system</p>
ISRE 2400, point 24	<p>Mission-level quality management</p> <p>The engagement partner must have competence in assurance skills and techniques, as well as financial reporting and capabilities, including having sufficient time available, appropriate to the circumstances of the engagement. (See paragraph A26)</p>

See:	Final regulation for other IAASB standards (from October 2021)
ISRE 2400, point 25	<p>The engagement partner shall assume overall responsibility for: (Ref: Para. A27A30):</p> <ul style="list-style-type: none"> (a) Managing and ensuring the quality of each assigned review mission and sufficient and appropriate engagement throughout the mission; (b) Coordinating, supervising, planning and conducting the review engagement in accordance with professional standards and applicable legal and regulatory provisions; (See paragraph A31) (c) The appropriateness of the practitioner's report in the circumstances; and (d) Carrying out the assignment in accordance with the company's quality management policies or procedures, including: <ul style="list-style-type: none"> i) Be satisfied that the firm's policies or procedures for acceptance and continuation of client relationships and review engagements have been followed and that appropriate conclusions have been drawn, including considering whether there is information that could lead the engagement partner to conclude that there is a lack of integrity at the management level; (See paragraphs A32A33) (iA) Determining that sufficient and appropriate resources are allocated or made available to the engagement team in a timely manner to perform the engagement, taking into account the nature and circumstances of the engagement, the firm's policies or procedures, and any changes that may occur during the engagement. (ii) Be satisfied that the engagement team collectively has the appropriate skills and capabilities, including sufficient time, assurance skills and techniques, and financial reporting experience, to: <ul style="list-style-type: none"> -Perform the review mission in accordance with professional standards and applicable legal and regulatory provisions; and -To allow the issuance of a report appropriate to the given circumstances; -To assume responsibility for maintaining adequate mission documentation; <p>and, When an engagement quality review is required in accordance with ISQM 1 or firm policies or procedures, do not date the report until the engagement quality review is complete.</p>
ISRE 2400, point A28	<p>The engagement partner's actions and appropriate messages to other members of the engagement team, in the context that the engagement partner assumes overall responsibility for the management and quality assurance of each review engagement, emphasize the essential nature of quality in the performance of a review engagement and the importance to the quality of the review engagement of:</p> <ul style="list-style-type: none"> - Carrying out an activity that complies with professional standards, as well as legal and regulatory provisions. - Compliance with management policies or procedures of quality within the company, as the case may be. - Issuance of an engagement report that is appropriate to the circumstances. - The ability of the mission team to express their concerns without fear of repercussions.

See:	Final regulation for other IAASB standards (from October 2021)
ISRE 2400, point A31	Assignment of mission teams (See point 25 letter (b)) When determining the appropriate competence and skills required for the engagement team as a whole, the engagement partner may consider such matters as: the team's understanding of the company's quality management policies or procedures.
ISRE 2400, point A29	Typically, the engagement team may depend on the firm's quality management system, unless: <ul style="list-style-type: none"> -The engagement team's understanding or practical experience indicates that the firm's policies or procedures will not effectively address the nature and circumstances of the engagement; or - Information provided by the firm or other parties about the effectiveness of such policies or procedures suggests otherwise. For example, the engagement team may depend on the firm's quality management system for: <ul style="list-style-type: none"> - Competence and capabilities of staff through their recruitment and formal training. -Independence by gathering and communicating relevant information about independence. -Maintaining customer relations through the firm's policies or procedures for accepting and continuing client relationships and review engagements. -Compliance with legal and regulatory provisions through the company's monitoring and remediation process. In reviewing identified deficiencies in the firm's quality management system that may affect the review engagement, the engagement partner may consider remedial actions taken by the firm to address those deficiencies.
ISRE 2400, point 273	Compliance with relevant ethics provisions During the course of the engagement, the engagement partner must remain vigilant, by observing and conducting interviews as appropriate, to detect evidence of violations of relevant ethical provisions by members of the engagement team. If matters come to the attention of the engagement partner through the firm's quality management system or other means that indicate that members of the engagement team have violated relevant ethical provisions, the engagement partner must determine the appropriate measures to be taken, after consultation with other people within the company.
ISRE 2400, point 28	Monitoring and remediation A company-wide quality management system includes establishing a monitoring and remediation process for: <ol style="list-style-type: none"> (a) You would provide the firm with relevant, reliable and timely information relating to the design, implementation and operation of the quality management system. (b) To take appropriate measures in order to respond to identified deficiencies so that they are remedied by the firm in a timely manner. The engagement partner should consider information from the firm's monitoring and remediation process, as communicated by the firm and, as appropriate, other firms in the network, and the extent to which it may affect the review engagement

See:	Final regulation for other IAASB standards (from October 2021)
ISRE 2400, point 92	<p>Date of the practitioner's report</p> <p>The practitioner shall date the report no earlier than the date on which the practitioner has obtained sufficient appropriate evidence on which to base its conclusion about the financial statements, including evidence that is sufficient to satisfy the practitioner: (Ref: Para. A144A147):</p> <ul style="list-style-type: none"> -that all the statements that make up the financial statements have been drawn up according to the applicable financial reporting framework, including the related notes, as the case may be; and -that persons with the necessary authority have declared that they have assumed responsibility for those financial statements.
ISRE 2400, point 94	<p>Documentation</p> <p>When documenting the nature, timing and extent of procedures performed under this ISRE, the practitioner must record:</p> <ul style="list-style-type: none"> -Who performed the activity and the date it was completed; and -Who reviewed the activity performed for the purpose of quality management related to the mission and the date and extent of the review. <p>ISQM 1 requires the firm to establish a quality objective that engagement documentation is completed in a timely manner after the date of the engagement report.</p>
ISRE 2400, point A32 and A34	<p>Acceptance and continuation of client relations and review missions:</p> <p>ISQM 1 requires the firm to establish quality objectives that address the acceptance and continuation of client relationships and review engagements. Information for accepting and continuing client relationships and review engagements have been followed and the conclusions drawn are appropriate may include information about:</p> <ul style="list-style-type: none"> -Integrity of principal owners, key management personnel and persons responsible for governance; and -Significant issues that arose during the current or previous review engagement and their implications for the continuation of the relationship. <p>The practitioner's consideration of the acceptance and continuation of client relationships and review engagements and relevant ethical provisions, including independence, is exercised throughout the engagement as certain conditions and changes in circumstances arise. Carrying out initial acceptance and continuation procedures for client relationships and review engagements and assessing relevant ethical provisions (including independence) at the start of an engagement provides the practitioner with information on which to base decisions and actions before undertaking other significant activities for the mission.</p>

Source: adapted made by the author using the provisions of ISQM 1 and ISRE 240 (Revised)

Conclusions

It is worth concluding that the International Quality Management Standard ISQM 1 “Quality Management for Firms Performing Audits and Reviews of Financial Statements and Other Assurance Engagements and Related Services” **will replace** the current International Quality Control Standard ISQC 1 “Quality Control for firms performing audits and reviews of financial statements, as well as other assurance engagements and related services.

In accordance with the new requirements of ISQM 1, a fundamental change was made **by replacing the concept of quality control** with that of **quality management**. The concept of quality control has been replaced by that of quality management, **which will be based on the risk-based approach**.

The risk-based approach provides a flexible system for the audit entity to adapt to the unique circumstances it faces and to deal with the tasks itself, which in certain situations goes far beyond the linear approach traditionally used until now. This will enable audit entities of all types and sizes to be able to apply ISQM standard 1. The new approach is also inherently proactive and based on continuous improvement and bug fixes. Quality objectives are found in most of the requirements prescribed in the new ISQM standard 1. That is, by the term “requirements” one actually means the quality objectives. It also follows that the main focus in the standard is on the final results.

Being currently in the period of transition and accommodation for the acquisition and proper implementation of the new audit quality management standards, we think that more internal restructuring will be required from audit entities than would be required to comply with the revised standards. The practical application of these standards will give much more credibility to the capital markets and will be a direct response to the most pressing needs of investors. The update of the standards was carried out taking into account modern technologies and effective approaches to quality management. In addition, these three standards can objectively be called stricter than the current requirements for audit quality management both at the level of the audit entity and at the level of the audit team.

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Ordonanța de urgență a Guvernului nr. 75/1999 privind activitatea de audit financiar, republicată în Monitorul Oficial nr. 598/22.08.2003, cu modificările și completările ulterioare.

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