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The fourth issue contains articles by scientists from different countries, prepared on the basis of their scientific work. It is designed for university teachers, graduate students, undergraduates, practitioners in economics, finance, accounting and auditing, as well as other branches of economics.

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CHAPTER 1

CURRENT TRENDS IN ECONOMIC DEVELOPMENT

THE IMPACT OF COVID-19 ON THE ECONOMY AND MANAGEMENT OF INTERNATIONAL COMPANIES

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Abstract. The Coronavirus (COVID-19) pandemic has dealt a severe blow to a global economy already in fragility. Although the full scale of the human and economic impacts of the pandemic will not be clear for some time the losses in these two areas will be significant. Already existing macroeconomic weaknesses make emerging market and developing countries vulnerable to economic and financial turmoil and this may limit the capacity and effectiveness of policy support at a time when it is most needed at the global and national levels. These implications are the necessity to close all institutions that have been affected. With the pandemic which was represented in schools universities companies factories places of entertainment and tourism companies the government had to take a set of decisions and measures to confront the economic and health crisis which resulted in economic and social repercussions that had an impact on society and then was the state's focus on Egyptian workers especially workers in the private and informal sectors which resulted in the deterioration of their conditions and the loss of their basic materials to meet the basic needs of their families. The study consisted of knowing what the Corona pandemic is how it affected global economies the effects that resulted from the Corona pandemic and its impact on business sectors and also knowing the most important consequences of the global crisis on unemployment rates through this and in light of the crisis the International Labor Organization of the United Nations A report indicating the most important consequences that occurred in the business sector as a result of the outbreak of the new Corona virus "COVID-19" and the following measures that include reducing employment and also reducing the number of working hours and sectors most affected by the spread of the Corona virus.

Keywords: world economy; financial markets; unemployment rates; economic; pandemic; global economy; global economic indicators; precautionary measures; COVID-19.

JEL Classification: D22, L20, L25, O10, E65, D78

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Introduction. The world is experiencing the emerging crisis and epidemic of Corona (COVID-19), and due to its strangeness and danger, it has attracted the attention of all scholars. With different specializations, even writers and philosophers in their intellectual tourism. There is no doubt that this communicative cognitive act was created. An important and necessary thing. Without any regard for geographic borders, dissemination of news, ideas, and facts about the epidemic is absolute and without Restriction, consider it a human right, as long as it has broken the monopoly of science and the complex of concentration in Western civilization, all this human indecency It closed the last stage in the normal life of man in the economic and social field At the heart of this reality and as a problem, the study poses the following: What

is the impact of the Corona pandemic on the formulation of the international economic reality and the making of critical decisions in it?

We are now experiencing a health crisis in the wake of a multi-dimensional economic crisis. It is the crisis of the epidemic and the economic catastrophe, which has turned into a mercurial relationship that escapes the grip of human control. The solution remains to prevail over wisdom and reason, the final touchstone. The economic reality in the time of the pandemic and the human being in it has a starting point on earth. This problem is subdivided into questions the following:

- What are the dimensions of the international economic decline that the world has known under the Corona pandemic?
- What are the justifications for the state of economic stagnation in the industrial developed world specifically at the time of the pandemic?
- To what extent did the international bodies interact with the pandemic and did they respond with balanced decisions to manage the global economy?
- What are the possible economic challenges for post-pandemic societies internationally and in the Arab world?

Literature review. Many researchers and specialists, whether they are individuals, entities or organizations, have made numerous contributions to study the impact of the Corona virus epidemic on the economy in general and on the management of businesses and companies, whether they are public or private. But from my point of view, I will present to you the subject of studying the effects of the Corona virus, especially on the sectors of industry and administration, and the repercussions of the crisis on the labor market and employment, the high unemployment rate and the effects that these factors have. And comparing the countries of the world in terms of the difference in the percentage of impact in general and comparing the lifestyle and its quality in each country, and what are the steps that must be taken to reduce this impact.

Aims. The main objectives of the study lies in addressing a current, influential and urgent topic, which is the Corona pandemic, which stopped the major economic powers and the effectiveness of their economic systems to the threshold of stagnation and despair. This study provides a deep intellectual entry, as this study includes a cognitive approach to the facts and challenges that impose the inevitability of changing the current and weak economy that brings together money, business, governments and rich countries, in a new international system, and then raises questions that need discussion and investigation, to reach a set of conclusions. Scientific studies that benefit researchers, decision makers and even business managers who are at the heart of microeconomic systems and its requirements for survival and growth in times of epidemics and crises.

Methodology. The study was limited to reviewing and analyzing the most prominent literature that dealt with the topic of epidemics, disasters, the global economy, and the scarcity of scientific resources, with the exception of some articles and regulations issued by international organizations. The content of this article is a modest attempt at understanding and economic analysis in relation to the health crisis and has been guided by the descriptive-analytical approach based on asking and

answering questions and approximating scientifically with the benefit of understanding the present to avoid errors in the future and removing confusion about the hidden secrets of this well-studied phenomenon “the epidemic and the world” economic disaster.

Results. Through the results of the research, it was found that there is a weakness in the precautionary measures to confront the Corona pandemic, both in terms of economic and social terms, at the internal and external levels for all countries of the world, which in turn contributed to the increase in negativity. The effects resulting from the study of economic indicators that showed the size of the losses resulting from this epidemic.

Companies are currently facing high levels of uncertainty, particularly with regard to their international operations. Geopolitical tensions are rising, and the US-China trade war may be just beginning. Countries around the world are seeking policies to counter the economic fallout of the COVID-19 pandemic and secure growth in the post-COVID-19 era. Globalization is also increasingly being scrutinized, and protectionist sentiment is spreading, even in countries like the US and UK, which have adopted an open market approach and have benefited greatly from increased global interdependence. The changes caused by COVID-19 are likely to have a lasting impact that will challenge us far beyond the current pandemic. Recent data and ongoing research on the world's largest multinational corporations suggest that the following trends will be especially relevant when formulating projections about how the international business landscape will evolve in the wake of the pandemic.

COVID-19 and Effects on the World Economy and Financial Markets. The effects of COVID-19 on the world economy have been substantial and widespread. Among the key areas affected is the economic activity, which has been reduced dramatically. find that industrial production fell by (15%) over the 30 days period from introducing the pandemic containment measures. The decline in economic activity is due to the health measures introduced in the work place and the need to close a number of factories and business units as a result of the surge in virus cases. The per capita income is now anticipated to contract in most countries with a (7%) drop expected in advanced economies and a fall by (2.5%) expected in emerging markets and developing economies (World Bank, 2020a, Para 4). While normality has returned to the level of business in some countries, such as China, the level of global economic output continues to be significantly lower than the one observed in the year before. If this is to continue for a long time, the shock to the world economy is likely to be enormous and will result in much larger budget deficits in most countries, which are already facing an unprecedented task in order to sustain public funding. In the Euro zone, for instance, the budget deficit is now predicted to rise to (8.5%) of the GDP in 2020 compared to (0.6%) in 2019 (Haroutunian, Hauptmeier, & Leiner-Killinger, 2020, Para 4). The scale of the deficit is, to a large extent, larger in the countries with high debt-to-GDP ratios at the time of entering the pandemic crisis. With the decline in commodity prices, such as oil and metals, governments are facing further burdens in their balance of payments and many countries have subscribed for

the IMF rescue package. Oil crude prices remain the most affected by the sharp fall in demand with the average price falling by (50%) in the first quarter of 2020. This is likely to cause a significant impact on the budget of oil producing countries and fiscal measures are needed to sustain public spending.

The cost of the packages offered as part of the liquidity and guarantee measures have been large in most countries with the US recording a fiscal package of (9.1%) of its total GDP, while Germany had a rate of (8.3%) and the UK of (8%) (Anderson et al, 2020, table 1). A report by the World Bank also reveals that public debt has surged in emerging markets following the pandemic crisis (World Bank, 2020a, para 7). The high level of the stimulus packages used to counter the effects of the pandemic is adding further pressure on the government budgets, raising public debt and the cost of servicing the national debt further. Therefore, it is imperative to strike a balance between the economic measures required as a response to the effects of the coronavirus and the size of the financial packages offered in order to better manage future public debt. Countries also need to be transparent in terms of the mechanisms they implement in managing the debt to avoid any future possible shocks to the economy. In less developed countries, COVID-19 has created pressures on the financing scheme set for their economic and social development. A research carried out by the OECD shows that the funding scheme is likely to decrease by \$700 billion in 2020, which creates further risks to development worldwide as global climate changes (OECD, 2020c, p. 1). With many individuals losing their jobs and lack of public investments, poverty will further worsen in these countries. According to an estimation made by the World Bank, COVID-19 will place 71 million people under extreme poverty raising the global extreme poverty rate to (8.82%) compared to (8.23%) in 2019 (World Bank, 2020b, p. 1). Supporting the hardest hit countries through interest free loans and grants would help to lower the severity of the financial and social impact caused by COVID-19.

The pandemic has also contributed to an acceleration in the unemployment rate resulting in more inequalities in the society and contributing to a rise in mental health cases (Blustein et al., 2020, p. 2). Governments have had to set large financial packages to support the unemployed with the amount set running in trillions of dollars. However, despite the efforts made and the large amounts spent, many households, particularly in developing countries, have been left without income and have to rely on donations for their basic daily spending. To address this detrimental situation, more international co-ordination is required to help those countries with poor economic conditions, and international organizations such as the IMF and the World Bank should offer more financial assistance to these countries. This would include, for example, emergency loans that can be repaid on long-term basis, and guiding the governments in their fiscal and monetary policies. In addition, COVID-19 brought high volatility to equities and fixed income securities. Stock markets across the globe experienced a sharp fall in the price of listed shares in the first weeks of the pandemic, particularly for the industries affected most by the lockdown measures, such as airlines, hospitality, and petroleum. Despite the rebound observed in the price of a number of equities, the pandemic is still driving investors' confidence low and

affecting market sentiments. Overall, research shows a negative correlation between stock market returns and COVID-19 (alAwadhi, al-Saifi, al-Awadhi, & al-Hammadi, 2020, p. 4). The market reaction is also greater towards the virus cases number than death numbers and seemed to be higher during the early days when the cases are confirmed (Ashraf, 2020, p. 6). Research further reveals that bond spreads and maturities have both been affected by the aftermaths of COVID-19 with maturities exceeding those observed during normal times (Halling, Yu, & Zechner, 2020, p. 530).

COVID-19 and Government Economic Measures. Countries across the globe introduced different economic measures to deal with the effects brought about by COVID-19. The measures include fiscal stimulus in the form of state guarantees of loans extended to companies, deferring the tax and social security, and increasing the level of public spending aimed at supporting businesses and enhancing investments. Governments also provided financial packages to support households and the unemployed. In many countries, including for example, the UK and the US, employees were furloughed and the self-employed were paid a large proportion of their monthly earnings. Employees of the private sector also received financial assistance in countries such as Saudi Arabia and the United Arab Emirates. Tax rebates have been adopted as well to lower the financial burden on households. In some countries, value added tax (VAT) has been reduced or abolished, at least in the short-term, and different incentive schemes have been used to encourage spending and prop up consumption (IMF, 2020).

In countries such as Germany, credit guarantees have been offered to exporters, and firms were also given access to public guarantees (IMF, 2020, fiscal response section under Germany). While in the UK, the eat-out scheme to help restaurants has been very successful in getting clients back to the restaurants (Roberts, 2020, pares 22-25).

The fiscal measures also contained substantial financial packages for the health sector, particularly in advanced economies. Heavy spending has been set for health equipment and virus testing and tracking (e.g., \$100 billion in the US) (IMF, 2020, fiscal response section under US). Large grants have been made available for research and development with a significant proportion of these grants set aside to develop a vaccine for the virus (IMF, 2020). With the absence of a first vaccine in the market, the heavy spending on health is likely to continue particularly in the winter time due to the expected rise in flu cases.

Certain governments provided separate funds to back the IMF's attempt to support low-income countries. The US, for example, used part of its large international fund assistance, \$49.9 billion, to inject funds to the IMF borrowing scheme. While the UK extended £2.2 billion as a loan to the IMF Poverty Reduction and Growth Trust in addition to other funds made available under the IMF Catastrophe Containment and Relief Trust (IMF, 2020, fiscal response section under the US, UK, & Japan). Japan also pledged large funds to the IMF funding schemes designed to help low-income countries. These schemes are vital at supporting individuals who face severe poverty, which escalated further as a result of the

pandemic.

Monetary and further macro measures have been adopted to improve the resilience of financial institutions. In Australia, for instance, funds have been allocated into mortgage and asset-backed securities to finance certain categories of banks and non-banking institutions (IMF, 2020, fiscal response section under Australia). In Italy and some other European countries, banks were allowed, temporarily, to hold below the minimum capital and liquidity requirements. While in India long-term repo operations and reduction in cash reserve ratio have been pursued (IMF, 2020, monetary and macro-financial section under Italy, India, and other countries). These measures have enabled banks to withstand the financial pressures brought by the decline in savings and extensive use of credit by both households and firms.

The base interest rate has also been reduced by a number of central banks with the rate being zero in a number of countries including the Euro zone. Besides, the deposit rate facility has turned negative in some countries, (-0.50%) in the Euro area (Deutsche Bundesbank, 2020, p. 15). The cut in interest rate is to encourage banks to borrow from the central bank and extend more credit to businesses and individuals. Likewise, the capital buffer has been reduced to enable banks to set more funds aside for financing. Interestingly, most countries kept their exchange rate regimes unchanged despite the pressures imposed on some of the national currencies. This can be attributed to the uncertainties associated with any exchange rate measure alongside the substantial fiscal and monetary changes introduced to contain the effects of the pandemic.

COVID-19 and Corporate Financial Measures and Impact. In addition to the fiscal and monetary measures, a number of decisions have been made to support corporations and small and medium enterprises (SMEs). Countries used different financial packages and approaches to help business firms, including free interest rate loans, grants, and equity acquisitions. The scale of the financial support also varied from one country to another. Industrialized countries, such as China, France, Germany, Japan, the UK, and the US offered sizeable packages to firms. In China, for instance, financial authorities made RMB 1.8 trillion available to manufacturers, agriculture sector, and SMEs in the form of re-lending and re-discounting (IMF, 2020, monetary and macro-financial section under China). While France, Germany, and the UK extended large funds to firms and SMEs in the form of grants and tax holidays (IMF, 2020, fiscal response section under the UK, France, & Germany). In the US, \$2.3 trillion were included as part of the coronavirus economic relief package (IMF, 2020, fiscal response section under the US). However, despite the efforts made, a number of businesses were forced to close down or to reduce their work force. Similarly, various financial schemes have been introduced to support businesses in developing countries. In South Africa, for example, funds have been made available to SMEs and small farmers. Refinancing facilities have been introduced in India to help SMEs, rural banks, and housing companies (IMF, 2020, fiscal, monetary and macro-financial sections under South Africa & India). What is apparent from these schemes is that each country took into account the severity of the

financial effect caused by the pandemic on the different sectors of the national economy. Nevertheless, like advanced economies, the program set has not fully prevented some companies from collapsing or reducing their work force. To avoid large job losses, subsidization of a number of industries is followed in various countries with some governments targeting the sectors that are most affected by the pandemic, such as tourism and airlines. The schemes introduced were in most cases highly effective at preventing companies from closure. But these schemes are less likely to continue in the foreseeable future due to their direct financial burden on the governments that did pursue them. Besides governments' interventions, corporations set their own measures to cope with the sharp fall in liquidity due to the pandemic. A number of airline companies, for instance, decided to reduce their fleet or lease back part of their aircrafts. They also sought debt restructuring from their creditors and placed a number of their employees on government's financial support schemes (Albers & Rundshagen, 2020, on the various measures taken by airline companies and their respective governments). These measures have enabled a large proportion of the airline companies to survive the turmoil caused by the pandemic. However, certain companies did not survive the effects caused by the pandemic, such as Virgin Australia. Many companies have also been subject to downgrading by credit agencies including British Airways, Easy Jet, and Lufthansa. Despite the gradual opening of the airline routes, many airline companies still face liquidity crises particularly in the countries where companies did not receive enough financial support and most routes remained closed. Similar to the airline and oil industries, hospitality and tourism industries incurred significant losses because of the restrictions imposed on peoples' movements, social distancing, and quarantine measures to prevent the spread of the virus (for Chin, Tan, & Phuah, 2020). Most countries remained closed until the mid of June 2020 when the re-opening of the economy started to take effect. The loss of the tourism industry is estimated at \$1.2 trillion with possible job losses of 120 million (UNWTO, 2020, p. 1). While OECD estimates the fall in international tourism to be between 60% to 80% (OECD, 2020b, p. 1).

Oil companies also faced a sharp fall in their incomes due to the substantial fall in oil prices and low demand for oil-related commodities. The price war between major oil-producing countries and problems associated with the supply chain has added pressure to an industry already in turmoil. Further consolidation and restructuring of debt is expected for the oil companies that are most affected by the drop in demand due to COVID-19. Other companies are likely to receive state help particularly in countries where the energy sector represents a symbol of the country's economic power. Figure 1 shows the sudden drop in oil price when COVID-19 first emerged in January 2020. Afterwards, the price recovered gradually although it was still below the price it reached the year before. Despite these major economic effects, some scholars perceive the pandemic as an opportunity to revive the industry through its transformation, revisiting the standards set for the sector, and promoting educational and training programs that take into account the new environment created by the pandemic (Sigala, 2020, pp. 319-320). This should cover the social, ethical, and practical elements of the industry, which are based on the new measures set to

restart the sector after months of closure. OECD also calls for more co-ordination at a global level and involving other businesses that are linked to the tourism industry (OECD, 2020b, pp. 15-16).

Other industries that are highly affected by COVID-19, include leisure and auto equipment. With most leisure events postponed or cancelled; the sector incurred hefty losses, while demand for auto parts and equipment dropped substantially in the first months of the pandemic. Despite the revival observed by mid-summer, both sectors remain significantly below their normal activity compared to 2019. With the world economy expected to take longer to recover, both sectors are predicted to continue experiencing a sharp fall in their revenues.

Some industries, instead, are reviving following the pandemic. This includes in particular pharmaceutical, groceries, and certain online-based businesses, such as those used for educational purposes or entertainments. Individuals and businesses alike continue adjusting to the new life and this is also reflected in their spending. Such spending habits are likely to continue as long as there is no permanent solution to the pandemic.



Figure 1. Crude Oil Prices, 2016-2020 during the time of COVID-19

Source: develop by author

Finally, unlike the financial crisis of 2007-2008, COVID-19 so far has not resulted in a severe impact on banks' income streams. However, this may start to materialize as savings drop and banks become hesitant to extend more credit to businesses due to their high risk.

Table 1. The economic effects of the emerging corona pandemic on some sectors
Economic

Areas of economic sectors	Economic Impact
International Flight	Significant financial losses as a result of stopping tourist trips
Employment and unemployment levels	Unemployment increases
Commodities and food products	Fear, panic and high prices
financial market sector	The collapse of the financial markets, and the negative impact on stock returns
All economic sectors	Radical change in the sector management system
Logistics and supply sector	Changing the method of supply and how to manage the strategic stock, the negative impact of high prices associated with logistics and the supply chain

Source: develop by author

While central banks are offering more assistance to banks to continue their lending to firms and individuals through open market operations and other monetary policy instruments, these mechanisms may become less effective due to the sharp decline in the economic activity and high market uncertainty.

COVID-19 impact on international business. According to the International Monetary Fund's latest estimates (IMF 2021) the world's real GDP grew by 2.8 per cent in 2019, contracted by 3.3 per cent in 2020 as a result of the COVID-19 pandemic, and is expected to grow by 6 per cent in 2021. These figures may erroneously suggest that we can expect companies' international operations to return to pre-pandemic levels by 2022.

A closer look at macro-economic indicators reveals that while it is true that the world's GDP bounced back to its pre-COVID-19 level relatively quickly, the international business landscape will change significantly. Especially when we compare the pandemic-related effects on trade versus the impact it has had on the actual investments companies make to build, buy or reinvest in operations abroad. As far as trade is concerned, the WTO estimates (UNCTAD , 2021) , that the world merchandise trade volume will increase by 8 per cent in 2021 after dropping by 5.3 per cent in 2020, a much lower decline than initially expected. Conversely, when looking at global foreign direct investment (FDI) flows, UNCTAD (UNCTAD , 2021) , data indicate that FDI flows will take significantly longer to recover, as illustrated in the chart below.

The heightened levels of uncertainty and on-going protectionist pressures are likely to further exacerbate the dynamics described above and limit the recovery of companies' international investments for a protracted period.

1. Hospitality & travel were among the hardest-hit industries. COVID-19 has had the most significant impact on businesses in the hospitality and tourism sectors. Hotels, pubs, restaurants, and clubs worldwide have been forced to close their doors to guests to prevent the spread of the virus. Millions of jobs were cut, many independent companies went under, and billions of US dollars were lost due to canceled flights, vacations, and business trips. In May 2021, the UK announced its

traffic light system for international travel, and though thousands of people have already taken advantage of it and been on vacation to countries on the “green list,” it is estimated that international travel will not return to pre-pandemic levels until at least 2025.

The spread of the new Corona virus in most countries of the world has affected many productive and economic sectors. The global travel and tourism sector is one of the most economic sectors that incurred significant losses. Huge losses as a result of the spread of this virus, as the movement of tourism and aviation stopped completely, as the global tourism sector witnessed a crisis that he has not experienced since the Second World War, which led many countries to reduce their projected plans for amid a view pessimistic about the future of tourism activity, whose revenues are an important item in the economies of many countries, although all indications point to The global tourism sector will continue to grow in 2020 by 40% compared to 2019, but the virus that appeared in the late December 2019 in China overturned all scales and led to major losses in most countries of the world. International tourism suffered its worst year ever and this is the result of a decrease in the number of international tourists due to restrictions global travel as well as creating entire borders between countries to contain the virus. As for international tourism revenues, it is also expected to decline by (-75%) compared to the year 2019, to reach \$511 billion.

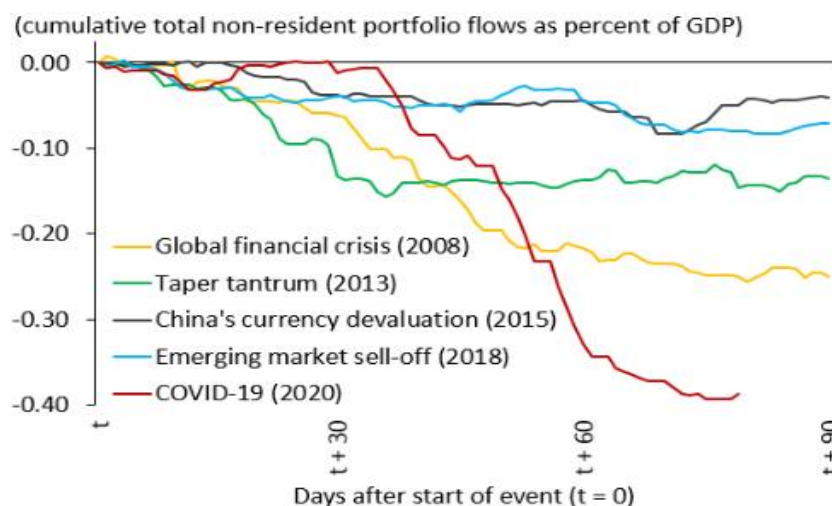
2. Unemployment rates have risen. The spread of the emerging “Corona” virus continues to have a clear impact on economic sectors around the world, as most global economies have entered a phase of recession and stagnation, and cast a shadow over the employment sector, which is facing challenges and obstacles that threaten to raise unemployment rates to unprecedented levels. The Corona epidemic may disappear from the world in the coming months, as some expect, but its economic, social and health repercussions will continue to gnaw on human bodies, countries, and political and economic systems for years to come, as the dangerous epidemic has left serious repercussions that exceed the energy of the global system. As the more complex problem lies in the fact that the epidemic has brought about a fundamental change in the foundations of the global economic systems, to make the strongest economic systems that used to boast and transcend others with their strategic stock of cash, gold and the ingredients of industrial production in all its forms and forms, groaning under the weight of economic and social problems and the most serious problem Unemployment, which is the common denominator between all the countries of the world, rich and poor, after hundreds of millions lost their jobs and became a major problem for their countries' economic systems.

In this context, the problem of unemployment exacerbated after the Corona pandemic, and no country was spared from it, no matter how strong its economy was.. In a country with huge economic potential such as the United States of America, reports issued (until late May) confirm that more than 42 million Americans lost their jobs, and requested benefits. Urgent livelihood from the federal government, and \$48 billion was disbursed to the unemployed, a number that America has not seen in its history. In Europe, the crisis of the Corona outbreak led to a rise in unemployment rates in Germany, where the Federal Employment Agency

announced that the number of unemployed people until the end of last April rose to two million and 644,000 people, in addition to the total number of workers whose working hours were reduced to one million and 100 thousand people. The Corona crisis has also led to a rise in the unemployment rate in the European Union as a whole, as the “Eurostat” agency announced that the unemployment rate had risen by more than five percent. In various countries of the world, the unemployment rate caused by the Corona pandemic varies according to the capabilities of each country, and the United Nations report estimated that the number of unemployed people due to Corona globally exceeded 450 million during the past four months, while the International Labor Organization said that more than (sixth) of the world’s youth lost Their jobs, due to this epidemic, are explained in the fourth edition of its report on the impact of the Corona pandemic that 305 million young people around the world have lost their jobs. A United Nations report entitled “Shared responsibility and global solidarity, to confront the social and economic effects of the Corona pandemic” confirmed that this epidemic will have huge and long-term effects on the global economy, and the International Monetary Fund has confirmed that the world has entered an unprecedented recession, and that this recession will lose more One-quarter of the world's workers will be employed because of it, and they will be a heavy burden on their country's economy for a long time.

The World Economic Forum suggested that the global economic crisis caused by the spread of (Covid 19) will continue for another year and a half, which will result in an exacerbation of the global unemployment problem. It called on all countries of the world to take effective coexistence measures for their citizens until the wheel of work and production begins again, To absorb what can be absorbed from the unemployed and to provide government care for those who lost their jobs and were unable to find alternative work. In a report by the League of Arab States, it was expected that Arab countries would lose about 1.7 million jobs in 2020, and that the unemployment rate would rise due to the Corona pandemic by 1.2 percentage points. While the International Labor Organization report expects that the world will witness a reduction in jobs by about 200 million full-time employees, and it is also expected that 25 million jobs will be threatened due to (Covid 19), especially after the closure procedures in many countries, and the impact that this had on About 2.7 billion workers, or 4 out of every 5 of the world's workforce.

Although all regions of the world are suffering from the crisis caused by the virus, Arab countries and Europe have experienced the worst impact in the field of employment in relative terms. The biggest losses in terms of numbers are concentrated in the countries of Asia and the Pacific, which is the most populated area in the world. There are sectors that are considered the most affected by the disease and the decline in production, and among these sectors mentioned in the report are food and hotels, the wholesale and retail sector, and business and management services and manufacturing.



Sources: Bloomberg Finance L.P.; EPFR Global; Haver Analytics; Institute of International Finance; and IMF staff calculations.

Figure 2. Global crisis plan

Source: develop by author

In addition, 136 million people work in the health and social professions around the world and are working on the front lines in the war against Corona, and the biggest threat facing this sector is infection with the Corona virus. Regardless of the place of residence in the world and the employment sector, the crisis has dramatic effects on the workforce around the world, and it is expected that the Corona crisis will lead to the abolition of 6.7 percent of the total working hours in the world in the second half of 2020, that is, what Equivalent to 195 million full-time jobs, of which 5 million are in the Arab countries.

3. Impact on international stock markets. The world's biggest stock exchanges, including the FTSE, Dow Jones Industrial Average, and the Nikkei, were hit hard during the first few months of the pandemic. Since the first vaccine was announced in November 2020, the major Asian and American stock markets are back on track, but the British FTSE is still in the red. However, the impact of COVID-19 upon international business has not been 100% negative. Perhaps unsurprisingly, global pharmaceutical companies involved in developing the vaccine have seen significant rises in their share prices over the last 12 months. In 2020, Moderna was by far the biggest beneficiary; its share value rose by a massive 715.5%, outstripping its nearest competitor, Novartis, by over 200%.

COVID-19 has created a more diverse and creative workforce. The spread of COVID-19 has rapidly accelerated the rate of digitization within global companies. The shift from onsite to remote working has forced organizations to implement new practices that allow colleagues to communicate and teams to continue working together from home. In 2021, government restrictions still apply in many countries, and they vary from region to region, but as the majority of us begin to emerge cautiously from strict lockdowns, the question is whether or not employers will continue to offer remote/flexible working in a post-pandemic world.

In May 2020, Jack Dorsey, CEO of Twitter and Square, announced his

employees could work from home “forever” if that was what they preferred. The pros and cons of remote working have been disputed since it became a widespread practice during the first wave of the pandemic. However, the majority of studies show that a dispersed workforce is more productive. Plus, now that location is no longer a barrier to employment, organizations embracing global, remote working are building more diverse teams, expanding their skill sets, and promoting creativity, all of which are net positives for any business.

Five ways while recovering from COVID-19:

1. Determining better viability, which is done by private stakeholders - those who have potential claims to the company and its assets - while governments can play the role of bringing together stakeholders. Determining viability requires several considerations, including: solvency (whether on the basis of financial position or liquidity), vulnerability (whether financial hardships are related to the coronavirus), the size of the company and its formal economic activity system (with direction of support for micro-enterprises The less formal is better through social protection mechanisms).

2. Corporate support programs should be conditional and linked to clear goals in the recovery process, such as fighting the virus, and the feasibility of operating at full capacity. It should also feature simple and transparent criteria. The support should also be based entirely on data to the extent possible, avoiding undue favoritism for state-owned enterprises.

3. Information about support programs, insolvency frameworks, and restructuring options must be communicated well and widely. Lack of awareness was a major barrier to obtaining policy support, particularly for disadvantaged groups.

4. The choice of financing instruments to support companies whether it be debt, equity, or a combination of the two must be determined by the size of the financial commitments. For viable companies with little debt, loan guarantees should remain the instrument of choice, but with less generous terms and conditions. For companies with significant financial commitments, it may be appropriate to provide an appropriate combination of equity/quasi-equity financing and debt restructuring. Even with support, some companies may need to restructure debt.

5. Strong insolvency and restructuring frameworks, including court-approved debt restructurings, out-of-court debt settlements and minor insolvency cases for SMEs, can help address financial hardship, preserve productive resources, and protect financial stability.

Discussion. From the results of the presentation and analysis of the impact of the Corona pandemic on the economies of different countries and their internal and external repercussions, where we note that there are differences, both in the percentage of impact, as well as in the speed of treatment and lifestyle. Since these countries have similar factors such as language, religion, and similar customs and traditions, but we note the discrepancy in the effect through economic studies of the proportion and size of price reversals by looking at the graphs. However, it must be taken into account that countries have their own local currency, as the US dollar is used as the general standard.

Conclusions. Through the study, prospects for further research and in-depth knowledge were opened, and new frameworks were created for the topic of the epidemic. Especially since the topic is alive and continuous and raises a lot of possibilities and expectations today and tomorrow. It is possible to conduct field studies and surveys in the future in many of the variables calculated by this study. With understanding and theoretical approximation such as (human security, the wealth of nations, social distancing and its impact on the economy of institutions, home quarantine and its economic and social impact, measuring profitability, home employee, production rates, open science and its applications and his ethics in universities in order to serve the economies of countries...

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MIXOLOGY AS BASIS OF FOOD SECURITY

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Abstract. The article proposes to analyze the theme of Mixology as one of the basic aspects of food security and self-organization of system of food security and examining the issues of food security accordance to the point of view to the theory of system and self-organizational approaches. The food security of the state is characterized not only by the physical and economic availability of food, but also by its usefulness, which refers to the qualitative characteristics that determine the consumer value of a particular product. The usefulness and quality of finished products depend not only on the quality of raw materials, production technology, quality of technological equipment, production culture, but also on the recipe according to which the product is produced. Tries to consider the mechanism of self-organizational development for ensuring food security, To investigate the mixology approach as third root of food security. The evolution of the control system involves the study, design, diagnosis and prediction of development of complex systems based on self-organized invariants -- generalized golden sections is an unique method, not comparable to any other. Investigation of food securities aspects should be based on transdisciplinary approach and use Nature's like models. Also, it should be methods of theory of system and theory of synergetic considered on the mechanism of self-organizational. Diagnostics of the level of self-organization implies entropy testing of systems and calculation as an integral indicator of the relative informational entropy. Entropy depends on temperature, pressure and distribution of structural inclusions making up the system. With the constancy of the first two, being calculated in relative form, the structural components of the system appear in the form of weights, frequencies or probabilities. Diagnostics of the level of self-organization implies entropy testing of systems and calculation as an integral indicator of the relative informational entropy. Entropy depends on temperature, pressure and distribution of structural inclusions making up the system. With constancy of the first two, being calculated in relative form, the structural components of the system appear in the form of weights, frequencies or probabilities.

Keywords: interdisciplinary synthesis; self-organization; food security; mixology approach; golden section; nature-like management.

JEL Classification: B41, C18, Q18

Formulas: 0; **fig.:** 2; **tabl.:** 1; **bibl.:** 14

Introduction. Process of development of economy of modern society differs today from past times. It depends of whole geopolitical situation in the world by the scale of economy. Extensive expansion of territories and resources for development and retreat in case of failures has been exhausted. Hence, high degree of responsibility of the global subject and a high payment for the errors committed in the actions committed by Mankind, which may turn out to be incommensurable with its further stay on Earth.

Today, with the beginning of the era of interdisciplinary synthesis, integrative fields of knowledge have appeared, combining the previously unreducible fields of science, this is their mission to form a single science about nature and man is still unrepresented. the queue of synergy and the general theory of systems) reveal the effect of a single method on qualitatively different objects.

To give the information society to fully manifest its original (informational) essence – such is the super task that determines progress. Actually, progress here is expressed in development of new means and ways to master space in the macro and

micro scales, each of it represents a self-contained area of objects. The most important factor is the amount of information, understood as a limited variety and, in particular, harmonized diversity, inherent in all normal structures of World.

Problems of system quality of management today remain perhaps the most important area where the interests of large groups of people intersect. Quality today is in demand as the main imperative of life and the engine of social development, which was confirmed by the Congress held by the European Organization for Quality.

Literature review. Since of end of the 20th century system and transdisciplinary methods have received a new development that provide a solution to problems of complexity, systemic quality of various systems, their dynamics, structural harmony, changes in states and processes of their self-organization. This is the time of comprehension of the laws of harmony, knowledge of the systemic quality of things and the quality of complex systems, methodological and theoretical support of systems synthesis technologies. By analogy, the provision of this task is intended to provide information tectology, the concept of which was introduced by .A. Bogdanov [1]. They focus on the harmonization of information bound in real structures as a limited variety.

General theory of harmony of systems Soroko E.M. [2] and synergetics give specific methods of how and to what extent "little things" should be introduced into the system or removed from the system in order to enhance the "effect of cooperative action" with their help, harmonize the whole, start the process of enzymatic action of these "little things", make chaos work as efficiently as possible to achieve the optimal functional mode of the system.

For example, for the food industry, harmonization provides for the development of methodological approaches from the search and study of options for the influence of "small factors", as starting elements in the structure of both technological and managerial processes.

Mixology as an innovative direction in ensuring the quality of finished products as a result of harmonization in accordance with the mathematical algorithm of recipes and mixtures on the basis of artificial design of structures provides for the application of the basic provisions of the general theory of harmony of systems "with a metric component, based on the nodal line of measures in its canonical form," which makes it possible to find the corresponding invariants, without which no theory, in principle, will have applied value.

Such invariants are the so-called generalized golden sections in the range of values of the integral characteristics of systems, on a single quality scale, which play the role of gravitational points, attractors that lie on the nodal line of measures. Nodes of interference (nodes of measures) within binary oppositions of the "quality-quantity" type, play the role of invariants, attractors "[1, 2, 3, 4].

To describe the state of the system used in the theory of systems, the works of the following scientists were used: Formula of information entropy - a formula for calculating the amount of information, was developed by K. Shannon [5, 6].. Prigogine's principle: outside the equilibrium, the production of entropy reaches a minimum [7]. It is contradicted by the Ziegler principle: "... in open self-organizing

systems, the production of entropy outside the equilibrium is maximum" [8]. These principles are consistent within the framework of the theory of generalized golden sections - invariants of self-organization and evolution of systems. There is an obvious alternation of "measure zones" with k-nodes as attractors (Prigogine's principle), and "zones of dimensionlessness" with "anti-nodes" as repellers (Ziegler's principle) [9].

I. Prigogine, to designate the state of partial order, arising far beyond equilibrium with its entropy maximum, introduced the concept of dissipative structure. Such structures provide "a striking example of the ability of disequilibrium to serve as a source of order [9, c.13]. The solution to the problem turned out to be at the nodes of the measure, in the generalized golden sections

Information as a limited variety is intended to provide strategies for structural synthesis in the design of complex systems, the harmony of composition and system quality of multicomponent objects, including formulations and mixtures. Generalized golden sections serve as attractors for the integral measure of the states of these systems, in particular, for the relative informational entropy. [1, 2, 14].

Aims. The purpose of the work is to explore the processes of self-organization in management and show their strategic perspective to achieve the innovative quality of modern management of system of food security.

Tasks of article: to consider theoretical and methodological essence of the phenomenon of self-organization; consider the metric evaluation of the self-organization system; consider the hypothesis of testing control of systems of food security for stability; propose an algorithm for designing self-organizing food systems as mixture.

The evolution of the control system involves the study, design, diagnosis and prediction of development of complex systems based on self-organized invariants - generalized golden sections is an unique method, not comparable to any other. The aspect "integral measurer of phase states of systems -- the nodal line of measure" [1] is also a kind of generalized "methodological comparator" because it is applicable in designing and analyzing systems of different origin, both economic and social, technical and technological also.

Methods. Synergetic in management is at the same time a new science, a new paradigm of knowledge, and a new world view - the world view of the development of integrity.

This is one of the productive generalizing lines of obtaining knowledge about the real processes of the objective world, in particular - knowledge about ordering and self-ordering, about management and self-organization. In the center of her attention: self-organization processes; cooperative phenomena; phase changes of quality of complex systems; invariants of evolution; patterns of evolutionary maturity; open systems; development of harmony and measure; processes and patterns of the formation of new qualities.

The use of a mixological approach will allow solving the problem of optimizing redundancy. Redundancy occurs in all processes and systems. Optimizing redundancy is a complex task, which allows you to bring the costs of production and

storage to more profitable ones while maintaining quality and improving it. from the point of view of the efficiency of the level of production, rational use of resources, the release of additional volumes of products. On a national scale, this will have a positive effect on the state of food security, provided that the conditions of usefulness for human consumption are met, which has a large-scale both social and economic effect.

A corresponding definition is associated with the concept of generalized golden sections: the concept of a recurrent series of golden crossings, which have such numerical values: 0.500 ...; 0.618 ...; 0.682 ...; 0.725., 0.825., 0.99 [1: 2; 3].

Each of the values is an invariant or attractor of the system, which ensures its stability and self-organization. In the dairy industry, we can observe this entire series (except for 0.500) as an indicator of the fat content of butter and ghee, which can be stored for a sufficiently long period of time without deteriorating consumer qualities. That is, there is a manifestation of the property of stability.

Results. Diagnostics of the level of self-organization implies entropy testing of systems and calculation as an integral indicator of the relative informational entropy. Entropy depends on temperature, pressure and distribution of structural inclusions making up the system. With the constancy of the first two, being calculated in relative form, the structural components of the system appear in the form of weights, frequencies or probabilities. Accordingly, entropy becomes the expression of the amount of information related to the distribution of system components. Normalized to one, i.e. being related to its maximum value, it in this case takes the form:

$$\bar{H} = -\frac{1}{\log n} \sum_{i=1}^n p_i \log p_i, \quad (1)$$

where n – number of system components. Being a measure of chaos, structural diversity, the maximum of which is reached at $\bar{H} = 1$ – в equilibrium system (i.e. if the weights p_i are equal to its structural components), it is additional to the measure of organization, order, uniformity of R and satisfies with it the conservation law:

$$\bar{H} + R = 1 \quad (2)$$

According to the Theorem of I. Prigogin, outside the equilibrium of a system, entropies capable of reaching a minimum of production (increment), and its opposite of R is a maximum:

$$\frac{d}{dt} \left(\frac{1}{\bar{H}} \frac{d\bar{H}}{dt} \right) = 0, \quad (3)$$

and correspondingly

$$\frac{d}{dt} \left(\frac{1}{R} \frac{dR}{dt} \right) = 0 \quad (4)$$

According to the condition of multiplicity of relative measures,

$$\frac{1}{R} \frac{dR}{dt} = k \frac{1}{\bar{H}} \frac{d\bar{H}}{dt}, \quad (5)$$

where $R = \bar{H}^k$, which, in combination to conservation law, gives the node generator a measure \bar{H} : $\bar{H}^k + \bar{H} - 1 = 0$. This is the same equation as above, but for the integral measure \bar{H} as an

average over statistical sum of probabilities capable of expressing both the level of infrastructural diversity and the “degree” of intrasystem chaos.

According to the Ziegler principle, outside the equilibrium of the system, the entropy production in it is maximized. Attractors and repellers of no equilibrium states of a system are nodes and anti-nodes - taps of states acquired by any of systems regardless of its scale and real specificity in the process of self-organization or evolution [1, p. 87,89], and transition between such states is quantized and fixed by measure nodes \overline{H} .

Modernization of a control system based on research, design, diagnostics of conditions and forecast of development of complex systems based on self-organizing invariants - generalized golden sections is a unique method, not comparable with any other. When conducting such a study requires strict control in the collection of statistical material.

Aspect “integral meter of phase states of systems --the nodal line of measure” is also a kind of generalized “methodological comparator” since it is applicable in the design and analysis of systems of different origin, both economic and social, technical and technological, also. As example will investigate third aspect of food security – quality of food.

Discussion. Food security of the state is characterized not only by the physical and economic availability of food, but also by its usefulness, which refers to the qualitative characteristics that determine the consumer value of a particular product.

The usefulness and quality of the finished product depends not only on the quality of the feedstock, production technology, quality of process equipment, production culture, but also on the formulation according to which the product is produced. A recipe is a kind of system. From the point of view of systems theory, a system has a “conservative” part — a structure and a “dynamic” part — a state. In the structure of the system, two main structural elements can be distinguished: invariants and variations. The invariant is invariable in the structure of the system.

“An invariant is a structural relation, a generalized quantitative or qualitative indicator that persists during certain transformations, transformations, changes in the system that it characterizes. Variations are changing elements of the system ”[2; 3].

“The stability of the system is determined by the relations of the values of the measure of order or disorder for the corresponding parameters by the Fibonacci method or the golden ratio” [2]. “Perhaps in nature there is a simple principle: the greater the number of proportions of the golden section, the higher the level of development and the higher the possibility of expansion, and the growth of entropy reflects this process as a quantitative measure.” [2].

An invariant aspect of any system is its structure, which always has a certain level of diversity. Through its harmonization, the system receives a nonequilibrium state, necessary for its effective life. Thus, it acquires an optimal mode of existence, characterized by functional quality. ... Generalized golden sections are invariants, on the basis of and through which, in the process of self-organization, natural systems

acquire a harmonious structure, a stationary mode of existence, structural-functional ... stability "[2, p.132].

The concept of generalized golden sections is connected, in fact, its synonym - the concept of a recurrent series of golden sections, which have the following digital values: 0,500 ...; 0.618 ...; 0.682 ...; 0.725 ..., 0.825 ..., 0.99.

Each of above figures is an invariant or attractor of the system, which determines its stability.

For example, in the dairy industry, we can observe all of this series (except 0.500) as an indicator of the fat content of butter and ghee, which can be stored for a sufficiently long period of time without compromising consumer qualities. . So, for example, the minimum fat content of butter is 62% and in some parameters its use is limited: butter with such a fat content cannot be heat treated and even has the appropriate name "Sandwich", the production of such butter requires higher operating costs for technological equipment. The most popular varieties are those with a fat content in the range of 72 - 73% and 82 - 83%, as well as ghee, the fat content of which is 98 - 99%.

And quality of the stability property takes place. Is it a coincidence? Is it possible to develop formulations of healthy and "sustainable" (long-lasting) foods? How can we use the effect of micro doses, also calculated on the basis of the principles of proportional division, called the Law of Measure?

Conclusions. Is it possible to develop formulations of healthy and stable food products that can be stored for a long period of time? Is it possible to use the effect of microdoses or "little things" based on the principles of proportional distribution, or the Law of Measure? The proportions of the law Measures are found in all material objects and can be classified as universal integral mathematical constants of nature-like technologies and control [2; 4]. The proportions of the Law Measures are found in all material objects and can be classified as mathematical constants of nature-like control.

Based on the foregoing, a scientific hypothesis is initiated on the possibility of substantiating a new methodological approach to the development of useful stable compositions (formulations, mixtures, etc.) that are commensurate or correspond to nature-like constants. The design of recipes and mixtures in the food industry based on the mathematical constants of the Measure law is the implementation of an innovative approach to product quality management. By harmonizing the formulation of finished products or mixtures for their constituents, changing their structure, introducing such an integral criterion as a measure, we approach the mathematical constants of nature-like technologies and processes with their dynamic shaping properties [12].

Some stages of the methodology for designing balanced formulations (stable systems):

1. Assessment of the status of the system, for example - the formulation of a particular product.
2. Assessment of the structural and functional state of the system.
3. Assessment of the share of value added in the product of the system;

4. Comparison of structural state assessment results with attractors representing a recurrent series of golden sections: 0.500 ...; 0.618 ...; 0.682 ...; 0.725 ..., 0.825 ..., 0.99 and other derivatives of the golden section.

5. Monitoring the reliability, viability and redundancy of the system (estimate the proportion of deviations) and entropy testing of the system (calculation of information entropy).

6. Formulation of the project of redesigning the system (compounding) and implementation of the project for the development of a new compounding.

7. Assessment of the designed system for structural and functional compliance with the law of the Measure [13].

Confirmation of this hypothesis requires additional research, for example, the existing widespread high-quality and sought-after products for compliance with the proportional division constants. But utility is the key characteristic of food security of a modern developed state.

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MANAGEMENT OF FOOD PROVISION FOR VULNERABLE LAYERS OF THE UKRAINE'S POPULATION

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Abstract. The topicality of the research paper is based on the fact that taking into consideration the global food crisis we analyzed trends in the domestic and global food sphere and their impact on food security in Ukraine. The author underlines the fact that the aggravation of the crisis in the food markets caused by COVID-19 has led to increased attention to food security in the world. The pandemic has significantly affected food security in all countries of the world. The most immediate impact was due to logistics disruptions caused by various sanitary and epidemiological measures taken by governments to restrict the movement of people and goods. These events have directly affected agribusiness and various value chains in the food production. Lack of adequate food security poses significant ethical, economic and social problems in all countries of the world, which makes it necessary to study this problem. Each country strives to achieve the highest level of self-sufficiency in meeting food needs through its own production. However, the production of sufficient food products is not always fully realized, in particular, its inadequate structure. Proposed research paper focuses on the problem of food security for vulnerable segments of the Ukraine's population in order to form an adequate food policy. The purpose of this study is to reveal the problem of targeted food support for vulnerable groups in Ukraine as an important alternative process for food security. This research is especially relevant given the need to bring social standards in Ukraine to the EU level, as required by the Association Agreement between Ukraine and the EU.

Key words: food security; vulnerable citizens; targeted assistance; process management; social features; regional features.

JEL Classification: D13, F20, H40, I31,

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Introduction. The issue of nutrition and food security has been of interest to experts and the public for a long time. FAO experts provided a definition of food security, which argued that it is provided when all people always have physical, social and economic access to sufficient safe and nutritious food that meets their dietary needs and preferences for active and healthy living.

The analysis is based on the need to introduce targeted food support for the poorest people of Ukraine as a necessary step to ensure food security in the context of European integration and accession to the Global Sustainable Development Goals, aimed at overcoming the degrading state of poverty and hunger under the Millennium Declaration [1].

Our country has a long-standing commitment to the fight against poverty and hunger in its international agreements. However, food security of citizens is below standard and is not a priority issue of government policy and international cooperation, and the tools to address it remain largely undisclosed to Ukrainian society. Food security has three dimensions: international, including regional (eg European Union), national (national) and at the household level, including its members.

To ensure food security at the state level, four conditions must be met:

- 1) Physical availability of food, which means that the national food system guarantees the satisfaction of at least the minimum physiological needs of man, while imports provide food that exceeds the minimum need;
- 2) Sustainability and reliability of food supply;
- 3) Affordability of food, which implies that the economically weakest households and their members have access to the necessary food (because there are various forms of food aid);
- 4) Compliance of a particular food product for human health and nutrition (required energy level, the right proportion of nutrients, the absence of harmful contaminants).

In a global economy, no country should be fully prepared for food self-sufficiency, as each country has its own set of food production conditions, which in some sectors gives it an advantage in world markets and in others makes it uncompetitive. National food security is achieved when - at the current level of consumption - the balance in food trade is maintained.

Literature review. Ukraine's poorest households use up to 80-90% (and sometimes up to 100%) of their income on food, while the average income in Ukraine is poor (which is expected to be reached only by the 2030s). , and does not allow a significant part of the population to achieve a minimum supply of nutrients and energy in accordance with scientifically sound standards [2]. In the EU, the share of food expenditures is in the range of 20-25%, which is on the one hand a manifestation of higher economic development, and on the other - the result of targeted, transparent and effective social and food policy [3].

The concepts of national food security and food self-sufficiency complement each other. But self-sufficiency is narrowing to strategic food (raw materials) and focusing on the optimal use of the potential of the national food system, which constantly interacts with the international market of means of production, as well as raw and finished foods. Whereas the concept of food security primarily concerns the consumption area (level, structure, quality of food) and the distribution area, which decides whether the interests of the economically weakest households are taken into account and whether their members have access to the necessary food.

This determines the food security of the household and its members, depending on the state of national food security. But still there is a specificity that follows from the fact that the household is the main entity in the field of consumption. The food policy pursued by the state should, first of all, be focused on the rationalization of food consumption. To this end, the state is launching a set of measures to inform consumers about the methods and possibilities of nutrition rationalization. The decision on how information is used in households is made by their members. These decisions depend on the level of education, traditions and habits, which streamline the process of food consumption.

When analyzing food security at the household level, there is often a mismatch between the economic security of the household in terms of access to food and distribution among family members. According to our observations, today this

discrepancy appears where malnutrition of children and other family members is a result of the need to provide better nutrition for working family members.

This discrepancy necessitates the provision of various forms of food aid to economically weak households (food stamps, school meals for children, and pregnant and lactating women). Food safety affects how food is produced, processed and distributed. Food safety standards are decisions that affect agricultural markets. The processes are especially noticeable in the countries that implement the Association Agreement with the European Union.

Food safety is a very important issue, especially in countries bringing their legislation closer to EU standards, such as Ukraine, and new EU members, as rules need to be put in place and enforced in a very short period of time. Biological balance, physical and economic availability of food are important factors for ensuring family and personal food security of the population, for individual citizens of the country, households, regions and society as a whole. Food security issues are particularly acute during the war, according to opinion polls and international organizations: 4.4 million civilians affected by the conflict in eastern Ukraine face a difficult humanitarian situation, reflected in limited access to food, medicine and education [4].

The situation with COVID-19 has raised serious food security concerns in a world where the pandemic has affected food supplies in different ways. The most immediate impact was due to logistics disruptions caused by various sanitary measures taken by governments to restrict the movement of people and goods. This has directly affected agribusiness and various food value chains.

It should be noted that the debate on food security at the global level is very quantitative, although the FAO has recently focused on the potential for faster progress, given the quality of safe and nutritious food and its nutritional benefits for active and healthy living. At the same time, 54% of internally displaced persons (IDPs), of whom there are currently 1.5 million in Ukraine, spend their money only on food or are forced to save even on this [5,6].

Significant volumes of agricultural production and the presence of trade networks in all regions of Ukraine, except for local territories of the armed conflict in eastern Ukraine, allow to establish targeted food aid according to world approaches. Only by receiving the necessary amount of calories and nutrients from food, a person becomes able to conduct socially useful activities.

One of the tools to curb price increases is to introduce price controls by setting a marginal level of profitability for producers and a marginal margin for retailers. However, in the process of economic liberalization, these price regulation tools have been abolished due to the fact that such government intervention is costly and due to the negative economic consequences it causes. It should also be noted that such instruments are ineffective in providing assistance to the poor, while targeted remittances play an important role in providing food assistance to the poor.

Method. In the process of preparing the analytical study, it was planned to develop and refine statistical information on own research in the pilot regions identified at the planning stage of the study at the level of spot surveys, namely:

Zhytomyr (Zhytomyr), Kyiv (Kyiv, Bila Tserkva, Fursy, Shamraivka), Odesa, Odesa, Belgorod-Dniester, and Dnipropetrovsk (Dnipro, Magdalinivka). Stakeholders were identified on the basis of an analysis of relevant categories of effective structures / types of actors in national and global food security practices - with some refinements in the research process - to identify the most interested actors in further development. public food programs and projects security.

The sequence of analysis of the listed categories of documents and identification of stakeholders for their discussion was determined by their thematic focus in the areas of research. Further work on the implementation of this globally recognized approach is based on identifying the types and characteristics of food aid in existing domestic approaches, which should be further transformed into pilot models and tested in various appropriate options (taking into account the specifics of vulnerable groups and regional differences). more effective forms.

Results. According to the Association Agreement between Ukraine and the EU, the use of national budget funds of Ukraine should be consistent with financial practices of planning and attracting EU support funds, based on publicly available calculations and reports, on a transparent basis of timely exchange of information with recipients (recipients of budget funds). in accordance with the principle of sound financial management, in accordance with Regulation (EU, Euratom) № 966/2012 of the European Parliament and of the Council ("Financial Regulation") [7].

An important feature of procurement programs for refugees is their compliance with international standards of quality management, the availability of specific certificates of quality and safety of products, as well as environmental certificates and requirements of the Ten Principles of the UN Global Compact in their corporate activities [8]. aggregates correspond to the ability of companies to participate in food security programs not only in Ukraine [9].

As for the structure of consumer spending on food (Fig. 1), compared to previous years, no positive changes were observed.

The first place is occupied by expenditures on: meat and meat products - 24% (UAH 1,032 per household per month), bread and bakery products - 17% (UAH 716), milk and dairy products - 12% (UAH 501) . At the same time, an average of 4,077.30 hryvnias was spent on food by the household in 2020. That is, the indicator of economic affordability was 47.6% with its 60 percent threshold. Compared to 2019, this figure increased by 3.1 percentage points, which indicates negative trends in food markets in Ukraine and around the world. If the structure of household expenditures is 50% or more of food, then such a country is classified according to the UN classification as poor countries, and if household expenditures on food are 60% or more - then such a country is very poor. According to statistics, Ukraine is close to poor countries with a negative trend in overcoming poverty. If we take into account not the total, but only the total consumer expenditure of households, the share of food expenditures in 2020 was 48.9%.

The study of the experience of using UN funds to help victims of the armed conflict in eastern Ukraine, opens significant prospects for expanding sales of farm products (while achieving the objectives of internal food security). Access to EU

structural funds is increasingly linked to participation in migrant assistance programs [10].

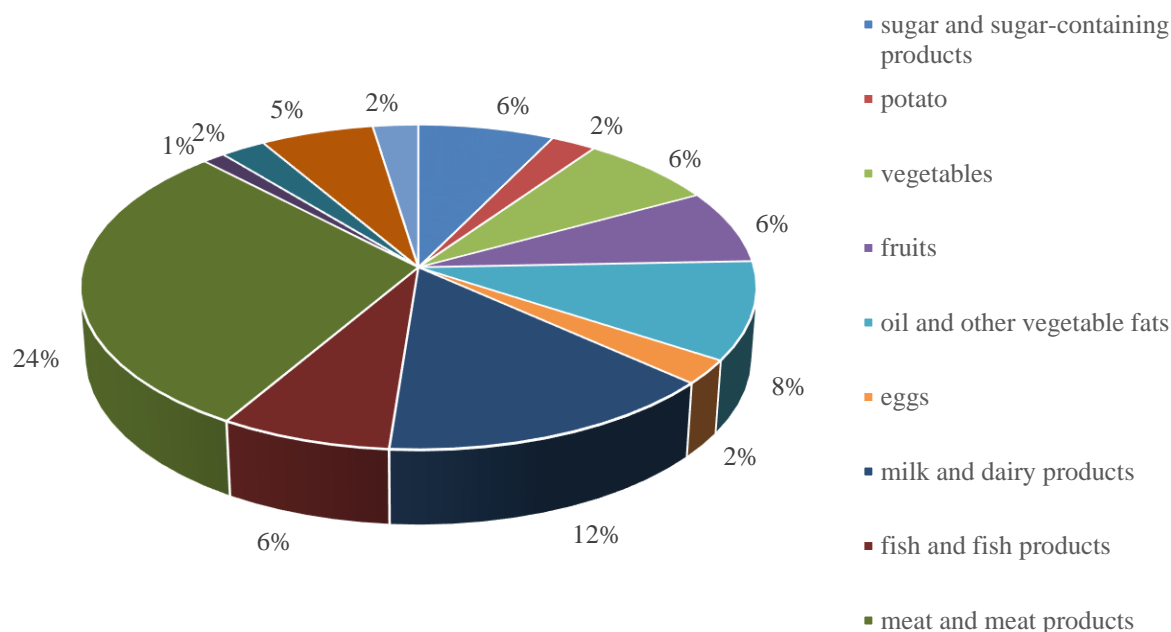


Figure 1. Structure of expenditures of Ukrainian households on food in 2020

Source: author's development based on [2]

The problem of access to food is a powerful factor in destabilizing societies across countries and continents, which can cause political and economic crises, serve as a means of genocide of certain social groups and ethnic groups, a weapon of mass destruction and incitement of the poor to participate in aggressive political groups.

Promising tools for solving the problems of food security for vulnerable groups of Ukraine include:

1. Introduction of electronic food aid cards through trade networks;
2. Introduction of electronic food aid cards through the farmers' association.

The first tool provides for the main form of targeted food aid to transfer to the card funds from the budget, for which the poor will be able to buy food. Social cards already valid in the region or special bank cards introduced for the implementation of the targeted assistance program with the participation of one of the banks of Ukraine can be used for accruals. In the event of an unstable market situation, hyperinflation or shortage of certain necessary products in the country, a mechanism is provided for receiving food aid in kind, when the citizen will be able to receive a set of products directly on the card. A new methodology for identifying needs should be proposed. It would be fair to provide assistance from the standpoint of the real subsistence level. We offer to issue food cards to those families in which the average per capita income per family member is less than the real subsistence level.

The amount transferred to a social or special bank card should increase income

to the level of the real subsistence level. Food non-cash targeted assistance should be financed from both local and state budgets, giving the program national status. Bringing national practice closer to the experience of the EU and the US, where similar programs already exist, in these countries, citizens who are listed as low-income in social services are entitled to a special bank card. The state regularly transfers subsidies to it, which can be spent only on food. At the same time, in the EU and the US, product cards are also issued depending on the income of citizens, rather than their belonging to a particular social group.

The main condition for obtaining an "electronic food aid card": each family member must be registered at the same address (in the same apartment or in the same house). You will also need documents proving the difficult financial situation of the family. If a person simply avoids work, he or she will be denied food aid. The introduction of this alternative creates operational programs that should identify and confirm the forms of nutrition and / or material poverty that need to be addressed and / or support social integration, and should describe the specifics of assistance to the poorest through the State Social Protection Service. . They should also include the elements necessary to ensure the effective and appropriate implementation of targeted food aid.

Emphasis is placed on the achievements of the world experience, which shows the possibility of reducing poverty and social exclusion through the use of social and economic policies by expanding access to education, health and other social services, improving the environment and using natural resources, especially in the countryside. It is in this integrated approach that FAO and EU programs on overcoming hunger are implemented and addressing needs and opportunities to address them in specific situations is identified [12].

The authorities should take appropriate measures to ensure the proper establishment and functioning of their management and control systems to ensure the lawful and regular provision of targeted food aid. Therefore, it is necessary to note the obligations of the social protection service regarding the management and control systems of their operational programs, as well as regarding the prevention, detection and correction of violations of the legislation of Ukraine. Those in need will receive an electronic food aid card (debit bank card of the national payment system), which can be used to pay for purchases. Credits not spent within a month will be burned. It is not possible to withdraw cash from the card, but it can be replenished. You can only spend money on basic necessities. Their list should be developed jointly with the Ministry of Health.

The recommended range includes flour, cereals, pasta, potatoes, fresh fruits and vegetables, sugar, salt, drinking water, eggs, vegetable oil, meat, fish and dairy products. In order to ensure the effective and efficient implementation of targeted food assistance measures financed from the state and local budgets, the state should promote cooperation between regional and local authorities and organizations representing civil society. The principle of partnership must be applied in order to respond as effectively and adequately as possible to different needs and to better reach the poorest people. The law on the protection of individuals with regard to the

processing of personal data and on the free movement of such data (to be implemented in accordance with European approaches and other trade and fair rules) should apply, in particular in the form of public-private partnerships with intellectual property rights, which meet the requirements of Regulation (EU) № 223/2014 of the European Parliament and of the Council of 11 March 2014 on the European Aid Fund for the Poor.

Potential benefits include the introduction of international standards for targeted food aid; control and food security of vulnerable groups; extensive retail network; a wide range of food. Potential disadvantages are that the initial stage of implementation requires large financial costs; lack of a state body with experience in implementing electronic food aid cards through the trade network at both national and regional levels.

The second tool involves the introduction of electronic food aid cards through a farmers' association. It should be noted that this targeted food aid instrument is aimed at helping local producers. All farms that are members of a farmers' association that has been certified to participate in the targeted food aid program and if they accept bank cards and set up scoring equipment will be eligible to participate in the program.

The participation of farmers in the sale of food through a targeted food aid program to vulnerable populations can play an important role in increasing the availability of high-quality fresh food. Farmers can sell their products to beneficiaries both directly and through farmers' markets. The advantage of farmers' markets is that they tend to offer a higher percentage of fresh fruits and vegetables compared to retail stores. In addition, the EU experience shows that the market model of farming is more flexible than other types of retail, and farmers' markets require less capital to put into operation. Farmers' markets also have the potential to strengthen the local economy in a variety of ways. For example, because the farmers' market is a direct distribution channel from farmer to consumer, this type of sale is a desirable outlet for farmers and thus can strengthen the rural communities that surround the market.

In order for Ukraine's farmers' markets to be a common model of access to healthy food, these markets need to be able to accept electronic targeted food aid cards. The farmers' market can indeed improve the level of nutrition in low-income rural communities and difficult access to the existing extensive retail network in district and regional centers.

Farmers may consider working with CSO partners to ensure the delivery of targeted food aid to the elderly or people with disabilities. policy evaluation. To evaluate the alternative by the criterion of efficiency, it is necessary to conduct a cost-benefit analysis, which required the collection of a wide range of statistics. The analysis and evaluation of the proposed policy alternatives are presented in Table 1.

To this end, social welfare authorities may provide such categories of recipients of targeted assistance with the opportunity to purchase food using paper vouchers. Farmer's markets should be conveniently located in a space that is well used by the community, or located in the central part of the city or town. Parks, recreation and youth centers are excellent examples of public spaces. For example, a market near a youth center or kindergarten can be a convenient place for parents to buy food.

Table 1. Summary assessment of policy alternatives

Criterion	Alternative 1	Alternative 2	Alternative 3
Justice	1	3	3
Political feasibility	3	1	2
Administrative feasibility	3	1	1
Effectiveness	1	3	2
Efficiency	1	3	3
Transparency	1	3	3
Total	10	14	14

Source: author's development based on [13]

Potential benefits. Increasing the consumption of fresh and healthy food of local production; reducing the risk of eating counterfeit food; additional mechanism for protection of agricultural producers; direct influence on the settlement of the problem of production and sale of local products; involvement of civil society organizations, namely: regional and national associations of farmers, charities and other organizations involved in the social sphere. Potential shortcomings. The initial stage of implementation requires significant financial costs; lack of a state body with experience in implementing electronic food aid cards through retail chains at both national and regional levels.

Discussion. The main burden in providing the poorest people with targeted food aid should be borne by the competent public and local authorities, which are directly responsible to the population of the whole country and its regions for sufficient provision of safe food of adequate quality, subject to transparency and transparency. control over the effective use of budget funds.

In order to ensure the effective and efficient implementation of targeted food assistance measures financed from the state and local budgets, the state should promote cooperation between regional and local authorities and organizations representing civil society. Food needs should be monitored and met on a case-by-case basis, with a focus on identified vulnerable populations and regional differentiation.

The problem of targeted assistance to the poor should be addressed through the tools of implementing a single system of electronic food aid cards through trade networks and farmers' associations in different proportions depending on regional characteristics. To do this, it is necessary to develop a number of programs and pilot projects, taking into account social and regional characteristics.

Conclusion. In order to ensure the effective and efficient implementation of targeted food assistance measures financed from the state and local budgets, the state should promote cooperation between regional and local authorities and organizations representing civil society. Food needs should be monitored and met on a case-by-case basis, with a focus on identified vulnerable populations and regional differentiation.

The use of alternatives 2 and 3 proposed by the author involves the introduction of a single system of electronic cards for targeted food aid through trade networks or farmers' associations in different proportions depending on regional characteristics. In the initial stages of implementation, several pilot regions should be selected to develop mechanisms and tools for identifying households in need of state support. This targeted assistance program should be financed from both state and local

budgets. At the same time, funds for the purchase of food should come from the State budget, and funding for the process of identifying households in need of targeted food assistance and administration of the process of its provision should be carried out using local budgets.

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CHAPTER 2

DEVELOPMENT OF FINANCE, ACCOUNTING AND AUDITING

BITCOIN: IT'S CONCEPT, CHARACTERISTICS AND IMPACT ON TRADE AND GLOBAL ECONOMY

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Abstract: Bitcoin is one of the most important developments in Blockchain technology, as this currency has become the main regulator of the virtual currency of Bitcoin, it is a currency that has no physical presence and is traded in the Internet. The aim of the article is to study the concept of bitcoin and its impact on trade and the global economy. It is an important phenomenon for the economy and electronic commerce in many aspects, such as the conclusion of electronic contracts and financing, during which payments are made at low costs, but there is a danger associated with dealing with it at the level of national economic security, especially when there is no organized legislation to deal with it in order to monitor dealing with it. Therefore, there are realistic threats to dealing with Bitcoin because it is not under the control or oversight of central banks and official agencies. The most important of these threats are money laundering and terrorist financing operations, in addition to the tax difficulties due to the difficulty of monitoring its dealers. It helps smuggle money abroad and thus harm the national economy, as the ambiguity and secrecy regard the dealing with the bitcoin currency and the instability of its value are source of concern for its use, which explains that there are several difficulties encountered when trading it, which has economic, financial and technical consequences.

Keywords: bitcoin, electronic transactions; national economy; legal regulation; virtual currencies; blockchain, risk.

JEL Classification: G15, G21

Formulas: 0; **fig.:** 0; **tabl.:** 0; **bibl.:** 15

Introduction. The Bitcoin currency has spread due to the ease of its trading and profitability in dealing with financial stock exchanges and economic investments without the presence of oversight or restrictions governing them, especially since the Bitcoin currency follows high levels of confidentiality and anonymity, which forms a protection for privacy and does not allow a third party or intermediary to interfere in the dealings between the two parties to the relationship (j.everette and others:2017.p3), Bitcoin is considered an innovation in the world of technology and in the world of finance, and its repercussions have affected many countries and institutions around the world. As the spread of Bitcoin using has effects on monetary policy in countries of the world, but the central banks cannot dealing with it without legislation regulating it because it is cryptocurrency, so the use of Bitcoin in transactions and investment has dangerous repercussions on the national economy and monetary policy in the absence of organized legislation or even special laws governing through international treaties that clarify the legal frameworks governing dealing with this currency, and this will not be done, except by clarifying the concept

of Bitcoin and determining the legal adaptation, especially since the current system of banks does not meet the great demand of the digital trade market, and the need has become necessary to create a convenient way for fast transactions via the Internet may go beyond the limits of legal jurisdiction, here comes the role of virtual currencies, and the most important of which is Bitcoin.

Literature review. Definition of Bitcoin, its importance and characteristics such as:

1) *Bitcoin definition.* The virtual currency (Bitcoin) has been defined as: a digital currency that is used all over the world on the Internet, and is created and exchanged from one computer to another via a decentralized network, which means that it is not subject to central control by any authority or government, and can be accessed by any connected person to internet (Matthew Kien-Meng ly : Spring 2014, p.589.) Which means that they are cryptocurrencies that do not have a real existence like coins.

Bitcoin is also defined as a digital image stored on internet, which takes shapes and appearances that mimic the appearance of physical money, transferred from it and real estate, and has a physical and virtual value in the virtual world. With real currencies, or even selling them, through an encrypted virtual contract, the most important characteristic of which is the principle of the authority of the will, without an intermediary controlling the contract, as in real currencies, in the sense that the will is absolute and does not limit it (Matthew Lee. Hertfordshire Law journal, 4 2016, p. 73). Bitcoin is also defined as: it is a digital currency that has no physical existence. It is created according to an algorithm that distinguishes each user from the other without indicating his identity and is stored in a private electronic wallet that sends and receives money, as its owner cannot be known. (Mahmoud, 2020, 141)

We can say that Bitcoin is a monetary value stored on the Internet in private wallets, not associate to a bank account, widely accepted by the non-issuer, and used for payment for various purposes.

Aims. The aim of the article is to study the concept of bitcoin and its impact on trade and the global economy.

Methods. The methodological basis of the article was the use of general scientific research methods, such as: analysis and synthesis, induction and deduction, comparative analysis, generalization method.

Results. As illustrated above that Bitcoin is a digital currency: it is the most prominent characteristic of Bitcoin, as it exists (digitally) in the sense that it does not have any physical existence - Intangible.

It is called a "virtual" term, as it is in the cyberspace, and stored in "Digital Wallets" on the Internet, these wallets store information related to the user's account, and are accessed through the "Mobile App". or a computer program or a "Service Provider".

Accordingly, it follows from this feature that Bitcoin differs from mandatory money, in that the former does not have a tangible physical form, nor can it be deposited in a bank, as it is saved on virtual wallets, and finally it is easy to carry and transfer via the Internet.

Also, the dealing with Bitcoin is through "peer-to-peer": is a technical term, used in computer networks, where it means direct interaction between a user on the network called a peer or peer and between others without any intermediary between them and all peers are equal, there is no primary or even dominant peer at the center of the network. In this context, dealing in bitcoin is through a "peer-to-peer" network system, meaning that all transactions in the Bitcoin network occur without going through a trusted third party "TTp" or a financial institution, such as a bank or even authority like government.

The working way of Bitcoin, in addition to the spread of the Internet around the world and its connection with computers, makes the opportunity available for anyone to join it through specialized programmers to create accounts for them in order to manage Bitcoin transactions, after creating a special account for any Bitcoin dealer, he can conduct transactions and transfer his money to other accounts anywhere around the world through a window called the general ledger, because it is a technology that records the transactions that are concluded through all the system (Amarah Abdulhafiz: 2019, P308)

By dividing it into blocks of transactions, called "Blockchain", its function is to keep track of every Bitcoin transaction in the current transaction, ensuring that Bitcoin is passed on to the intended person. The new blocks of Bitcoin are created through mining, which is an algorithmic system that is presented in the form of digital equations, and the miner who wants to acquire Bitcoin, must solve this mathematical equation, by means of programs for Bitcoin mining, and the increasing number of miners has increased the value of this currency more and more, the so-called mining farms appeared, which contain thousands (processors) "Motherboard" to obtain new blocks of Bitcoin (Artus Krohn-Grimberghe & Ghristohp Sorge, 2013, p. 23).

From here, these important transformations appeared at the level of the global economy, which were produced by technological developments, especially with regard to payment systems in terms of speed and effectiveness that it provides, as innovations in payment methods have reduced the role of the monetary currency and shown the existence of new currencies, which are virtual money and the most common and widespread it is the Bitcoin currency. This spread of the Bitcoin currency is due to its ease of use, low cost and speed, without the need for an intermediary (Alawi, 2020, 175). Virtual currencies are a digital representation of value, issued by private developers as a unit of account, that can be obtained, stored, accessed and transacted electronically, and is used for a variety of purposes when two parties agree to use it. (Al-Bahouth, 2017, 20). It can be said that virtual currencies are a digital representation of a monetary value that is not issued by a central bank or a public authority, and is not necessarily linked to paper currency, but is accepted by natural or legal persons as a means of payment, and can be transferred, stored or traded electronically.

2) *The importance of Bitcoin.* There is an importance of the Bitcoin currency for consumers, merchants, exporters and others, the most important of which is the

importance of virtual currencies in a number of points, most notably (Ahmed et al., 2018, 106–107):

The feeling of security and privacy, getting rid of legal restrictions, freedom in transactions, and lower costs are of great importance to the consumer, and the attraction of new customers for trade and the increase in sales it achieves by using Bitcoin as a more efficient alternative than traditional money. Bitcoin leads to a move away from the control of the tax department for traders and legal authorities, in addition to that, the importance of dealing with Bitcoin for exporters, such as controlling the markets without the supervision of the official authorities, in addition to make profits through exchange operations and from the subscription fees of customers to produce currency, in addition to freedom from legal accountability by states.

Bitcoin has many characteristics and many risks that we address in the following two sections:

1) Advantages and Disadvantages of Dealing with Bitcoin. Bitcoin has unique advantages that make dealing with it encouraging for individuals and companies, the most important of which are:

Advantages of dealing with Bitcoin:

– *lower fees:* The Bitcoin currency is available to everyone and without any fees for transfer, as in dealing with traditional currencies to transfer money through banks and credit card companies, and there will be no intermediary between customers and merchants, in addition to the fact that merchants have units to help process transactions and convert Bitcoin into currencies and deposit them in their bank accounts directly and on a daily basis, because these services are specific to Bitcoin, they will cost much less than credit cards.

– *Transparency and neutrality of Bitcoin dealing:* Bitcoin has a global public ledger, which contains all Bitcoin operations that are executed in full, called “Blockchain”, which is an encrypted information program that undertakes the task of a unified recording of information on the network. This ledger includes a series of so-called blocks (blockchain). Each block contains a list of operations, as well as the electronic signature of the previous block that made up the ledger. Each block is linked to the previous one, which gives a comprehensive picture of everything that happens in the entire system, where everyone watches with complete transparency. A movement that moves the currency between the wallets and the number of bitcoins owned by the owner of the wallet, but at the same time no one can know the identity of its owner. This is secured through an encryption system so that no one or organization can control or tamper with the Bitcoin protocol (Mahmoud, 2020, 143-144).

– *Speed, Privacy & Confidentiality:* While dealing with Bitcoin, it is not possible to monitor the buying and selling operations that take place through it or to interfere in it by governments and banks over the currency, as it can be transferred at any time and to any place in the world, with complete privacy without passing through any supervisory entity or bank, as well as it can possessing many Bitcoin accounts and wallets without being connected to a name, address, or any information about their properties.

- *Global*: Bitcoin is not restricted to a specific country or continent, as it is worldwide, and no country can prohibit it, therefore no one can block these transactions or transfers, and transfers in traditional currencies cannot be exposed to it if it was doubtful, or it was made to pay transactions illegal, because only its owner has the power to determine the mechanism, place and type of its use (Albahouth, 2017, 32).
- *Low risk of collapse*: Regular currencies rely on governments that sometimes fail to protect their currency, such events either cause hyperinflation or a complete collapse of the currency which can wipe out the lifetime savings in one day. Bitcoin is not regulated by any government, it is a virtual global currency (Aljawareen, 2018, 5)

Disadvantages of Bitcoin:

- *Currency fluctuation*: The price of the virtual currency Bitcoin and its large fluctuations constitute a major problem for its dealers for many reasons, including that it is not based on any assets or fair valuations that can be relied upon in anticipating a decrease or rise in the price of this currency. The business in which this currency is used is still relatively small compared to what it could be, which negatively affects the price and significantly, so the loss component is very large because it lacks monetary stability, which is the most important goals of the monetary system of any country, and this does not mean that it does not happen to a currency at some point, what is meant by stability is the ability to reasonably predict currency trends, so central banks are trying to develop strategies that help relative stability so that people and the economy are not harmed.
- *Legal risks*: Dealing with the virtual currency Bitcoin reveals many risks, the nature of this encrypted currency, which is invisible, made it an attractive and convenient tool for criminals and fraudsters to practice money laundering operations and sell stolen and prohibited products such as drugs, especially in outer space due to the difficulty of identifying who is using and buying it. This is related to the extent to which individuals use Bitcoin. In their transactions, which motivates the perpetrators of these operations to use them in purchase and transfer without the need to contact intermediary financial institutions, and the decentralization of Bitcoin led to the lack of obligation to write reports on the national movement on the volume of transactions, as is the case in banking systems that require reporting to the regulatory authorities about the financial operations of the clients
- *Mining*: One of the most important obstacles to the spread of the use of Bitcoin in the world is the difficulty of mining (issuing it) by the average user due to the complexity of access programs and the complexity of the calculations necessary to perform mining operations, although the mining of the currency is available to everyone in theory.
- *Tax Evasion*: It will be difficult for government entities in charge of tax collection to collect them from the qualities that are made by virtual currencies, because they are done via the Internet without the availability of fixed records through which the amount of these qualities can be verified, and thus the state loses an important resource of the state's general budget.

2) *Risks of Bitcoin*. There are many risks surrounding the Bitcoin currency and realistic threats, because it is not under the control of banks or supervision and its use instead of the traditional payment system and also its acceptance by many companies and individuals around the world, which led to the start of the transition to the era of the digital economy and the digital economy, which is a series of economic, social and cultural activities that they are performed on information networks and are related to the use of information and communication technologies by the bank, commercial transactions and benefiting from education using the Internet and devices connected between them.

The most important of these risks are:

1) *Decentralization of dealing with the currency of Bitcoin due to lack of legislative and regulatory texts*:

There is no control or any government power, as it allows the payment of cash directly via the Internet, without the need for an intermediary to intervene, so it is transmitted directly, from the buyer to the seller, or more precisely from the transferee to the beneficiary. (Abdullah Al-Bahouth, Virtual Money: pg. 19)

Bitcoin is a decentralized currency that does not belong to any country, bank, or any regulatory body. It is a cryptocurrency, which is difficult to trace. Because it does not have serial numbers, in contrast to electronic money that belongs to either a state, a bank or a regulatory body, and it has serial numbers through which dealers can be tracked. This feature that is unique to Bitcoin, made it unique by the decision of the contracting parties, without the broker having authority. It is the same as in electronic money, and this defect poses risks to the person dealing with it, as one of its risks is that it is considered a means of money laundering and support for terrorist groups and criminal organizations, and the state has no authority over it to impose taxes and fees on its dealers.

Due to the lack of legislative texts regulating the currency of Bitcoin, it is not possible to punish or fine those dealing with it, because the general principle that governs the Penal Code is that there is no crime or punishment without a text, and it is the responsibility of the legislator to take the initiative to organize legislation that regulates this currency and imposes penalties on violators and those who employ it as an illegal method.

2) *Bitcoin Cryptocurrency*. The disadvantage of Bitcoin is that it is encrypted; , i.e. it is confidentiality in dealing, it is not reached by non-dealers, and in fact this mode may be a fertile environment for tax evasion, money laundering and the sale of contraband, then the goal of encryption is to distance digital dealing outside the financial and monetary system in countries, and not to be subject to central banks, however, avoiding encryption is practically impossible ; Because it is one of the pillars of digital currency. (Ahmed Amer, Digital currencies (Bitcoin as a model): 2019, p. 283).

3) *Constant fluctuation in the price of Bitcoin*. The most significant risks of dealing with the currency (Bitcoin) is fluctuate the price of its value, it goes down and rises from time to time without proof of a specific price and without precedents (Mothan W.Y.: <https://www.alukah.net/>)

4) *Mining*. To obtain the Bitcoin, it is necessary to mine to obtain the electronic currency, through complex calculations, via central processing devices (Motherboard) with a high degree of technology, and these processors need continuous work for a period of time, to solve the calculations posed by the mining program of the (Bitcoin), however, this period requires permanent energy, and the presence of mining farms for thousands of processors in America and Russia at the present time, makes it difficult to mine using ordinary processors

5) *Hacking*. Bitcoin is vulnerable to piracy and theft because it is a currency stored in a digital wallet. Virtual money is more vulnerable to these risks, and in fact, there have been many hacking incidents of virtual wallets that were not well protected from piracy, and what increases the risk is the inability of the user whose money was stolen from his account to recover them, due to the unknown mechanism of the system's work and the inability of the aggrieved to take legal measures to prosecute them. (Abdullah Salman AlBahouth, Virtual Currency, p. 34.).

Discussion. Bitcoin considered a currency resulting from modern technological techniques and has many advantages and risks because it is used to transfer money over the Internet and can be used in legitimate and illegal business and this leads to affecting the national and global economy, especially due to the lack of various international legislation for a tight legal regulation to deal with the currency of Bitcoin, but the only legal fact that can be asserted is that Bitcoin trading is considered a legal act that falls within the area of commercial activities in order to deal with money and provide services, and the Bitcoin currency has raised a legal controversy about drawing its economic dimensions in light of international changes and challenges of the modern era, so it constitutes a system Virtually parallel to the international monetary system.

Conclusion. Based on the study, the following conclusions can be drawn:

- Bitcoin is a type of encrypted digital currency that is intangible and is traded via the Internet.
- The lack of central control to protect dealing with Bitcoin is a result of the weak infrastructure of this currency because it is produced in an encrypted digital form and without interference from any financial authority.
- A great risk and an uncertain future for individuals and companies, as well as the national economy, as a result of dealing with Bitcoin in its current state.
- Lack of legislation regulating dealing with Bitcoin leads to its use in illegal activities.
- Bitcoins are managed by their users without any central or regulatory authority.

Based on the study, the following recommendations can be provided:

- Pre- and adequate preparation of the legal, economic and technical means to ensure the safe use of the bitcoin in the event of its adoption and away from any potential risks or threats.
- Develop appropriate means to monitor the dealing with Bitcoin, its movement and trends, because of its national interest that affects the national economy.

- The possibility of setting controls for dealing with these currencies, including Bitcoin, by international organizations such as the International Monetary Fund and the World Bank.
- Developing the culture of society in order to protect them from deception and fraud as a result of dealing in such currencies.
- Activating the role of central banks to rent a tool to monitor these cryptocurrencies, including Bitcoin.
- The International Monetary Fund also recommended to setting rules and controls to integrate this cryptocurrency with the rules of the global monetary system.
- I recommend countries to put in place special legislation regulating dealing with Bitcoin.

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EVOLUTION OF PRACTICAL USE OF BLOCKCHAIN TECHNOLOGIES BY COMPANIES

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Abstract. The article examines the main stages of evolution of blockchain technologies in the activities of various companies from 1991 to the present. The aim of the article is to study the evolution of the use of blockchain technologies in the practice of different companies. The research methodology includes the use of the historical method to study the main stages of development of blockchain technologies and the study of blockchain use practices by different companies. The relationship between the stages of evolution and Tiers of Blockchain has been established: 2008-2013 (Blockchain 1.0); 2013-2015 (Blockchain 2.0); 2015-2018 (Blockchain 3.0); From 2018 to now (Generation X). The main types of blockchain (public blockchains; private blockchains; semi-private blockchains; sidechains; permissioned; distributed ledger; shared ledger; fully private of proprietary blockchains; tokenized blockchains; tokenless blockchains) are systematized. Peculiarities of practical implementation of blockchain technologies in the activity of companies of different sectors of the economy are studied. A SWOT-analysis was conducted, which revealed that blockchain technologies will undoubtedly continue to develop, affecting many industries, including public administration, retail, information technology, travel, health, education, agriculture and entertainment. One of the ways to improve the use of blockchain technologies should be: increasing the confidentiality of operations; scaling of chains of blocks; establishing compatibility between different blockchain systems; strengthening the security of blockchain operations; individual approach to the use of blockchain technologies.

Keywords: blockchain technology; tiers of blockchain; types of blockchain; company.

JEL Classification: C80; D74; E44; G30

Formulas: 0; **fig.:** 3; **tabl.:** 2; **bibl.:** 25

Introduction. The modern world is impossible to imagine without information technology, which actively accompanies our whole life. Unfortunately, along with their development, there are technologies that can use information about you for their own purposes. Blockchain technologies have been developed to counter such operations. Blockchain technology is a "chain of blocks", where each block is unique and has a specific reference to the previous one, which provides great difficulty in changing and / or deleting data elements.

Blockchain technology is one of the greatest innovations of the 21st century, given the impact it has on various sectors of the economy, including medicine, logistics, financial calculations, education, public administration and other areas.

Literature review. According to S. Makridakis, A. Polemitis, G. Giaglis and S. Louca (2018), due to the significant number of benefits that blockchain can bring to each industry, its level of importance is compared with the role of the Internet in the early 1990s [1]. Researchers of the blockchain claimed that it was actively used in various fields. So, K. Fanning & D. P. Centers (2016), I. Eyal (2017), A. Simpson (2018) and others studied the use of blockchain in the financial sphere [2-4]. A. Reyna, C. Martín, J. Chen, E. Soler and M. Díaz (2018), S.-C. Cha, J.-F. Chen, C. Su and K.-H. Yeh (2018), K. Yeow, A. Gani, R. W. Ahmad, J. J. P. C. Rodrigues and K.

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The rapid growth of Blockchain technology in recent years has opened up many gaps and directions for further research. However, in our opinion, it is necessary to study the study of effective practices of using blockchain technologies by companies in various industries.

Aims. The aim of the article is to study the evolution of the use of blockchain technologies in the practice of different companies.

Methodology. The research methodology includes the use of the historical method to study the main stages of development of blockchain technologies and the study of blockchain use practices by different companies.

Results. We propose to begin the study of the practice of using blockchain technology by studying the main stages of its development (Fig. 1).

Throughout these five years, there was a growing interest in using blockchain for applications other than cyberrcurrency. This trend continues into 2021 as governments and enterprises look to blockchain to handle a variety of use cases. This includes voting, real estate, fitness tracking, intellectual rights, the internet of things and vaccine distribution.

Each of the described stages of development of blockchain technologies is associated with Tiers of Blockchain (table 1).

Table 1. The ratio of the main stages of development of blockchain technology and Tiers of Blockchain

Periods	Tiers of Blockchain	Description
2008-2013	Blockchain 1.0	This Blockchain is basically used for cryptocurrencies and it was introduced with the invention of bitcoin. All the alternative coins as well as bitcoin fall into this tier of blockchain. It also includes core applications as well.
2013-2015	Blockchain 2.0	Blockchain 2.0 is used in financial services and industries which includes financial assets, options, swaps and bonds etc. Smart Contracts was first introduced in Blockchain 2.0 that can be defined as the way to verify if the products and services are sent by the supplier during a transaction process between two parties.
2015-2018	Blockchain 3.0	Blockchain 3.0 offers more security as compared to Blockchain 1.0 and 2.0 and it is highly scalable and adaptable and provides sustainability. It is used in various industries such as arts, health, justice, media and in many government institutions.
From 2018 to now	Generation X	This vision the concept of singularity where this blockchain service will be available for anyone. This blockchain will be open to all and would be operated by autonomous agents

Source: systematized by the author on the basis [16-19]

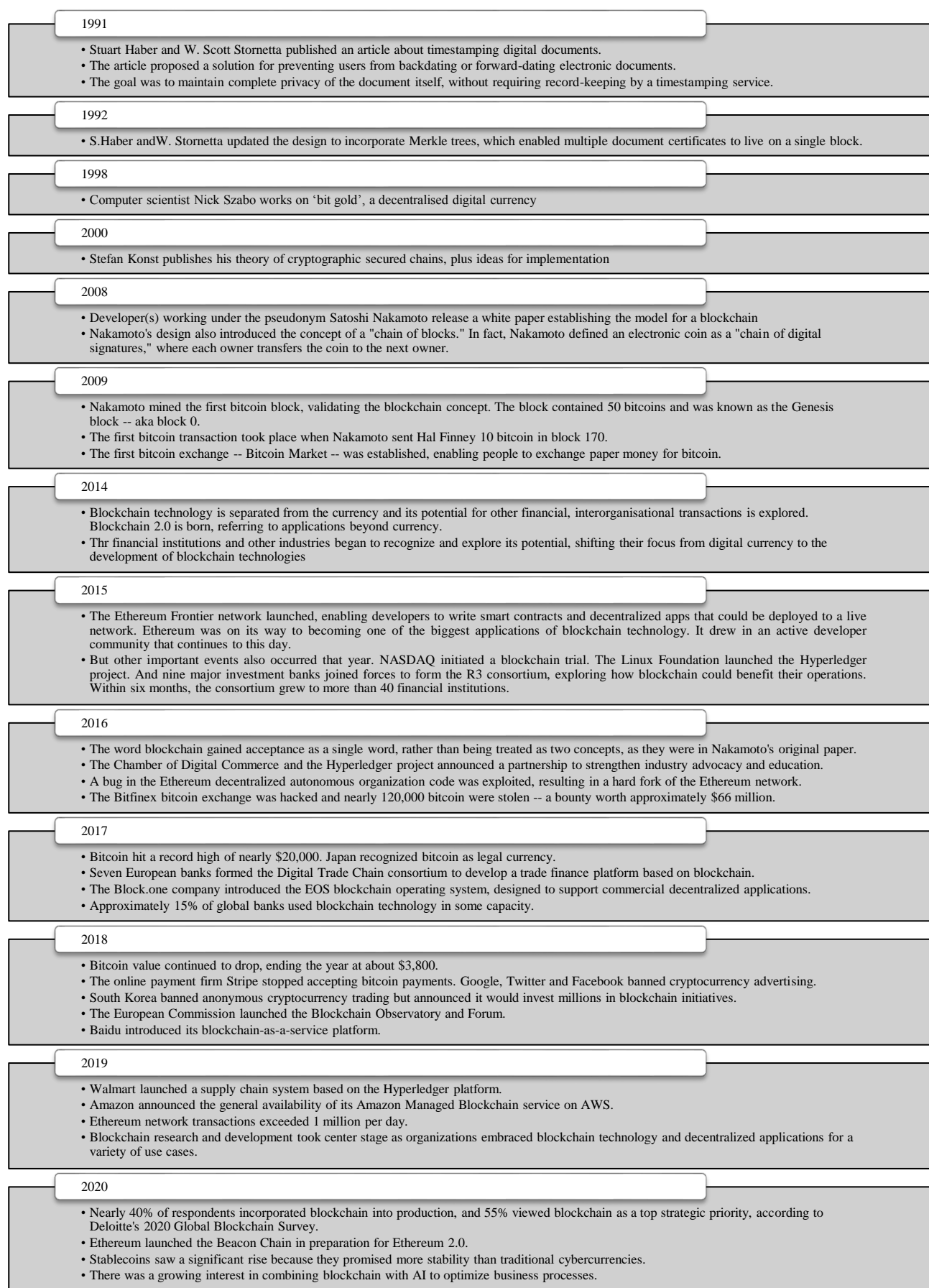


Figure 1. The main stages of development of blockchain technologies

Source: systematized by the author on the basis [16-26]

The most scholars distinguish three main types of blockchain: public blockchain, permissioned blockchain, private blockchain [16-18, 20-23]. However, Blockchain has evolved greatly in the last few years and based on its different attributes, they can be divided into multiple types.

The most complete classification of blockchain types is given by Simanta Shekhar Sarmah (2020) [19]:

1. *Public Blockchains*. Public blockchains are open to the public and any individual can involve in the decision-making process by becoming a node, but users may or may not be benefited for their involvement in the decision-making process. No one in the network has ownership of the ledgers and are publicly open to anyone participated in the network. The users in the blockchain use a distributed consensus mechanism to reach on a decision and maintain a copy of the ledger on their local nodes.

2. *Private Blockchains*. These types of blockchains are not open to the public and are open to only a group of people or organizations and the ledger is shared to its participated members only.

3. *Semi-private Blockchains*. In a semi-private blockchain, some part of the blockchain is private and controlled by a group or organizations and the rest is open to the public for anyone to participate.

4. *Sidechains*. These blockchains are also known as pegged sidechains where coins can be moved from blockchain to another blockchain. There are two types of sidechains naming one-way pegged sidechain and two-way pegged sidechain. One-way pegged sidechain allows movement from one sidechain to another whereas two-way pegged sidechain allows movement on both sides of two sidechain.

5. *Permissioned*. Ledger In this type of blockchain, the participants are known and already trusted. In permissioned ledger, an agreement protocol is used to maintain a shared version of the truth rather than a consensus mechanism.

6. *Distributed Ledger*. In a distributed ledger blockchain, the ledger is distributed among all the participants in the blockchain and it can spread across multiple organizations. In distributed ledger, records are stored contiguously instead sorted block and they can be both private or public.

7. *Shared Ledger*. Shared ledger can be an application or a database that is shared by public or an organization.

8. *Fully Private of Proprietary Blockchains*. These types of Blockchains are not a part of any mainstream applications and differ the idea of decentralization. These type of blockchains come in handy when it is required to shared data within an organization and provide authenticity of the data. Government organizations use private of proprietary Blockchains to share data between various departments.

9. *Tokenized Blockchains*. These are standard blockchains which generate cryptocurrencies through consensus process using mining or initial distribution.

10. *Tokenless Blockchains*. These blockchains are not real blockchains as they do not have the ability to transfer values, but they can be useful when it is not required to transfer value between nodes and there is only the need to transfer data among already trusted parties.

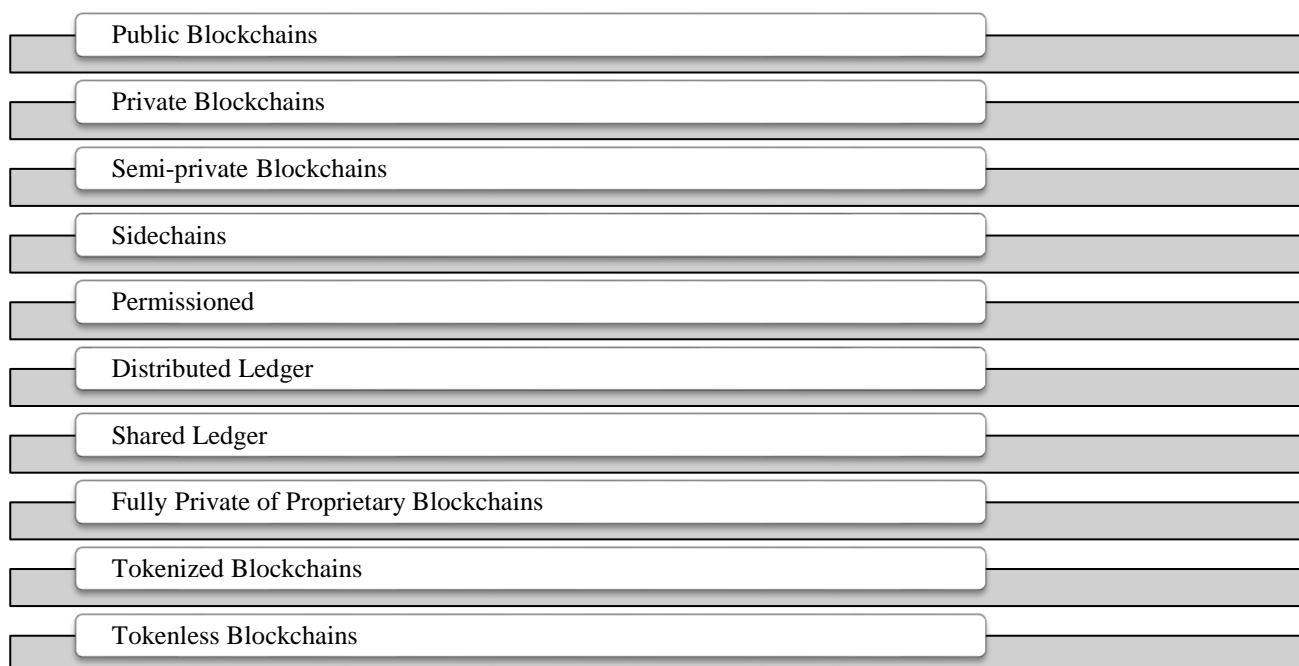


Figure 2. Classification of the main types of blockchains by Simanta Shekhar Sarmah

Source: systematized by the author [19]

Blockchain's transparent and decentralized platform has become attractive to companies in many industries that tend to use blockchain for a variety of business purposes. The list of companies that have implemented blockchain technologies in their activities is shown in Table 2.

Banking and payment systems have begun to use the blockchain to make their transactions more efficient and secure. The use of blockchain technologies in financial calculations allows you to efficiently and securely transfer funds using decentralization technology.

Blockchain is also becoming increasingly popular in the healthcare industry, as it is able to restore lost trust between clients and healthcare facilities. With the help of the blockchain, authorization and identification of patients has become easier, and fraud with prescriptions and medical data, as well as the loss of records can now be avoided.

Thanks to the blockchain's ability to efficiently store and verify documents, the legal industry has begun to use the blockchain to securely verify records and documents. Blockchain can significantly reduce litigation and battles by providing an authentic means of verifying and validating legal documents.

Industries such as Insurance, Education, Private transport and Ride sharing, government and public benefits, retail, real estate etc. have started implementing blockchain to reduce costs, to increase transparency and to build trust.

Blockchain technologies have also begun to be used in the public sector, for example during elections. Rigging of election results can be avoided with an effective use of blockchain. Voter registration and validation can be done using blockchain and ensure the legitimacy of votes by creating a publicly available ledger of recorded votes.

Table 2. List of Enterprises Implementing Blockchain

Company	Sector	Blockchain Solution
Ford	Auto	Leveraging blockchain technology to enhance the mobility technologies
Toyota	Auto Industry	Planning to use blockchain technology to enhance autonomous driving technology
HSBC	Bank	Using blockchain technology to fully digitize their record keeping and increasing the security of vault system
Anheuser Busch InBev	Beverage	Using blockchain for their beverage supply chain and increasing transparency
Alibaba	e-commerce	Using blockchain technology to track luxury goods in its e-commerce platforms
Tencent	e-commerce/retail	Solution for verifying invoice authenticity and for ensuring tax compliance
UnitedHealthcare	Healthcare	Using blockchain technology to improve doctors directories to enable accurate insurance claim fillings
Metlife	Healthcare	Using blockchain technology for storing patients medical records for insurance purposes
AIA Group	Insurance	Launched the first of its kind bancassurance for sharing policy data
Prudential	Insurance	Unveils a blockchain powered trading platform for small and medium-sized enterprises
BHP Billiton	Mining	Leveraging blockchain technology for supply chain management
Shell	Oil	Planning to use blockchain for crude oil trading to get rid of corruption
Pfizer	Pharmaceutical	Tracking records and managing the digital inventory of pharmaceutical products
JLL	Real Estate	Exploring blockchain for Spanish commercial real estate valuation
Walmart	Retail	Using blockchain technology to track product movement from farmers to stores
Nestle	Retail	Using blockchain technology in supply management to track baby food products
Baidu	Search giant	Using blockchain to enhance intellectual rights management
Maersk	Shipping	Blockchain system for tracking movement of shipments between ports
UPS	Shipping	Blockchain powered logistics monitoring and management solution
FedEx	Shipping	Working on blockchain solution for settling customer disputes
Samsung	Tech	Intends to use blockchain technology to enhance supply chain management when it comes to electronics shipments
Facebook	Tech	Exploring the use of blockchain to enhance data security and users privacy
Apple	Tech	Patented blockchain technology for time stamping data
Google	Tech	Exploring the use of blockchain technology to enhance cloud service security and for data protection
British Airways	Travel Industry	Implementing blockchain to manage flight data as well as verifying traveler's identity

Source: systematized by the author [21]

SWOT-analysis of the practical use of blockchain in companies has shown that this technology has sustainable prospects.

Discussion. Blockchain technology will no doubt continue to evolve, affecting many industries, including government, retail, information technology, travel, healthcare, education, agriculture and entertainment.

One of the ways to improve the use of blockchain technologies should be:

- increasing the confidentiality of operations;
- scaling of chains of blocks;
- establishing compatibility between different blockchain systems;
- strengthening the security of blockchain operations;
- individual approach to the use of blockchain technologies.

Based on the scientific research on the practical use of blockchain in various fields SWOT-analysis was performed (Fig. 3).

<p style="text-align: center;">Strengths</p> <ul style="list-style-type: none"> - One of the biggest advantages of Blockchain is dissemination which allows a database to be shared without a central body or entity. - Users are empowered to control their information and transaction. - Blockchains provide complete, consistent and up to date data without accuracy. - Since blockchain does not have any central point of failure due to its decentralized network, it can withstand any security attack. - As no central authority is required, users can be assured that a transaction will be executed as protocol commands. 	<p style="text-align: center;">Weaknesses</p> <ul style="list-style-type: none"> - Blockchains are expensive and resource intensive as every node in the blockchain repeats a task to reach consensus. - In blockchain, users verify a transaction based on certificate authentication, land titles, cryptocurrencies, etc. But there is no way to reverse a transaction even if both the parties involved in the transaction are ready to do so or if the transaction go sour due to some reason. - One of the disadvantage of blockchain is its complexity and complicity to understand for a general human being. Blockchain is full of complex concepts and processes which is not yet refined so that common man can easily digest and consume the information on how to use it and hence it's not yet ready for mainstream use.
<p style="text-align: center;">Possibilities</p> <ul style="list-style-type: none"> - Blockchains provide transparency and immutability to the transactions as all the transactions cannot be altered or deleted. - Blockchain's peer-to-peer connections help to identify fraud activities in the network and distributed consensus. - By using blockchain, sensitive business data can be protected using end to end encryption. - Users in a blockchain can easily trace the history of any transaction as all the transactions a blockchain are digitally stamped. - Blockchain are resilient to cyber-attacks due to peer-to-peer nature and network would operate even when some of the nodes are offline or under security attack. - Multiple copies of the data can be stored in the blockchain and hence users can avoid storing sensitive data in one place 	<p style="text-align: center;">Threats</p> <ul style="list-style-type: none"> - A transaction in the blockchain is settled only when all the nodes in the blockchain successfully verifies the transaction. This could be a very slow process as the block inserted needs to be verified to mark the transaction as authentic by all the nodes. - The size of blockchain grows with an addition of a block. A node needs to store the entire history of the blockchain to be a participant in validating transactions, causing the blockchain to grow continuously. - In blockchain, all the transaction related information is available publicly which can become a great liability when distributed ledgers are used in sensitive environments such as dealing with government data or patients medical data. The ledgers need to be altered and access should be limited with proper clearance only.

Figure 3. SWOT-analysis of the practical use of blockchain in companies

Source: developed by the author [20-25]

Conclusions. According to the results of the study, the following conclusions can be drawn:

1. The article examines the main stages of evolution of blockchain technologies in the activities of various companies from 1991 to the present.
2. The relationship between the stages of evolution and Tiers of Blockchain has been established: 2008-2013 (Blockchain 1.0); 2013-2015 (Blockchain 2.0); 2015-2018 (Blockchain 3.0); From 2018 to now (Generation X).
3. The main types of blockchain (public blockchains; private blockchains; semi-private blockchains; sidechains; permissioned; distributed ledger; shared ledger; fully private of proprietary blockchains; tokenized blockchains; tokenless blockchains) are systematized.
4. Peculiarities of practical implementation of blockchain technologies in the activity of companies of different sectors of the economy are studied. A SWOT-analysis was conducted, which revealed that blockchain technologies will

undoubtedly continue to develop, affecting many industries, including public administration, retail, information technology, travel, health, education, agriculture and entertainment.

5. One of the ways to improve the use of blockchain technologies should be: increasing the confidentiality of operations; scaling of chains of blocks; establishing compatibility between different blockchain systems; strengthening the security of blockchain operations; individual approach to the use of blockchain technologies.

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IMPROVING THE MECHANISM OF FISCAL POLICY IN UKRAINE TO ENSURE SUSTAINABLE DEVELOPMENT UNDER A STATE OF EMERGENCY

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Abstract. The article examines the fiscal function of the state, which is implemented through its fiscal policy. The aim of the article is to define a comprehensive approach to the interpretation of the essence of the category of "fiscal policy" and improve the mechanism of fiscal policy during the crisis in Ukraine. In the course of the research general and special methods and techniques of cognition were used. The methods of analysis, synthesis, grouping, abstraction, generalization, induction and deduction are used in the work. The genesis of the phrase "fiscal policy" is studied and the main approaches to defining the essence of the category "fiscal policy" are systematized. Approaches to defining the category of "fiscal policy" are presented: comprehensive, financial, expenditure. State budget revenues are classified: tax, non-tax, from financial transactions, transfers. The main subjects and objects of fiscal policy implementation in Ukraine are systematized. The main types of fiscal policy are generalized: stimulating, restraining, stabilizing. The directions of improvement of the mechanism of fiscal policy in Ukraine are offered.

Keywords: fiscal policy; state budget; income; expenses.

JEL Classification: D33, E62, H11, H32

Formulas: 0; **fig.:** 7; **tabl.:** 1; **bibl.:** 18

Introduction. The fiscal function of the state is realized through its fiscal policy. The latter is mostly associated by researchers with the activities of the country in the face of state or local authorities aimed at managing revenues and expenditures of budgets at various levels. However, this understanding of it, in our opinion, is quite contradictory and somewhat narrows the scope of its tasks.

At the same time, the legislation does not single out fiscal policy among the types of economic policy, and its fiscal function is not noted among the functions performed by the state.

At the same time, both the government and current scholars consider fiscal policy as an unconditional phenomenon. For example, in Ukraine, the central executive body of the State Fiscal Service of Ukraine (SFSU) was even established by law, with the definition of the purpose of its activities and the range of tasks, but without outlining the essence of fiscal policy. This has led to some contradictions and confusion both among the scientific community and in the current regulations.

In turn, a comprehensive study of the functions performed by the state, allows you to assess the actual state of affairs in various fields: social, economic, tax, political, etc., as well as the nature of government.

Literature review. Since Ukraine gained independence, several stages have already taken place, characterized by various types of crisis (1991-1994, 1998-1999, 2008-2009, 2014-2015, from 2020 to the present).

Among the main shortcomings of fiscal policy of those times are mostly the following: the absence of fiscal rules; inefficient use of funds, which led to a constant budget deficit; excessively burdensome tax system, etc. The Government used certain measures to establish the situation in the state, reduce its debt, reduce fiscal risks, transform the management system of public finances, change the tax system, etc.

Ukraine is currently experiencing its fifth, most severe global crisis since the Great Depression, caused by the global COVID-19 pandemic, followed by a state of war imposed by Russia. Thus, today the issues of development, implementation and effectiveness of fiscal policy are becoming especially important and relevant.

The genesis of the phrase "fiscal policy" has Latin roots:

- "fiscus" - "basket" or "money box"), and in the modern sense - the state treasury;
- "fiscalis" - "state";
- "politikos" - "state (civil or public) activities".

Interesting is the fact that Peter I introduced the public office of "fiscal", whose responsibilities included secret surveillance of the activities (mostly financial) of government agencies and officials.

Further in the work we will consider the understanding of the essence of the studied category by modern scientists. The results of the study are systematized and summarized in table. 1.

Aims. The article is aimed at defining an integrated approach to interpreting the essence of the category "fiscal policy" and improving the mechanism of fiscal policy during the crisis state of Ukraine.

Methods. In the course of the study, general scientific and special methods and methods of cognition are applied. The paper uses methods of analysis, synthesis, grouping, abstraction, generalization, induction and deduction.

Results. Thus, according to the results of the review of literature sources, it can be stated that there are a large number of definitions for understanding the term "fiscal policy". The opinion of A. Blainder [2], who based on the results of the analysis concluded that all the diversity of existing definitions of this category in general can be divided into the existence of three approaches, the characteristics of which are illustrated in Fig. 1.

The author of [18] emphasizes that a number of scholars share the view that "the essence of fiscal policy is to implement government activities in the field of public revenue and expenditure management."

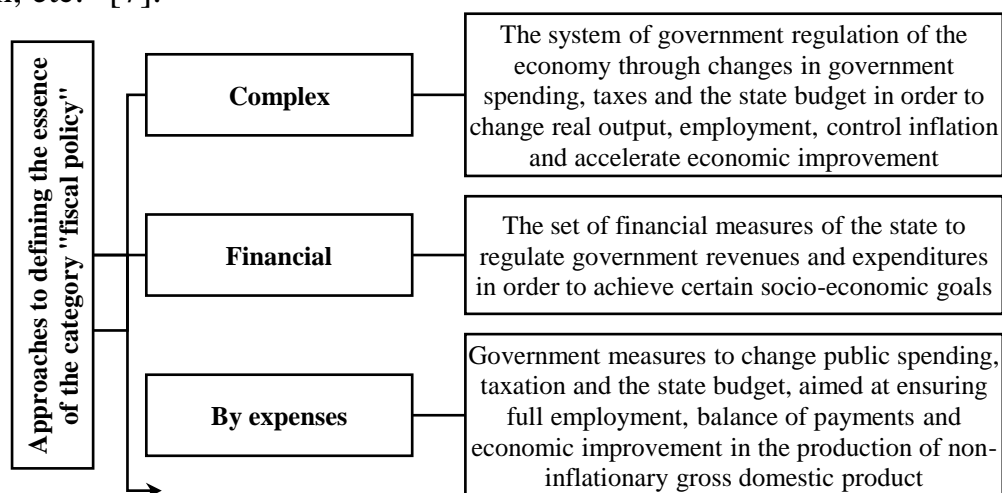
At the same time, there are works in which researchers use fiscal and tax policy as synonyms, which is not correct enough. We share the opinion of Duliba E. as to the fact that such identification of these concepts somewhat limits the scope of fiscal policy, reducing it to "a set of measures aimed at regulating relations arising in the field of taxes and fees, rather than regulating revenues and expenditures of the state budget" [7].

Table 1. Approaches to determining the essence of the category "fiscal policy"

Author	Category Entity
Banton D., Taranhul V. [1, p. 30–35]	Fiscal policy is a set of financial measures of the state to form the revenue side of the budget and the tax system, determine the size and structure of public spending and transfer payments.
Morshch Y. [12, p. 10–11]	A component of the state's financial policy aimed at mobilizing financial resources at the local level with synergistic interaction of budget, tax and loan policies in order to intensify economic development.
Osovska G., Yushkevych O., Zavatskyi J. [8]	A set of financial measures of the state related to the regulation of government expenditures and profits to achieve certain socio-economic goals (crisis regulation, ensuring high employment, combating inflation, etc.).
Hatsalov M. [4]	Government measures to collect taxes and spend state budget funds to regulate the level of business activity.
Honcharov S., Kushnir N. [5]	Government policy on taxation, public spending, the state budget aimed at eliminating inflationary processes, increasing employment.
Kalinina I. [11]	A set of measures by which the state influences the economy through the structure of sources of state revenues and areas of public spending by changing the type and rates of taxes, fees, deductions, other mandatory contributions to the budget, state extra-budgetary funds, as well as by determining the size and establishment of mandatory public expenditures, including content, payments, subsidies, transfers and subsidies, the formation of targeted programs at all levels of public administration (federal, regional and local), aimed at improving the efficiency of the economy and stimulating economic growth.
Rakul O. [15]	A set of measures carried out by public authorities on the formation and implementation of revenue and expenditure components of the state budget in order to effectively perform their functions by the state.
Duliba E. [7]	Purposeful activities of the state in the field of regulation of revenues and expenditures of the state budget, which includes tax policy, budget policy, policy on non-tax budget revenues, policy on budget revenues from capital transactions, transfer policy, targeted funds policy and policies on state budget expenditures.

Source: develop by author

In addition, the author of [7] rightly notes that "consideration of fiscal policy in terms of tax diverts attention from a number of measures aimed at regulating relations arising during the preparation, consideration and approval of budgets, as well as control and responsibility for their implementation, compliance with budget legislation, etc." [7].

**Figure 1. Approaches to determining the category "fiscal policy"**

Source: develop by author based on [2]

This thesis is correct, because it is confirmed by the requirements of Art. 9 of the Budget Code of Ukraine [3] regarding the fact that the most important factors in filling the state budget along with tax are non-tax revenues, which is detailed in Fig.2.

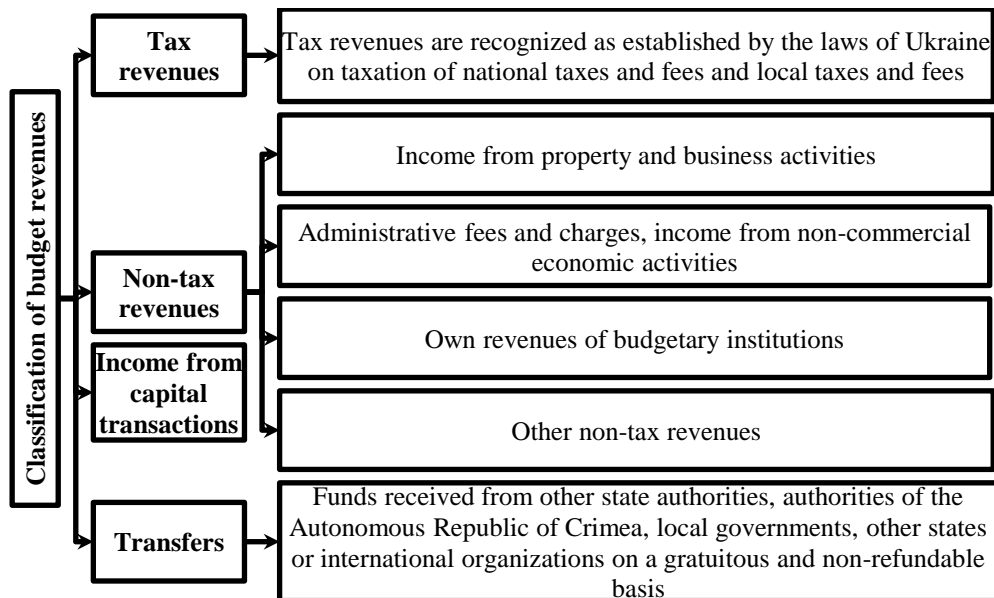


Figure 2. Factors of filling the state budget

Source: develop by author based on [3]

The subjects of the implementation of fiscal policy are public authorities and other public authorities, which are empowered to form it, determine the strategy and directions of development. Their composition is clearly shown in Fig. 3.

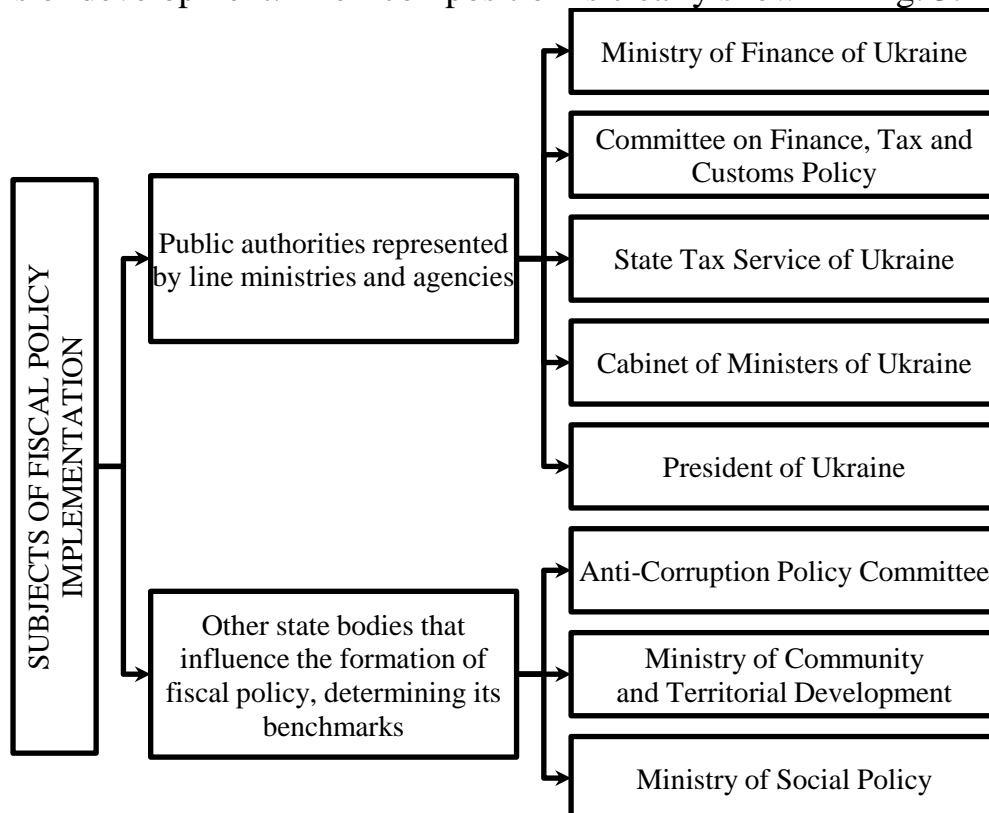


Figure 3. Subjects of fiscal policy implementation in Ukraine

Source: develop by author

Thus, the quality of the formation of state fiscal policy is influenced by the level of cohesion of efforts of the legislature, the executive and the President of Ukraine.

It should be noted that the main objectives of fiscal policy, as the most important instrument of the state, are the following:

- 1) stabilization of aggregate demand and GDP;
- 2) maintaining macroeconomic balance, which is possible only with the efficient use of all resources in the economy.

As objects of fiscal policy, researchers mostly consider the creation and implementation of effective tax and budget systems, their mechanism and tools that allow both to accumulate financial resources and allocate them to the development goals set by the strategy [15; 18]. The composition of the objects of fiscal policy in Ukraine is shown in Fig. 4.

According to the results of the study, we summarize that the content of fiscal policy is the implementation of its subjects of activity to manage the accumulation of state revenues and regulate government expenditures. At the same time, as the authors rightly point out [17], "fiscal policy should not be aimed at reducing budget expenditures at any cost, but to achieve such amounts that are sufficiently covered by the amount of mobilized revenues" [17].

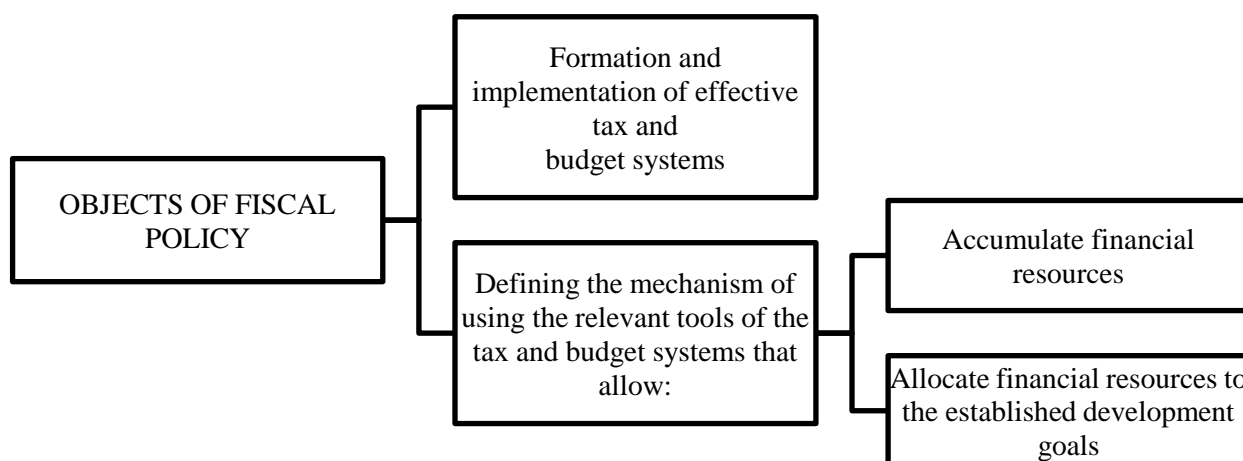


Figure 4. Objects of fiscal policy in Ukraine

Source: develop by author

Note that the use of a certain set of tools (budget, tax, etc.) may affect the development of certain sectors of the economy, reformatting the structure of the national economy, inflation, encouraging the development of national goods, employment and unemployment and more. At the same time, fiscal policy can affect the financial space in different ways, due to the cyclical nature of the economy.

The opinion of the authors of the work deserves attention [10, p. 120], who, as a result of a careful analysis of the category "fiscal space" identified the existence of four fundamental positions to its understanding by scientists: target, quantitative, resource, cost and result. This allowed researchers [10] to identify the strengths and weaknesses of each approach, organize them and formulate the following interpretation of the term, which, in our opinion, comprehensively characterizes it: "fiscal space is the amount of financial resources generated by the state policy,

through the mobilization of revenues to state and local budgets, rationalization of budget expenditures, the implementation of government borrowing within budget constraints, the formation of funds to ensure the implementation of state functions and for its socio-economic development [10, p. 120].

Given the impact of fiscal policy on the fiscal space, scientists distinguish its various types, which is clearly shown in Figure 5.

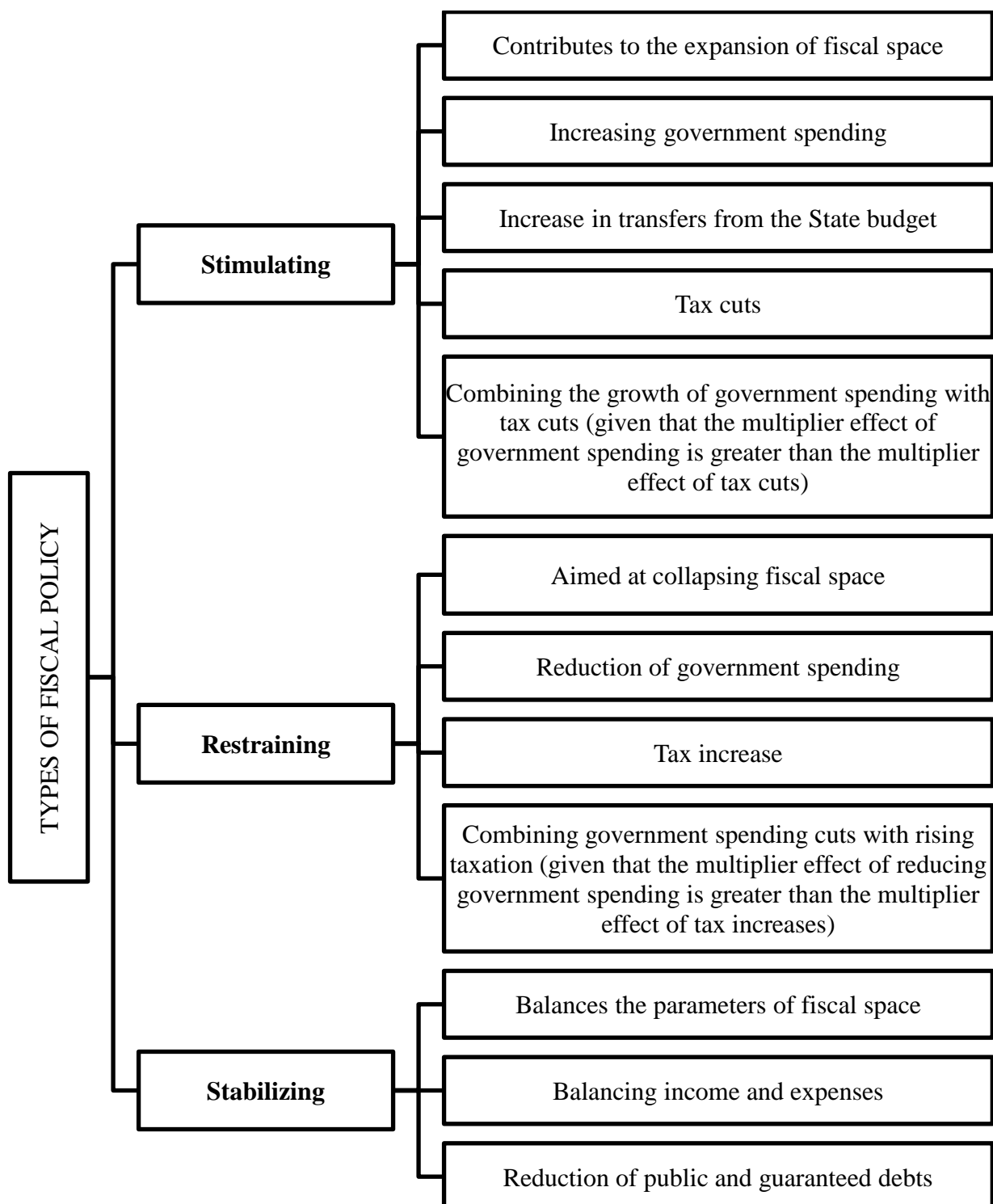


Figure 5. Types of fiscal policy

Source: develop by authors based on [12; 1; 18]

It should be noted that in practice fiscal policy can be implemented at two levels: state and regional.

The mechanism of fiscal policy outlined in Figure 5 is typical for the state level. From the above data it can be stated that it can be:

- 1) stabilization (or neutral), aimed at balancing revenues and expenditures of the state budget, debt reduction, etc.;
- 2) tough (or restraining), as it is mostly associated with a reduction in government spending and an increase in taxes;
- 3) flexible (or stimulating), aimed at increasing government spending and reducing taxes.

The chosen type of state fiscal policy is laid down in the requirements and provisions of regulations aimed at its regulation.

Thus, according to the results of the review of literature sources, we can conclude that for the most part scholars' understanding of the category of "fiscal policy" is as follows:

- 1) is identified with the "budget policy" and is considered as a government activity on the management of state revenues and expenditures;
- 2) identifies with the "tax policy", narrowing the scope of its activities to regulate the tax burden of economic entities and relations arising in the field of collection of taxes and fees;
- 3) is seen as a symbiosis of "fiscal policy".

In our opinion, the consideration of fiscal policy from the point of view of the approaches outlined above is not correct enough, and its understanding by the scientific community is largely due to the fact that at the legislative level the category of "fiscal policy" is not defined. The main directions of economic policy of Ukraine are defined by Art. 10 of the Commercial Code of Ukraine [6] and is presented in Fig. 6.



Figure 6. Directions of economic policy of Ukraine

Source: develop by author based on [6]

Thus, we emphasize that among the areas of economic policy of Ukraine, defined by Art. 10 of the Commercial Code of Ukraine [6], fiscal policy is not separated.

At the same time, a central executive body, the State Fiscal Service of Ukraine (SFSU), was established in the country in 2014. Its activities were regulated by the requirements of Regulation 36236 [14], which also did not define the essence of the concept of "fiscal policy", but found that the SFSU "implements state tax policy, state policy in the field of state customs, state policy on single contribution administration. compulsory state social insurance, state policy in the field of combating offenses in the application of tax and customs legislation, as well as legislation on the payment of a single contribution "[14].

Thus, we conclude that the legislator considers fiscal policy more broadly than tax and budget policy.

Now, on November 24, 2021, the Cabinet of Ministers issued Order №1493-r "On the Commencement of the Economic Security Bureau". With the start of this bureau, the SFSU should be liquidated. The Law of Ukraine №1150-IX [9], which was adopted to regulate the activities of the Bureau of Economic Security, the essence of fiscal policy is also not defined.

Given that the category of "fiscal policy" is quite common in both legislative and scientific spheres, we consider it appropriate to clarify the definition of this category and use it in the following interpretation: "fiscal policy is a complex concept that includes public administration policy (local) debt, as well as budget, tax, customs and social policies with their inherent goals, objectives and methods by which state (local) authorities implement measures aimed at effective formation of budget revenues, their distribution in accordance with the balance of budget expenditures appropriate level, resolving possible contradictions (in the tax, budget, customs, social, or debt spheres) and avoiding possible imbalances by making the necessary changes to the relevant tools of fiscal policy components.

Based on a comprehensive approach to the interpretation of the essence of the category "fiscal policy", we will further outline its mechanism with its inherent features in the outlined direction (Fig. 7).

It should also be noted that in the scientific literature a fairly common category is "fiscal function of the state." At the same time, at the legislative level, among other functions of the state, this function is not separated and, accordingly, is not reflected in regulations. In general, the list of functions performed by the state is quite extensive and debatable, because researchers offer different classification features.

It should be emphasized that the requirements of the Tax Code of Ukraine [13] among the principles on which tax legislation is based, the principle of "fiscal sufficiency". Under this category, the legislator means "the establishment of taxes and fees, taking into account the need to achieve a balance of budget expenditures with its revenues" [13]. But the principle of fiscal sufficiency cannot be equated with the fiscal function of the state, as researchers often do.

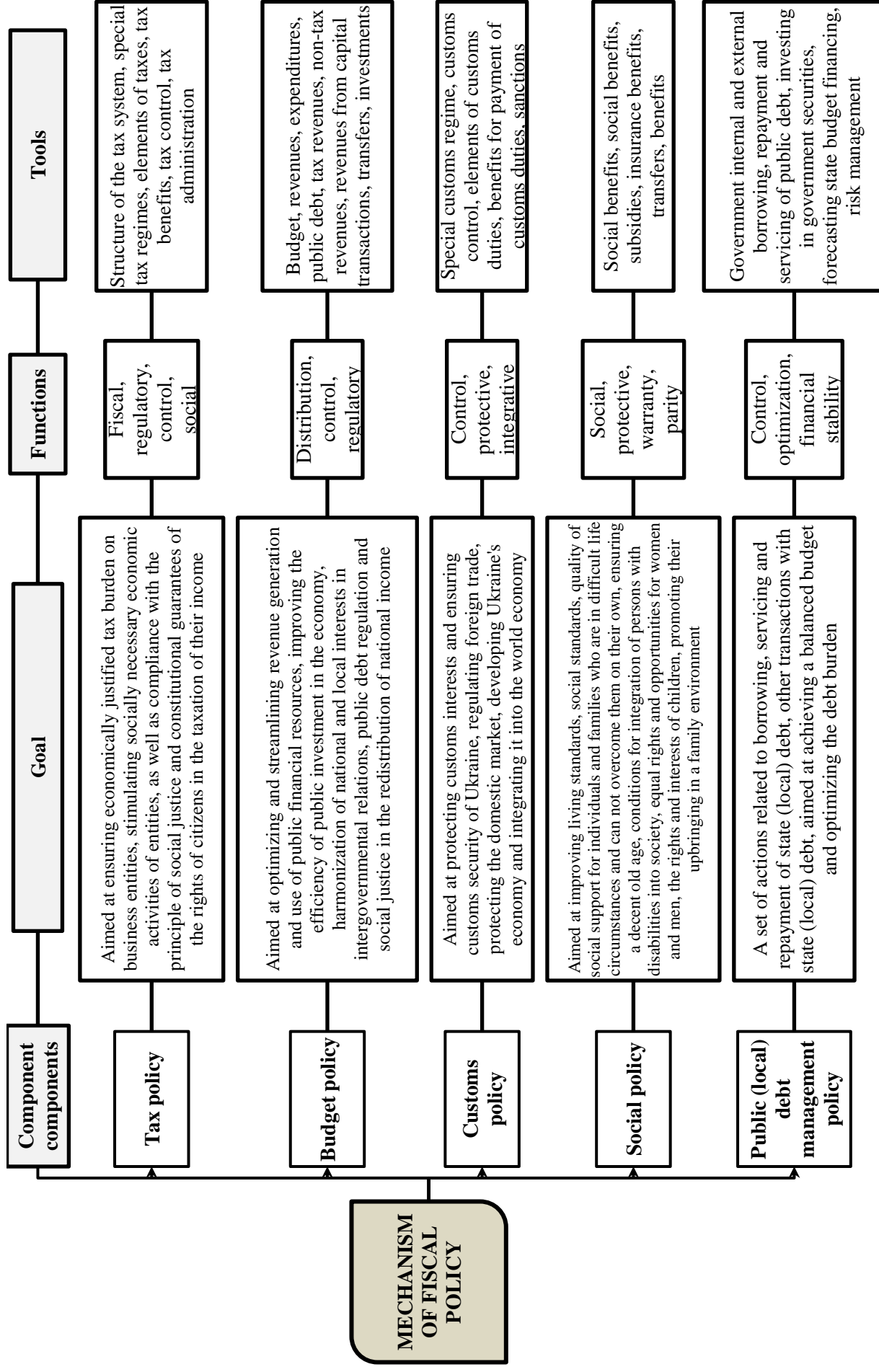


Figure 7. Improving the mechanism of fiscal policy in Ukraine Source: developed by the authors

Discussion. The author's opinion [16] seems to be correct that «in the legal literature the fiscal function is not singled out as an independent function of the state, it is often interpreted as part of the economic function or considered as a function of taxation and financial control that serves other functions» [16, p. 79].

At the same time, today the essence of the fiscal function of the state is not only to fill the state budget, but also to distribute funds between budgets of different levels and their use.

According to the results of a thorough study, the author of [7] identified the features that are most characteristic of the fiscal function of the state. Duliba EV, who offered his own understanding of this category, which, in our opinion, most deeply among the existing definitions reflects its essence, namely: "the fiscal function of the state is one of the main socially significant areas of state activity political in nature and is to create the prerequisites for effective fiscal activity using such basic instruments as government revenues and public expenditures "[7].

Conclusions. According to the results of the study, the following conclusions were made:

1. The article examines the fiscal function of the state, which is implemented through its fiscal policy.

2. The genesis of the phrase "fiscal policy" is studied and the main approaches to defining the essence of the category "fiscal policy" are systematized. Approaches to defining the category of "fiscal policy" are presented: comprehensive, financial, expenditure. State budget revenues are classified: tax, non-tax, from financial transactions, transfers.

3. The main subjects and objects of fiscal policy implementation in Ukraine are systematized. The main types of fiscal policy are generalized: stimulating, restraining, stabilizing. The directions of improvement of the mechanism of fiscal policy in Ukraine are offered.

Author contributions. The authors contributed equally.

Disclosure statement. The authors do not have any conflict of interest.

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CHAPTER 3

MODERN MANAGEMENT TECHNOLOGIES

THE INFLUENCE OF MANAGERS' MARKETING CAPABILITIES AND INTERNATIONAL EXPERIENCE ON SMES' EXPORT PERFORMANCE: THE MEDIATING EFFECTS OF EXPORT COMMITMENT

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Abstract. *Small and Medium-sized Enterprises (SMEs) increasingly need to develop their business by entering international markets. SME's managers' international experience as a basis for decision-making, their commitment to exports, striving to obtain information from new markets and the optimal use of resources can help raise these companies' productivity in international activities and improve their export performance. The purpose of this study was to look at the direct and indirect effects of SMEs managers' marketing capabilities and international experience on SMEs' export performance, as well as the mediating roles of managers' export commitment. The interested population of this study included senior, marketing, and sales managers of 39 SMEs in Iran, of which 244 people participated in this study. The data collection tool was a questionnaire whose validity was confirmed by experts and its reliability was confirmed by calculating Cronbach's alpha. Data analysis was performed by SPSS-22 software and research hypothesis were tested by Structural Equation Modelling (SEM) technique using AMOS software. According to the findings, managers' marketing capabilities have a significant and positive impact on their export commitment and performance, and managers' international experience has a strong and positive effect on their export commitment and performance. Meanwhile, in the indirect relation between managers' marketing capabilities and international experience and export performance, managers' commitment plays a mediating role.*

Keywords: *export performance; international experience; marketing capabilities; internationalization; commitment; small and medium sized enterprises.*

JEL Classification: *C40, F19, O11*

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Introduction. SMEs significantly contribute to the economic growth of several countries by increasing their share in GDP, reducing unemployment rate, and improving people's welfare (Blankson, Cowan, & Darley, 2017). During the last decades, SMEs have had charming chances to enter international markets owing to the depletion of business hedges, high-tech communication facilities, and the expansion in mutual governmental agreements (Zaki, 2019). Effective decision-making is important for managers of companies operating in the markets. This means that they must consider the best way to implement performance enhancement strategies by targeting overseas customers (Yang and Gabrielsson, 2017). Exporting is known as the oldest form and the first foreign markets entry mode that SMEs managers think about when they are in the primary stage of their development (Leonidou et al., 2010). Export is a beneficial strategic option for the internationalisation of companies and concurrently, it is still the most popular way to enter foreign markets. Compared to other methods of direct entry into foreign markets; exporting resources involves less risk and cost (Leonidou et al., 2010) in

turn, provides companies with a high degree of flexibility and is a quick and cost-efficient way to quickly penetrate new foreign markets (Sousa et al., 2008). Lin and Ho (2019) are of the opinion that some companies can internationalise just through exports. Based on the resource-based view, export performance is understood as the outcome which managers expected from their company's capabilities (Ricciardi et al., 2018). Export performance refers to achieving the company's goals concerning exporting. Therefore, it can be said that this concept, considering a wide range of strategic and marketing goals, refers to the company's evaluation of its export activities. As a consequence, it is obvious that how export performance has been conceptualized and measured varies greatly in different kinds of literature (Citing Paula Monteiro et al., 2019).

Nowadays, the process of internationalisation is increasingly emphasised regarding managers' experience and commitment. Issues such as being the first to seize opportunities and learn about them through various tools enable companies to quickly become international, regardless of perceived distance from other potential countries (Calvo and Villarreal, 2019). Different decision-makers vary in their commitment concerning foreign markets and make use of different resources along with different capabilities such as knowledge, experience, and networks to facilitate internationalisation in specific ways (Lages et al., 2008). For instance, via the knowledge and experience of current and new decision-makers, communications, external resources such as access to various communities, and export promotion programs (Crick et al., 2020). The export market orientation enables the company to explore emerging opportunities and discover the competencies in the product market to promote export performance (Sundqvist et al., 2012). Additionally, for companies to have a sustainable competitive advantage and to perform better internationalisation, they must also develop capabilities that are appropriate for international market environments. SMEs should find niche markets, adapt themselves to these markets, and/or develop new products that are appropriate for exporting. Along with these marketing activities, exporters need to delineate pricing strategies, select proper distribution channels as well as set suitable promotional activities. An exporter is afforded all these through its marketing capabilities (citing Acikdilli et al, 2020). Recognition of the determinants of export performance and how companies are able to use their ability to be more productive in satisfying the consumers' demands and strengthen their international competitive advantages in comparison with their competitors has always been debated (Monteiro et al., 2019). Katsikeas et al. (2000), Leonidou et al. (2002), Sousa et al. (2008), Leonidou et al. (2010), Mysen (2013), and Chen et al. (2016) are scholars who have provided studies regarding the determinants of export performance.

Due to the expansion of SMEs in Iran, there is the ability and potential that in addition to meeting the demands of domestic markets, in various fields to seek to enter the markets of other countries. A large volume of Iran's exports and GDP is the sale of oil, gas, and minerals, and since these resources are non-refundable, it is necessary to pay special attention to the capabilities of manufacturing companies, so that this country can reap the benefits from the huge export revenues. This issue

requires the adoption of export-oriented policies and the need for SMEs to increase their marketing capabilities and identify target markets and the needs of their customers, as well as improve their experience and knowledge in the international arena that can effectively be present in foreign markets. However, the percentage of presence of SMEs in Iran in foreign countries and exports is limited and most of their focus is on the domestic market. Accordingly, it is necessary for these firms to find ways to develop their capabilities to have an effective role in the market of other countries.

Literature review. Export success is determined by the alignment between export strategies and the context of the marketing environment (Katsikeas et al., 2006). Moreover, some studies identify that export performance is affected by companies' marketing strategies (Chen et al., 2016). Consequently, it can be assumed a positive correlation between performance in international markets and adaptation of individuals, processes, programs, and performance to the needs and expectations of foreign consumers (citing Ngo-Thi-Ngoc et al., 2021). Capabilities must be dynamic in all markets, which means the firm must have the capability to renovate competencies to continually ensure consistency between the business and strategy environment. Recent studies have concentrated on dynamic capabilities as a sustainable resource of competitive advantage (Fernandes et al., 2017).

Most scholars are of the belief that managerial approaches and cognitions affect a company's exports (Sousa et al., 2008). Zou and Stan (1998), in their research, realise that managers' commitment to exports is remarkably associated with export Performance. In this sense, the theory of the internationalisation process suggests that the gradual acquisition of knowledge brings a greater commitment to exports and a superior Export Performance (Welch et al., 2016). Consequently, companies that commit more tangible and intangible resources to export activities are more successful in this company (Cavusgil and Zou, 1994). Leonidou et al. (1998), suggested a managerial features structure and their relationships with the tendency, aggressiveness, performance, and export development. Previous studies and literature demonstrate the manager's export experience as one of the most important determinants of export performance (Love et al., 2016). Evidence shows that SMEs witness a wide variety of issues that potentially lead to uncertainty and hedge to their export (Altintas et al., 2007). On the other hand, managers' export experience has been considered as an important and determining factor in reducing the level of these uncertainties in export processes and activities. By increasing exporting experience, companies are probably facing uncertainty during their exporting process. The theoretical explanation of this issue is that the relationship between manager's export experience and performance is mainly based on concepts such as learning and uncertainty (Forsgren, 2002). The more experienced export managers are, the more inclined they will be to export. Learning through export experience could help companies and their managers to develop their capabilities while enabling them to better understand foreign markets and come up with effective strategies for achieving high-level export performance (Johanson et al., 2009).

Recently, Love and Mariez (2019) state that all previous actions and activities abroad may have contributed to the continuation of the subsequent export activities of the respective companies, although partial and intermittent learning due to the scattered export pattern may affect this. In summary, export experience is an important ability that has shaped the positive attitude of decision-makers towards internationalisation, and this can lead to their commitment to foreign markets (citing Sraha et al., 2020). Sraha et al. (2020) in their research conducted at the level of international companies in Ghana with a business-to-business approach have concluded that the export experience has not a significant direct impact on export performance, but it has a significant and positive effect on commitment, and at the same time, there is a significant relationship between commitment and performance. Commitment fully mediates the relations between international experience and performance of exporting. Sinkovics et al. (2018) in their research conducted at the level of small and medium-sized companies active in the field of export in the United Kingdom have concluded that international experience and commitment have a striking and affirmative impression on export performance. Mahmoud et al. (2020) in a study conducted at 210 companies active in the field of export with a history of using social media in Ghana have found that the ability to market directly and with respect to the mediating role of trust and commitment has an impressive impact on export performance and there is a positive relationship between them. Machado et al. (2018) in their research conducted at the level of SMEs in Brazil have also concluded that the commitment to export has a significant and positive effect on the export performance of the company and in the research conducted by Ismail et al. (2017) performed at the level of SMEs in Malaysia also shows that commitment is directly related to export performance. Acikdilli et al. (2020) in their research conducted by companies active in the field of export in Turkey have concluded that marketing capabilities in the field of product development, pricing, distribution, and advertising have a significant and positive effect on export performance.

Export Performance. Export performance refers to the success or failure of companies in the field of domestic products and services sold in other countries. According to Cavusgil & Zou (1994), companies have started their export activities and actions to achieve specific goals, which can be strategic or economic. Companies' economic goals are associated with increased profits or sales, while strategic goals include indicators such as market diversity, improving the company's market share or the company's brand reputation (citing Hossain et al., 2021). In this regard, the export performance of SMEs is one of the primary indicators of the company's ability and talent to develop its resources and capabilities in the global arena and a tool to create company value (Cadogan et al., 2016) which in turn will lead to more organisational benefits in the form of upgrading the company's production scale and exercising more control over the distribution of products and services (Peng, 2003). Accordingly, export performance can be considered as a structure that provides a good basis for assessing the level of the overall success of the company in foreign markets (Ural, 2009). This action or process based on the development of a company's actions and activities to new foreign markets is generally associated with high levels of risk and

requires companies to offer unique products to the market and at the same time use new strategies to maintain their position and expand their activities in these markets (citing Robb et al., 2020).

Export performance can be measured based on different organisational levels such as company, country, market, export investment portfolio, and production line (Diamantopoulos and Kakkos, 2007). However, most studies have attempted to base their analysis on firm-level analysis (Hult et al., 2008). Some researchers argue that while it may make sense for large organisations to consider other levels, the firm level is particularly appropriate for SMEs, given the smaller size of the business, so measures and actions mean that other sub-levels cannot create accurate and correct insights and perceptions about the company's performance (Oliveira and Cadogan, 2018). Styles (1998) argues that SMEs seek to use aggregate assessments at the firm level because smaller firms have less ability to differentiate the performance of a particular export action as the total export performance or even the entire performance of the company (citing Sadeghi et al., 2021).

Marketing Capabilities. The capability and ability of an organisation are based on its strategy in the market and are accompanied by the identification of its distinctive features and capabilities (Ghauri et al., 2011). Khan (2013) defines organisational and managerial capabilities as activities and actions resulting from a combination of insight and organisational structure that help a company to perform better than its competitors. Capabilities include a set of skills and knowledge that enable companies and their managers to use the internal resources in a sustainable and profitable way and achieve their goals (Andrews et al., 2015). There are several ways to enhance a company's capabilities that are debatable in the terms of components such as business assets (efficiency, scope, and scale, financial condition, brand equity, location), business capabilities (skills and knowledge, ability to do business), core competencies and partnerships (scope and support, multiple business lines) and specific capabilities (excellence in the integration of management, knowledge and learning development) (Cited by Karedza and Govender, 2020).

Marketing capability has been used as a market knowledge management process at different organisational levels, which includes the integration of low-level and high-level knowledge to increase the marketing value of the organisation (Morgan et al., 2018). In general, according to the resource-based view perspective, an organisation's competitive advantage and maintaining profitability, in the long term, depends on the proper use of its resources and capabilities (Haapanen et al., 2016). Similarly, other marketing studies have been conducted in connection with the identification of resources and capabilities in organisational processes to support benchmarking for marketing (Santos-Vijande et al., 2013). In addition, the knowledge-based approach emphasises the principle that the marketing capabilities defined for operating in the domestic market are not sufficient to operate in the process of overseas operations, and rarely a company can derive very specific knowledge management capabilities from a Transfer the applied business unit to another operational unit (cited by Hoque et al., 2021). In a general context, according to Khan (2013), the company's resources include all assets, capabilities,

competencies, reputation, organisational processes, company characteristics, information, knowledge, and other understandable items and strategies that consequently will help to improve the productivity of the company in exporting and is considered as a competitive advantage (Othman et al., 2015). Studies by Morgan et al. (2012) and Murray et al. (2011) show the positive impact of marketing capabilities (such as product, price, distribution, marketing communications, sales, market information management, marketing planning, and execution) on export performance (citing Acikdilli et al., 2020).

Hypothesis (1): Managers' marketing capabilities have a significant and positive effect on SMEs' export performance.

Hypothesis (2): Managers' marketing capabilities have a significant and positive effect on managers' export commitment.

International Experience. Export experience is considered as the main factor in reducing export uncertainty, and according to the evidence, with increasing export experience, companies are more likely to witness conditions based on less uncertainty in their export activities (Sinkovics et al., 2018). Export knowledge and experience is essential to enter international markets (Okpara, 2010). Export knowledge includes ancillary knowledge available to potential exporters in the field of export, knowledge of export market benefits, knowledge of potential markets, availability of skilled and experienced, or trained workforce for export markets, and knowledge of market entry options for export (Okpara, 2010). Having a better understanding of the foreign market helps a company's position in that market. Export knowledge and experience helps a company identify changes in products that lead to greater acceptance and sales (He et al., 2012). If a company's knowledge of foreign markets is insufficient, the process of internationalisation becomes problematic and they may even fail (Sui & Baum, 2014, citing Abban, 2020).

The level of international experience influences the company's decision to choose how to enter international markets. Companies with less international experience are more likely to experience difficulties in managing their activities in foreign markets, and it is expected that such companies will not have the necessary skills and resources to enter and access multiple foreign markets. Accordingly, they are expected to simply select one strategy and focus their efforts in foreign markets on using the methods that have the highest potential for maximum profit and best returns (citing Lin and Ho, 2019). The experience of internationalisation of corporate executives is either based on personal experience or as a result of being hired and working for international companies (Hewerdine & Welch, 2013). Overall, it is accepted that the international experience of company owners affects the speed of internationalisation of a company, and companies whose founders have professional experience abroad or have studied abroad will probably become international very soon. By reducing management's perception of the risks and inherent conditions based on the uncertainty of internationalisation, prior knowledge accelerates the decision to internationalise (Knight & Liesch, 2016; citing De Cock et al., 2020). In general, an international experience determines marketing strategies and enables managers to offer products and services in an international environment by a

continuous commitment to export that meets the needs of the market and customers that finally leads to a high level of export performance (citing Ali et al., 2020).

Hypothesis (3): Managers' international experience has a significant and positive effect on exp SMEs' export performance.

Hypothesis (4): Managers' international experience has a striking and affirmative impact on Managers' export commitment.

Export Commitment. Uppsala Internationalisation Model Process emphasises a company's knowledge of foreign markets and management commitment to these markets. This model assumes that management's high commitment to allocating resources to markets depends on their empirical knowledge of exports. Commitment to export was considered a key concept in the social sciences in the 1960s. This concept is widely studied in various other fields and disciplines (Papadopoulos & Martin, 2010) and is one of the components that emphasise the characteristics of attitude (Sousa et al., 2008) and explains the difference in sales of export companies. Export management commitment can be defined as the general tendency to pursue export market opportunities, avoid international threats, and implement and implement effective marketing strategies that improve export success (Julian & Nhat, 2007). When a company's management or leadership is committed to exports, it is likely to work hard, make special efforts, and regularly allocate production, technical, financial, marketing, and human resources to related activities (Stoian et al., 2011). One of the components that can have a positive and significant impact on the export performance of companies is the commitment to exports. Commitment to export indicates the desire of the company's management to start taking effective and efficient measures actively, which can be interpreted as improving the company's performance. Commitment to export in a company is based on creating a suitable structure to interact with all activities in the field of export and ensuring the travel of company managers to other countries on an ongoing basis. Furthermore, Companies must ensure that adequate budgets are provided for the development of the company's export activities and foreign markets entry, and at the same time, companies must be required to learn about the export procedure, know about export-related matters, and have sufficient knowledge that exists in this field. All these activities indicate that a company has given high priority to its managers' export commitments, which will ultimately lead to the improvement of the company's export performance (Afriyie, 2019). In general, the company's commitment to exports is referred to in various ways, including export commitment, senior management commitment, or managerial commitment (Lages & Montgomery, 2001). Managers' commitment to exports, regardless of performance dimensions, has become one of the main determinants of export performance (Lages et al., 2008).

Hypothesis (5): Managers' export commitment has an effectual influence on SMEs' export performance.

Furthermore, commitment constitutes an important mediating variable that mediates the success of any long-term relational exchange. In other words, commitment is essential for generating outcomes that promote efficiency, and effectiveness at the same time. Commitment defined as the partner's belief in the

significance of the exchange relationship and the exchange partner's enthusiasm to attempt to preserve it (Wang et al., 2015). Likewise, commitment in international marketing is usually defined in terms of managers' enthusiasm to dedicate resources to improve export performance (citing Mahmoud et al., 2020). Increasing commitment is critical to the success of exporters (Leonidou et al., 2014), and although many have argued for a meaningful and direct relationship between commitment and performance (Barnes et al., 2015), there is evidence that this relationship is not always direct and the commitment to influence export performance interacts with other contextual variables such as marketing capabilities (Obadia et al., 2017) and can provide the basis for their impact on export performance (citing Mahmoud et al., 2020).

Hypothesis (6): Managers' export commitment plays a mediating role in the relation between managers' marketing capabilities and SMEs' export performance.

Hypothesis (7): Managers' export commitment has mediated the relations between managers' international experience and SMEs' export performance.

Research's Conceptual Model. In the conceptual model of this research, four variables are considered in which managers' marketing capabilities with communication and information components as an independent variable, managers' international experience as an independent variable, managers' commitment as a mediating variable and export performance as a dependent variable. All relationships in the conceptual model have been theoretically validated according to the research background as well as scientific documentation.

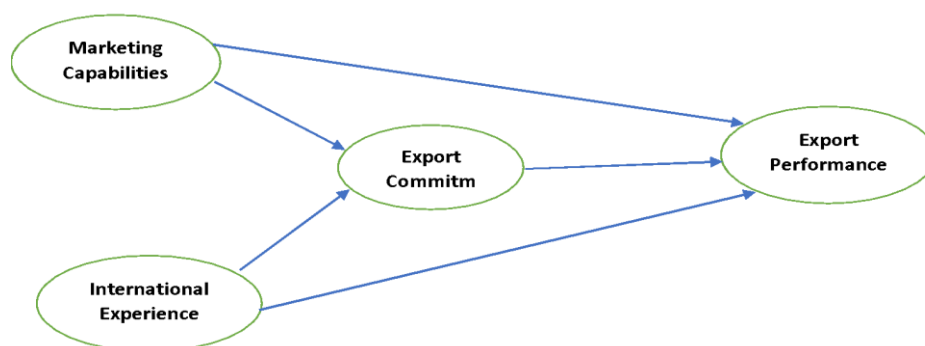


Figure 1. Structural Model

Source: develop by author

Methods. This research has been descriptive-analytical and survey through the distribution of questionnaires and testing of hypotheses. Accordingly, its purpose is to examine the impact of marketing capabilities and international experience on export performance directly and with respect to the mediating role of commitment. The results and findings can be used by managers and decision makers of the study community and other SMEs in Iran and other countries in the field to apply effective marketing policies to communicate with customers and obtain information from them and improve the level of international knowledge and experience, as well as awareness of the importance of adhering to commitments and allocating the necessary resources for exports. In terms of purpose, it is practical, although, this research is done by collecting data and information in a period of 4 months in a cross-sectional manner and finally due to the study of the bilateral relationship between

variables and considering the type of research questions were studied by correlation method.

Statistical Population. The statistical population of this research includes senior managers, marketing, and sales managers of SMEs in Iran. The reason for their selection is the type of variables and concepts used in this research that is related to the field of export and the company's activities. The findings of this study can also be a good reference for many companies that are active in the field of export or want to sell their products in other markets beyond their borders to experience the importance of marketing capabilities, awareness as well as having an export commitment to know and improve their performance during this process.

Statistical Sample and Sampling Method. In this study, 244 senior managers, sales, and marketing managers of 39 SMEs in Iran participated. Dean et al. (1995) performed a lot of studies and agreed that 100 to 150 subjects are satisfactory for performing structural equation models. Velicer and Fava (1998) are of the belief that samples of over 200 subjects are suitable for structural equations modelling. Schumacker & Lomax (1996) stated that the number of samples should be between 200 and 500, but social science research samples are always below 200 or more than 500, and when the sample is less than 200, the test power is reduced. (Rigdon, 2005, Song, 2019). It is not unlikely that sampling will not be random because people included in a sample are available and eager to participate in the study (Taduvana, 2017). The sampling method in this study, which has been done at the level of senior managers, marketing, and sales managers of SMEs in Iran, is in a probabilistic and simple random format. Data collection was done in May and June 2021 and the people who participated in this research had the necessary qualifications to answer the questions according to the subject of the research.

Methods and tools of data collection. Information related to each of the variables and research records was collected through library studies (Articles available on the Internet). Moreover, in order to collect data, a questionnaire was used. At first, questions related to the company's Organisation, type of Organisation, amount of international experience, the field of work, number of employees, and demographic information included Gender, age, level of education, job title, and work experience, followed by questions related to each variable and were sent online to the respondents in Persian version. According to Churchill (1999), the data in the questionnaire was reviewed and corrected to ensure the minimum quality of raw data. Then we assigned ordering numbers to data and entered the software. Lost data were removed before further analysis. In this study, a total of 25 questions were asked in which marketing capabilities (relationship, information) in the form of 10 questions, commitment with 4 questions, export performance with 7 questions, and international experience with 4 questions were examined.

The validity of the research tool is initially approved based on the views of the supervisors and in the form of content, and therefore, it can be said that the questionnaire does not have ambiguity and provides the required information.

Table 1. Structure of the Questionnaire

Variable	Component	Variable Type	No. Questions	Reference
Marketing Capabilities	Relational	Independent	1-5	Mahmoud et al., 2020
	Informational		5-10	
Commitment	---	Mediator	11-14	Mahmoud et al., 2020
Export Performance	---	Dependent	15-21	Mahmoud et al., 2020
International Experience	---	Independent	22-25	Sraha et al., 2020

Source: develop by author

Then the Cronbach's alpha test, which assesses the extent to which research questions measure the same characteristics and should be above 0.7. In order to evaluate the reliability of the questionnaire of this research, considering the limited number of samples, a pilot study was conducted as a test of a real questionnaire on a small sample of the population in which the research is conducted and 30 questionnaires by senior managers, marketing and sale of managers SMEs in Iran was completed.

Table 2. Primary Cronbach's alpha Values (pilot)

Variable Name	Component	(α)
Marketing Capabilities	Relational	0.91
	Informational	
Commitment	---	0.82
Export Performance	---	0.86
International Experience	---	0.80

Source: develop by author

Analysis Methodology. Collected data were analysed by a covariance-based approach (CV-SEM). SEM is known as a second-generation statistical technique that enables researchers to test causal relationships between latent variables. Anderson and Gerbing (1988) have recommended a two-stage analytical process in which at first the measurement model is examined, and then an assessment of the structural model would be applied (Hair et al., 2014). Here, Confirmatory factor analysis (CFA) is implemented to test whether each of the measurement items specified loaded significantly on the latent factor, and whether each factor had discriminant validity between the other criteria (Williams et al., 2009). After that, the SEM was used to evaluate the path significance. Based on Preacher and Hayes's (2004) recommendation, we employed a bootstrap analysis to avoid issues of non-normal distribution in our research. Furthermore, Amos24 was used to analyse data with bootstrap on 5,000 samples, containing bias-corrected confidence intervals for all parameters in the model.

Results. In the current research, there are 4 latent variables, which is measured by 25 observed variables. All the four variables of this study, marketing capability, export commitment, international experience and export performance were measured reflectively. The model's quality criteria were assessed following purification: average variance extracted (AVE) and composite reliability (CR) estimates all meet the minimum of 0.7 and 0.5 respectively as recommended by Hair et al. (2017). AVE for international experience was less than 0.50 so, index2 was removed for improvement AVE. The results are shown in Table 3. Moreover, all remaining items' loadings were statistically significant by using bootstrap P-values (5000 sub-samples)

(Tortosa et al., 2009). The results show that the convergent validity is sufficiently satisfied.

Table 3. Scales of variables in the model

Scale Items		Mean	SD	Loading	CR	AVE
Marketing Capability		3.610	0.717	-	0.920	0.543
We have the Ability to create relationships with new clients	Mrca1			0.825		
Our company is able to maintain relationships with new existing clients	Mrca2			0.772		
We use different Facilities and equipment's to be able to effectively communicate with clients	Mrca3			0.451		
We are able to jointly solve problems with clients	Mrca4			0.819		
We are able to achieve targets when negotiating	Mrca5			0.814		
We use different information channels to Facilitate the Identification of prospective customers	Mrca6			0.64		
We use different channels to Facilitate the identification of prospective customers in capturing important market information	Mrca7			0.806		
We use different channels to Facilitate the identification of prospective customer's acquisition of export market related Information	Mrca8			0.803		
We use different channels and platforms to Facilitate the identification of prospective customers to make contacts in the export market	Mrca9			0.81		
We use different channels to Facilitate the identification of prospective customers monitoring competitive products in the export market	Mrca10			0.511		
International Experience		3.585	0.722	-	0.774	0.533
The degree of our professional exporting experience is high	Inex1			0.79		
The degree of our overseas experience-worked or lived abroad is good enough	Inex2			0.551		
We are able to follow up on trade leads	Inex3			0.747		
We have enough experience of operating in many foreign markets	Inex4			0.653		
Export Commitment		3.527	0.726	-	0.813	0.525
Our company desires to devote much time to getting to know our overseas customers.	Exco1			0.797		
This firm will devote the resources essential to grow worthy relationships with foreign customers.	Exco2			0.731		
Activities of this company will be disturbed if we end our relationships with our overseas customers	Exco3			0.569		
We have insufficient choices to consider terminating our relationship with overseas clients.	Exco4			0.779		
Export Performance		3.682	0.751	-	0.904	0.576
We are able to offer lower cost channels for transacting with customers.	Expe1			0.786		
We are able to maintain relationships with overseas customers and access new international markets.	Expe2			0.697		
Our export capabilities enable us to exploit new sources of revenue	Expe3			0.79		
We are able to Reduce operating costs.	Expe4			0.818		
We have competency to offer new services to our existing customers.	Expe5			0.779		
We are able to develop stronger relationships with suppliers and customers	Expe6			0.601		
We are able to introduce new products/services to the international market quickly	Expe7			0.815		

Source: develop by author

The next phase after testing for convergence validity is to test for distinctive validity. Distinctive validity is achieved when the square root of the estimated mean-variance for each of the four structures is bigger than the inter-structural correlation between them as shown in Table 4 (Fornell and Larcker, 1981; Barclay et al., 1995).

In addition to Fornell and Larcker criteria, discriminant validity was assessed using the heterotrait-monotrait ratio (HTMT 0.85) (Henseler et al., 2009).

The presented outcomes show that none of the correlations exceeded 0.85. This shows that each structure is distinct and different from the other measurement structures in the model, and consequently, the four structural models show distinct validity.

Table 4. Discriminant validity by fornell-larcker criterion

	MRCO	INTEX	EXCOM	EXPER
marketing capability	0.737			
international experience	0.602***	0.73		
export commitment	0.650***	0.681***	0.725	
export performance	0.575***	0.580***	0.674***	0.759

Significance of Correlations: *** $p < 0.001$

Confirming the measurement model by CFA. Reliability and validity check for the data was conducted using CFA and the final result is shown in a graphical manner. The model of this research consists of 4 constructs. Each construct is measured with several observed variables. The observed variables which have less than 0.4 factor loading were removed it cannot be counted as the true representation of the constructs. Only these observed variables with their respective constructs were considered for further analysis.

Table 5. Model fit indices for cfa

Indices	Recommended value	Model fit indices
CMIN/Df	< 3	1.486
P-Value	< 0.05	0.000
GFI	> 0.90	0.891
AGFI	> 0.80	0.867
NFI	> 0.90	0.897
CFI	> 0.90	0.963
RMSEA	< 0.080	0.045

Source: develop by author

All the four constructs are shown to be intercorrelated as shown in figure 2. The summary of model fit indices of CFA is also shown in table 4-6 which complies with the recommended value. As Table 4-6 shows, we can find that the overall model fit indices are admissible in the recommended values provided by the researchers, so it can be concluded that the hypothesised model fits the sample data.

Structural model analysis. After compliance with the validity and reliability check by using confirmatory factor analysis (CFA), the overall fit of the model was estimated through structural equation modelling. First, we need to construct the SEM path diagram based on the theoretical framework. The structural equation model path diagram is shown in figure 3.

The results showed that the chi-square test (χ^2) was significant for model fit ($P = 0.000$). In this study, other fit indices should also be considered. The values of the remaining indices indicate the appropriateness of the data ($\chi^2 = 365.48$, $p < 0.001$; CFI = 0.963, TLI = 0.959, RMSEA = 0.045). These factors provide evidence that the hypothesis model fits well with the data.

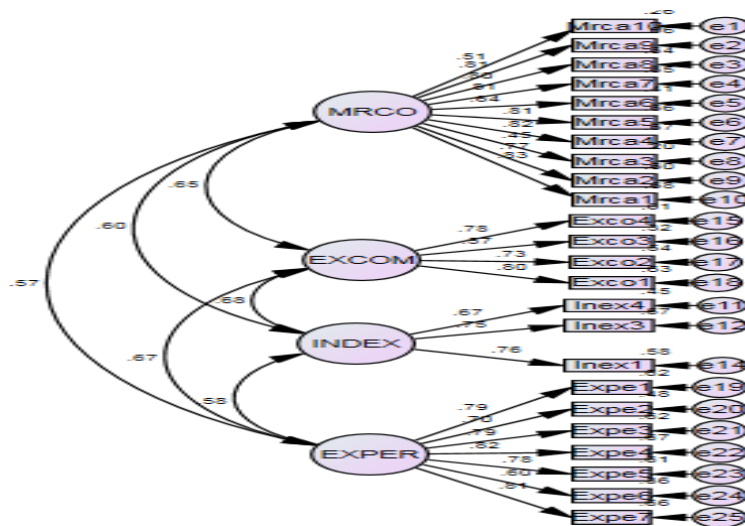


Figure 2. Amos output of the measurement model or CFA – standardised

Source: develop by author

Table 6. Amos CFA output: unstandardised and standardised regression weights

			Estimate*	Estimate**	S.E.	C.R.	P
Mrca9	<---	MRCO	1.462	0.81	0.177	8.249	0.000
Mrca8	<---	MRCO	1.433	0.803	0.174	8.219	0.000
Mrca7	<---	MRCO	1.465	0.805	0.178	8.229	0.000
Mrca6	<---	MRCO	1.187	0.64	0.162	7.316	0.000
Mrca5	<---	MRCO	1.589	0.814	0.192	8.269	0.000
Mrca4	<---	MRCO	1.481	0.819	0.179	8.291	0.000
Mrca3	<---	MRCO	0.881	0.452	0.151	5.838	0.000
Mrca2	<---	MRCO	1.436	0.772	0.178	8.073	0.000
Inex4	<---	INEXP	1.000	0.671			
Inex3	<---	INEXP	1.117	0.755	0.120	9.336	0.000
Inex1	<---	INEXP	1.106	0.762	0.118	9.385	0.000
Exco4	<---	EXCOM	1.000	0.781			
Exco3	<---	EXCOM	0.610	0.567	0.071	8.562	0.000
Exco2	<---	EXCOM	0.907	0.733	0.080	11.303	0.000
Exco1	<---	EXCOM	0.910	0.796	0.074	12.291	0.000
Expe1	<---	EXPER	1.000	0.786			
Expe2	<---	EXPER	0.863	0.696	0.075	11.433	0.000
Expe3	<---	EXPER	0.989	0.791	0.074	13.359	0.000
Expe4	<---	EXPER	1.028	0.819	0.074	13.959	0.000
Expe5	<---	EXPER	0.993	0.779	0.076	13.116	0.000
Expe6	<---	EXPER	0.731	0.601	0.076	9.627	0.000
Expe7	<---	EXPER	1.012	0.815	0.073	13.874	0.000
Mrca1	<---	MRCO	1.542	0.825	0.185	8.319	0.000
Mrca10	<---	MRCO	1.000	0.511			

* Unstandardised

** Standardised

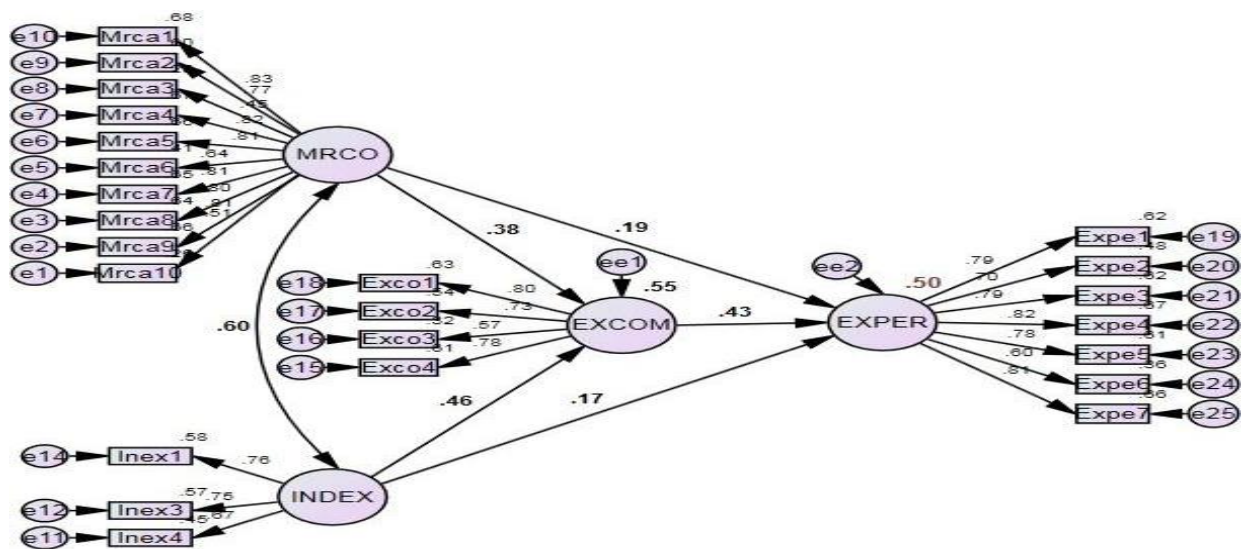


Figure 3. The results of structural equation modelling

Source: develop by author

The outcome of AMOS is given in the tabulated and graphical form as given table 7.

Table 7. Amos sem output: unstandardised and standardised regression weights

			Estimate*	Estimate**	S.E.	C.R.	P
EXCOM	<---	MRCO	.564	0.376	.134	4.212	0.000
EXCOM	<---	INDEX	.550	0.456	.112	4.909	0.000
EXPER	<---	MRCO	.281	0.19	.122	2.307	.021
EXPER	<---	EXCOM	.428	0.434	.102	4.208	0.000
EXPER	<---	INDEX	.203	0.17	.115	1.763	.078

* Unstandardised

** Standardised

Discussion and conclusions. In terms of the path coefficient for testing hypotheses, Hypothesis 1 stated that marketing capabilities are positively and significantly related to export performance. Our results supported this proposition ($\beta = 0.19$, $p = 0.021 < 0.05$). Hypothesis 2 stated that marketing capability is positively and significantly related to export commitment. The data supported this research hypothesis ($\beta = 0.38$, $p = 0.000 < 0.001$). Hypothesis 3 stated that international experience is positively and significantly related to export performance. Our results supported this proposition ($\beta = 0.17$, $p = 0.078 < 0.1$). Hypothesis 4 stated that international experience is positively and significantly related to export commitment. The data supported this research hypothesis ($\beta = 0.46$, $p = 0.000 < 0.001$). Hypothesis 5 states that export commitment has a positive and significant relationship with export performance. The data supported this research hypothesis ($\beta = 0.43$, $p = 0.000 < 0.001$). After examining the direct paths, we will examine the indirect path. We hypothesised that export commitment mediated a positive and significant relationship between marketing capabilities, international experience, and export performance in Hypotheses 6 and 7.

Table 8. Indirect effect

Indirect Path	β	Lower	Upper	P-Value
Marketing Capability \rightarrow Export Commitment \rightarrow Export Performance	0.163***	0.101	0.479	0.001
International Experience \rightarrow Export Commitment \rightarrow Export Performance	0.198***	0.116	0.442	0.001

Significance of Estimate: *** $p < 0.001$

The indirect effect for the indirect path of marketing capability \rightarrow export commitment \rightarrow export performance was $\beta = 0.163$ ($p = 0.001 < 0.001$) therefore, marketing capabilities had a significant effect on export performance indirectly. In other words, marketing capabilities 16.3% indirectly and 19% ($P < 0.05$) directly has a significant effect on export performance. Therefore, it can be seen that between marketing capabilities and export performance, export commitment is a partial mediator. For hypothesis 7, the indirect effect between international experience and export performance through export commitment was $\beta = 0.198$ ($p = 0.001 < 0.001$). Marketing capabilities 19.8% indirectly and 17% ($P < 0.1$) directly have a significant effect on export performance. Therefore, export commitment partially mediates marketing capabilities and export performance relationships.

Table 9. Results of hypotheses

Direct Path	Direct effect	Indirect effect
Marketing Capability \rightarrow Export Performance	0.190*	0.163***
International Experience \rightarrow Export Performance	0.170*	0.198***
Marketing Capability \rightarrow Export Commitment	0.376***	-
International Experience \rightarrow Export Commitment	0.456***	-
Export Commitment \rightarrow Export Performance	0.434***	-

Significance of Estimates: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, * $p < 0.10$

Findings indicate that the export capabilities and international experience as two strategic concepts in boosting the performance of firms in international markets seem to be ubiquitous among SMEs in emerging markets such as Iran too. Though past research suggests SMEs in emerging markets seldom analyse the relationship between them in their marketing activities, these results depict export commitment is used to supplement the marketing activities of these firms. Export as one of the most important (and the first choice) entry modes is always considered by companies; hence, it is necessary for exporting ventures in emerging markets like Iran to empower themselves by the realisation of the profound impact of these factors on their performance while the decision making is in an uncertain situation. Since exporting SMEs in Iran do not have sufficient resources to compete favourably in foreign markets, it is of paramount importance for them to make a decision that ensures their business continuity and resilience in both the local and international environments.

Practical suggestions for managers. According to the research findings that show the impact of marketing capabilities on performance directly and considering the mediating role of commitment, it is recommended to managers of SMEs Iran and other countries, by considering the limited and insufficient capital and financial resources, high level of competition, lack of information flow, import laws in other

countries to establish better communication with customers, looking for communication networks and channels in the destination country could be done in the form of representatives, or agreements with business partners to allow for a physical presence in those markets and direct contact with customers while also being able to respond to market signals. This may be associated with the high costs of maintaining the Representation or entering the market and maintaining the distribution network, but nevertheless higher profitability than other export methods in terms of communication and Acquiring information is more efficient and the risk perception in this method will be lower.

In determining their international market entry strategies, these companies should first examine the appropriateness between their products and services to the needs of the target foreign market and cost-effectiveness, and then the barriers associated with transportation and consider legal requirements, geographical distance between the country of origin and destination, political relations between countries, banking and financial restrictions, cultural compatibility and differences, costs related to the transfer and import of goods to other countries, etc. and choose their entry method by segmenting the target market. Nowadays, due to the growth and development of information and communication technologies and the widespread use of the Internet by people all around the world, it is possible for companies to introduce themselves by creating websites, social networks, and other platforms to pay attention to customers in other countries and at the same time communicate with them and, if necessary, receive their views, comments, and suggestions.

The research results also show that international experience has a significant and positive effect on export performance directly and considering the role of commitment. One of the main challenges for SMEs is the existence of small and often unfamiliar management teams with exports and its rules and requirements, lack of experienced staff so that these companies seek to hire managers with the background of working in the field of the export or living abroad or have export approaches that can be used to gain the most experience. For example, in indirect exports, or direct exports using a foreign broker and representative, despite the low cost and risk, the level of knowledge about foreign markets is low, and international experience is limited; therefore it is better to use the direct export method or uses a representative office or a personal external distribution network or invite specialists and experts at regular intervals to train the employees and sales and marketing managers of these companies in the field of international marketing, to learn about entering the foreign markets, and export affairs.

Suggestions for future research. In this study, a questionnaire was used to collect information and according to the content and concept of the variables in this study, in order to obtain comprehensive and accurate information, it is suggested that researchers use other structured methods such as interviews to know the perspective of the respondents. The suggestion is that a similar study with such a conceptual or structural model with other independent variables at the level of SMEs in other countries be examined or by classifying and clustering industries only on one industry or there is a specific business area of focus. In addition to the variables used

in this study, we suggest that researchers examine the impact of marketing capabilities and export approach to the market on export performance with respect to the role of trust, the impact of experience, and commitment to exports with performance according to the role Internal and external barriers, the direct relationship between social media resources and export performance, or the role of trust and commitment due to the growth and development of social business.

Managing factors (knowledge and skills, self-efficacy, networks, risk-taking, distance, organisational factors (company position and firm commitment to exports) and external factors such as government support for export performance considering the role of strategy, the influence of market approach and learning on export performance with respect to the role of entrepreneurial approach; The impact of company characteristics, knowledge absorption, export organisational structure, communication networks, innovations and entering mode on export performance; And consider the role of factors such as the intensity of competition, government laws, domestic and foreign market conditions as moderators.

Research limitations. The process of distributing the questionnaire was time consuming in itself and due to the crisis of Covid-19, it was impossible to communicate directly with the respondents and the questionnaire was distributed electronically among them. Answering the questions in this research was limited to senior, sales, and marketing managers of SMEs in Iran. Therefore, considering that the perceptions of business owners in companies operating in different regions and countries may be different in terms of marketing capabilities as well as international experience, it is not logical to generalize the research results to all companies.

Participants' responses were limited to the questions assigned to each of the variables. Accordingly, there may be other topics that are more appropriate to explain and interpret each of the variables and are more comprehensive so that people have a better understanding of marketing capabilities, commitment, or international experience, or Some questions may not be related to the work process of some companies and there is a need to ask questions according to the type of industry and their activities. In the conceptual model of this research, variables such as marketing capabilities, international experience, and commitment are considered as factors affecting export performance, though it should be noted that these are not the only factors affecting export performance, and maybe there would be different views on nature and the meanings of each of these variables. The present study was a cross-sectional study and therefore the initial research was conducted on a group of respondents in a specific period. Due to time constraints, it was not possible to conduct a longitudinal study. A longitudinal survey could help to conduct similar surveys with different sets of respondents over a long period of time and make the findings more consistent.

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DEVELOPMENT OF A METHODOLOGICAL APPROACH TO RATING TO ASSESS THE ECONOMIC SECURITY OF INSTITUTIONS OF PROFESSIONAL PRE-HIGHER EDUCATION

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Abstract. The article is devoted to the development of a solution for creating a ranking of institutions of professional higher education. The purpose of the article is to develop a methodological approach to the rating of professional higher education institutions to assess their economic security. The research methodology involves the use of general scientific (induction and deduction, analysis and synthesis, comparison and generalization) and special (coefficient method, integral method, experiment) research methods. The developed methodological approach involves the calculation of the following indicators: indicators for assessing the academic environment of institutions of professional higher education; indicators of evaluation of partnerships with employers; indicators for assessing the formation of academic integrity among participants in the educational process; indicators for evaluating the implementation of non-formal education; indicators of evaluation of international cooperation; indicators of evaluation of content analysis of the official website; indicators of assessing the reputation in the external environment. The methodological approach involves the distribution of sources of information on the basis of which the calculation of indicators on the "open" (O) and "closed" (C). The obtained result will characterize the compliance of the institution of professional higher education with the proposed indicators, the level of success of participation in the ranking, prospects in the formation of the contingent of students who will ensure its economic security. The proposed methodological approach, on the one hand, allows the administration of the institution to identify challenges and anticipate threats that may affect their competitiveness and economic security, and, on the other - to inform all stakeholders about the economic security of higher education institutions to make appropriate decisions. In order to test the proposed methodological approach, the calculations of the integrated rating indicator were performed on the basis of the data of the Professional College of the KROK University, which showed a sufficient level. This is confirmed by the stability of the quantitative indicator of the contingent of educational institutions at all stages of its development, but to increase the level of competitiveness, it is necessary to pay attention to certain shortcomings that may reduce its economic security.

Keywords: institution of professional higher education; methodical approach; rating; threat; economic security.

JEL Classification: C43, C81, C83, I23

Formulas: 3; **fig.:** 1; **tabl.:** 16; **bibl.:** 10

Introduction. An important indicator of the competitiveness of educational institutions is the place they occupy in the rankings, as it is the focus on them in Ukraine has recently become an increasingly important factor in choosing educational institutions by students (or their parents or substitutes), who are the main sub objects that shape the demand for educational services.

Literature Review. The study of scientific papers showed that most of the attention was paid to the methodology of calculating ratings (Ilnytskyi D. & Sakharov V., 2011), university ratings and their dynamics (Kurbatov S., 2016; Rauhvargers A., 2022), as well as the impact of ratings on educational status. services (Tatarinov I. & Herasymov O., 2013; Shostak A., 2017; Radzihovskaiy Yu., 2016;

Mihus I., 2020). Unfortunately, in their works they studied only the rankings of universities. Institutions of professional higher education do not have their own rating today.

Aims. The purpose of the article is to develop a methodological approach to the rating of professional higher education institutions to assess their economic security.

Methods. The research methodology involves the use of general scientific (induction and deduction, analysis and synthesis, comparison and generalization) and special (coefficient method, integral method, experiment) research methods.

Results. Taking into account the need in the conditions of increasing competition to diagnose the state of ensuring the economic security of institutions of professional pre-higher education, we propose a methodical approach that provides for the creation of a rating of educational institutions of this level, participation in which can become a tool for timely identification of external and internal threats, will make it possible to effectively counteract them and prevent their impact in the future by diagnosing the condition. Comprehensive provision of economic security, taking into account the specifics of the activities of institutions of professional pre-higher education.

This methodical approach involves several stages:

- 1) assessment of the peculiarities of the functioning of institutions of professional pre-higher education from the standpoint of economic security;
- 2) study of sources of information and analytical support of economic security;
- 3) determination of indicators of assessment of the state of ensuring the economic security of the institution of professional pre-higher education (Fig. 1);
- 4) distribution of indicators to open and closed;
- 5) formation of an integral indicator for assessing the economic security of institutions of professional pre-higher education;
- 6) establishing the compliance of the integral indicator of the institution with professional pre-higher education with established criteria.

Assessment of the peculiarities of the functioning of institutions of professional pre-higher education from the standpoint of economic security is carried out in order to establish the position of a separate institution in the market of educational services.

The main indicators, the calculation of which is provided in accordance with the proposed methodology, are presented in Fig. 1.

Since some of the indicators are (or is envisaged by this method of its placement) in the public domain and will be made by the analytical center, the proposal for the creation of which at the Ministry of Education and Science is indicated in paragraph 3.2 of the dissertation, and the rest will be provided by the administration of institutions of professional pre-higher education to participate in the rating, we propose to divide them into two categories: open, which are conditionally denoted by the letter "O", and closed "C".

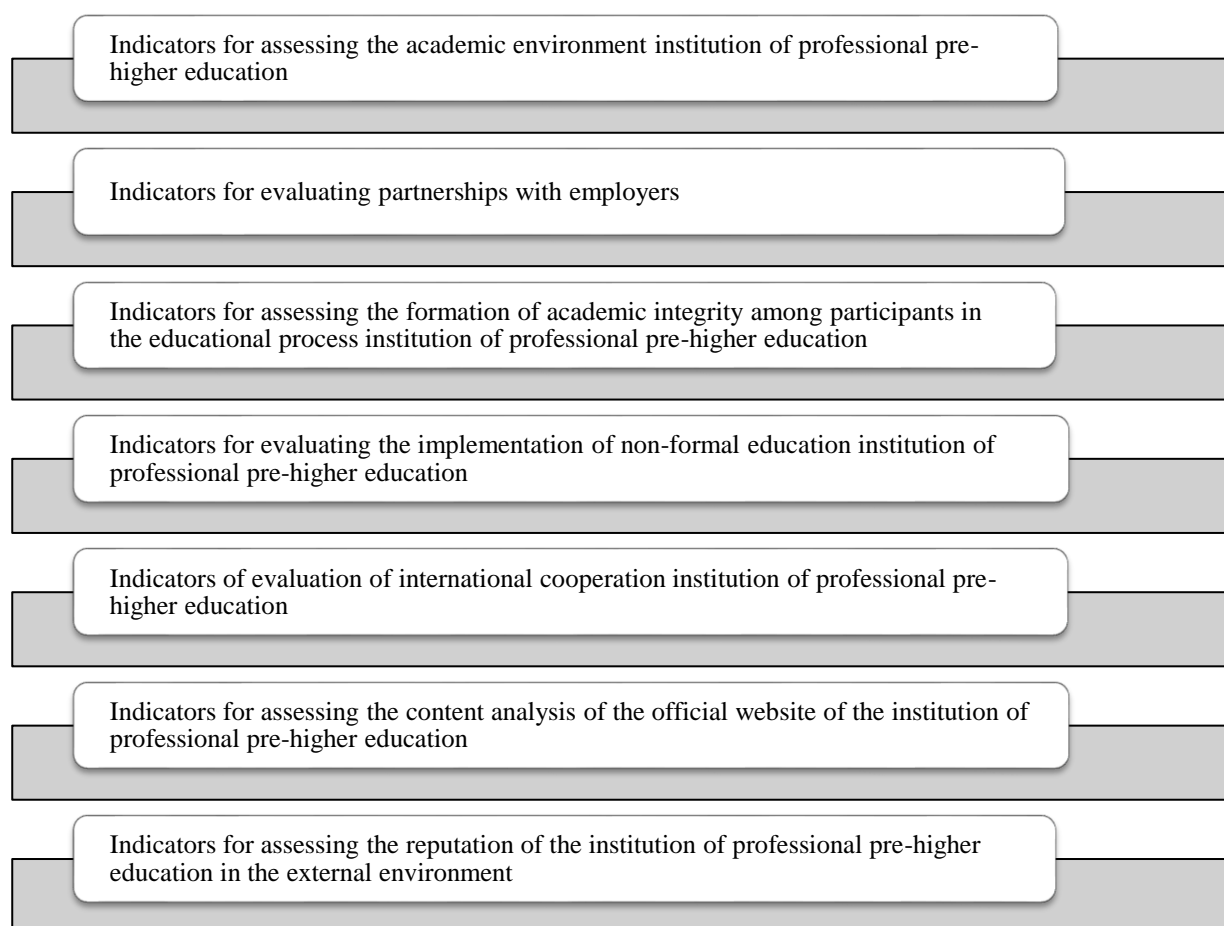


Figure 1. Indicators of assessment of ensuring economic security of the institution of professional pre-higher education

Source: developed by the author

Indicators of evaluation of the academic environment of institution of professional pre-higher education category "O" from the standpoint of economic security are given in Table. 1.

Table 1. Indicators of evaluation of the academic environment of institution of professional pre-higher education (O)

Indicators	Denomination	From 0 to 5
Number of proposed forms of education (full-time, part-time, distance, dual, workplace training)	K11	
Number of offered educational and professional programs, certified courses	K12	
Together	K1	

Source: developed by the author

Assessment of the indicator "The number of proposed forms of education" is proposed to be carried out in accordance with the number of forms of education that are presented among the proposed educational institutions.

The indicator "Number of offered educational and professional programs, certified courses" can be calculated according to the following criteria: availability of

4 programs / courses - 1 point; 5 programs/courses – 2 points; 6 programs/courses – 3 points; 7 programs/courses – 4 points; more than 7 programs/courses – 5 points.

Indicators of evaluation of the formation of academic integrity among the participants of the educational process of the ZFP category "O" from the standpoint of economic security are given in Table. 2.

Table 2. Indicators of evaluation of the formation of academic integrity among participants in the educational process of institution of professional pre-higher education (O)

Indicators	Denomination	No (0)	Yes (5)
Availability of regulations on academic integrity	K21		
The presence of the Code of Ethics/Conduct of Participants in the Educational Process	K22		
Together	K2		

Source: developed by the author

Indicators of evaluation of the implementation of non-formal education of ZFP category "O" from the point of economic security are given in Table. 3.

Table 3. Indicators of evaluation of the implementation of non-formal education of institution of professional pre-higher education (O)

Indicators	Denomination	No (0)	Yes (5)
Availability of the Regulations on Student Self-Government	K31		
The presence of youth, public associations, etc. among applicants for education	K32		
Together	K3	Together	

Source: developed by the author

Indicators of evaluation of content analysis of the official website of ZFP CATEGORY "O" from the point of economic security are given in Table. 4.

Table 4. Indicators of evaluation of content analysis of the official website (O)

Indicators	Denomination	No (0)	Yes (5)
General information about ZFP	K41		
Availability on the website of the Charter of the GFPO	K42		
Availability of regulations on the organization of the educational process	K43		
Information on the composition of governing bodies	K44		
Organizational information: structure of the educational institution	K45		
Fullness of all pages of the site	K46		
Relevance of news	K47		
Availability of information on the Supervisory Board	K48		
Publication of the annual report of the head	K49		
Availability of rules for admission to the GFPO for the current year	K410		
Availability of information on the schedule of classes	K411		
Availability of a schedule of the educational process	K412		
Presence of information on the activities of student self-government bodies	K413		
Together	K4		

Source: developed by the author

Indicators for assessing the reputation of ZFP In the external environment of category "O" from the point of economic security are given in Table. 5.

Table 5. Indicators for assessing the reputation of institution of professional pre-higher education in the external environment (O)

Indicator	Denomination	From 0 to 5
External expert assessment of the quality of academic programs provided by representatives of educational institutions belonging to one group	K51	
Assessment of the quality of education of graduates by employers	K52	
Evaluation by graduates of the quality of training	K53	
The ratio of the number of license places and applications for admission to the current academic year	K54	
Average score of the document on education of cepo enrolled in the current academic year	K55	
Together	K5	

Source: developed by the author

Indicators "External expert assessment of the quality of academic programs provided by representatives of educational institutions belonging to the same group", "Assessment of the quality of education of graduates by employers", "Assessment by graduates of the quality of training" are proposed to be made from the results of surveys, the organization proposed in paragraph 3.2 of the dissertation. It should be borne in mind that these indicators will be subjective.

The indicator "The ratio of the number of license places and applications for admission to the current academic year" is proposed to be calculated according to the following parameters: the amount of total competitive points in relation to the number of programs or the total number of license places - up to the total number of applications submitted. The rating by points is as follows: the ratio to 0.5 – 1 point, from 0.6 to 1 – 2 points, from 1.1 to 1.5 – 3 points, from 1.6 to 2 – 4 points, more than 2 – 5 points.

For calculations of the last indicator "Average score of the document on education of cephased by the institution of professional pre-higher education in the current academic year", taking into account the fact that that students with high scores in education are focused on admission to higher education institutions, we offer the following gradation: the average score of the education document is up to 6 points – we score 1 point, the average score is from 6.1 to 7 – 2 points, the average score is from 7.1 to 8 – 3 points, average score from 8.1 to 9 – 4 points, average score above 9 – 5 points.

Indicators of evaluation of the academic environment of institution of professional pre-higher education category "C" from the standpoint of economic security are given in Table 6.

For the calculations of the indicator "Staffing meets the licensing requirements for all specialties from which licenses are obtained", we propose to take as a basis the methodology specified in the draft "Regulations on accreditation of educational and professional programs for which the training of applicants for professional pre-higher education is carried out" [15], expanding the ball system. items: "corresponds" – 75% or more of the maximum possible amount of points according to the criterion; "corresponds conditionally" – 50% or more (up to 74.5% inclusive) of the maximum

possible amount of points by criterion; "does not correspond" – less than 50% of the maximum possible amount of points by criterion. We offer the following distribution of points: staffing meets the requirements of less than 50% - 1 point; from 51% to 60% - 2 points; from 61% to 70% - 3 points; from 71% to 74% - 4 points; more than 75% - 5 points.

Table 6. Indicators of evaluation of the academic environment of institution of professional pre-higher education (C)

Indicators	Denomination	From 0 to 5	
Staffing meets the licensing requirements for all specialties from which licenses are obtained	K11		
The ratio of graduates who received diplomas with honors and high scores to the total number of graduates	K12		
Practice-oriented educational and professional programs	K13		
The ratio of the number of students who entered the FPPE and how many of them graduated	K14		
FFP spending on maintaining academic infrastructure (libraries, computer equipment, etc.) per student	K15		
ZFP spending on supporting general infrastructure (sports, career services, medical infrastructure, etc.) per student	K16		
		No (0)	Yes (5)
The ratio of the number of students to the number of teachers	K17		
		Degree of engagement (from 0 to 5)	
Involvement of student self-government bodies in the process of periodic review of the educational and professional program and other procedures for ensuring its quality as partners	K8		
Together	K1		

Source: developed by the author

The ratio of graduates who received diplomas with honors and high scores to the total number of graduates is proposed to be assessed according to the following criteria: if the ratio is up to 7%, we charge 1 point; from 8% to 10% - 2 points; from 11% to 13% - 3 points; from 14% to 16% - 4 points; if the indicator is more than 16% - 5 points.

The indicator "Practice orientation of educational and professional programs" is calculated through the ratio of educational components of curricula: the sum of hours of practical classes and all types of practice to the sum of hours of lecture classes, independent work. The basis is taken by the average indicator for the educational institution. Although it should be noted that there is a significant difference in the training of professional junior bachelors in various specialties, therefore, in the future, in order to improve the rating system, it is necessary to consider the need to create ratings of educational institutions by group. At this stage, we offer the following criteria for assessing this indicator: the ratio is up to 15% - 1 point; from 16% to 20% - 2 points; from 21% to 25% - 3 points; from 26% to 30% - 4 points; more than 30% - 5 points.

The distribution of points in assessing the indicator "The ratio of the number of students who entered the FPGE and how many of them graduated" is proposed to be performed according to the following parameters: the ratio is up to 70% of the

number of entrants - 1 point; from 71% to 75% – 2 points; from 76% to 80% – 3 points; from 81% to 85% – 4 points; more than 85% - 5 points.

Financial indicators "Expenses of institution of professional pre-higher education to support academic infrastructure (libraries, computer equipment, etc.) per student" and "ZFP spending on supporting general infrastructure (sports, career services, medical infrastructure, etc.) per student", in our opinion, should be presented as the amount of expenditures on these categories of expenses from general and special funds, and the transfer to points should be regulated every year depending on the overall indicators in the country.

Since the standards for the ratio of the number of students to the number of teachers depend on educational and professional programs and differ in their coefficients, this indicator is proposed to be calculated as a "discrepancy" - 0 points and "compliance" - 5 points with regulatory requirements.

The indicator "Involvement of student self-government bodies in the process of periodic review of the educational and professional program and other procedures for ensuring its quality as partners" is estimated by the degree of involvement and consideration of the wishes of education applicants: attracting and taking into account wishes is less than 50% - 1 point; from 51% to 60% – 2 points; from 61% to 70% – 3 points; from 71% to 74% – 4 points; more than 75% – 5 points.

Indicators of evaluation of partnerships of institution of professional pre-higher education with employers of category "C" from the point of economic security are given in Table 7.

Table 7. Indicators for assessing GFPO partnerships with employers (C)

Indicators	Denomination	From 0 to 5	
Availability of memorandums/agreements on cooperation with enterprises, institutions, etc.	K21		
Availability of agreements on practice bases	K22		
Holding joint events with employers (projects, conferences, trainings, etc.)	K23		
		No (0)	Yes (5)
Passing by pedagogical workers of advanced training and internship at enterprises, institutions, etc.	K24		
Availability of orders from employers for the training of specialists	K25		
The practice of collecting, analyzing and taking into account information on the career path of graduates	K26		
		Degree of engagement, compliance (from 0 to 5)	
Involvement of employers in teaching professional disciplines	K27		
Involvement of employers in the state certification	K28		
Involvement of employers in the process of periodic review of the educational and professional program or certified course as partners	K29		
Compliance of the proposed educational and professional programs, certified courses with the needs of the region	K210		
Together	K2		

Source: developed by the author

We believe that the indicators "Availability of memorandums / agreements on cooperation with enterprises, institutions, etc." and "Availability of agreements on the

bases of practice" should be calculated on the basis of providing these documents with all educational and professional programs certified courses of the institution of professional pre-higher education. Accordingly, points are distributed: less than 50% of licensed educational and professional programs, certified courses are provided with existing memorandums / cooperation agreements and agreements on practice bases - 1 point; from 51% to 60% - 2 points; from 61% to 70% - 3 points; from 71% to 74% - 4 points; more than 75% - 5 points.

To assess the indicator "Conducting joint events with employers (projects, conferences, trainings, etc.)" we propose to take into account the frequency of such events: the absence of such events – 0 points; one event during the academic year – 1 point; one event during the semester – 2 points; quarterly holding – 3 points; two events per month – 4 points; more than two – 5 points.

The degree of involvement of employers in the teaching of professional disciplines, state certification, the process of periodic review of the educational and professional program, the certified course as partners is determined in accordance with the number of such programs / courses: the lack of participation of employers in these processes is 0 points; involvement in less than 60% of licensed educational and professional programs or certified courses – 1 point; from 61% to 70% of educational and professional programs / certified courses receive support for these indicators from employers – 2 points; from 71% to 80% – 3 points; from 81% to 90% – 4 points; more than 90% – 5 points.

The indicator "Compliance of the proposed educational and professional programs, certified courses with the needs of the region" should be based on the data of regional employment centers and in cooperation with them. We offer the assessment of this indicator according to the following parameters: the training of staffing meets the needs of the region less than 50% - 1 point; from 51% to 60% - 2 points; from 61% to 70% - 3 points; from 71% to 74% - 4 points; more than 75% - 5 points.

Indicators of evaluation of the formation of academic integrity among the participants of the educational process of institution of professional pre-higher education category "C" from the standpoint of economic security are given in Table 8.

Table 8. Indicators of evaluation of the formation of academic integrity among participants in the educational process of institution of professional pre-higher education (C)

Indicators	Denomination	No (0)	Yes (5)
Foresight in the employment agreement and in the contract on liability training regarding violations of the Regulations on Academic Integrity, the Code of Ethics / Conduct of Participants in the Educational Process	K31		
Organization of systematic work on the formation of academic integrity among participants in the educational process	K32		
Together	K3		

Source: developed by the author

Indicators of evaluation of the implementation of non-formal education of ZFP category "C" from the point of economic security are given in Table 9.

Table 9. Indicators of evaluation of the implementation of non-formal education of institution of professional pre-higher education (C)

Indicators	Denomination	No (0)	Yes (5)
The presence of a program to encourage applicants for education to socially useful activities	K41	Degree of engagement (from 0 to 5)	
Involvement of education applicants in project activities aimed at the formation of soft skills	K42		
Together	K4	Together	

Source: developed by the author

The degree of involvement of applicants for education in project activities aimed at the formation of soft skills can be determined by the ratio of the total contingent of the institution of professional pre-higher education to the number of applicants for education who took part in the events that were held within the framework of the implementation of the non-formal education program. Points are divided according to the following indicators: the involvement of applicants for education is less than 30% of the total number of contingent - 1 point; from 31% to 40% - 2 points; from 41% to 50% - 3 points; from 51% to 60% - 4 points; more than 60% - 5 points.

Indicators of evaluation of international cooperation of institution of professional pre-higher education category "C" from the standpoint of economic security are given in Table 10.

Table 10. Indicators of evaluation of international cooperation of institution of professional pre-higher education

Indicators	Denomination	From 0 to 5
Availability of foreign partners	K51	
Participation in grant programs	K52	
Participation of participants of the educational process in international conferences, projects, etc.	K53	
Together	K5	

Source: developed by the author

Indicators of this category are proposed to be evaluated in accordance with the number of available facts of the institution's activities of professional pre-higher education in this direction: one fact – 1 point; five or more, respectively, five points.

According to the results of the survey of applicants for education, their parents, scientific and pedagogical workers of institutions of professional pre-higher education, employers, which are presented in paragraph 2.2 of the dissertation, each of the above indicators (Fig. 2). 3.3) was assigned a share depending on the position in the rating of criteria and, accordingly, on the impact on the state of comprehensive ensuring the economic security of the institution of professional pre-higher education. Since the indicators are divided into "open" (O) and "closed" (C), which affected the order of indicators, then the specific weight is presented in accordance with this distribution.

The share of rating indicators of institutions of professional pre-higher education from open sources (O) is given in Table 11.

Table 11. Share of indicators of rating of institutions of professional pre-higher education from open sources (O)

	Metric Name	Specific gravity
K1	Indicators of evaluation of the academic environment of the GFPO	0,25
K2	Indicators of evaluation of the formation of academic integrity among the participants of the educational process of ZFP	0,05
K3	Indicators of evaluation of the implementation of non-formal education of ZFP	0,2
K4	Indicators for evaluating the content analysis of the official website of the GFPO	0,3
K5	Indicators for assessing the reputation of GFPO in the external environment	0,2
K	Integral indicator of assessment of the state of comprehensive ensuring of economic security of a higher education institution	1,0

Source: developed by the author

The share of rating indicators of institutions of professional pre-higher education from closed sources (C) is given in Table 12.

Table 12. Share of rating indicators of institutions of professional pre-higher education from closed sources (C)

	Metric Name	Specific gravity
K1	Indicators of evaluation of the academic environment of the institutions of professional pre-higher education	0,25
K2	Indicators for assessing partnerships with employers	0,15
K3	Indicators of evaluation of the formation of academic integrity among the participants of the educational process of ZFP	0,05
K4	Indicators of evaluation of the implementation of non-formal education of institutions of professional pre-higher education	0,2
K5	Indicators of evaluation of international cooperation of institutions of professional pre-higher education	0,35
K	Integral indicator of assessment of the state of comprehensive ensuring of economic security of a higher education institution	1,0

Source: developed by the author

Since the proposed methodology provides for the division of indicators into "open" (O) and "closed" (C), when calculating, we consider it expedient to give 0.6 specific gravity from the whole, "closed" - 0.4 specific gravity from the whole, since they may not be correct enough. Calculation of the integral indicator of the state of conformity of the institution of professional pre-higher education to certain indicators is proposed to be carried out according to the formulas:

$$K = 0.6K^O + 0.4K^C \quad (1)$$

where K is an integral indicator of assessing the state of conformity of the institution of professional pre-higher education to certain indicators;

$$K^O = \sum K_i^O \cdot \Pi_i^O \quad (2)$$

where K^O – integral indicator of "open" evaluation criteria; K_i^O – indicators of evaluation of "open" evaluation criteria; Π_i^O - the specific weight of each indicator;

$$K^C = \sum K_i^C \cdot \Pi_i^C \quad (3)$$

where K_i^C – integral indicator of "closed" evaluation criteria; Π_i^C – indicators of evaluation of "closed" evaluation criteria; K^C - the specific weight of each indicator.

The result will be characterized by the criteria given in Table 12, compliance of the institution with professional pre-higher education with the proposed indicators,

the level of success of participation in the rating, the prospects in the formation of a contingent of applicants for education, which will provide it with economic security.

The eligibility criteria are calculated according to the basic integral indicators, taking into account the specific weight specified in formula 1. The basic integral indicators according to the "open" criteria are given in Table 13.

Table 13. Basic integral indicators according to "open" criteria

	1 point	2 points	3 points	4 points	5 points
K_i^0	3,54	7,08	10,62	14,16	17,7

The basic integral indicators according to the "closed" criteria are given in Table 14.

Table 14. Basic integral indicators according to "closed" criteria

	1 point	2 points	3 points	4 points	5 points
K_i^c	2,02	4,04	6,2	8,08	10,1

The total amount of basic integral indicators by "open" and "closed" criteria is given in Table 15.

Table 15. The total amount of basic integral indicators

	1 point	2 points	3 points	4 points	5 points
K_i	5,56	11,12	16,82	22,24	27,8

Based on the basic integral indicators, we formulate the criteria for the institution's compliance with professional pre-higher education with the proposed indicators.

Table 16. Criteria for compliance of the institution with professional pre-higher education with the proposed indicators

Rank	Characteristic	Mark
And	The state of conformity of the institution of professional pre-higher education is high, which can provide it with economic security and development.	22,25-27,8
Would	The state of conformity of the institution of professional pre-higher education is sufficient, but there are certain shortcomings that can reduce the level of its economic security.	16,83-22,24
Into	The state of conformity of the institution of professional pre-higher education is average, but there are trends in its deterioration that may threaten its economic security.	11,13-16,82
G	The state of conformity of the institution of professional pre-higher education is low, there are rapid trends to its deterioration, which can have serious threats to its economic security.	5,57-11,12
Etc	The state of conformity of the institution of professional pre-higher education at the level of survival	up to 5.56

Source: developed by the author

Discussion. In order to test the proposed method, we will calculate the integral indicator on the basis of the activities of the Professional College of the KROK University, which are presented in the annexes.

$$K^0 = \sum K_i^0 \cdot \Pi_i^0 = 8 \cdot 0,25 + 10 \cdot 0,05 + 10 \cdot 0,2 + 45 \cdot 0,3 + 16 \cdot 0,2 = 21,2$$

$$K^c = \sum K_i^c \cdot \Pi_i^c = 25 \cdot 0,25 + 28 \cdot 0,15 + 8 \cdot 0,05 + 9 \cdot 0,2 + 9 \cdot 0,35 = 15,8$$

$$K = 0.6 + 0.4 = 0.6 \cdot 21.2 + 0.4 \cdot 15.8 = 19.4$$

Thus, the state of compliance of the Professional College of the KROK University with the proposed indicators is sufficient. This is confirmed by the stability of the quantitative indicator of the contingent of the educational institution at all stages of its development. But in order to increase the level of competitiveness, given the fact that this institution is a private form of ownership, and this forms certain challenges, one should pay attention to certain shortcomings that may reduce the level of its economic security.

Conducting an analysis of the results obtained according to this methodology, taking into account the fact that the proposed indicators are based on both the experience of the leading countries of the world, the opinion of experts, and the priorities formulated by potential consumers of educational services, the administration of the educational institution will be able to timely identify challenges and anticipate threats that may affect the competitiveness of *educational entities (business entities conducting educational activities) and their activities*. economic security.

Conclusions. Based on the results of the study, the following conclusions can be drawn:

1. The developed methodological approach involves the calculation of the following indicators: indicators for assessing the academic environment of institutions of professional higher education; indicators of evaluation of partnerships with employers; indicators for assessing the formation of academic integrity among participants in the educational process; indicators for evaluating the implementation of non-formal education; indicators of evaluation of international cooperation; indicators of evaluation of content analysis of the official website; indicators of assessing the reputation in the external environment.

2. The methodological approach involves the distribution of sources of information on the basis of which the calculation of indicators on the "open" (O) and "closed" (C). The obtained result will characterize the compliance of the institution of professional higher education with the proposed indicators, the level of success of participation in the ranking, prospects in the formation of the contingent of students who will ensure its economic security.

3. The proposed methodological approach, on the one hand, allows the administration of the institution to identify challenges and anticipate threats that may affect their competitiveness and economic security, and, on the other - to inform all stakeholders about the economic security of higher education institutions to make appropriate decisions.

4. In order to test the proposed methodological approach, the calculations of the integrated rating indicator were performed on the basis of the data of the Professional College of the KROK University, which showed a sufficient level. This is confirmed by the stability of the quantitative indicator of the contingent of educational institutions at all stages of its development, but to increase the level of competitiveness, it is necessary to pay attention to certain shortcomings that may reduce its economic security.

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CREATING A METHODOLOGICAL BASIS FOR MEASURING THE QUALITY OF AN EFFECTIVE LABOR PROCESS MANAGEMENT

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Abstract. The efficiency of the labor process directly depends on the productivity of employees and the interaction between the company and the employee. The aim of the article is to study the existing methodological approaches to measuring the quality of management of effective labor process and the prerequisites for creating a new methodological approach to personnel audit to assess the quality of company management. The research methodology involves the use of methods of analysis and synthesis, methods of comparative analysis and the method of generalization. The main results presented in the article are the study of the experience of foreign corporations aimed at assessing productivity, analysis of factors affecting productivity, as well as the creation of measures to improve the practice of using this indicator. The main approaches to the analysis and diagnosis of organizational culture are studied, which differ in the degree of complexity and depend on the tasks to be solved. It is established that the use of labor productivity as a criterion of efficiency makes it possible to assess the results of work, both the organization as a whole and individual employees. The internal organizational environment is an important factor that affects the efficiency of the work process. The relationship between subordinate and manager is an important factor for an effective work process. The employee is an element of the internal organizational environment. An original set of organizational values was formed during the team creation. This set is called the organizational culture. The organizational culture manages the tools that allow to identify and update the humanistic reserves of effectiveness. It is established that the new methodology for assessing the quality of management of labor process efficiency can be based on labor productivity and organizational culture.

Keywords: labor productivity; methods; quality of company management; employee; labor process; efficiency.

JEL Classification: C44, C52, J24

Formulas: 0; **fig.:** 0; **tabl.:** 1; **bibl.:** 16

Introduction. Assessing labor productivity as a quality and efficiency indicator of the labor process, it is necessary to note its role in managing the economic system of various countries through the prism of personnel management and the quality of interaction between company and employee. In the international community, special attention is paid to the management of the labor process and the selection of quality personnel, managers of the upper and middle rings.

Literature review. The World Forum for Economic Co-operation and Development Organization (July 2019, Australia) pointed out that productivity is a key source of good management and economic growth, as well as improving living standards. The report says that "Organization of economic cooperation and development pays special attention to internal organizational factors that affect productivity, including the interaction of employees and the organization and their socio-cultural part". [1, p. 6-13].

Activities of various foreign organizations, such as:

- The Japan Productivity Center (JPC) [2],

- Rationalisierungs und Innovationszentrum der Deutschen Wirtschaft (RKW) [3],
- National Productiv Cantry (NPC) [3],
- The European Association of National Productivity Centers (EANPC) [4],
- The Asian Productivity Organization (APO) [5],
- The Center of Productivity and Prosperity (CPP) [6],
- American Productivity and Quality Center (APQC) [7] and others, aimed at studying productivity, analyzing factors that affect productivity, as well as creating measures to improve the practical application of this indicator.

The economic literature describes various approaches to measuring labor productivity. These approaches are theoretical and can be applied in practice. Various aspects are described in the works of O. Marshall, K. Marx, F. Taylor and other researchers. According to K. Marx, time savings is a measure of the employee productivity effectiveness and organization of working time. [8, p117].

Aims. The aim of the article is to study the existing methodological approaches to measuring the quality of management of effective labor process and the prerequisites for creating a new methodological approach to personnel audit to assess the quality of company management.

Methods. The research methodology involves the use of methods of analysis and synthesis, methods of comparative analysis and the method of generalization.

Results. The formation and change of organizational culture always begins with an analysis of its current state, then reveals the prospective state of organizational culture and quantification of contradictions between staff and group profiles of organizational culture within the organization [9, p. 61-65]. Establishing the relationship of the responsible individual organizational culture degree with the group is necessary to develop organizational solutions aimed at improving the efficiency of the workers labor process in the organization.

There are different approaches to the analysis of organizational culture, which differ in complexity and depend on the tasks. The choice of organizational culture assessment option for this paper was based on a comparison of methods [9, p. 61-65], [10, p. 5-15], given in table 1, based on the practical values and reliability of the results, the possible quantitative interpretation of the data, as well as labor costs to achieve them.

Each of those listed in table 1 approaches to the description of the organizational culture assessment has its own characteristics. The method of E. Shane clinical research is a holistic approach that allows you to get the most accurate results in the diagnosis of the deep level of organizational culture, but requires special psychology knowledge. The method of identifying the relationship of organizational structure with organizational culture, which is proposed by Charles Handy, is easy to use, but subject to environmental factors. The application of some methods such as C. Orlay, J. Chatman and D. Caldwell is difficult because there is no adapted tool and sufficient evidence of reliable results. The method called the model of "managerial lattice" proposed by R.R. Blake, JS Mouton helps to visualize the organizational culture of

the organization. At the same time it limits the possibility of choosing management decisions.

Table 1. Analysis of methods for organizational culture assessing

Author	Methodology	Typology of cultures	Features of application
Edgar H. Schein [11, c. 35-42]	Methods of clinical experiment	Artifacts (surface level)	High quality, reliability, clarity, interest and involvement of participants in the diagnostic process, the availability of special knowledge for the experiment.
		Proclamations and values (surface level)	
		Basic basic concepts (in-depth analysis)	
C. Handy [12, c. 180-216]	Methods of interaction of organizational structure with organizational culture	Manager's culture	Theoretical basis of the methodology, ease of use, universality, assessment of the external environment impact on the organizational culture
		Role culture	
		Task culture	
		Personality culture	
R. Blake, J. Mounton [13, c. 17-27]	"Management lattice" model	"Club out of town"	Possibility of practical application of the methodology, graphical representation of results, subjectivity of assessment (depending on the position of the head), limited management decisions (focus on the interest of the company or focus on human interest)
		"Power-subordination"	
		"Organizational management"	
		"Team Management" Group	
		Combined management	
J. Sonnenfeld [14, c. 97-101]	Career development system (emergence and distribution of leadership)	"Baseball Team"	Assessment of the organizational culture type based on type of activity, not taken into account the mechanism of individual organization evaluation, consideration of mixed types of the organizational culture
		"Fortress"	
		"Academy"	
		"Club"	
C. O'Relly, J. Chatman, D. Caldwell [15, c. 487-516]	Methods of profile approach to organizational culture (Organization Culture Profile - OCP)	Innovation	Evaluation and comparison of individual and group characteristics using correlation, workload; lack of adaptive tools, low level of reliable results.
		Attention to detail	
		Team spirit	
		Aggressiveness	
		Focus on interaction	
		Respect for people	
		Determination	

Source: the table is compiled by the author based on a literature example [10, p. 5-15]

Discussion. The efficiency of the labor process is determined by the indicator of labor productivity, the number of products or services produced by the worker per unit time. The use of labor productivity as a criterion of efficiency makes it possible to assess the results of work, both the organization and individual employees.

The internal organizational environment is an important factor that affects the efficiency of the work process. The relationship between subordinate and manager is an important factor for an effective work process. The employee is an element of the internal organizational environment. An original set of organizational values is formed during the team creation. This set is called the organizational culture. The organizational culture manages the tools that allow to identify and update the humanistic reserves of effectiveness. Effective management depends on the correct

selection of personnel who pass the first step of selection through a questionnaire. The questionnaire allows you to get detailed answers on professional and general questions. Questionnaires save time, which is important for each party. The obligatory question in the questionnaire is the attitude to organizational culture and the test task on the essence of organizational culture in the organization.

Conclusions. The main results presented in the article are the study of the experience of foreign corporations aimed at assessing productivity, analysis of factors affecting productivity, as well as the creation of measures to improve the practice of using this indicator. The main approaches to the analysis and diagnosis of organizational culture are studied, which differ in the degree of complexity and depend on the tasks to be solved. It is established that the use of labor productivity as a criterion of efficiency makes it possible to assess the results of work, both the organization as a whole and individual employees. It is established that the new methodology for assessing the quality of management of labor process efficiency can be based on labor productivity and organizational culture.

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MANAGEMENT OF ART-PROJECT TEAMS UNDER CONDITIONS OF HIGH INSTABILITY

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Abstract. This section of the monograph discusses the formation and management of the project team, taking into account the psychological characteristics of each team member and clarifying their further impact on project implementation. This is especially important for art projects, where the team is creatively gifted people with certain psychological aspects, which are inherent in talented individuals. Identifying and analyzing the special traits that are usually inherent in creative people will greatly help the project manager to understand the needs and opportunities of each team member, his motivations and fears and create conditions for the full disclosure of each talent. This knowledge is necessary in order to create a coordinated teamwork that will be the key to the success of any art project, regardless of its complexity and size. An analysis was conducted to determine the degree of interest of a creatively gifted person in various forms of activity of the art project. It was found that she was not interested in the organizational work of the project in general. The artist is fully absorbed in the creative process of creating a product. But organizational issues remain out of the creative person's attention only until the organization of the project activity is directly related to the schedule of its work, the quality of materials or equipment with which it must work. In accordance with the peculiarities of art projects and the psychological characteristics of their stakeholders, a classification of key risks of art projects has been developed. Identified risks associated with distributed projects. Given these risks, the project manager needs to build the project management process in such a way as to minimize the risks to the project management goals, namely to manage the project management in such a way as to obtain a product of a certain quality on time and within the allocated budget.

Keywords: project; creative sphere; creative project; creative event; creative activity; art projects; art project risks; risk; risk management; specificity of art projects; distributed projects; weak formalization.

JEL Classification: C19, D22, Z10

Formulas: 0, fig.: 1, tab.: 3, bibl.: 24

Introduction. Traditional and common areas for the project approach are IT, industry, construction, media, manufacturing, and business. But these areas are no longer the only ones where project management practice is applied. For example, social, scientific, educational, pedagogical, innovative projects, etc. are currently quite relevant and widespread. Recently, there has been a significant increase in interest in the relationship between the traditional model of management and the cultural and creative spheres. These areas are becoming important economic industries due to several factors: the successful operation of some cultural and creative organizations, the ability to change the vision of societal issues, namely, approach to innovation, product design, ways of thinking and more, thanks to creative views. Today, culture has become an important resource for socio-economic development and human growth. It contains not only the concept of material and spiritual values. Now it is a complex structure that interacts with various spheres of human activity, including education, architecture, organization of cultural events in the presentation of Ukraine as an attractive tourist region of the world and image

during diplomatic meetings at the international level. For example, the experience of cities such as Dublin, Glasgow, Manchester, Bilbao shows that their competitiveness has already gone beyond purely industrial development, and cultural projects have become the engine for urban development. Nevertheless, in the conditions of formation of competitive environment of socio-cultural space and transition from planned to market economy, creative sphere is one of the last spheres of human activity, which could not fully adapt to the requirements and conditions of modern market. Creative projects, from the standpoint of organization, implementation and system management are more complex [1]. The introduction of a project approach in the creative sphere will give a significant positive result in improving the quality of organization and implementation of creative activities.

Literature review. The project approach in the activities of organizations is considered by many scientists and practitioners in project management. The following authors reflected on the application of project management methodology in their scientific works: Bushuyev S.D. [2] Bushuyeva N.S. [3], Morozov V.V. [3], and many other scientists [1].

Scientists paid attention to the combination of project management with the creative sphere relatively recently, in the 90s of the twentieth century. A separate thorough study of the creative sphere began much earlier, around the second half of the twentieth century, but the question remains relevant for further study today. Unfortunately, scientific works on the application of the project approach to creative projects have not received extensive research in world science. However, it should be noted that interest in this issue is constantly growing. The issue of development and implementation of art projects is a relevant and popular practice of cultural and artistic groups. However, it is insufficiently studied in the theoretical and applied aspect.

With the application of the methodology of the project approach to the management of art projects, domestic managers are more familiar with foreign experience and study on their own, successfully implemented projects. However, there is no tendency towards systematic and professional implementation of the approach today. Everything happens spontaneously, without proper critical analysis, identifying possible prospects for its application, adaptation to the national culture of management and the specifics of the conditions for the implementation of such projects. Fundamental work is missing and awareness of its effectiveness as an organizational and managerial form is still quite weak. Among the separate articles devoted to this issue, we should highlight the scientific works of the following authors: Danchenko O.B. [4], Bass D.W. [5]. Therefore, research should be continued, based on existing research in the study of specific features and differences of creative activity from other areas where the project approach is used to develop adapted models and methods of project management in the creative field, which will be effective tools for project managers [1].

Aims. Identify conditions of high instability as a source of risk in the management of art project team in two directions. Namely, features of art projects and psychological aspects of creative personality of project team members. And also

to analyze their impact on the implementation and outcome of art projects when applying a project approach to creative activities.

Methods. System approach, system analysis, expert assessment method, risk management methods, decomposition method.

Results. The article proved the compliance of the creative event with the characteristics of the project, which allows to apply the methodology of project management in the creative sphere. The peculiarities of art projects and psychological aspects of creative personality, which are factors of high instability of art projects and sources of risks in the management of the art project team, were analyzed. This step will further adapt the project management methodology by developing methods and ways to manage the art project team, taking into account possible risks from certain sources. Understanding the nature of risk will allow the project manager to make more accurate predictions about the occurrence of risk events and the choice of effective methods and ways to prevent their occurrence or minimize the consequences.

Discussion. Every idea that was implemented started with a plan, thanks to which it was realized. An idea is an idea whose goal is to achieve the desired economic, technical, technological or organizational result. This is in line with the definition of a project provided by, for example, the PMBoK standard [6]: "A project is a temporary activity aimed at creating a unique product, service or result." Over time, the interpretation of this concept has become somewhat broader. For example, current standards in project management provide the following definitions of a project:

- a unique process consisting of a set of interconnected and controlled works with start and end dates and designed to achieve the goal of meeting specific requirements, including time, cost and resource constraints [7];
- temporary activities aimed at creating a unique product, service or result [6];
- a unique set of coordinated actions with a specific beginning and end, carried out by an individual or organization to solve specific tasks with a specified schedule, costs and performance parameters [8];
- time and cost limited system of operations (works), which is aimed at achieving a number of agreed results or products (the plan is necessary to meet the objectives of the project) at the level of requirements and quality standards [9].

Therefore, based on this explanation, it is safe to say that the implementation of each idea without exception is a project where the creative sphere is no exception. Each individual event (event - a set of actions or means to achieve, implement something [10]) can be considered as a separate project that meets all its characteristics. Namely:

- Temporary - limited time (ie the presence of certain start and end dates of the project);
- Uniqueness of the product (ie in such conditions the project is created for the first time);
- Progressive Elaboration of project and product specifications (ie step-by-step development and gradual advancement, refinement);

- Limited resources (ie any project is implemented with limited financial, labor, material and other resources);
- Goal setting (ie any project has a final, specific and clearly defined goal).

First, consider the definition of the terms "creativity" and "creative activity". The Ukrainian Small Encyclopedia defines creativity as a human activity aimed at creating qualitatively new, previously unknown spiritual or material values. Necessary components of creativity are fantasy, imagination, the mental content of which is contained in the creation of the image of the final product (the result of creativity) [1, 11].

Creative activity is an individual or collective creativity, the result of which is the creation or interpretation of works of cultural value [12]. Therefore, applying the term "project" to creative activity, the definition of a creative project, or art project, was made:

- art project is a completed cycle of artistic activity aimed at creating an original work of art in a limited time and resources [5].

Consideration of each event in the field of culture and art (realization of various holidays, performances, concerts, festivals, competitions, exhibitions, etc.) as a separate project, has grounds for the application of project management methodology. Table 1, to substantiate this judgment, presents the characteristics of the creative event "Organization of a festive New Year's morning for primary school children" to analyze its compliance with all the characteristics of the project [1].

Table 1. Characteristics of the project of organizing and conducting a creative event

Features	Project of the creative event "Organization of a festive New Year's morning for primary school children"
Temporary - limited time (ie the availability of certain start and end dates of the project)	Project dates: December 5 - December 30
Unique product (in such conditions the project is created for the first time)	Holding an event with a certain number of participants (people involved in the cast - 7 people; with a certain number of children - 90 people; invited guests - up to about 80 people).
Progressive Elaboration of project and product specifications (ie step-by-step development and gradual advancement, refinement)	<ul style="list-style-type: none"> - Initiation (morning scenario offered to management). - Planning (detailed development of the scenario, taking into account available resources, distribution of tasks among the performers, making clarifications and re-planning if necessary, coordination of organizational actions). - Implementation (event). - Completion (analysis, accounting for errors).
Resource constraints (ie any project is implemented with limited financial, labor, material and other resources)	<ul style="list-style-type: none"> - Limited budget for the purchase of essential materials to create decorations or costumes. - The presence or absence of certain technical means. - Allocation of teachers to help organize and conduct the event.
Goal setting (ie any project has an ultimate, specific and clearly defined goal)	Carrying out of action according to the scenario, in accurately planned date (December 29 15:00)

Source: developed by the author

Based on the analysis of compliance, it can be argued that any creative event in all its characteristics corresponds to the project.

A more detailed analysis of creative activities showed that when using the methodology of the project approach, you need to take into account specific features that are unique to creative projects or psychological aspects of creative individuals who are members of the project team. For example, when some events are held solely due to the enthusiasm of individual employees, without additional payment for its organization. Or, due to insufficient funding, some work is carried out at the expense of the project initiator. Another important and influential feature of the project is the misunderstanding between the main stakeholders of the project: the management of the institution (usually the customer), the project organizer (usually called a project manager), and the executors. The essence of the conflict of interest is that the management of the institution can usually be more formal and prioritize the terms and limits of the budget, rather than the behavior of a creative person, which is one of the sources of risk. All this often leads to negative consequences: from delays in project implementation, to unsatisfactory quality of the product or event [1; thirteen].

Figure 1 shows some of the most common features of creative projects, which at the same time correspond to the characteristics, according to the methodology of project management, and show the specificity of creative projects [14].

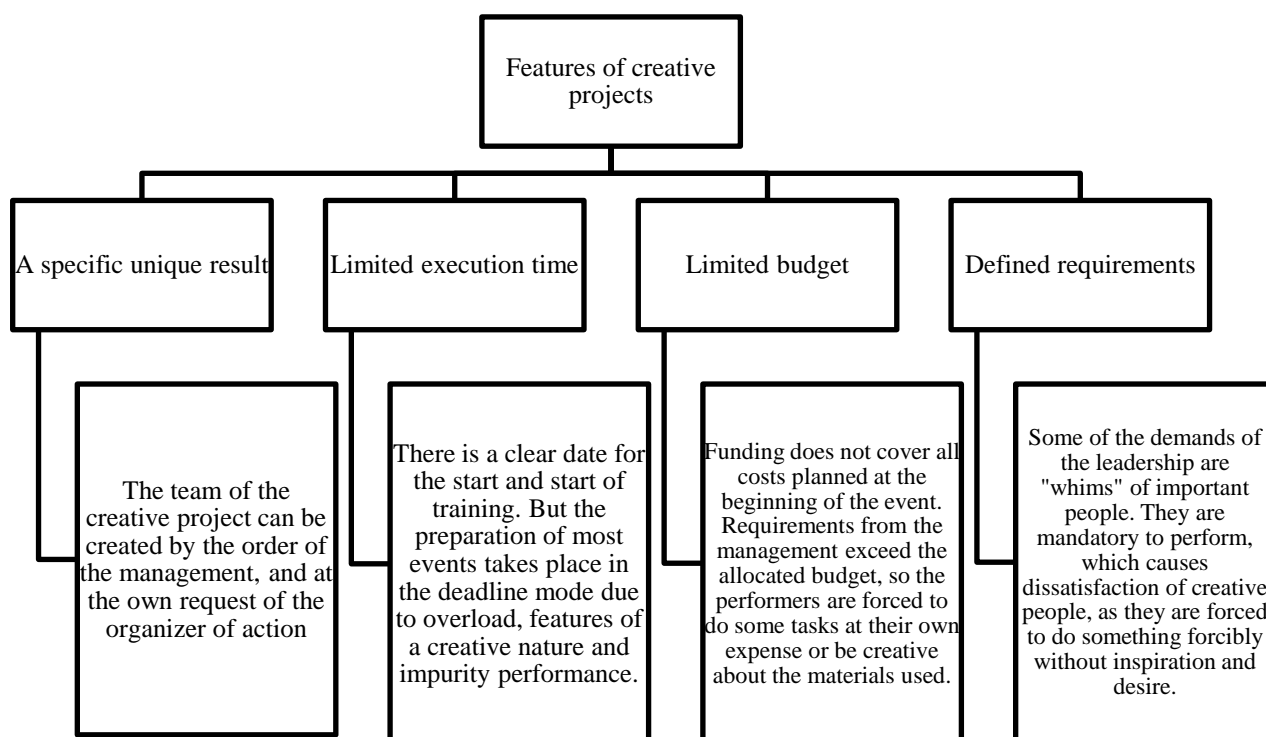


Figure1. Features of creative projects

Source: designed by the author

In addition to these features, it can be noted that [5]:

- the purpose of the creative project is very mobile and plastic, but it is constantly present in the mind of the author;
- personification of the project product;

- special requirements for resources (material resources, conditions of implementation, performer and his individual characteristics);
- high degree of risk due to the subjective perception of the product of the art project.

Today, the world has drawn attention to an extremely important indicator - the concept of the value of the project and its outcome. The Japanese system of enterprise project and program management (P2M) reveals the most profound concept of value. The value of a creative project is assumed by defining for the manager everything that is essential values for the customer and the consumer.

However, given the vulnerability of creative individuals, their bias towards their own work, it is important to consider the value of creating a project product for performers (project teams) or artists or creative people who create this product. The expectations and values of the project participants in any field include such work that will allow them to independently and creatively perform the task and be able to jointly solve broader tasks and feel involved in the common goal, not just "cogs in the mechanism". they do not decide anything, they have no influence on anything. And in the case of creative projects, the manager does not work with a team of people who are guided by logic and facts (for example, software engineers, designers, development engineers). He will have to work with creative people, such as art directors, teachers, designers, writers, musicians, artists and others, who are more visual and intuitive gifted individuals, who have specific, extraordinary character traits. Creative people need to be clearly aware of their differences emotionally.

Therefore, the general level of emotions in creative projects is much higher than in technical ones. Compassion, understanding and support will always be balanced with demanding, persistent and categorical in adhering to clear criteria for the implementation of tasks, the use of the allocated budget and project schedule [1].

The project always has certain limitations that must be observed regardless of the scope of the project approach and all the differences from any business project. The creative project must also be completed on time, within the allocated budget and meet the specified specifications. Therefore, the creative project manager needs to find a balance between encouraging project executors to optimize productivity and providing all the necessary resources to inspire and enjoy personal satisfaction with the process and product, thus developing talent and creativity, willingness to work effectively and maximize creative potential. Therefore, their management requires the development of new methods or adaptation of existing to the specifics of art projects and taking into account the psychology of the creative team [15].

Most scientists have agreed that a creative person is an individual with a high level of knowledge and a desire to create a new, original product. Creative activity becomes a vital necessity for her, and creative style of behavior is the most characteristic. The analysis showed that in the views of many scientists can be identified the following main features of creative personality:

- courage of thought, desire for risk;
- developed imagination and fantasy;
- ability to think critically, identify contradictions and ways to resolve them;

- the problem of seeing objective reality, identifying new promising ideas in the usual;
- ability to use knowledge and experience to solve new situations;
- independence of judgments, own beliefs and positions;
- clarity of justification, alternative approaches to the development and implementation of various tasks;
- depth and flexibility of thinking;
- ability to purposeful activity, dedication;
- the emergence of a directed interest in a particular field of knowledge (may manifest itself in childhood);
- extremely high efficiency during the hobby;
- resilience and stubbornness.

The well-known Ukrainian scientist V.O. Moliako has a correal view of the psychological aspects of creative personality. But he believes that the speed and ease of assimilation of knowledge, skills and competencies by creative people and the ability to effectively organize independent work should be added to the above features [16]. The second aspect is extremely important in project activities. But. It should be noted that effective self-organization is, unfortunately, not inherent in all artists. Low level of self-organization and desire to act only with the emergence of inspiration, takes place outside of project activities. However, given the time constraints of the art project, the project manager should pay attention to those team members for whom inspiration is a prerequisite for work [15].

It should also be noted the presence of an intellectual component of the creative personality - a divergent type of thinking. It provides several correct and equal answers to one question (as opposed to the convergent type, which focuses on an unambiguous and the only correct solution that removes the problem as such). It is the divergent type of thinking that contributes to the manifestation of several psychological traits: the ability to use knowledge and experience to solve new situations and courage, the independence of their own judgments, beliefs and positions, and alternative approaches to developing and performing different tasks. This type of thinking and approach, when several solutions are proposed to the task, from which the optimal one is chosen, is especially important for the implementation of art projects, where the solution of certain problems requires a creative approach [17].

Also interesting are the works of Carl Leonhard, who created a typology of personality in terms of temperament and some character traits [18]. According to the survey, he highlighted the qualities that are most common in creative people. Thus, among them are [15, 18]:

- emotionality, ie the ability to care about the emotional state of another person;
- tendency to sudden mood swings: from a high level of activity, cheerfulness and cheerfulness to a depressed gloomy mood;
- exaltation, ie the power of feelings, the scope of experiences as the ability to have emotional experiences of positive and negative events.

Another British and American psychologist R. Kettel conducted a study in which he identified 16 personality traits [19]. Some of them are inherent in creative people. Among them: friendliness, openness, social courage, independence, impulsiveness, low self-control. Of particular interest is the so-called "childhood" complex, which is characterized by immediacy of perception, brightness of impressions, trust and openness to the world. Yes, an adult combines a complex of "childhood" with a sense of social responsibility, the ability to master their behavior and manage inspiration. But it should be noted that the presence of this feature can have negative consequences. If a person does not learn to control his emotional state (trust, openness, unpredictability, impatience, outward whimsy, frivolity), which are inherent in childhood, in adulthood can often lead to problems in communication and social, business and personal relationships and relationships with others. For example, hypersensitivity can manifest as vulnerability and anxiety, and the need for self-affirmation can transform into painful selfishness. A creative person often feels unprotected, and anxiety can lead to mental instability and behavioral disorders. And it is intense, and often exhausting, and productive work allows you to be alone and "hide" from the pressure of the environment [15; 17].

Another important feature that is necessary for the implementation of projects is the desire and ability to work in a team. It depends on what type of person or type of behavior a particular person belongs to. That is, she is an extrovert or introvert. The concept and description of extraversion and introversion first appeared in the works of Carl Jung in the early 20th century [20]. Further, many scientists dealt with this issue, including G.Yu. Eisenk, Carl Leongard and others. According to their research and further definition of these personality types, we have the following generalized characteristics:

- An extrovert is a person focused on the outside world, on others. It is characterized by a desire to communicate with people, attention from others, participation in public speeches and crowded events;
- An introvert is a self-centered person. Characteristic behavior for her is loneliness with inner thoughts and experiences, creativity or observation of the process.

From these characteristics, we can determine that extroverts are more prone to teamwork, which is not the case with introverts. But among creative personalities there are representatives of both types. The implementation of an art project involves the creation of material or spiritual values by individual artists, which is ideal for introverts, but these individual material or spiritual values are also part of the product of the art project. That is, project activities involve teamwork in performing certain tasks, which will be more comfortable for extroverts. The project manager cannot select only representatives of one type to the team. He should take into account the behavior of both types and plan work on the project, allocating tasks so that all team members can work effectively, feel comfortable and show all the necessary qualities and skills [15].

When considering the use of the potential of creative personality and creating conditions for its manifestation and disclosure in the project, we should also take into

account the concept of "creativity", which in recent years has been widely used in combination with the concepts of "creativity" and "creative personality". The English word "creativity", derived from the Latin creation - creation, generation, in Ukraine is interpreted quite contradictory. In the most general form, creativity is described as the ability of a person to go beyond the situation, to offer answers that are highly original and non-standard thinking. In terms of project management, creative capacity discovery is equally important for the team of performers and for the project manager, for whom it is an opportunity to find and implement innovative solutions in cases where traditional models and methods of project management can not be used [3].

A creative person is eclectic, inquisitive and constantly strives to combine data from different fields in his ideas. High enthusiasm, absorbing one's work for several hours and returning to it in the following days, often leads to the desire to constantly improve one's work, where "perfection" is a purely subjective factor of the artist himself, and not a requirement of society.

Table 2. Analysis of the impact of psychological characteristics of stakeholders on art projects

Psychological features of stakeholders of art projects	Impact on the project (1 - minimal, 2 - medium, 3 - strong, 4 - critical)																									
	Resource							Project requirements							Project processes					Performance evaluation						
	people	money	equipment	materials	information	knowledge	priorities	objectives	specifications	work schedule	budget	quality	logistics	supply	team work	project processes	organizational	infrastructure	technologies	solving problems	project progress	success of the project	team work	competencies	personnel award	employment guarantee
Affectiveness	2	1	1	1	1	3	1	3	1	3	1	1	1	1	4	3	3	2	2	3	3	4	4	4	4	2
Integrity	2	1	1	1	3	4	3	3	1	3	1	1	1	1	4	3	3	2	2	3	3	4	4	4	3	2
Lack of conservatism	1	1	1	1	1	1	1	2	2	3	1	1	1	1	4	3	3	2	2	4	3	4	4	3	3	2
Independence of one's own judgments	1	1	1	1	1	1	1	2	2	2	2	2	1	1	4	4	3	2	2	4	3	4	4	3	3	2
The desire to interact with other people	1	1	1	1	1	1	1	2	1	2	1	4	1	1	4	3	4	2	2	4	4	4	4	3	3	2
The desire for solitude and avoidance of communication	4	1	1	1	3	2	1	1	1	2	1	4	3	1	4	3	4	2	2	4	4	4	4	3	3	2
Courage of thought	1	1	1	1	1	1	1	3	1	1	1	2	1	1	4	4	4	2	2	4	4	4	4	4	2	2
Critical thinking	1	1	1	1	1	1	1	3	1	1	1	2	1	1	4	3	4	3	3	4	3	4	4	3	3	2
Ability to transfer knowledge to a new situation	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	4	3	4	4	4	4	4	4	4	3	2
Emotionality	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	4	3	4	4	4	4	4	4	4	4	2
Exaltivity	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	4	3	4	4	4	4	4	4	4	4	2
"Childhood" complex	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	4	3	4	4	4	4	4	4	4	4	2

Source: developed by the author

Therefore, too high personal standards and feelings of dissatisfaction with one's own results, which arise both for objective reasons, when the result is worse than planned, and from a subjective point of view on perfection, lead to psychological vulnerability caused by hypersensitivity of the creative personality. In turn, psychological vulnerability affects the emotional state and performance of a creative

person, which can have negative consequences for the implementation of the art project. Hypersensitivity and breadth of perception contribute to the manifestation of creative qualities and properties, as well as a deep experience of social injustice, which affects the emotional state and the ability to mobilize forces for further work. The degree of manifestation and further improvement of the above psychological properties depends on [15]:

- ability to constantly learn about the objective world and the place of man in it, to discover, comprehend and reproduce in art projects new knowledge, ideas, images, etc.;

- readiness for critical and creative analysis of the development of the nature of people's social relations, their interests, ideals and values, the development of the need to act in accordance with joint teamwork;

- the desire for creativity, improvisation of intellectual and creative activity for the development of relevant, popular art projects.

Extremely interesting, but insufficiently studied is the study of the impact of psychological characteristics of creative people on various aspects of the art project during its implementation. Therefore, an expert method of analyzing the impact of the most important psychological traits of creative individuals on the implementation and outcome of an art project using a matrix of stakeholders' influence on the project [15].

Therefore, the analysis showed that a creatively gifted person is not interested in organizational work on the project as a whole. But only until the organization of the project activity is not directly related to the schedule of its work, the quality of materials or equipment with which it must work. And in this matter, self-organization and interpersonal relationships and relationships in the project team play an important role.

Although a creative person seeks to interact with others, but the independence of judgment, affectivity, emotionality and exaltation, as well as the presence of a complex of "childhood" can significantly complicate teamwork [1]. In addition, the psychotype of each team member should be considered to clearly define and allocate team and individual tasks, to establish communication and interaction, and thus reduce discomfort and stress for performers.

When it comes to evaluating a project, a creative person is subjective and biased towards his personal result and may be too critical or, on the contrary, too loyal to the result of a colleague, depending on his personal relationship with him. It should also be noted that for some creative people the process of creating something is more attractive than the end result. And this has certain threats to meet the criteria of the project product [1; 15].

Analysis of the impact of psychological characteristics and specific features of the art project on its implementation showed that all the above factors are significant risks for creative projects. Disregard for them and the lack of a plan to prevent or minimize the consequences will inevitably affect the achievement of project management objectives, namely exceeding the budget, violation of deadlines and unsatisfactory quality of the final result of the project [21].

Project management defines risk as a general phenomenon, as an uncertain event or condition that, if any, will have an impact (negative or positive) on at least one of the objectives of project management. The risks to which a project is exposed may arise due to internal and external uncertainties as a combination of different circumstances and conditions that are combined or separated in a particular activity. This creates an appropriate situation that may facilitate or hinder the implementation of the decision.

Scientific works of Bushuyev S.D., Danchenko O.B., Yaroshenko F.O., and other authors [5; 22; 23; 24] offer approaches to risk management and their adaptation to modern conditions of project implementation in Ukraine. However, there is no significant attention on the part of scientists to researching the risks of art projects today. This may be due to the fact that the introduction of a project approach to the implementation of art projects at the professional level is still not common and remains unnoticed by many institutions, and counter-risk measures begin to be developed only after the risk. That is, risk management work exists in a very small percentage of institutions.

Risk management methodology is widely covered by a number of project management standards: PMBOK - Project Management Body of Knowledge, P2M - Project and Program Management for Enterprise Innovation, PRINCE2, ISO 21500, ICB / NCB and others. In real life, risk management is the art and science of risk analysis with the subsequent organization of activities that allow the best way, in terms of project objectives, to eliminate or minimize risk [22].

Unfortunately, it is impossible to create a single universal risk classification system for projects in all areas. First, there are different approaches to its creation. Secondly, it is impossible to take into account the specifics of all projects without exception in all areas of human activity. Given these reasons, there is a need to study the impact of external and internal factors for further development of the classification scheme, which will reflect the most common types of risks specific to art projects. This can greatly facilitate the forecasting of risk events and the development of certain measures and appropriate methods and techniques of risk management. Therefore, based on previous own research and analysis of scientific works [1; 5; 17; 22-24], based on the identified factors of specificity of creative projects, the following types of risks for art projects were identified (Table 3).

The development of a classification scheme of risk factors for two identified sources (features of art projects and psychological aspects of the creative personality of project team members) has practical value for the art project manager. It will provide an understanding of the nature of the origin and causes of risk, to choose effective methods and ways to manage a team of art projects that can prevent risk or minimize its consequences.

Conclusion. The result of the analysis of the characteristics of creative activities on a specific example, proved the compliance of the creative event with all the characteristics of the project. Consideration of the specific features of creative projects gives grounds to argue that the use of project management methodology

without adapting it to these features can lead to negative consequences at the stage of planning and organizing a creative event.

Table 3. Identification of risks of the art project

Risk factor	Type of risk	Relation to the project
Lack of clear parameters of the project result (formalization).	Creative risk	Internal
Mobile and plastic target.		
Product product personification.		
Emotionality, ie the ability to care about the emotional state of another person.	Psychological risk	Internal
Predisposition to sudden mood swings from increased activity, cheerfulness and cheerfulness to depressed gloomy mood.		
Exaltation, ie the strength of feelings or the scope of experiences, as the ability to overly emotional experiences of positive and negative events.		
Impulsiveness.		
"Childhood" complex		
High level of enthusiasm and dedication	Social risk	External
Negative or relatively indifferent consumer perception of the project product		
The organization and holding of the event can be due to the enthusiasm of individual employees, who themselves take on the function of art project manager without additional payment and the time allocated for this in the work schedule.	Organizational risk	Internal
To organize an event to perform the functions of an art project manager, a person under duress is involved without any motivation for encouragement.		
Pandemic, military action, natural disasters, etc.	Force majeure risk	External
Special requirements for project resources.	Technical or material risk	Internal
Ability to work in a team.	Human risk	Internal
The head of the institution, who is also the customer, does not take into account the peculiarities of the psychology and behavior of creative people and prioritizes the deadline and budget.	Communication risk	Internal
Misunderstandings between the art project manager and the customer or the manager and team members due to the lack of clear formalization of project requirements by the customer will complicate.		
Lack of funding for a number of reasons (informal outcome of the art project, so it is impossible to determine at the beginning how much money is needed or the emergence of additional requirements for the project result; due to lack of targeted funds for art projects in sufficient quantities, etc.).	Financial risk	Internal
Subjective perception of the product of the art project and your personal result by the performer.	Value risk	Internal

Source: developed by the author

A detailed review of creative activities revealed specific features of art projects and psychological aspects of creative individuals who are members of the project team, as factors of high instability in the implementation of the art project, which identified two sources of risk. This should help to draw up a classification scheme of the most common types of risks of art projects to help the project manager in forecasting risk events, developing certain measures and appropriate methods and techniques of risk management. It is also the basis for developing new or adapting existing methods and ways of managing an art project team.

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