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тел/факс: (03131) 2-11-09, (03131) 2-11-09
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Influence of socio-demographic factors on the development of marketing communications

Volodymyr Nesterenko*

PhD Student

Sumy State University

40007, 2 Rymysky-Korsakov Str., Sumy, Ukraine

<https://orcid.org/0000-0002-1792-9823>

Abstract. The study of the influence of socio-demographic factors on the development of marketing communications is relevant, as it helps businesses to interact more effectively with the changing needs and behaviour of consumers in the context of global demographic changes. The purpose of this study was to investigate marketing communications that are preferred by different segments of the population. During the study, the following methods were used: analysis of statistical data, logical, graphic, and generalization methods. The study covers various categories of families and their influence on the consumption and perception of advertising. Large families, Muslims, gay people, and serial monogamists were found to have their own unique characteristics and preferences in advertising. Specifically, large families can be targeted by advertising aimed at children's goods and services, which can be encountered while walking with children. Muslim families who are allowed to have multiple wives may be interested in advertising that reflects the values and needs of this religious group. Gay people and serial monogamists may show a greater interest in branded clothing and higher-priced goods. Furthermore, the age and income level of the population influence the perception of advertising. Young and middle-aged people may be more trusting of advertising, while older people may show less trust in it. It was also found that advertising in the media and Internet advertising are effective channels of communication with various categories of the population. The results of the study can be used to adjust marketing strategies, from the correction of advertising messages to the selection of platforms for advertising promotion, which, considering the demographic characteristics of the target audience, can significantly increase the effectiveness of marketing activities and business profitability

Keywords: social development; promotion; advertising; values; brands; trends; transformation of social values

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*Corresponding author

Introduction

Modern business cannot be imagined without product advertising. Both for new companies and those that have been working on the market for a long time, promoting products through advertising is an effective marketing tool for successful development and increasing competitiveness among others. The wide variety of marketing tools, their impact on the development of information technologies and the digitalization of all spheres of society's life presents companies with the important task of choosing the most effective tools for offering and selling products. Under such conditions, it is relevant to investigate patterns between a person's trust in marketing communications and their socio-demographic status. Companies need to be aware of which methods and types of communication are more appropriate to select and invest in their development to increase sales and profits. The essence, features of application, advantages, and disadvantages of marketing communications were studied by Ukrainian, American, and scientists from other countries of the world.

Thus, Ukrainian scientists N. Yaloveha and A. Zakharenko-Seleznyova (2020) summarized the essence and types of communication technologies, described the components of the information and communication process and revealed the features of the application of marketing communication technologies. The scientists also investigated the issue of the possession of digital skills by the population of Ukraine, which contributes to the intensity of the development of digital communications. This analysis was carried out by L.K. Hlinenko and Y.A. Daynovskyy (2022), who emphasized the need for constant monitoring of the state and trend of digital marketing to understand its development and impact on consumers.

M. Malchyk and I. Adasiuk (2021) investigated the state and development of the market of marketing communications in Ukraine, focusing on the types of Internet advertising and its distribution. I. Ivanenko (2020) found that one of the factors that affects the field of Internet advertising is the level of income and purchasing power of the population, the decrease of which during the coronavirus pandemic adversely affected the marketing communications market. Advantages in the priorities of the population regarding marketing communications, depending on socio-demographic indicators, were studied by M. Demko *et al.* (2021) using evidence from marketing communications policy for banking institutions. Scientists have discovered the inclination of older people to advertising on television and radio, and younger people to information on websites.

American scientists J.J. Nieves-Casasnova and F. Lozada-Contreras (2020) studied marketing communications with the use of digital content for the automotive business, which includes the social network Facebook in Puerto Rico. However, research on the perception of marketing communications by different segments of the population needs in-depth study. In turn, Slovak scientists L. Falát and M. Holubčík (2017) argued that a properly established marketing communication of a company can

predict an increase in the number of its customers, which is a considerable factor in increasing sales. The author analysed the effectiveness of the advertising of the automobile industry company and proved that it should be effective from a financial standpoint and profitable when building relations with the client. A comparable perspective is held by Bulgarian scientists G. Todorova and G. Zhelyazkov (2021), who investigated the impact of elements of marketing communications on the business results of individual small and medium-sized enterprises in the Stara Zagora region, located in Bulgaria. The results of their study indicated a significant relationship between advertising, sales promotion and financial indicators: profit and net income from sales. However, the issue of using marketing communications to increase business profitability still is debatable and requires detailed study.

The main purpose of this study was to investigate marketing communications for different segments of the population depending on socio-demographic factors and to identify regularities between the types of marketing communications that enjoy the trust of the population and the demographic characteristics and social situation corresponding to a certain segment of the population, as well as the development of proposals for selection of the most relevant tools of marketing communications, the use of which will increase the effectiveness of the financial resources invested in advertising and contribute to the increase in sales and income of companies.

Materials and Methods

The basis of the methodological approach in this study is the combination of the analysis method used to investigate the dynamics of statistical data regarding socio-demographic features of the population; logical – applied to distinguish communication tools that are more popular for different segments of the population, graphic, used for graphical display of the results obtained during the study, and the method of summarizing information – for summarizing information, a summary of the data discovered during the study. The theoretical framework of this study included Ukrainian (Ivanenko, 2020; Demko *et al.*, 2021; Hlinenko & Daynovskyy, 2022), American (Kramer, 2020; Gligor *et al.*, 2021), Romanian (Madan & Rosca, 2022), Slovak (Sramova, 2015), Bulgarian (Todorova & Zhelyazkov, 2021), German (Lohmann, *et al.*, 2021; Eisend, *et al.*, 2023) studies, and research from other countries of the world on the issue of development of marketing communications in modern business conditions and the influence of socio-demographic factors on advertising and promotion of company products.

The application of the method of statistical data analysis helped investigate the dynamics of socio-demographic indicators of Ukraine for different periods of time. Statistical information on the volume of advertising expenditures and total revenue of the LVMH Group company for 2008-2022 was researched based on data from the website of the German company Statista, which specializes

in global indicators of companies, the economy, consumer opportunities, and others (Retail & Trade, 2022). Indicators on the dynamics of the population of Ukraine for 1960-2020 were taken from the information posted on the World Bank website (Population, total – Ukraine, 2021). Data on the distribution of the population of Ukraine by gender and age, the number of marriages, the level of population income, the dynamics of the level of working people with higher education, as well as the distribution of households by the number of people and children in families were obtained from the website of the State Statistics Service of Ukraine (Demographic and social..., 2022). The poverty level of the population in Ukraine for 2000-2021 was analysed based on data from the Institute of Demography and Social Research named after Birds of the National Academy of Sciences of Ukraine (Libanova, 2020).

Using the logical method, the priority of certain types of marketing communication tools for certain segments of the population, depending on socio-demographic indicators, was covered. Based on the data of the All-Ukrainian Advertising Coalition (Volumes of the advertising..., 2023), the volume of the advertising market in Ukraine by types of marketing communication tools for 2019-2022 was analysed, the rating of marketing communications was determined and which segments of the population prefer different communication channels. Information on the number of gay people was researched based on data obtained from the website of the LGBT Human Rights Centre "Nash Svit" (The position of..., 2022).

Using a graphic method, data obtained during the research on the relationship between LVMH Group's advertising expenses and total revenues for 2008-2022, the dynamics of the total world population for 1960-2020 and changes in the poverty level of the population of Ukraine during 2000-2020, displayed in the form of a graph. The application of the generalization method allowed: to record the information obtained in the research process regarding

marketing communications that are preferred by the population with different socio-demographic characteristics, and to formulate conclusions that represent the final reflection of the research, namely to substantiate proposals for improving the effectiveness of advertising and increasing profits companies and determine further approaches to the study of this issue.

Results and Discussion

The main issue of the development of marketing communications in modern socio-economic conditions in Ukraine is that not all types of marketing communications tools are effective, and their use helps increase product sales. This issue is also aggravated by the deterioration of the social condition of the population after the coronavirus pandemic and during military operations on the territory of Ukraine, which became the reason for changing the priorities and needs of citizens and the reason for changing approaches to the use of marketing communications. The beginning of the scientific search is determined by a hypothesis, the essence of which is the existence of interdependence of the profitability of companies from the use of individual channels of marketing communications. Large companies use diverse types of advertising to develop their activities and considerably increase sales.

For instance, the largest chain of coffee shops in Texas, Coffee Grounds, whose annual revenue is estimated at 25 million dollars, began to use the Twitter network as a direct channel for orders and communication with customers, which contributed to the growth of sales revenue by 20-30% per year (Letunovska *et al.*, 2021b). Jimmy Choo, a designer shoe company with annual revenue of about \$32 million, used Twitter to advertise their shoes (Letunovska *et al.*, 2021b). As a result, sales revenue increased by 33%. French luxury goods company LVMH Group has spent around €9.5 billion on advertising and promotion worldwide by 2022 (Fig. 1).

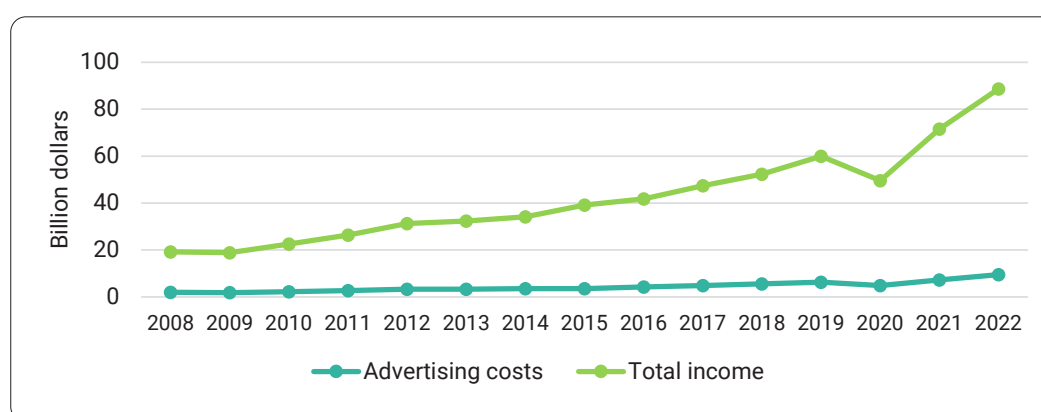


Figure 1. The relationship between LVMH Group's advertising expenses and income for 2008-2022

Source: Retail & Trade (2022)

The data in Figure 1 show that along with the increase or decrease in advertising expenses, the company's income changed in direct proportion, which helps assert

the effectiveness and feasibility of such expenses. Among the main types of marketing communications used by the LVMH Group is branding, which allows taking advantage

of the creative approach and developing the identity of each brand. To attract more customers and gain their trust in the company, it is important to focus on the main marketing trends, which helps apply new tools in the strategy for cooperation with the client. Targeting as a marketing tool and audience segmentation is the main trend in contextual

advertising on the Internet. One of the common types is socio-demographic targeting, i.e., selection of visitors by gender, age, education, social status, income level, etc. To investigate the influence of socio-demographic factors on the development of marketing communications, it is advisable to study the dynamics of the world population (Fig. 2).

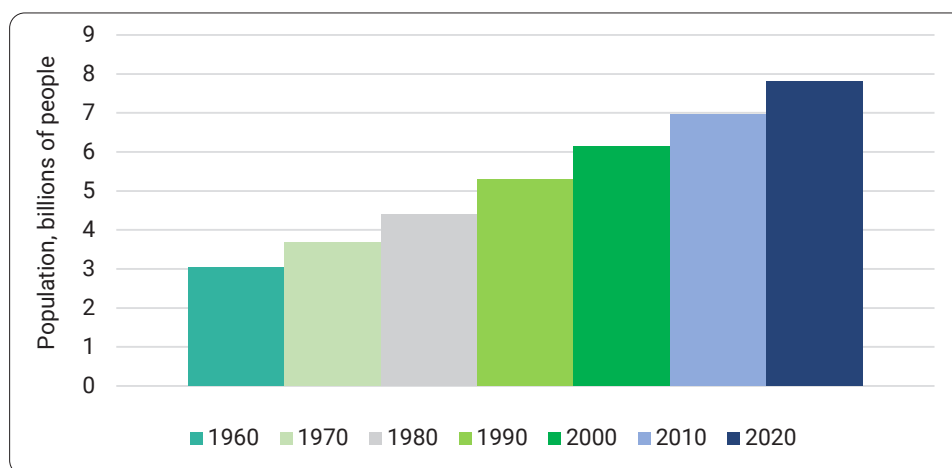


Figure 2. Dynamics of the total population of the world for 1960-2020

Source: The population of the Earth will grow to 8 billion people by November – UN forecast (2022)

According to the data in Figure 2, starting from 1960, the population of the planet gradually increased, and only for 2010-2020 it increased by 12%. With the growth of the population, the needs also grow and latest trends in the development of marketing services appear. For an in-depth

study of the influence of socio-demographic characteristics on the choice of marketing communications, the dynamics of the number of the population and types of family were analysed starting from 1960 and the trend forecast for several decades was made (Table 1).

Table 1. The population of the world, the United States of America (USA) and Ukraine and its composition for 1960-2020 with a forecast for 2030-2050

Indicator	1960	1970	1980	1990	2000	2010	2020	2030*	2040*	2050*
Number of population of the earth, billion people	3.03	3.69	4.4	5.29	6.14	6.97	7.82	8.5	9.1	9.7
US population, million people	180.7	205.1	227.2	249.6	282.2	309.3	331.5	380	395	420
Traditional families in the USA, million people	40.2	45.37	49.71	53.26	54.94	60.38	62.34	63	65	67
The share of traditional families in the total number in the USA, %	22.2	22.1	21.9	21.3	19.5	19.5	18.8	16.6	16.5	16
Single people in the USA, million people	34	38	55	69	82	100	118	121	126	130
Share of single people in the total number (USA), %	18.8	18.5	24.2	27.6	29.1	32.3	35.6	31.8	31.9	31
Population of Ukraine, total	42.8	47.3	50	51.9	49.4	45.8	41.6	40.5	38.4	35
Number of traditional marriages in Ukraine, million people	0.46	0.47	0.46	0.48	0.27	0.306	0.168	0.155	0.14	0.135
Part of the total amount (Ukraine), %	1.07	0.98	0.93	0.93	0.56	0.67	0.4	0.38	0.36	0.39
Single people (Ukraine), million people	8.35	9.37	9.55	9.86	10.32	10.76	7.9	9.5	9.8	9.9
Part of the total amount (Ukraine), %	19.5	19.8	19.1	19	20.9	23.5	19	23.5	25.5	28.3

Note: * – forecast data obtained by constructing a trend line on a graph showing the trend of data changes and considering the dynamics of data in previous years

Source: Retail & Trade (2022), Population, total – Ukraine (2021), Demographic and social statistics of the population of Ukraine (2022), The population of the Earth will grow to 8 billion people by November – UN forecast (2022), B. DePaulo (2021), How the population of Ukraine will decrease due to the war – A forecast of a sociologist (2022), L.I. Slyusar (2021)

Table 1 shows that the world population has doubled from 1960 to 2020, and according to the forecasts of the Office of the United Nations High Commissioner for Refugees (UNHCR), its number will reach almost 10 billion by 2050 (The population of the..., 2022). The population of

Ukraine in 2020 compared to 1990 decreased by 20% (from 51.9 million people to 41.6 million people) (Demographic and social..., 2022). Forecast data for some indicators was obtained based on constructed trend lines for these data (Fig. 3 and 4).

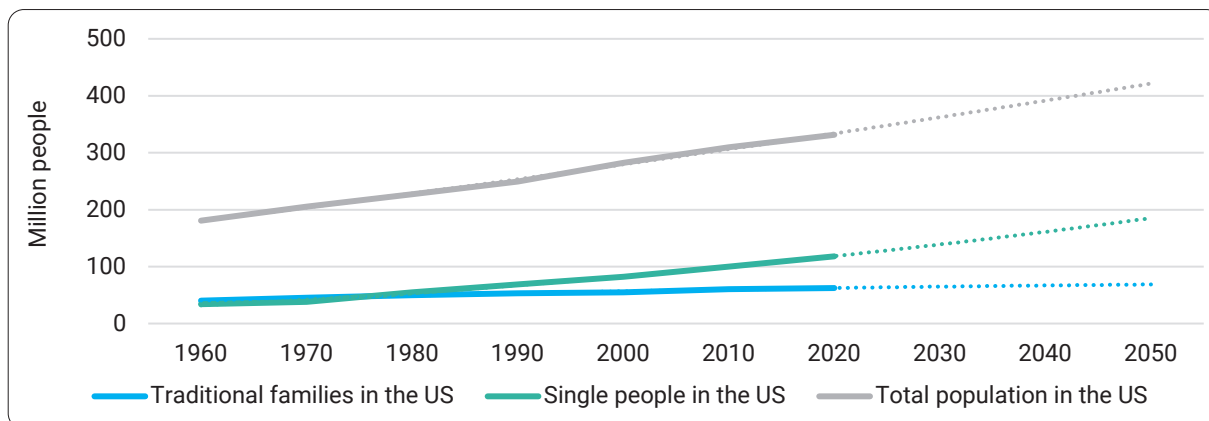


Figure 3. Dynamics and projections of traditional families and single people in the United States of America, 1960-2050
Source: Retail & Trade (2022), B. DePaulo (2021)

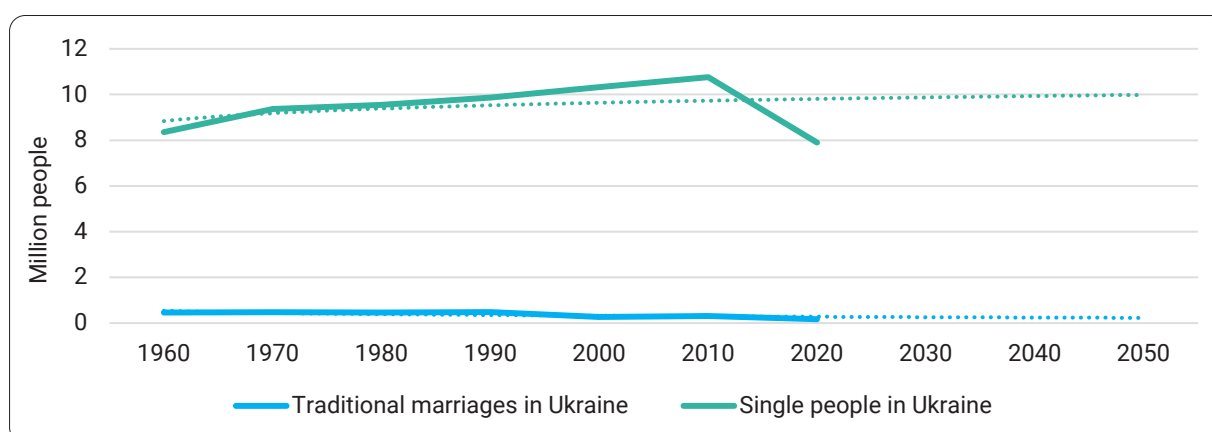


Figure 4. Dynamics and forecast of traditional marriages and single people in Ukraine for 1960-2050
Source: Demographic and social statistics of the population of Ukraine (2022)

The category of families with many children includes Muslims, whose religion allows them to have several wives. Thus, in the world, about 2% of the world's population lives in polygamous households, and in most countries in the world, this share is less than 0.5% (Kramer, 2020). About 3.5% of Muslims lived in Ukraine, who were mostly located in the south and east of the country, but a significant number of them left Ukraine because of the war. As a rule, the wives of polygamous men have several children, and therefore, in such families, preference will be given to advertising that can be seen while walking with children, i.e., in the park, on the streets, in the subway, on billboards, on television while watching cartoons, etc. Among non-traditional relationships, one can single out gay people and those who belong to serial monogamy. According to research by the German company Statista, the share of same-gender couples in the

world is about 2% of the population (Retail & Trade, 2022). Gay people live in Ukraine, whose number, according to various sociological data, is estimated from 450 thousand to 1.2-1.5 million people, which is 1-3% of the population (The position of..., 2022). According to research, such people are more interested in branded clothes and expensive goods. Most traditional families are in monogamous relationships, but serial monogamy also occurs (when one partner remarries after a divorce or after the death of the other partner). There is no exact data on the number of such partners, but according to equal studies of marriages and families, about 20-30% of people are in such relationships (Retail & Trade, 2022). Such people's preferences for advertising are similar to people in traditional family relationships. Analysis of the population by gender and age will allow determining the main advantages in these categories (Table 2).

Table 2. Distribution of the population of Ukraine by gender and age for 2019-2021

Age	As of 01.01.2020		As of 01.01.2021		As of 01.01.2022	
	men, million	women, million	men, million	women, million	men, million	women, million
Total, million	19.3	22.4	19.2	22.2	19	22
under 15 years old	3.3	3.1	3.2	3	3.2	3
15-29 years old	3.4	3.3	3.3	3.1	3.3	3.1
30-39 years old	3.5	3.4	3.5	3.4	3.4	3.3
40-49 years old	2.9	3.1	3	3.1	3	3.1
50-59 years old	2.6	3.1	2.6	3.1	2.5	3
60-69 years old	2.1	3.1	2.1	3.1	2.2	3.1
70 years and more	1.5	3.3	1.5	3.3	1.5	3.3

Source: Demographic and social statistics of the population of Ukraine (2022)

As Table 2 demonstrates, under the age of 40 the number of men exceeds the number of women, and after this age the trend of gender preference changes in the opposite direction. At the age of 70 and over, the number of women exceeds the number of men by more than 2 times. The age of the population affects people's attitude towards advertising, and as a result, its perception and the expected effect for the advertiser. A study conducted during August and September 2021 by the Nielsen company, with the participation of 40 thousand people in the countries of Europe, the Middle East, Africa, the Asia-Pacific region, North and Latin America, shows that young people (25-40 years old) and people aged 41-56 trust advertising the most, and people aged 65 and older trust advertising the least, followed by the 15-24-year-old and 57-66-year-old generations. Men and women all over the world have the

same general levels of trust in advertising. 89% of people trust the recommendations of acquaintances the most (Nielsen study reveals who..., 2021). Building trust in advertising makes it effective. Advertising is aimed at introducing certain values and standards into society. The standards and values promoted in advertising become generally accepted norms of behaviour for people, that is, advertising can transform universal human values. The development of marketing communications depends on the income level of the population. People are more capable of responding positively to advertising and buying various goods and services when they have a sufficient level of income. According to the Institute of Demography and Social Research named after Birds of the National Academy of Sciences of Ukraine can analyse the poverty level of the population in Ukraine (Fig. 5).

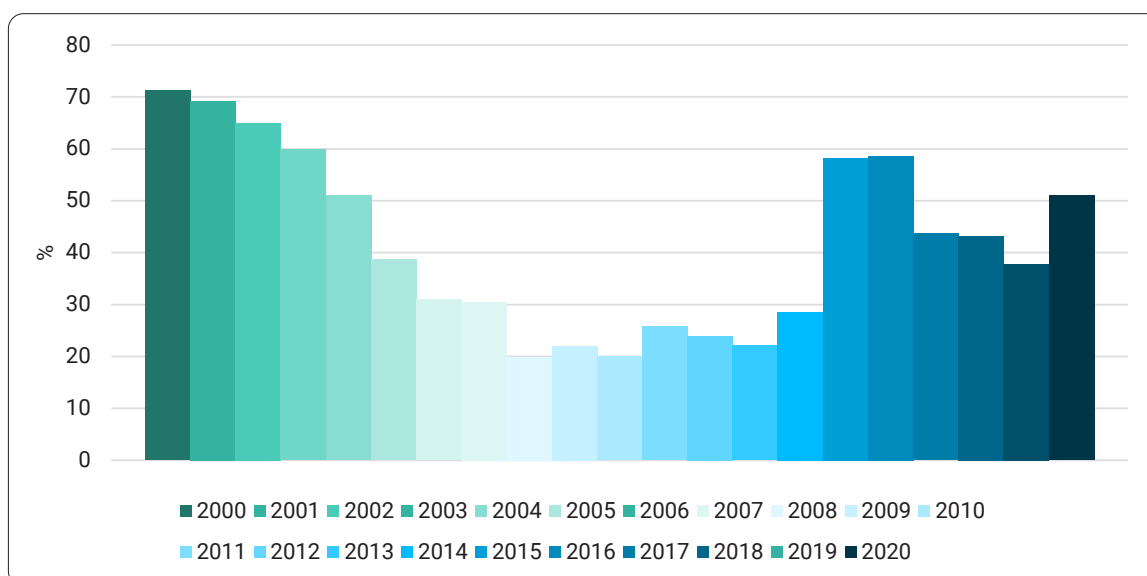


Figure 5. The poverty level of the population of Ukraine during 2000-2020

Source: E. Libanova (2020)

Figure 5 shows that the lowest level of poverty in 2008-2014 ranged from 20-30%. However, already in 2020-2021, it exceeded 50%. This means that the share of households in which the income per person is below the minimum level. During 2019-2021, 60-70% of the population received incomes up to UAH 7,000, i.e., below

the average wage, but slightly above the minimum level. Households with children have a poverty rate 8-9% higher than households without children. Analysis of the dynamics of households in Ukraine by the number of people and children allows determining the main trends in this area (Table 3).

Table 3. Information on the composition of households, employment and education of the population for 2014-2021

Indicator	Age							
	2014	2015	2016	2017	2018	2019	2020	2021
Households, which include:								
One person, %	22.8	20.3	19.7	19.9	19.7	19.5	19	18.2
Two persons, %	29.6	32.5	32.3	32	32.8	33.4	34.5	35.4
Three persons, %	25.3	25.9	26.9	27.3	26.5	26.7	26.5	26.6
Four persons and more, %	22.3	21.3	21.1	20.8	21	20.4	20	19.8
One child, %	73.6	75.7	76	75.4	75.1	74.6	79.2	79.3
Two children, %	23.3	21.2	21.4	21.9	21.4	22.6	18.7	18.8
Three children and more, %	3.1	3.1	2.6	2.7	3.5	2.8	2.1	1.9
Households with children under 18 y.o., %	38	38.2	38.2	38.2	37.8	37.9	37.7	37.8
Households without children, %	62	61.8	61.8	61.8	62.2	62.1	62.3	62.2
Number of unemployed, thousand people	1,847.6	1,654.7	1,678.2	1,698	1,578.6	1,487.7	1,674.2	1,711.6
Pensioners, million people	13.5	12.1	12.3	11.9	11.7	10.9	10.8	10.6
Employed with higher education, %	52	52.3	52.6	52.9	53.4	53.6	64	71

Source: Demographic and social statistics of the population of Ukraine (2022)

As Table 3 shows, the predominant number of households consists of two and three persons, although starting from 2015, the number of two persons began to prevail over the other by about 10%. Furthermore, the number of families with one child is much higher than those with two or three. The share of families with many children decreased by 1.5 times during 2014-2020. There is a tendency to increase the number of workers with higher education, some of whom have increased by 19% since 2014. Considering the trend towards a decrease in large families, advertisers should use more advertising in the media and the Internet. Since single people and families without children or with one child have more spare time than those with a family, it can be argued that such people use social

networks more often. Companies that want to increase the effectiveness of marketing communications should choose to advertise depending on its product range. For example, if the product is intended for the segment of people with a low income, then preference should be given to advertising on radio, the Internet, and television, and vice versa, if the product or service is intended for the population with an above-average income, then it is worth advertising them in addition to the above channels communication, even in expensive magazines because rich people are more interested in them than the population with a low income. Analysis of priorities in advertising for distinct categories of the population helps rate the effectiveness of marketing communications (Table 4).

Table 4. Rating of effectiveness of marketing communications

Seq. No.	Name	Efficiency, %	Segments of the population that prefer this type more
1	Advertising in the media	16	People of different ages and genders, whether single or married
2	PR activities	15	People with income above average
3	Promotion of goods (services) at points of sale	14	Women and men working in business, mostly with higher education
4	Outdoor advertising	12	Families with children
5	Sales promotion	12	Young and middle-aged women
6	Advertising on the radio	11	Population of retirement age

Table 4, Continued

Seq. No.	Name	Efficiency, %	Segments of the population that prefer this type more
7	Direct marketing	10	Employed women of all ages and income levels
8	Advertising on the Internet	10	Single people, young women and men with children

Source: Volumes of the advertising and communication market of Ukraine (2023)

The rating given in Table 4 shows that the most effective is advertising in the media because they are used by all categories of the population, regardless of age, gender, education, and family composition. An analysis of the volume of the advertising market in Ukraine according to the All-Ukrainian Advertising Coalition shows that the largest part of the market in 2021 will be television advertising (41.3%) and Internet advertising (38.8%), and in 2022 – television advertising (21.3%), Internet advertising (58.8%). Thus, in 2021, the Internet advertising market increased by almost 2 times compared to the previous period, during the strengthening of the coronavirus pandemic, this market even had a 9% increase compared to others. At the same time, advertising costs in cinemas decreased by 65% due to the temporary closure of these institutions during the pandemic. In 2022, as a result of the war in Ukraine, the advertising market decreased by 63% in all positions, but Internet advertising decreased less than other types – only by 42%.

The use of marketing communications should consider modern trends in advertising. Romanian scientists A. Madan & M. Rosca (2022), who evaluated the latest approaches to marketing communication and described their global trends, reached the same conclusion in their work. Scientists emphasize that in modern society, the influence of marketing communications is a significant value. Fully supporting the researchers' assertions, the importance of using a variety of new communication methods should be emphasized: media advertising, public relations, direct marketing tools, and sales promotion are all marketing communication methods that must be effectively integrated for business success. Thus, Arabic scholar H.S. Mirfallah (2021) argues that the concept of integrated communications by combining messages strengthens the company's base and position in the market. The author emphasizes that in today's competitive and changing environment, companies must constantly implement and use a variety of new communication methods (for example, advertising using artificial intelligence: for texts – ChatGPT, and for creating advertising layouts – a neural network that generates visual content Midjourney), to maintain effective customer relations. Therewith, there is a constant need to explore a wide spectrum, which is essential.

A more in-depth study on the integration of communications was carried out by Y. Rashkova *et al.* (2023) who conducted a content analysis of websites and Instagram pages to analyse their integrated strategies applied in the market. The study found that there is an opportunity to adopt one of four strategies, considering the design, content of the website and social media at the same time standardized, adaptive, mixed and cross-convergence of the

divergence of media. The work emphasizes the importance for companies to determine exactly which marketing communications will be more relevant for different segments of the population, which will contribute to increasing their trust in advertising and increasing sales. These results are consistent with the findings of the current study that the effectiveness of marketing communications depends on considering the needs and characteristics of different segments of the population. Other scientists hold a similar opinion. For instance, S. Boonchutima & K. Sahakitpijarn (2022) conducted an experimental study using a sample of a customer segment by gender, namely, women of a certain generation in Thailand to investigate the effect of augmented reality marketing on consumer behaviour when purchasing lipstick. In their study, the authors compare the effectiveness of traditional marketing communications and advertising with the use of augmented reality in improving women's attitude towards the brand and increasing purchase intentions. Overall, the research shows that understanding the demographic and social characteristics of consumers can be key to an effective marketing strategy, especially when implementing the latest technologies, such as augmented reality. The findings are consistent with the focus on analysing different segments of the population in the current study, which emphasizes the need to pay attention to the needs and preferences of distinct categories of consumers.

To distinguish certain segments among the population, the work considers the population's trends in creating a family and the number of single people. At the same time, sociological research on the number of singles was conducted by D.L. Surkalim *et al.* (2022), who analysed the prevalence of loneliness in 113 countries. Data were considered for adolescents (12-17 years) in 77 countries, young people (18-29 years) in 30 countries, adults (30-59 years) in 32 countries and older people (60 years and over) in 40 countries. Scientists raise the problem of loneliness and the comparison of lonely people in high-income and low-income countries. According to the results of the study, it is emphasized that the presence or absence of children in the family affects the advertising from which sources adults perceive better. Along with this, Slovak scientist B. Sramova (2015) studied the orientation of marketing communications to children as consumers. It is worth agreeing with the opinion of the researcher because children and young people spend a lot of time in the media environment. The author emphasizes that children can be the main target group, i.e. the advertised products are addressed to them, as well as the secondary target group, i.e. the products are addressed to their family members, but the message is focused on children's interests, as they significantly influence

the purchase process in the family. This is consistent with the findings of the current study that children may be an important target group. This research focuses on traditional marketing techniques used in the media environment (repetition, celebrity endorsements, etc.) as well as new techniques.

The use of femininity in marketing communications to attract more attention of consumers in Nigeria was studied by A. Oniku & A.F. Joaquim (2022), who focused on parameters such as skin colour, brand image for young single people between the ages of 21 and 40. Supporting the results of the authors, it should be noted that the purchasing decisions and behaviour of young people in 2019 are strategically dependent on various manifestations of female attractiveness and equally affect market share. The results of this study confirm that displays of female attractiveness can influence the purchase decisions and behaviour of single young adults. The effect on the effectiveness of the advertising image of people with different attributes was studied by M. Eisend *et al.* (2023), who noted that gender, ethnicity, sexual orientation, and age were the most common. The authors proved their own standpoint regarding the incorrect and insufficient representation of certain groups in society, although various advertising and promotion of goods and services can have a beneficial effect on the brand and social values.

However, some scientists in their research support the idea of reducing the emphasis on the segmentation of the population according to the socio-demographic principle when choosing marketing communications. Thus, the impact of interactive marketing communications used in social networks on the emotional and behavioural components of adolescents in South Africa was studied by the scientists I. Dmytriiev *et al.* (2022), who examined the effects of additional factors (access, duration, and frequency of use, length of time logged in, and frequency of profile updates) and demographic variables (gender, age, and population group) on attitudes toward social media marketing communications. Customers make demands on companies and have specific ideas about how they should be represented in advertising. Thus, J. Lohmann *et al.* (2021) emphasize that clients mostly try to ignore conservative gender roles and support equal representation of men and women. The authors emphasize that companies should focus on customer retention through gender equality, breaking with common gender binaries and integrating lesbian communities into future marketing efforts. In comparison, the current study covers a wider range of demographics and advertising preferences. It considers aspects such as religious affiliation, number of children in the family and income level, which are also important for advertisers in determining marketing strategies.

Therewith, research on the effect of gender on customer engagement was investigated by D. Gligor *et al.* (2021) in four dimensions of customer engagement: customer purchases, referrals, influence, and customer knowledge. It is worth agreeing with the opinion of scientists that

women compared to men show a higher level of purchases, but a lower level of recommendation to other customers. The authors proved that perceived brand equity mediates the effect of gender on customer engagement. Brand identification negatively moderates the relationship between gender and perceived brand honesty. This study focused on the effect of gender on customer engagement in a broad context, while the current study more specifically looked at the effect of different family categories and parameters such as age, religion, and orientation. After conducting research among 637 Vietnamese participants in marketing communication programs of fashion brands, M.S. Vo *et al.* (2022) evaluated the characteristics of marketing communication content that influence electronic radio broadcasting, namely, entertainment, interaction, trendiness, and customization. At the same time, the scientists emphasized that such characteristics are characteristic of the segment of people aged 18-40 years.

N.E. Letunovska *et al.* (2021b) analysed the essence of marketing in the digital environment, covering the main tools necessary for the work of a marketer who seeks to successfully implement projects in various directions on the Internet. The authors also analysed the structure and dynamics of scientific publications in the field of environmental management and social marketing in their relationship. The authors researched original keywords in the field of environmental management and social marketing (Letunovska *et al.*, 2021a). Unlike other scientists, A. Rosokhata *et al.* (2021) investigated the characteristics of advertising not only according to demographic principles, but also according to territorial principles, which systematized the goals and models of marketing territories, compared the target audience and marketing strategies, and also considered examples of the successful application of marketing tools for little-known territories.

Summarizing the above, it is worth noting that advertising costs will be justified if companies consider socio-demographic factors (a person is single or with a partner, income level, education, number, or absence of children, etc.) when choosing a type of marketing communication to promote the products being produced. The right choice of marketing communication channels can contribute to increasing the profitability of companies.

Conclusions

The conducted research shows that marketing communications is a powerful tool for attracting new customers, increasing their trust, selling goods and services, and increasing profits from activities. The purpose outlined in this study and the analysis of the main socio-demographic factors that affect the effectiveness and efficiency of the use of marketing communications helped formulate proposals.

According to the results of the analysis of the essence and types of marketing communication tools, the spread of the use of digital technologies in the field of advertising and product promotion was revealed. It has been proven that the increase in the company's advertising expenses can be

covered by sales revenues, which increase due to the effect of advertising. It is substantiated that different segments of the population, depending on age and article, tend to trust diverse types of marketing communication tools. The study of the attitude of the population towards advertising on the Internet shows that it depends on age. It is concluded that the choice of communication channels by consumers depends on their income level, which is mostly below average in Ukraine. It was found that the demand for advertising also depends on social status and the number of children: single people prefer advertising on social networks, and for families with children, advertising on the street, in the subway, parks, cinemas, etc. is more suitable. The hypothesis has been confirmed that the targeting of advertisers to the interests of individual segments of consumers depending on socio-demographic features and their choice of particular types of marketing communication tools can contribute

to more effective promotion of products and increase in sales revenue.

The results of the conducted research are of practical importance for advertisers when planning marketing communications and choosing channels of communication with consumers, as well as company managers when making decisions about financing activities for marketing promotion of products. The main directions of further research of this issue will be the study of the possibilities of using the latest technologies to improve marketing communication tools.

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None.

Conflict of Interest

None.

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Вплив соціально-демографічних факторів на розвиток маркетингових комунікацій

Володимир Іванович Нестеренко

Аспірант

Сумський державний університет

40007, вул. Римського-Корсакова, 2, м. Суми, Україна

<https://orcid.org/0000-0002-1792-9823>

Анотація. Дослідження впливу соціально-демографічних факторів на розвиток маркетингових комунікацій є актуальним, оскільки це допомагає бізнесу ефективніше взаємодіяти зі змінюваними потребами та поведінкою споживачів в контексті глобальних демографічних змін. Метою роботи є вивчення маркетингових комунікацій, яким надають перевагу різні сегменти населення. Під час дослідження використовувались такі методи: аналіз статистичних даних, логічний, графічний та метод узагальнення. Дослідження розкриває різні категорії сімей та їх вплив на споживання та сприйняття реклами. Виявлено, що сім'ї з великою кількістю дітей, мусульмани, гомосексуалісти і люди, які перебувають у серійній моногамії, мають свої унікальні особливості і уподобання в рекламі. Зокрема, багатодітні сім'ї можуть бути націлені рекламою, спрямованою на дитячі товари та послуги, яку можна зустріти під час прогулянок з дітьми. Мусульманські сім'ї, яким дозволено мати кілька дружин, можуть бути зацікавлені у рекламі, яка відображає цінності та потреби цієї релігійної групи. Гомосексуалісти та люди, що перебувають у серійній моногамії, можуть проявляти більший інтерес до брендового одягу та товарів з вищою вартістю. Крім того, вік та рівень доходів населення впливають на сприйняття реклами. Молодь та люди в середньому віці можуть бути більш довірливими до реклами, тоді як старші люди можуть виявляти меншу довіру до неї. Також виявлено, що реклама в засобах масової інформації та Інтернет-реклама є ефективними каналами комунікації з різними категоріями населення. Результати дослідження можуть застосовуватись для налаштування маркетингових стратегій, від корекції рекламних повідомлень до вибору платформ для рекламного просування, що, враховуючи демографічні особливості цільової аудиторії, може значно підвищити ефективність маркетингових заходів та прибутковість бізнесу

Ключові слова: суспільний розвиток; просування; реклама; цінності; бренди; тренди; трансформація суспільних цінностей

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Comparative characteristics of accounting models

Nina Poyda-Nosyk*

Doctor of Economic Science, Professor

Ferenc Rakoczi II Transcarpathian Hungarian College of Higher Education

90201, 6 Koshuta Sq., Beregove, Ukraine

<https://orcid.org/0000-0002-5378-8028>

Noemi Markush

Graduate Student

Ferenc Rakoczi II Transcarpathian Hungarian College of Higher Education

90201, 6 Koshuta Sq., Beregove, Ukraine

<https://orcid.org/0009-0007-9526-8200>

Abstract. The relevance of this study lies in the need to investigate evolution of accounting practices and influence of economic, political, and social factors on them over time. Investigating the evolution of accounting practices is essential to gain insight into the historical context of how accounting has adapted to the changing circumstances. This knowledge helps appreciate the foundations of modern accounting and identify the reasons behind current practices. The purpose of this study was to compare the types of accounting models and to consider their impact on the present accounting systems. Among theoretical research methods, which formed the basis of this study, are methods of qualitative data processing and prognostic methods. Key element of the research methodology is the historical-theoretical part, which involves the study of accounting models of different groups of countries, considering the connections and interdependencies between them. It was concluded that the development of accounting models was affected by various factors that lead to distinguishing certain types with their own characteristics: Continental (with strict laws and conservatism); Anglo-American (limited intervention in accounting regulation); South American (adaptation to high inflation and simple accounting system) and Islamic (compliance with religious principles and lack of diversity in accounting). The orientation of the information is different for every separate model. The continental model is intended for state needs and the provision of reports; the Anglo-American model is for the needs of investors, stock market participants and the requests of creditors; the South American one is focused on state regulation and taxation of economic activity; Islamic is for state and economic regulation and religious principles. The study of both the rudimentary state and the modern application of the international accounting system plays an important theoretical and practical role for the development of accounting and taxation area. Practical value of the study is that the research results and discussions enhance better understanding the nature of modern accounting practices, provide insight into how changes in business processes, cultural norms, as well as legal and regulatory frameworks shaped accounting practices and systems

Keywords: accounting systems; Anglo-American model; Continental model; South American model; Islamic model

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*Corresponding author

Introduction

Understanding the history of accounting and development of accounting models, which defined the foundations of the accounting system of certain areas and states, is essential for researchers. The relevance of the subject under study has been in the focus of scientists due to the current processes of convergence and harmonization in accounting systems. Over 100 national accounting systems have been developed throughout history. As early as 1977, a group of UN experts analysed the accounting practices of 46 countries (Bogáth, 2018). According to the author E. Bogáth (2018), the experts concluded that the national accounting systems in various countries differ in their organizational structure, the composition and number of objects and subjects, the type of relationships between them, the level of comparability of accounting information, and the scope and nature of the relationship with the external environment. Recent studies show that no two countries have identical accounting systems. Even though accounting practices are generally similar, there are many significant differences. The difference in accounting systems can be attributed to many factors (Evdokimov *et al.*, 2012).

Countless researchers examined criteria for grouping of countries or nation according to accounting similarities. Thus, M.I. Skrypnyk & O.O. Grigorevska (2017), N.S. Akimova *et al.* (2016) T.A. Naumova and others compared the models and investigated which countries incorporate them. The latest research on the subject under study includes the work of T.O. Dovhanets (Moshkovska & Dovhanets, 2019), who examined the Continental Model. Attempts to analyse the accounting models and highlight the features of implementation some aspects in Ukraine have been made in the studies of A.A. Frolova (2018), V. Tsaruk (2019), L.V. Tovkun (2019), O.O. Nesterenko (2019), V. Ilin & S. Kuzmych (2020), D. Lubinets (2018).

The explanations regarding the causes of the accounting systems multiplicity and also their classification by some experts in compared accounting systems has constituted a strongly debated issue in the second half of the 20th century (Valeriu, 2010). According to E. Eromonsele (2017), the accounting classifications have always sparked interest among the researchers and practitioners either to explain the major differences which exist in the case of apparent accounting options due to cultural influences, or to compare the countries which have the scope of accelerating international harmonization.

G. Mueller *et al.* (1997) states that no two countries have identical financial accounting practices; hence each country is a unique mixture of environmental variables that collectively have influenced the pattern of accounting development in that country. Authors grouped accounting into three major models based on certain distinguishing features of accounting, with close identification of national patterns that conform to the identified features such as Legal Compliance Model, Fair Presentation Model, and Inflation-Adjusted Model.

The purpose of this study was to compare the Continental, Anglo-American, South American and Islamic

accounting models and to consider their impact on the current accounting systems.

Materials and Methods

The main components of the given research methodology are the theoretical-methodological part, based on which the research methodology is built, and the historical-theoretical part, which involves the study of accounting models of different groups of countries, taking into account the connections and interdependencies between them.

The study is built on the basis and results of theoretical research methods, among which focus is on methods of qualitative data processing and prognostic methods. As part of the methods of qualitative data processing, techniques of classification, differentiation, and categorization were used based on selected features and criteria of the legal, social, and political environment of the countries. Among the prognostic methods, there were used such methods as the information method and the method of morphological analysis. The information method made it possible to ensure quick and effective obtaining of information from various sources regarding the essence and historical differences in accounting models, including from scientific articles, collections of scientific articles, monographs, etc. The method of morphological analysis, considering the analytical and synthetic approach, allowed identifying separate groups of countries and conducting a comparative analysis of accounting models, their features of accounting information orientation, with a corresponding generalization of the obtained data.

Among the spectrum of general scientific methods, induction and deduction were used in this study. The induction method made it possible to study the accounting models of individual countries and to find out in them essential features that are characteristic only of a selected class of models. With the help of the deduction method, the research process was structured and formalized.

The theoretical basis of the research consists of concepts and definitions of accounting models and standards in the relevant scholarly literature, existing theory in works of both Ukrainian and foreign scientists. Thus, this paper considered the scientific studies of N.S. Akimova *et al.* (2016), Evdokimov *et al.* (2012), V.G. Glotova (2017), I.V. Orlov & D.O. Hrytysyshen (2017), M.I. Skrypnyk & O.O. Grigorevska (2017) and D. Lubinets (2018). Among foreign scholars, it is worth to highlight works of A. Unegbu (2014), Eromonsele E. (2017), A. Hellmann *et al.*, (2013), B. Valeriu (2010).

Results and Discussion

The result of 15th century accounting is the creation of double-entry bookkeeping. Its creator, Luca Pacioli, an Italian mathematician and monk, described the method of double-entry bookkeeping in his book *Summa de arithmetica, geometria, proportioni et proportionalita* (*Summa of arithmetic, geometry, proportions and proportionalities*),

published in 1494 with B. Cotrugli. In the third chapter of their work, *Tractatus XI Particularis de computis et scripturis* (Independent treatise XI on accounts and documents) deals with the regulation and documentation of double-entry bookkeeping. It defines the formal requirements and types of documents, which are: memorandum (an event is recorded immediately, especially in larger enterprises), journal or *primanota*, general ledger, inventory of assets, balance sheet (Unegbu, 2014).

By the end of the 17th century, an Italian type of accounting had emerged in which synthetic and analytical data were added to the accounts. J. Savary, a French accountant, devised a system of record-keeping and divided the accounts into synthetic and analytical parts. On this basis, he developed a class of accounts which helped several types of accounting to evolve. (Unegbu, 2014)

The first English accounting book was prepared by H. Oldcastle, in which he distinguished two sides to each account: debit and credit. In English-speaking countries, the Anglo-American form of accounting was developed. American accountants proved that profits did not reflect the realistic results of economic activity. Two types of accounting were distinguished: managerial and financial (Unegbu, 2014).

The accounting of different countries is determined by their history, the application and regulation of accounting methods, the control of the activities of legal entities. The national accounting system of a given country is the result of the formation and development of its legal, social and political environment.

Nowadays, every country in the world has its own accounting system, characterised by codes, laws, national standards, regulations, national accounting plans and specific methodologies. In 1994, Gernon and Mick Müller divided accounting models into four groups, which were supplemented by a new model of modern accounting (Akimova *et al.*, 2016).

Anglo-American (Anglo-Saxon, British-American) accounting system. The Anglo-American accounting standards were created by the G4+1 countries: the USA, the UK, Australia, Canada, and New Zealand. 40 countries use it: USA, Great Britain, Australia, Zimbabwe, Israel, India, Ireland, Canada, Cyprus, Mexico, New Zealand, Venezuela, Iceland, Panama, Tanzania, Uganda, Fiji, Philippines, Central America countries, Jamaica, Ghana, Zambia, etc. (Orlov & Hrytysyhen, 2017).

The Anglo-American accounting system is internationally accepted and compatible regarding the economic content, processing and accounting methods of information.

At the end of the 20th century, extremely strict rules applied to accounting in the USA. In industrialized England in the 19th century, an Anglo-Saxon accounting system was already present, the purpose of which was risk sharing among investors. Shareholders demanded the statistics and financial reports of large companies. By the end of the 19th century, industrialization also took place in the USA. In both countries, the conviction has developed that the

accounting settlement does not correspond to the determination of the tax base. The centre of this system was the distribution of information and adequate information of the capital market.

The task of the Financial Accounting Standards Board, established in 1973, was to create US-GAAP. The FASB is an independent body that adopted 140 standards between 1973 and 2000. US-GAAP regulates the accounting principles, methods, and all processes of accounting by organizations since there is no legal regulation of accounting in the USA.

From the 20th century onwards, there are many auditing organizations that play a significant role in the regulation of accounting. This is where the international auditing companies come from.

Development stages of this accounting system are the followings (Skrypnyk & Grigorevska, 2017):

- informal stage – until the beginning of the 1930s;
- problem solving phase – from the 1930s to 1973;
- the emergence of the FASB – 1973 to the present.

The condition for the existence of the model is the existence of a developed financial and stock market in the country. Accounting regulations are established by an independent trade union. By legally approving the rules, countries accept their mandatory compliance. The principle is objective and reliable information. Countries that use this model are characterized by state regulation of accounting by law. This task is performed by the standards of the state's accounting unions (Akimova *et al.*, 2016).

Principles of the Anglo-American model are provision of accurate, reliable and relevant information; a gut-based approach is not allowed when making decisions; information about businesses should be open; high level of social protection; what is not forbidden is allowed. Providing accurate and reliable information is crucial in ensuring transparency and trustworthiness in any information exchange or communication. Providing only relevant information helps to avoid information overload and allows for more effective decision-making. A gut-based approach is not allowed when making decisions, as it can be subjective and based on personal biases rather than objective facts.

Principle related to openness of information about businesses means that relevant information about a company should be available to stakeholders and the public to ensure transparency and accountability. A prominent level of social protection is important in promoting social justice and equality, and can include measures such as healthcare, education, and social welfare programs. The principle of "what is not forbidden is allowed" means that unless something is explicitly prohibited, it is allowed, allowing for more flexibility and freedom in decision-making and action taking.

The Anglo-American model places great emphasis on the profitability of investments and the effects of inflation. It is true that the rate of inflation in the USA is stable, nevertheless, its standards prescribe methods for its evaluation and influencing power. Its focus is on the interests of small and medium-sized equity investors.

Main features of the system (Glotova, 2017) are multi-variable and flexible accounting system; keeping in mind the needs of creditors and investors; highly developed securities market; high level of accounting qualifications; the presence of multinational companies in the country; to ensure the information supply of investors and creditors with minimal state intervention in the accounting system. A multi-variable and flexible accounting system allows for customization to suit different industries and organizations. The system is designed to keep in mind the needs of creditors and investors and provide financial information in a transparent manner. It also has a highly developed securities market that is essential for attracting investment and promoting economic growth. The system values prominent levels of accounting qualifications to ensure the quality and accuracy of financial reporting. The presence of multinational companies in the country can bring significant benefits to the economy, such as increased investment, job creation, and access to innovative technologies and markets.

To ensure the information supply of investors and creditors, the accounting system aims to strike a balance between transparency and accountability, and the need to minimize unnecessary regulation and bureaucracy. In other words, it is designed to provide financial information to stakeholders with minimal state intervention.

The main means of attracting capital in countries is the issuance of securities. In countries that use this accounting system, there is usually no accounting plan specific to the state. For this reason, accountants at businesses must be able to organize an effective work draft and flowchart of accounting processes. The work plan is determined based on national standards (Akimova *et al.*, 2016).

Continental accounting system. The continental accounting model is used in most European countries and in Japan: Austria, Belgium, Greece, Denmark, Spain, Italy, Norway, Portugal, France, Sweden, Germany, Switzerland, Japan, Congo, Cameroon, Luxembourg, Morocco, Mali, Senegal, Togo, Ivory Coast, etc (Orlov & Hrytsyshen, 2017).

Unlike the Anglo-American model, public information about businesses is less detailed here. The common goal is to reduce the tax base, which is derived from the accounting result. Therefore, this accounting system is used by countries with a stable political system and a developed economy characterized by 3 main factors:

1. The existence of financial reports to meet the needs of banks.
2. Regulation of the accounting system by law.
3. The accounting activity serves to satisfy the needs of the government, keeping in mind the interests of the macro-economy.

Financial statements focus on tax and other governmental needs, and secondarily on the needs of investors and creditors. The accounting system is regulated by laws, characterized by conservatism and an elevated level of state intervention. Accounting becomes subordinate to tax accounting. The state strives to achieve macroeconomic goals through extensive use of the banking system (Akimova *et al.*, 2016).

Accounting is prepared uniformly according to the national accounting plan, which ensures the application of standardized methods and their sustainability. The professional qualifications of accountants are no less high than in the USA or the UK. Since the 1930s, auditing organizations have been monitoring accounting activities in these countries (Lubinets, 2018; Khushvakhtzoda, 2022).

In countries that use this model, a prominent level of trust is present, which is achieved by limiting the dissemination of financial information and increasing its secrecy. Therefore, the government determines the extent to which financial statements are published.

This country is also characterized by the close relationship of its economic units with banks and other state financial institutions, which entails the continuous development and improvement of the state's tax accounting. The development makes it possible to check the completeness and timeliness of taxation (Akimova *et al.*, 2016; Zeghal & Lahmar, 2022).

South American (Latin American) accounting system. It can also be seen from its name that the South American or Latin American accounting model is used by most countries in South America: Guyana, Brazil, Ecuador, Peru, Bolivia, Chile, Paraguay, Argentina, Uruguay (Orlov & Hrytsyshen, 2017).

The South American accounting model focuses exclusively on tax rules. The main means of attracting financial resources to the country is state financing. It primarily affects priority sectors in which the country specializes in the international division of labour. The accounting methodology is legally uniform and foresees the mandatory recalculation of price changes. These price changes are related to long-standing, persistent inflation.

Countries using the Latin American system have a central government system that includes state control of accounting. In most countries, accounting is characterized by low professionalism, because accounting methods and their development are provided by the state. Therefore, it undertakes certain guarantees for the reliability of published information, creates the basis of trust in businesses and the sphere of successful development of the industry (Akimova *et al.*, 2016).

Typical of the countries of the South American model:

- the unstable political system;
- the underdeveloped economy and high inflation;
- the financial reports satisfy the requirements of the authorities;
- regulation of accounting standards by law;
- standardization of accounting methods;
- adjustment of accounting results in relation to continuous inflation;
- government-oriented accounting system;
- strict requirements for the distribution and control of income of natural and legal persons;
- the state is actively involved in the activities of enterprises.

Islamic accounting system. The Islamic accounting

system is used by the member states of the international Islamic Organization, mostly in the countries of the Middle East. It appeared relatively recently. It was formed with the spread of Islam and is based on the economic views of the religion's doctrines.

The Islamic accounting system is greatly influenced by historical, religious, geographical and social factors. States seek a golden mean between individual and social welfare, and this also affects their accounting system. Its main goal is the full transition to the Islamic economy (Akimova *et al.*, 2016).

Accounting in these Islamic countries develops in a coordinated manner with the accounting technology of Western states. General accounting methods and techniques can be used if they do not contradict Islamic law and Muslim economics.

Accounting information is used both at the micro and macro level. This results in changes in the economic system, as appropriate, efficiency-seeking management decisions are made based on the information. Accounting forms the basis of the information system, which ensures the effectiveness and reliability of management activities.

The creation of various economic and financial institutions and technologies led to the development of the Islamic accounting system. These resulted in new accounting principles and rules. This system differs from those established in the West in terms of its provisions:

- Islamic Insurance – “Takaful”;
- interest-free financing;
- obligatory payment of the religious tax – “Zakat”.

These specific conditions necessitated a special approach to accounting items. The similarities between the Anglo-American and Islamic models exist due to the colonial nature of Muslim countries for many years. There are big differences between the techniques, but the accounting elements are still the same.

The task of Islamic accounting is to reflect the process of economic activity and events, the use of assets and the effectiveness of the activities of companies, as these have social (infrastructure development, welfare of employees, development of social programs) and economic (making a profit, building economic relationships, expanding economic activity) effects.

Accounting must ensure the calculation of the religious tax, the maintenance of the special tax system, the part of the income devoted to charity and the continuation of activities allowed by the prescribed law. Individual reports have been developed and are available to information users.

Features of the accounting system:

1. Ensuring environmentally friendly economic activity;
2. Orientation in the balance sheet due to the importance of the tax;
3. Reflecting a fair distribution of financial results;
4. Valuation of the subject of accounting at market price to ensure the accuracy of payments.

Nowadays, there is not a single common, unified accounting system in the countries that use this model. For the sake of transparency and comprehensibility, provisions were made that are present in all countries of the region. The religious-legal regulation directs the publication of accounting information. This type of regulation is present only in the Islamic model, since in others the system of religion and socio-economic relations does not have such a major influence on each other.

International regulation is related to pan-Islamism, which is nothing more than the effort to unite the Mohammedan peoples in one empire. This form of regulation is closely related to the functioning of the Academy of Islamic Law, which adopts decisions on business units and accounting. The Accounting and Auditing Organization of Islamic Financial Institutions specializes in the development of reporting standards. These standards are mainly aimed at financial institutions, as they are the most important investors for industries, and therefore specific financial products have been created. This includes, for example, the method of profit-making by banks: it runs on the “poor man’s bank” principle, and it is possible to reschedule its repayments. Unlike the banking system of other models, this rescheduling in Islam does not entail any penalty. Equal sharing of profit or loss is also such a financial product.

National level regulation is carried out by the authorities in compliance with the regulations and legislation of the Organization of the Islamic Conference. Table 1 lists the expressions requiring regulation in the following areas: accounting, financial institutions, and accounting control.

Table 1. The national level of regulation of the Islamic accounting model

Subject to regulation	Manifestation
Accounting	<ul style="list-style-type: none"> • evaluation and settlement of financial assets, • the Zakat system in the accounting activity, • profit distribution, • the establishment of guarantees and reserves of enterprises, • the mechanism of subsequent settlements, • accounting for foreign economic activity, • reporting on the activities of insurance companies, • financial statements.
Financial institutions	<ul style="list-style-type: none"> • with Sharia economic norms, • adherence to the principles of government.

Table 1, Continued

Subject to regulation	Manifestation
Accounting control	<ul style="list-style-type: none"> • the organization and mechanism of control, • conditions for completion, • the activities of the inspectors, • preparation of an inspection report.

Source: compiled by the authors based on (Evdokimov *et al.*, 2012)

As table 1 shows, according to the Islamic accounting model the next elements are the subjects to regulation. In the field of accounting, the list enumerates the manifestations requiring regulation. Among others, it includes the evaluation and accounting of financial assets, the operation of the Zakat system in accounting activities, the distribution of profits, the establishment of collateral and reserves of enterprises, the mechanism of subsequent settlements, the accounting of foreign economic activity, the reporting of the activities of insurance companies and financial statements. The field "Financial Institutions" include compliance with Sharia economic norms and adherence to the principles of government. Accounting control as a subject for regulation foresees understanding namely of the organization and mechanism of the control, the conditions for its performance, peculiarities of the auditors' activity and the preparation of the report on the control.

Micro-level regulation is present in the countries, which, considering the characteristics of a specific

enterprise, develops rules and documents for internal use that meet the governing organization and religious requirements. It regulates corporate governance, investments, and financial statements. (Evdokimov *et al.*, 2012)

There are four main accounting models used in various countries: Continental, Anglo-American, South American and Islamic (Table 2). The Continental model is used in countries such as Germany, Austria, France, and Japan. It is characterized by strict regulation of accounting by laws, close relations between businesses and financial institutions, and a focus on the reliability of financial results. The Anglo-American model is used in countries such as the USA, Canada, Great Britain, and Australia. It is characterized by limited legislative intervention in the accounting regulation process and a focus on providing users with financial information. The South American model is used in countries such as Brazil, Argentina, and Chile. It is characterized by primary regulation of accounting by law and standardization of accounting methods.

Table 2. Comparison analysis of accounting models

No.	Model	Countries, which uses	Characteristics	Orientation of accounting information
1	2	3	4	5
1	Continental	Germany, Austria, France, Denmark, Sweden, Norway, Italy, Belgium, Greece, Egypt, Spain, Switzerland, Portugal, Japan, Algeria, DRC, Cameroon, Luxembourg, Mali, Morocco, Senegal, Togo	<ul style="list-style-type: none"> - regulation of accounting by strict laws; - establishing close relations between businesses and financial institutions; - maintaining conservatism in accounting practice; - standardization of accounting procedures, documentation and reports; - prioritizing the reliability of the financial result. 	<p>Keeping in mind the state needs of taxation and macroeconomic regulation</p> <p>Preparing reports for the government and the tax authorities</p>
2	Anglo-American	<p>American version: USA, Canada, Mexico, Philippines, Japan;</p> <p>English version: Great Britain (Bahamas and Bermuda Islands), Republic of South Africa, New Zealand, Australia, Ireland, Netherlands;</p> <p>Mixed version: Zimbabwe, Israel, India, Cyprus, Venezuela, Iceland, Panama, Tanzania, Uganda, Fiji, Central American countries, Jamaica, Ghana, Zambia</p>	<ul style="list-style-type: none"> - limited legislative intervention in the accounting regulation process; - creation of national accounting organizations; - development of professional standards of accounting regulation; - maintaining the flexibility of the accounting system; - high requirements for the level of education and training of accountants; - providing users with financial information; prefers reliable valuation of assets and liabilities. 	<p>The needs of investors and stock exchange participants</p> <p>Reports, reports on creditors' requests</p>

Table 2, Continued

No.	Model	Countries, which uses	Characteristics	Orientation of accounting information
1	2	3	4	5
3	South American	Brazil, Argentina, Bolivia, Paraguay, Peru, Uruguay, Chile, Ecuador, Guyana	<ul style="list-style-type: none"> - primary regulation of accounting by law; - standardization of accounting methods; - adaptation of accounting procedures taking into account high inflation; - simple accounting system due to the small size of the enterprises; - low level of qualification of accountants; - revaluation of currencies in the report; - compliance with tax accounting and reporting regulations defining its parameters; - prefers a reliable assessment of the financial result and tax liability. 	The need for state regulation of the economy and taxation of the activities of economic units
4	Islamic	Kingdom of Saudi Arabia, United Arab Emirates, Iran, Iraq, Lebanon, Pakistan	<ul style="list-style-type: none"> - regulation of accounting by law; - the availability of accounting standards for banking institutions; - compliance of accounting principles with Islamic religious principles; - mandatory taxation of natural and legal persons for the benefit of the poor; - lack of diversity in accounting. 	<p>State taxation and economic regulation needs</p> <p>For the religious and moral principles present in the countries</p>

Source: compiled by the authors based on (Akimova & Grinko, 2016; Orlov & Hrytsyshen, 2017; Glotova, 2017)

Most models are named after the geographical location of the countries that use them. Their task is to resolve conflicts of interest. Islam differs from the rest mainly due to its religious views. Trade unions, provision of financial information, reliable assessment of assets and liabilities and accounting flexibility are common features of each accounting system. The orientation of the information varies with each model.

During the development of accounting, along with these four systems also the fifth model has been formed – the international accounting system. The common characteristics of the discussed above models are summarized in the latter one that includes such elements as international trade unions; professional standards; flexibility; high level of education; provision of financial information; reliable assessment. The degree of adaptation of the international model to the accounting system of the countries that use this model provide countless opportunities for further research.

The Continental accounting orientation is followed by countries such as Germany, France, and Japan. Its main characteristics include the regulation of accounting by strict laws, close relations between businesses and financial institutions, and prioritizing the reliability of financial results. The orientation is primarily oriented towards keeping in mind the state needs of taxation and macroeconomic regulation and preparing reports for the government and tax authorities.

The Anglo-American accounting orientation is followed by countries such as the USA, Canada, and Great Britain. Its key features include limited legislative

intervention in the accounting regulation process, creation of national accounting organizations, and high requirements for the level of education and training of accountants. The orientation is primarily oriented towards meeting the needs of investors and stock exchange participants and providing reports and reports on creditors' requests.

The South American accounting orientation is followed by countries such as Brazil, Argentina, and Chile. Its key features include primary regulation of accounting by law, standardization of accounting methods, and compliance with tax accounting and reporting regulations. The orientation is primarily oriented towards the need for state regulation of the economy and taxation of the activities of economic units and prefers a reliable assessment of the financial result and tax liability.

The Islamic accounting orientation is followed by countries such as Saudi Arabia, Iran, and Pakistan. Its key features include regulation of accounting by law, compliance of accounting principles with Islamic religious principles, and mandatory taxation of natural and legal persons for the benefit of the poor. The orientation is primarily oriented towards meeting the state taxation and economic regulation needs and adhering to religious and moral principles present in the countries.

Discussion

In recent scientific works, researchers and scholars have engaged in discussions regarding the classification and comparative characteristics of accounting models. Thus, such scholars as A. Unegbu, (2014), A.A. Frolova (2018),

E. Eromonsele (2017) focused on evolution of accounting models. Authors have explored the historical development of accounting models and their underlying principles. They discuss how accounting models have evolved over time, transitioning from traditional approaches like Historical Cost Accounting (HCA) to more contemporary models such as Fair Value Accounting (FVA) and Accrual Accounting (AA). Eromonsele (2017) fairly notes that the explanations regarding the causes of the accounting systems multiplicity and their classification by some experts in compared accounting systems has constituted a strongly debated issue in the second half of the 20th century. The accounting classifications have always created interest to the researchers, practitioners either for the explanation of the major differences which exist in the case of apparent accounting options due to cultural influences, or for making possible comparisons between the countries which have the scope of accelerating international harmonization.

It is important to state that the specific discussions and viewpoints regarding classification of accounting models and list of factors affecting them may vary across different scientific works and authors. Some researchers, as V. Tsaruk (2019) and O.O. Nesterenko, have examined the impact of accounting models on financial decision-making and economic outcomes. They explore how different models affect the valuation of assets and liabilities, profit recognition, and the measurement of financial performance. This analysis often includes discussions on the potential implications for investors, creditors, and other stakeholders. This aspect should be taken as well into consideration when assessing the impact of political, economic and other factors at the accounting system.

Discussions also revolve around the movement towards global convergence and harmonization of accounting standards. Author E. Bogáth (2018) has examined the challenges and benefits associated with aligning diverse accounting models across different jurisdictions. The potential has been explored for increased comparability, transparency, and the facilitation of international business transactions that is especially important for any national accounting system.

Different authors have proposed classification frameworks to categorize accounting models based on their fundamental characteristics, which allows to highlight Continental Accounting Model (Hellmann *et al.* 2013; Lubinets, 2018; Moshkovska & Dovhanets, 2019), (Glотова, 2017; Lubinets, 2018), (Evdokimov *et al.*, 2012). These frameworks usually consider factors such as measurement basis (e.g., historical cost, fair value, cash flow, or accruals), financial reporting objectives (e.g., reliability, relevance, liquidity, or comprehensive depiction), and decision-usefulness. They aim to provide a systematic approach to understanding the different accounting models and their characteristics.

It is worth highlighting the works of the authors D.V. Lubinets. (2018) and A.I. Elsidig (2020) who have conducted comparative studies to evaluate the strengths and limitations of different accounting models. Authors

have analysed the qualitative and quantitative characteristics of various models, assessing factors such as reliability, relevance, comparability, complexity, and the ability to reflect economic realities.

It should be noted that the classification of accounting models is an effective tool for describing and comparing different accounting systems, which helps separate countries to select the most suitable accounting model and identify possible problems that may arise when using a particular accounting model. Moreover, the accounting modelling is a very dynamic process that greatly influences the economic environment. If accounting system can be exported from one country to another, just as socio-political ideas are exported among different countries, so accounting models also tend to be changing throughout decades.

The authors have critically analysed existing accounting models, pointing out their specific orientation of accounting information and characteristics. At the same time, the classification given by the authors is conditional, since the same accounting model may have differences in individual countries that run on the principles of this model. In addition, accounting models lose their specificity with the development of the international accounting system and the recognition of international financial reporting standards in many countries of the world.

Thus, an accounting model is determined by the environment in which it operates, and the methodological principles of its organization, theory and practice depend on the social, political and economic environment of the given country.

Conclusions

To sum up, accounting has a rich history dating back to the 15th century with the creation of double entry book-keeping by Luca Pacioli. Over time, different accounting systems evolved based on the legal, social, and political environment of each country. The Anglo-American accounting system, which is used in 40 countries, places a strong emphasis on the provision of accurate and reliable information, the needs of investors and creditors, and a highly developed securities market. It is characterized by an independent regulatory body, prominent level of accounting qualifications, and minimal state intervention in accounting. While accounting regulations have become increasingly strict over time, the goal still is to provide objective and reliable information to stakeholders and protect the interests of investors and creditors.

Nowadays, every country in the world has its own accounting system, which is characterized by codes, national standards, regulations, plans of national accounts, and a specific methodology. Researchers divided the accounting models into four groups (Anglo-American, Continental, South America, Islamic models) which were supplemented by a new model of the modern accounting system, namely the international system.

There are several areas of further research that can be explored in the field of accounting models. There are a few potential research opportunities. Firstly, the impact of

technology on accounting models should be mentioned. With the rapid development of innovative technologies, such as artificial intelligence and block chain, there is a need to investigate the impact of these technologies on accounting models. Researchers could explore how these modern technologies could be used to improve the accuracy and efficiency of accounting models.

Accounting models are also influenced by cultural and institutional factors. A comparative study of accounting models across diverse cultures and countries could provide insights into the factors that shape accounting practices. In addition, in recent years, there has been a growing awareness of the importance of sustainability in accounting. Researchers could explore how accounting models can be adapted to incorporate sustainability considerations, such as environmental and social impact. Behavioural aspects of accounting models are also particularly important here. Accounting models are based on assumptions about

human behaviour. Researchers could explore how these assumptions affect the accuracy of accounting models and how they can be improved.

Another key aspect is the impact of accounting models on decision-making. Researchers could investigate how the design of accounting models affects decision-making and how they can be improved to better support these processes. Overall, there are many opportunities for further research in the field of accounting models, and these research areas could provide valuable insights into how accounting models can be improved and adapted to meet the changing needs of businesses and society

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Conflict of Interest

None.

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Порівняльна характеристика облікових моделей

Ніна Никифоровна Пойда-Носик

Доктор економічних наук, професор
Закарпатський угорський інститут імені Ференца Ракоці II
90201, площа Кошута, 6, м. Берегове, Україна
<https://orcid.org/0000-0002-5378-8028>

Ноемі Ласлівна Маркуш

Магістрант
Закарпатський угорський інститут імені Ференца Ракоці II
90201, площа Кошута, 6, м. Берегове, Україна
<https://orcid.org/0009-0007-9526-8200>

Анотація. Актуальність дослідження полягає в необхідності дослідження еволюції практик бухгалтерського обліку та впливу на них економічних, політичних і соціальних факторів у часі. Вивчення еволюції практики бухгалтерського обліку має важливе значення для отримання розуміння історичного контексту того, як бухгалтерський облік адаптувався до мінливих обставин. Ці знання допомагають оцінити основи сучасного бухгалтерського обліку та визначити причини поточної практики. Метою даного дослідження є порівняння типів облікових моделей та розгляд їх впливу на сучасні облікові системи. Серед теоретичних методів дослідження, покладених в основу дослідження, можна виділити методи якісної обробки даних та прогностичні методи. Ключовим елементом методології дослідження є історико-теоретична частина, яка передбачає вивчення облікових моделей різних груп країн з урахуванням зв'язків і взаємозалежностей між ними. Зроблено висновок, що на розвиток моделей бухгалтерського обліку вплинули різні чинники, які призвели до виділення певних типів зі своїми особливостями: континентальний (із суворими законами та консерватизмом); англо-американський (обмежене втручання в регулювання бухгалтерського обліку); Південноамериканський (адаптація до високої інфляції та проста система обліку) та ісламський (відповідність релігійним принципам та відсутність різноманітності в обліку). Для кожної окремої моделі орієнтація інформації різна. Континентальна модель призначена для державних потреб і надання звітності; англо-американська модель для потреб інвесторів, учасників фондового ринку та запитів кредиторів; південноамериканський орієнтований на державне регулювання та оподаткування господарської діяльності; Іслам виступає за державне та економічне регулювання та релігійні принципи. Вивчення як рудиментарного стану, так і сучасного застосування міжнародної системи бухгалтерського обліку відіграє важливу теоретичну та практичну роль для розвитку сфери бухгалтерського обліку та оподаткування. Практична цінність дослідження полягає в тому, що результати дослідження та обговорення сприяють кращому розумінню природи сучасної практики бухгалтерського обліку, дають зрозуміти, як зміни в бізнес-процесах, культурних нормах, а також законодавчій та нормативній базі сформували практику та системи бухгалтерського обліку

Ключові слова: системи бухгалтерського обліку; англо-американська модель; континентальна модель; південноамериканська модель; ісламська модель

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Specific features of the financial system of Ukraine in the conditions of war

Violetta Roshylo*

PhD in Economics, Associate Professor

Chernivtsi Institute of Trade and Economics of State University of Trade and Economics

58002, 7 Tsentralna Sq., Chernivtsi, Ukraine

<https://orcid.org/0000-0002-9361-9632>

Abstract. The impact of a range of factors on the country's financial system, primarily related to the war, determines the relevance and importance of conducting this study. In modern conditions, the sphere of finance is transformed and adapted, therefore the purpose of this study was to investigate the current state of the country's financial system in the context of the functioning of its main structural elements. The methodological basis of this study included the use of both general scientific methods, such as analysis, synthesis, comparison, comparison, and specific methods. To detect existing trends and processes in the financial system of Ukraine, statistical methods of dynamic and structural analysis were used. The study used a complex approach to the investigation of the financial system, specifically, the budget sphere, the banking system, the securities market, and the currency sphere were analysed. The main processes that affect the formation and implementation of the revenue and expenditure part of the state budget have been identified. The volume of tax revenues and their share in the formation of state budget revenues in the pre-war and wartime periods were compared. The main reasons for the growth of the budget deficit have been identified. The key sources used to cover the deficit were highlighted. The state of the national securities market was described based on the analysis of the structure of trade transactions in terms of financial instruments. The study found that the main share of trade transactions takes place with government debt securities. The banking sector, the financial system of the country, based on indicators of liquidity and profitability, was studied. Using the stability rating of banking institutions, it was found that leading positions in it are occupied by financial institutions that have foreign sources of financing, as well as state banks. The dynamics of devaluation of the hryvnia with the dynamics of inflationary processes were investigated. The results of the study allow for a comprehensive assessment of the current state of the country's financial system and will be useful both to actors in the country's financial sector and to managers who determine the basis of its functioning

Keywords: state budget; banking sector; securities market; currency stability; debt obligations; devaluation

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*Corresponding author

Introduction

The structure of the national financial system of any country is dynamic, i.e., in its development and adaptation to new conditions, it may be supplemented, or some of its elements may disappear. In general, the financial system is a structure in the economy that mobilizes capital from various surplus sectors to distribute it among various areas that need it (Buckle & Thompson, 2020). The Swiss scientist S. Evenett (2019) fairly emphasizes that financial crises, which threatened the viability of financial systems, necessitated the implementation of significant intervention in the financial system by the governments of many countries. The exclusive role of the state in the functioning of the financial system is also discussed in the study of American scientists F. Allen & D. Gale (2001), who note that the state acts as the main borrower, especially during war, recession, or when significant infrastructural projects are implemented. Apart from the role of the borrower, the state certainly plays other important roles. It is the state that has the exclusive right to issue money, which underlies the financial system and acts as a means of payment. As US scientists J. Begeau & T. Landvoigt (2022) note, central banks and other regulatory institutions exert their influence on the structural elements of the financial system. That is, direct intervention means that the system formed by state authorities determines the appropriate financial and economic policy and determines the parameters of the country's financial system.

Wartime conditions determine the need for effective state regulation to ensure resilience and stability of the financial system of Ukraine. The governments of other countries are also forced to respond accordingly to challenges related to the war in Ukraine, to stabilize their economies and financial processes. According to the French scientist G.-D. Lo *et al.* (2022), which was based on an analysis of the financial and economic systems of 73 countries, the world financial markets reacted to the war with a shock, reducing the return on assets and increasing volatility, which shook the stability of the financial systems of these countries.

N. Tataryn & R. Chornyj (2022), researching the financial system of Ukraine during the war, focus on the banking sector. The authors, based on the results of the analysis, conclude that the national banking system, even in the current conditions of martial law, has demonstrated its stability, thanks to the coordinated actions and regulatory activities of the National Bank of Ukraine and has successfully performed intermediary functions regarding credit support of the economy. Undoubtedly, the source of resources for such support was state funds received from various sources.

Ukrainian scientist M. Trofimchuk (2022) assessed the impact of the war on financial and economic processes in the country. Trofimchuk substantiated the specific features of budgetary policy during the war period, specifically, it was established that in the first 6 months of the war, the main sources of financing of state budget expenditures were the funds of the National Bank of Ukraine. The relationship between gross domestic product and tax revenues was investigated. In addition, analysing currency transactions,

it was emphasized that the devaluation of the hryvnia is caused by a substantial drop in exports and an increase in imports. All this, according to the author, conditions the development of inflationary processes and the stability of the country's financial system. In the study, an attempt was made to investigate the processes in the financial and economic system of the country at the beginning of the war from several angles.

Despite existing achievements, considering the time factor and the intensity of changes, there is a need for a comprehensive study of the state of the main structural elements that ensure the functioning of the country's financial system in modern, complex conditions. The dynamism of the development of financial and economic processes, a decrease in business activity, a drop in the profitability of the budget system, currency devaluation and other factors determine the relevance of the study. Therefore, the purpose of this study was to assess the current state of the financial system of Ukraine in terms of the functioning of the key areas that form it.

Materials and Methods

The methodological framework of this study included the use of a systemic approach to understanding the essence of the financial system, which is based on a clear definition of the spheres that form it and condition the specific features of its functioning. The comprehensive approach helped single out the key components of the modern financial system of Ukraine, such as the sphere of public finance (state budget), the securities market, the banking sector and the sphere of currency regulation. The state budget was investigated in terms of key indicators that characterize it, namely, revenues, expenditures, and deficit.

To ensure the relevance of the analysis, the statistical data of the state budget of Ukraine is taken as a basis because it is the financing of the country's defence needs, which have increased substantially due to military aggression. Based on dynamic analysis, the main trends in the implementation of the expenditure and revenue part of the budget and instruments for financing the deficit of the state budget of Ukraine in the conditions of war were revealed. The cause-and-effect analysis helped identify the main factor that influenced the underperformance of the revenue part of the budget. Based on the juxtaposition and comparative analysis, the role of tax revenues in the formation of the revenue part of the state budget is determined. Based on structural analysis, the main sources that were used to finance the deficit of the state budget and allowed to balance the budget policy to ensure socio-economic stability and smooth functioning of the country's financial system were identified and classified.

To determine the current state of the securities market, which is an integral element of the country's financial system, a structural analysis of trade transactions with market instruments was used. This provided an opportunity to determine the share participation of each instrument and

revealed that the securities market does not fully perform its functions, but is used exclusively for the preservation of capital, effectually through investing and trading only in government securities, which in conditions of instability are the safest financial instrument.

The assessment of the state of the banking system was based on two key indicators: liquidity and profitability. The analysis of the conducted study in this area suggested that despite the difficult conditions, as a result of the correct national policy, the liquidity of the banking sector was preserved, and profitability was gradually restored. Furthermore, the research used the results of the rating of banking institutions by the level of stability in 2022, according to a methodology based on the use of key indicators of bank activity. Such indicators include the quality of funding, dependence on individual deposits, profitability, liquidity, scale of operations, capital adequacy, the bank's share in the market of retail deposits, payment reputation. The assessment of the rating list revealed the tendency that leading positions are occupied by banks with foreign capital and state banks. Furthermore, the causal analysis helped establish the importance of the development and use of information technologies to develop competitive advantages of a financial credit institution in the market.

The study of currency stability was carried out based on a dynamic analysis of the exchange rate of the hryvnia against the US dollar and a comparison of the level of volatility of the exchange rate with the data of 2014-2015. A comparison of the dynamics of changes in the hryvnia

exchange rate and the consumer price index revealed the relationship between these indicators. The analysis of the available scientific developments in this area strongly suggested that the devaluation of the hryvnia has a substantial impact on inflationary processes, the effect of transfer in periods of instability can reach 60%. The use of critical analysis helped form a general conclusion regarding the current state of the country's financial system.

Results

The financial sector can be considered as a part or sphere of the economy that offers and provides financial services to various branches of the national economy, the key elements of which are the central bank of the country, a set of banks, financial institutions of a non-banking nature, organized capital markets and institutions and organizations that carry out supervision and regulation (Krahnen & Schmid, 2004). Accordingly, the interaction between these elements ensures the formation of supply and demand for capital and other finance-related services, and this, in turn, is the country's financial system.

The effectiveness of the country's financial system mainly depends on the use of various financial instruments that help implement financial policy at all hierarchical levels of the economy, which, through the synergy of financial interactions, markets, institutions, levers, tools, affects the distribution and redistribution of financial resources and their impact on the social-economic development of the country (Fig. 1).

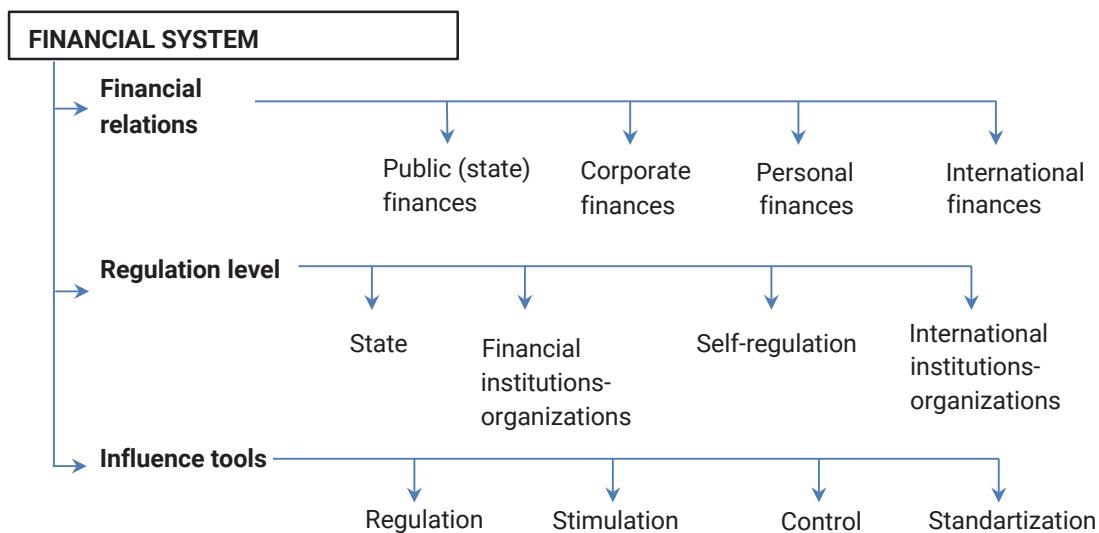


Figure 1. National financial system

Source: compiled by the author based on I.A. Lomachynska (2020), R.G. Hubbard (2001)

Public finance is one of the basic components that ensure the stability of the country's financial system (Tresch, 2023). The current issues with ensuring a balanced budget in Ukraine, as a result of a decrease in business activity, which is expressed in a 30% drop in the country's GDP

(Fig. 2) and significant costs for the country's defence against an aggressor, have a substantial destabilizing effect on the financial system, the resources of which are directed towards the levelling of budgetary imbalances using various levers. Notably, this refers not only to the ability of the

economy to form a suitable fiscal (budget-supplementing) resource, but to the real possibility of the fiscal system to accumulate this resource and create a balance between the socio-economic provision of the country with necessary goods and energy resources and fiscal policy. Such a

situation with GDP indicates a decrease in economic activity, a drop in production volumes, a decrease in trade turnover and, as a result, a decrease in the tax base, which negatively affects budget revenues and its ability to finance necessary expenditure items (Table 1).

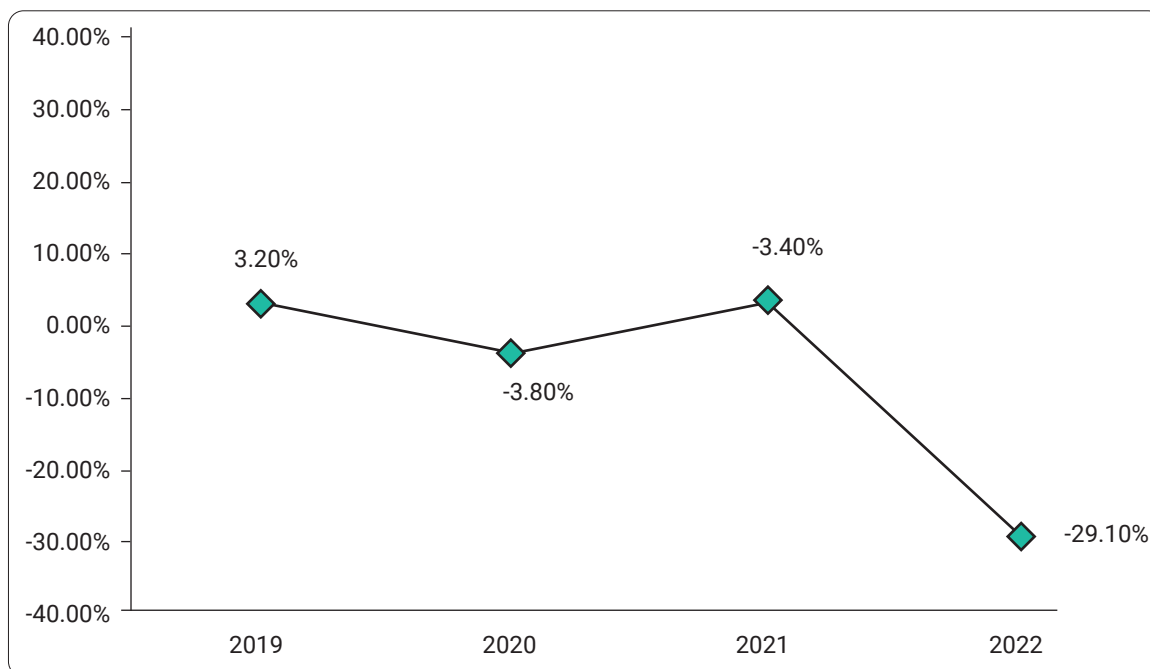


Figure 2. Change in the volume of the gross domestic product of Ukraine at constant prices, %

Source: compiled by the author based on data from the State Statistics Service of Ukraine (2023)

Table 1. Individual indicators of the state budget of Ukraine for 2019-2022

Indicators (fulfilled), mln UAH	2019	2020	2021	2022
Revenues	998,278.90	1,076,016.60	1,296,852.90	1,787,395.60
Tax revenues	799,776.00	851,115.60	1,107,090.80	949,764.30
Income from the European Union, foreign governments, international organizations, donor institutions	-	-	1,289.80	481,313.9
Expenditures	1,072,891.40	1,288,016.70	1,490,258.90	2,705,423.30
Expenditures for the Ministry of Defence of Ukraine	-	-	125,956.50	1,113,343.40

Source: compiled by the author based on data from the State Budget web portal for citizens (2023)

As Table 1 suggests, the revenue part of the state budget during the war in 2022 increased substantially, by more than 37%, compared to the previous year. However, tax revenues in the structure of revenues in 2022 amounted to only about 53%, while in the previous, pre-war years, they accounted for over 80%, and in 2021, in general, 85.3% of all state budget revenues. Substantial help in balancing the budget sector is provided by partner countries, including

the USA, European Union countries, Japan, and others. Thus, revenues from these countries in 2022 increased more than 400 times compared to 2021 and accounted for about 27% of all state budget revenues in 2022. The imbalance in the revenue and expenditure parts, caused by the war and, accordingly, the need to finance the country's defence (defence expenditures increased almost 9 times in 2022), led to the emergence of a substantial budget deficit (Fig. 3).

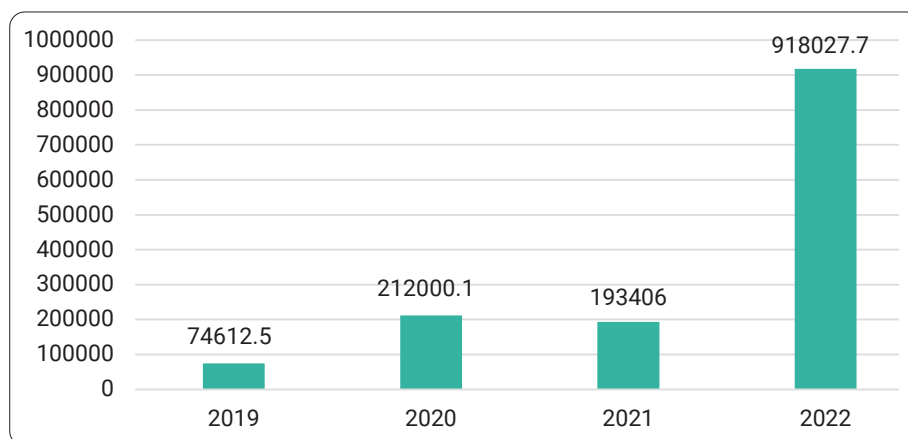


Figure 3. Dynamics of the state budget deficit of Ukraine

Source: compiled by the author based on data from the State budget web portal for citizens (2023)

As Fig. 3 suggests, in 2022 there was a significant increase in the deficit of budget funds for financing state expenditures. Accordingly, such a situation required the search for sources of funding for such a gap between income and expenses. In 2022, the dominant source of attracting financial resources used to finance state budget expenditure items was state borrowing, which was carried out in two forms – internal and external. In general, for 2022, it was possible to ensure the receipt of funds in the form of state loans in the amount of UAH 1,309.1 billion. Within the internal financial market, the Ministry of Finance of Ukraine quite often organized auctions for placement of various types of debt instruments. The main ones were bonds issued in national and foreign currency. In general, as a result of state borrowing on the internal market, it was possible to get UAH 666.9 billion to the general fund of the state budget, of which UAH 266.9 billion was raised using the Domestic Government Bonds of Ukraine (DGB) through auctions, of which UAH 197.2 billion were military bonds. It was military bonds that became an effective investment tool that helped support the state budget and were sold at affordable prices, both for individuals and legal

entities, including non-residents of Ukraine. Notably, UAH 400 billion was brought into the budget by the National Bank of Ukraine (NBU), which purchased military bonds for its portfolio. State budget borrowing on foreign markets in 2022 amounted to UAH 612.2 billion, of which UAH 48.0 billion was involved in a special budget fund from various partner countries and international investment and financial and credit institutions, with the purpose of implementing joint projects (Ministry of Finance of Ukraine. National budget, 2023).

Another, but less substantial, source of financing the state budget deficit was income from the privatization of state-owned property. In general, in 2022, under this article, it was possible to attract funds in the amount of UAH 1.7 billion, which more than doubled the planned figure (the plan was to receive UAH 0.8 billion). In general, despite the demanding situation in the country's economy, Ukraine fully performed its debt servicing and repayment obligations to its creditors. This situation with the emission of government debt instruments, in general, formed the trends of activity on the securities market, which is an integral part of the country's financial system (Table 2).

Table 2. The volume of completed transactions with financial instruments in 2022 on the organized market, by type of instrument, UAH million

Type of financial instrument on the securities market	Trading volume in UAH million
Share	91.75
Share of a foreign issuer	936.60
Share of a foreign state	2.89
Investment certificate	1.49
Corporate bond	197.88
Domestic Government Bonds of Ukraine (DGB)	152,825.19
Domestic Local Bond (DLB)	61.53
Eurobonds of Ukraine	3,819.30
Bond of a foreign issuer	88.28
Bond of a foreign state	229,608
Enterprise bond	309.19
Futures contract	5.87
Total for all instruments	160,636.02

Source: compiled by the author based on O. Sokolova & S. Diachenko (2023)

As Table 2 suggests, the dominant instrument of trade on the Ukrainian securities market was bonds issued by the government, the share of their trade (DGB) in the general

structure of trades on the market is dominant. Other securities had insignificant shares in the total volume of trading activity of the national securities market in 2022 (Fig. 4).

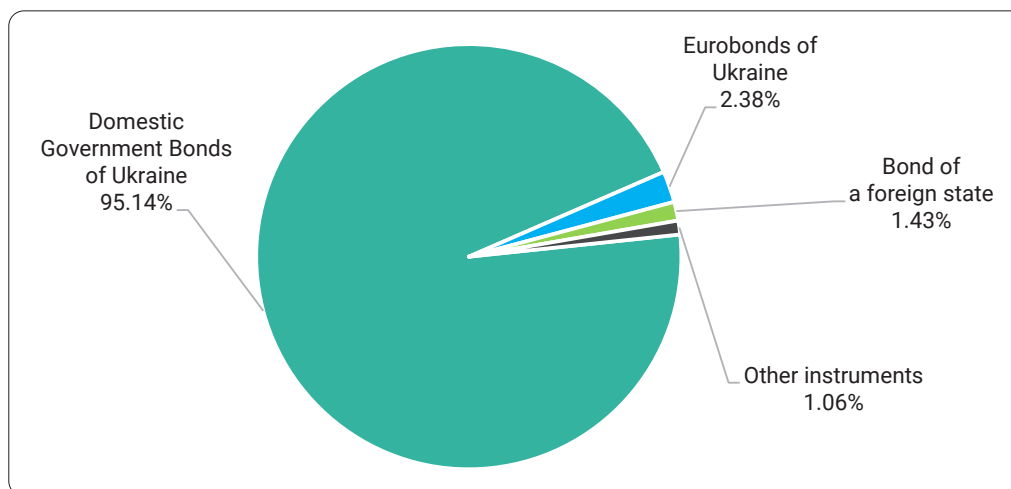


Figure 4. The structure of trading in financial instruments on the securities market of Ukraine, in 2022

Source: compiled by the author based on O. Sokolova & S. Diachenko (2023)

As for the banking system, the modern trend in its functioning is digitalization. The digital transformation processes, which are currently taking place in the financial sphere, and the banking sector specifically, have a substantial impact on the external and internal environment of the functioning of a banking institution. The banking system of the country, as a result of military aggression, for a certain period did not have the opportunity to provide the appropriate level of service to its customers and to work properly, which led to a decrease in opportunities for income generation. However, institutions with developed digital services had more opportunities to ensure the profitability of their activities (Levandivskiy *et al.*, 2023).

Since the national banking system is in conditions of uncertainty, as well as the financial system in general, because there are increased risks caused by military actions, the key task of banking and other financial and credit institutions is to guarantee stable work for their customers and performing all their obligations to them.

According to U. Grudzevuch & N. Drebot (2023), in 2022 the liquidity of banks stayed at a prominent level and

all key indicators showed an upward trend, both for the banking system as a whole and for the group of savings banks separately. If, on average, the all-currency LCR (liquidity coverage ratio for all currencies) increased over 3 times in the banking system as a whole, it increased by 1.38 times in savings banks.

During the war year, the profitability of the banking system decreased by three times to UAH 24.7 billion. The number of unprofitable depository corporations increased from 5 to 21 – out of 67 active in 2022. Along with the decrease in profitability in absolute terms, indicators of profitability of assets and profitability of capital showed a decrease, so compared to the data of the beginning of the year, profitability of capital and assets in the banking system decreased more than 3 times. According to the data of the analytical portal “Minfin”, which carries out an integral assessment of the stability of banking institutions and forms the corresponding rating, the leading positions in the rating of institutions in 2022 were occupied by banks with foreign capital and state banks (Table 3).

Table 3. TOP-15 most stable banking institutions of Ukraine, in 2022

Ranking	Name of the financial institution	Overall rating (maximum – 5 points)	Stress resistance	Loyalty of depositors	Analysts’ assessment	Ranking in terms of deposits of individuals
1	JSC “Ukrsibbank”	4.39	4.3	4.6	4.22	7
2	JSC “RAIFFEISEN BANK AVAL”	4.34	4.1	4.9	3.89	3
3	JSC “Crédit Agricole Bank”	4.16	3.8	4.5	4.33	11
4	JSC “Kredobank”	4.15	3.9	4.5	4.11	12

Table 3, Continued

Ranking	Name of the financial institution	Overall rating (maximum – 5 points)	Stress resistance	Loyalty of depositors	Analysts' assessment	Ranking in terms of deposits of individuals
5	JSC "OTP Bank"	4.12	4	4.3	4.11	10
6	JSC CB "PrivatBank"	4.04	3.5	4.5	4.33	1
7	JSC CB "UniversalBank"	3.84	3.1	4.9	3.56	4
8	JSC "PUMB"	3.73	3.2	4.5	3.56	6
9	JSC "OSCHADBANK"	3.61	2.9	4.2	4.11	2
10	JSC "Ukreximbank"	3.60	3	4.5	3.33	8
11	JSC "ProCredit Bank"	3.54	3.2	4	3.56	16
12	JSC "Ukrgasbank"	3.51	2.9	4.2	3.67	9
13	JSC "A-Bank"	3.49	3.1	4.6	2.33	13
14	JSC "Pivdenny"	3.46	3.3	4.1	2.67	14
15	JSC "Accord Bank"	3.38	2.9	4.1	3.22	21

Source: compiled by the author based on Ministry of Finance of Ukraine. Stability rating of banks (2023)

The banking sector, and the NBU specifically, play a significant role in ensuring the stability of the national currency, which is the basis of the financial system of any country. The devaluation of the national currency intro-

duces an imbalance not only into the financial system of Ukraine, but also, considering the structure of export-import trade operations, has a momentous relationship with inflationary processes in Ukraine (Fig. 5).

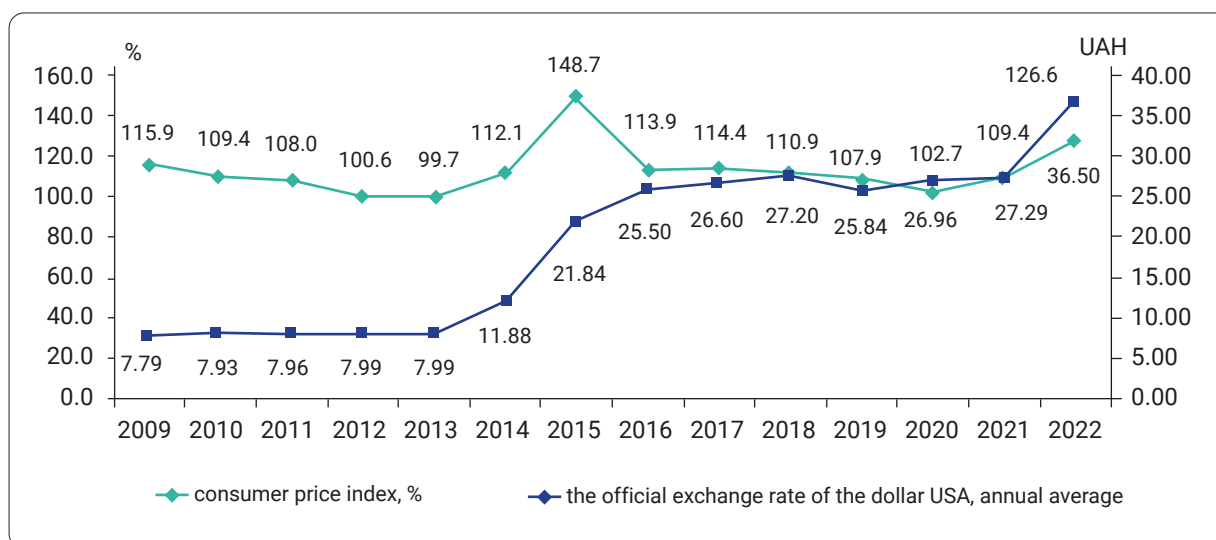


Figure 5. Dynamics of inflationary processes and the average annual exchange rate of the hryvnia and the US dollar in Ukraine

Source: compiled by the author based on State Statistics Service of Ukraine (2022), National Bank of Ukraine (2022)

As Figure 5 shows, there is a relationship between the hryvnia exchange rate and the consumer price index. The degree of influence of devaluation on inflation in the country (scientists call it the transfer effect) was studied in detail in the works of foreign scientists E. Beckmann and J. Fidrmuc (2013), I. Korhonen and P. Wachtel (2006), as well as Ukrainian scientist O. Faryna (2016). Analytical studies by the above-mentioned authors suggest that the effect of transfer of devaluation (the calculation was made relative to

the US dollar) on consumer prices in Ukraine ranges from 0.4 to 0.45. However, in periods of instability, it can reach the level of 0.65. That is, a devaluation of the hryvnia by 1% can contribute to an increase in inflation by 0.6%. Such results must be considered when forming the monetary policy of the NBU and the general financial and economic policy of the government for the stabilization of the financial system and the economy of the country in the conditions of the war and its further development in the post-war period.

Discussion

As noted by L.K. Chu (2020) and R. Barradas (2020), the financial system, or rather its structure, is closely related to economic growth. Therefore, understanding the relationship between the financial structure and economic growth under different financial and economic conditions is critical to ensure the effective role of the financial sector in stimulating economic activity. Based on this, it is advisable to investigate the financial system by analysing its key structural elements, such as the budget system (the main indicators of the state budget, income and expenditure, deficit, financing, public debt), the banking system (and, accordingly, the currency system), the capital market (securities market).

Sharing the conceptual approaches of J. Krahnen & H. Schmid (2004) to the study of the country's financial sector and its financial system, it is also necessary to consider the role of the state, specifically the sphere of public finance, as an integral part of the country's financial environment. Therefore, one can agree with M. Kyere & M. Ausloos (2020) that finance without public administration would hardly be possible. Management of the financial sector forms an integral part of the financial system of any country. This also includes the sphere of public finance, the budgetary sphere, debt financing.

The sphere of public finances (namely, the state budget) in Ukraine, in modern conditions, is under unprecedented pressure from both external and internal factors that have a negative impact on it, thereby unbalancing it. A substantial increase in the expenditure part of the budget in 2022 (by almost 40%) is conditioned upon the need to finance expenses related to defence measures due to the war waged against Ukraine. Therewith, the fall in GDP volumes, as a basic indicator of production activity and business activity, against the background of military actions, means a curtailment of economic activity, as a result of which the revenue part of the budget is not executed as it was in the pre-war period. The colossal shortfall in tax revenues, which in 2022 accounted for only 53% of the country's state budget revenues (in 2021, this indicator was almost 90%), requires the search for new sources of financing of state expenditure items, on which the existence of not only the financial system depends, but also the state in general.

A vital role in the financial system and macroeconomic stabilization process of the country was played by government borrowing in the form of bonds. The results of the study by J. Boukhatem *et al.* (2021) are fully confirmed by the example of Ukraine, showing that the interaction between the bond market and macroeconomic variables is very pronounced in developing countries compared to countries with advanced economies. The relationship between the bond market and macroeconomic indicators varies over time and is most pronounced during periods of instability, which Ukraine is currently experiencing. In fact, it was only thanks to the bonds of the domestic government bonds that it was possible to attract funds that accounted for 72.6% of the state budget deficit in 2022. External

borrowing in the form of Eurobonds and other debt instruments also played an influential role in ensuring the stability of both the budget system and the financial sector of the country in general.

According to French scientists W. Bounou & A. Yatié (2022), the conditions of war create an elevated level of uncertainty of further development. That is why government debt securities were the main instrument traded on the Ukrainian securities market. That is, the Ukrainian securities market does not perform all its key functions, it is not a source of transformation of savings into capital to ensure the development of national enterprises, but it plays the role of securing capital and obtaining income when investing funds exclusively in the safest instruments, which are government debt securities.

Transactions with government bonds of Ukraine, both domestic and foreign loans, in 2022 accounted for more than 97.5% of all trade agreements executed on the national securities market. Banks, which act as primary dealers in Ukraine, played a leading role, particularly in terms of initial placement (O. Sokolova & S. Diachenko (2023)). The banking system, thanks to the correct and coordinated actions of the NBU and participants in the banking sector, managed to demonstrate flexibility and relative stability despite the substantial challenges associated with the war. The National Bank of Ukraine concentrated its efforts on the stable operation of banking institutions in exceedingly difficult wartime conditions. In general, it is possible to single out several key principles that helped ensure, as much as possible, the mitigation of the negative impact of military actions and other factors related to them. All depositors and users of banking services were provided with the possibility of using their own, and initially partially, and later with fewer restrictions, credit funds, making payments and transfers, i.e., customer protection was provided to prevent total panic and withdrawal of funds from the banking system. Thanks to special refinancing, the liquidity of banking institutions was supported, which helped stabilize the activities of individual banks that suffered the most as a result of military aggression, and not to declare them insolvent and provide opportunities for recovery. Moreover, the established requirement to reflect the state of affairs in the activities of banking structures helped observe the real processes and state of affairs to further implement an effective mechanism for restoring the banking system in the following periods.

The above is confirmed by the results of a study by U. Grudzevich & N. Drebot (2023), which show that even though the main indicators of liquidity and profitability of banks showed a decrease at the beginning of the war, the relatively high level of short-term liquidity provided by the NBU became the exact factor that enabled the banking system to function as stably as possible without considerable losses. Furthermore, bank liquidity increased thanks to issue financing of the state budget and receipt of international financial support. The growth of profits in absolute terms and relative profitability at the end of 2022 and the

beginning of 2023 is the basis on which it can be argued that the banking system managed to cover the losses that were received in the first months of the war; furthermore, it now has a substantial margin of financial stability, which creates opportunities for expanding the lending portfolio, and in accordance with the gradual recovery of economic activity.

Evaluating the banking sector in terms of the stability of specific financial and credit institutions, a trend is observed that the most stable organizations (take the first places in the rating) are banks with foreign capital, which is not surprising because parent companies can recapitalize these institutions, as well as state banks, through which debt instruments of the state are realized. In general, the relevance of the obtained results of the rating of financial institutions is confirmed by the methodology of its implementation. Thus, the assessment of stress resistance includes indicators of the quality of financing, dependence on individual deposits, profitability, liquidity, scale of operations, and capital adequacy. To calculate the loyalty index, the bank's share in the retail deposit market, the absolute growth of the retail portfolio of deposits for the period, the relative growth of the retail portfolio of deposits for the period, experience in the market, and payment reputation of the bank are considered. Apart from these indicators, an adjustment factor is also used, which is an average assessment of the bank's reliability according to a pool of experts.

Notably, despite the financial instability caused by the war, banks with advanced IT services, such as PrivatBank and UniversalBank ("Monobank" service), are the best capable of dealing with activities related to the attraction of funds from individuals. Therefore, we can agree with O. Levandivskiy *et al.* (2023) that an effective strategy of information and technological restructuring of the banking sector is a critical component for successful activity in modern conditions. Banking organizations must adapt both to external changes caused by the popularity of digital services and to internal changes, using the potential of digital technologies as a competitive advantage to increase profitability.

Despite the more devastating consequences of the military conflict in Ukraine, which began in 2022, compared to 2014-2015, the state authorities managed to ensure the stability of the national currency and prevent its colossal devaluation. As a result of relevant effective precautionary measures, as well as considerable international financial support, the hryvnia devalued in 2022, relative to 2021 (in relation to the US dollar) by approximately 35%, while in 2014-2015, the devaluation amounted to more than 200% (National Bank of Ukraine, 2022). This achievement is crucial because the devaluation of the hryvnia in Ukraine has a high transfer effect on inflationary processes, which significantly slows down the possibilities for the recovery of economic activity, which does not contribute to the strengthening of the country's financial system.

In general, the coordinated, quick and correct actions of the National Bank of Ukraine, the Cabinet of Ministers of Ukraine, the Ministry of Finance of Ukraine in close cooperation with international financial donors, who provided

an unprecedented level of support, played a critical role in stabilizing the financial system of Ukraine, which continues to function in extremely difficult conditions.

Conclusions

The study helped establish that the financial system, as an integral element of the national economy, should contribute to the development of the economy, providing it with the necessary financial resources and guaranteeing the stability of the national currency, especially under the negative influence of external factors, one of which, in today's conditions, is war. It was proved that the state must act as a guarantor of the functioning of the financial system in periods of instability. It is expedient to investigate the financial system of Ukraine based on the key structural elements that ensure its formation and determine the parameters of its functioning. Such components include the sphere of public finance, specifically the state budget, the banking system, the securities market and the currency system. Based on the results of the analysis, it was established that the current trends in the budgetary sphere are characterized by a significant deficit of the state budget, as a result of a decrease in tax revenues due to the devastating consequences of the war and a considerable increase in the country's defence expenditures. It was revealed that the main sources of covering such a deficit are state debt instruments, namely DGB, Eurobonds, and loans from the international community. Furthermore, a significant role in financing the deficit is played by irrevocable financial aid from the countries of the European Union, the United States, and other partners.

The results of the study strongly suggest that the conditions of uncertainty determine the monodirectional nature of trade on the securities market. Government bonds, as the safest investment tool in times of instability, are a key asset of trading activity on the Ukrainian securities market. It was established that transactions with shares and other corporate instruments are practically absent at Ukrainian trade organizers.

It was established that the banking sector, as a result of effective decisions of the authorities and national support, managed to ensure liquidity, stability of functioning, and performed all the functions assigned to it. However, increasing liquidity through refinancing opportunities reduces profitability, which may affect the solvency of individual financial institutions in the future. It was discovered that despite the fall in GDP and the increase in imports, thanks to the coordinated and timely actions of the National Bank of Ukraine, the Cabinet of Ministers of Ukraine, and the Ministry of Finance, it was possible to stabilize the exchange rate of the hryvnia against the leading world currencies, as a result of which the devaluation of the national currency was substantially less than in 2014-2015. In Ukrainian realities, this is critical because the devaluation of the hryvnia is significantly reflected in inflationary processes, which inhibit economic development and limit the possibilities of using the potential of the country's financial system. It is advisable to direct further research to

the development of practical actions aimed at ensuring the stable functioning of each structural element of the financial system, which will make it possible to create the basis for the post-war recovery and development of the country's national economy.

None.

None.

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Conflict of Interest

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Особливості функціонування фінансової системи України в умовах війни

Віолетта Іванівна Рошило

Кандидат економічних наук, доцент
Чернівецький торговельно-економічний інститут
Державного торговельно-економічного університету
58002, Центральна площа, 7, Чернівці, Україна
<https://orcid.org/0000-0002-9361-9632>

Анотація. Вплив різноманітних чинників на фінансову систему країни, в першу чергу пов'язаних з війною, обумовлює актуальність та важливість проведення цього дослідження. В сучасних умовах, сфера фінансів трансформується та адаптується, тому метою статті є дослідження сучасного стану фінансової системи країни в контексті функціонування її основних структурних елементів. Методологічною базою проведення дослідження стало використання, як загальнонаукових, таких як аналіз, синтез, зіставлення, порівняння, так і специфічних методів. Для виявлення існуючих тенденцій та процесів у фінансовій системі України, використовувались статистичні методи динамічного та структурного аналізу. В роботі застосовано комплексний підхід дослідження фінансової системи, зокрема проаналізовано бюджетну сферу, банківську систему, ринок цінних паперів, та валютну сферу. Виявлено основні процеси, які впливають на формування і виконання дохідної та видаткової частини державного бюджету. Проведено порівняння обсягів податкових надходжень та їх частки в формуванні доходів державного бюджету у довоєнний та воєнний період. Виявлено основні причини зростання бюджетного дефіциту. Виділено ключові джерела, які використовуються для покриття дефіциту. Охарактеризовано стан національного ринку цінних паперів на основі аналізу структури торговельних операцій в розрізі фінансових інструментів. Виявлено, що основна частка операцій з торгівлі відбувається з державними борговими цінними паперами. Досліджено банківський сектор, фінансової системи країни, на основі показників ліквідності та прибутковості. Використовуючи рейтинг стабільності банківських установ, виявлено, що провідні позиції в ньому займають фінансові установи, які мають іноземні джерела фінансування, а також державні банки. Досліджено динаміку девальвації гривні в поєднанні з динамікою інфляційних процесів. Результати дослідження дозволяють комплексно оцінити сучасний стан фінансової системи країни, та будуть корисними як учасникам фінансового сектору країни, так і управлінцям, що визначають засади її функціонування

Ключові слова: державний бюджет; банківський сектор; ринок цінних паперів; валютна стабільність; боргові зобов'язання; девальвація

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Improvement of accounting and tax accounting of receivables

Svitlana Stender*

PhD in Economics, Assistant Professor

Podillia State University

32316, 12 Shevchenko Str., Kamianets-Podilskyi, Ukraine

<https://orcid.org/0000-0002-6234-1877>

Abstract. The relevance of this study is determined by the fact that the importance of effective management of receivables for ensuring financial stability is considered. Reducing the risk of insolvency, improving liquidity, increasing current assets, strengthening trust and reputation, as well as macroeconomic impact are the key mechanisms through which effective management of receivables contributes to the financial stability of enterprises and the country as a whole. The purpose of this study was to find ways to improve work with receivables of enterprises operating in the Khmelnytskyi region of Ukraine. As a work methodology, such research tools as analysis, synthesis, and PESTEL analysis were chosen. The results of the study demonstrated that it is critically important for any enterprise to be able to efficiently record its receivables to avoid the risk of receiving tax fines and interest charges. By implementing new mechanisms for improving accounts receivable accounting, enterprises can obtain more accurate financial reporting, improve cash flow management, ensure timely payment of services and goods from customers, improve compliance with Ukrainian tax legislation, which leads to an increase in their economic efficiency. Accounting for receivables also considers the accounting of customers' credit ratings, which gives companies an idea of the areas of development and serves as the basis for work on managing funds. Moreover, a well-established business process, from the standpoint of avoiding the appearance of debts due to the improvement of tax and accounting, can also help the government of Khmelnytskyi region to collect taxes more effectively (timely and in full) and promote the development of public infrastructure and the provision of services in the region. The significance of the obtained results lies in the potential contribution to the construction of a stronger and more stable financial system of the Khmelnytskyi region

Keywords: cash flow; bankruptcy avoidance; economy; financial stability; lending

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*Corresponding author

Introduction

Effective accounting and tax accounting of receivables is important for any business. The ability of the enterprise to work efficiently with accounts receivable becomes one of the decisive factors for maintaining financial stability and ensuring compliance with legislation. Thus, A. Kolevatova (2022) emphasizes that there are certain differences in the Ukrainian and foreign understanding of the term “receivables”. According to the National regulation (standard) of accounting 10 “Receivables” (Order of the..., 1999), this term is understood as the amount owed by debtors to the enterprise on the current date. Accounts receivable can be defined as an asset, only if it is assumed that the enterprise will receive economic benefits in the future, considering the determination of a reliable amount of income. Receivables are divided into several types, which include current (which can be repaid within 12 months), long-term (which will be repaid after 12 months), and bad debts (for which there is a certainty that the debtor will not return the funds, or the one where the term of summons has expired of antiquity) (Order of the..., 1999).

A. Okungbowa (2022) defines accounts receivable as the total amount of money that must be returned to the company by its customers. The scientist classifies receivables as financial assets. The author emphasizes that accounting for receivables is an important part of the financial management of any enterprise that sells its products or services on credit.

Accounts receivable is an essential component of a company's assets, and its accurate accounting and management can substantially affect a company's financial performance. Thus, researchers M. Paseková *et al.* (2021) determine that receivables constitute a significant part of the current assets of enterprises, and should be investigated and analysed constantly, and at different levels. The authors note that a significant excess of receivables indicates great financial difficulties of the enterprise and reflects the critical need to find additional financing (attraction of investments) (Paseková *et al.*, 2021). Moreover, according to Ukrainian scientists A.P. Mararenko and D.Y. Levitska (2021), if the company is unable to find the necessary funds to cover the debt, the company may be declared bankrupt and liquidated.

R.P. Singh *et al.* (2021) determined that the analysis, accounting, and management of receivables also has a significant impact on the attitude of customers towards the enterprise. The authors note that accounting for receivables can highlight the most attractive areas of cooperation for concluding profitable deals with solvent and conscientious clients of the firm. The more a company is confident in its customers, the higher the level of loyalty it will receive from them. Moreover, the termination of cooperation with “honourable” debtors improves the situation with the level of trust of honest customers and reduces the possible financial risks of the enterprise.

Recently, enterprises of the Khmelnytskyi region of Ukraine have encountered several problems related to the management and accounting of receivables. These

challenges include a lack of clear guidance on the accounting and tax approach to accounts receivable, ineffective use of accounting software, and a lack of clearly defined debt collection processes (Reports, 2021). Notably, this situation is not unique to the Khmelnytskyi region, it is inherent in many Ukrainian enterprises, as evidenced by the audit reports of the State Audit Service of Ukraine (Reports 2022, 2022).

Furthermore, the activities of many Ukrainian enterprises became more difficult due to the beginning of the full-scale invasion of the Russian Federation into Ukraine. This led to the impossibility of some companies to perform their debt repayment obligations. Therefore, for enterprises with large amounts of receivables, the risk of turning current debt into long-term debt has significantly increased, which can have major negative consequences for the financial condition of these enterprises.

The purpose of this study was to investigate the current state of accounts receivable management in the region and to identify the main shortcomings of the current approach to accounting and to find ways to improve the accounting and tax accounting of accounts receivable of enterprises in the Khmelnytskyi region of Ukraine.

Materials and Methods

As a basis for the analysis, within the framework of this study, official data from reports on the financial activities of the enterprises “Khmelnytskyi Forestry” (Financial information, 2023) and Khmelnytskvodokanal (Company reports, 2023) were used. The regulations and relevant legislative documents of Ukraine in the field of accounting (Order of the..., 1999) and tax accounting (Tax Code of Ukraine, 2010) served as an additional tool of the theoretical basis of the article. For this study, financial and audit reports for the last 5 years (from 2018 to 2022) were processed, including official statistical information of the State Statistics Committee of Ukraine (Official website of..., 2023). All the information used is publicly available on the Internet.

The methodological framework of this study, in the context of improving accounting and tax accounting of receivables, are such methods as analysis (which consists in evaluating the current system and identifying its main shortcomings, as part of this analysis, familiarization with the types of receivables, the means of how it is kept in accounting, and how the collection of debts from customers is monitored, and subsequently, an assessment of the current state is carried out to determine the main areas that require substantial improvement); synthesis (applied as an auxiliary method, within the framework of the development of a new improved system, which covers the strengths of the current system, while eliminating the identified weaknesses).

PESTEL analysis (where P – political factors, E – economic factors, S – social factors, T – technological factors, the second E – environmental factors and L – legislative influence factors) was an auxiliary research method. Within the framework of the impact of each factor on accounting and tax accounting of receivables, it should be determined that:

- political factors refer to the influence of national policy;
- legislative influence factors are responsible for the analysis of regulations, laws of Ukraine that are in force or are changing and affect the accounting and tax accounting of receivables;
- economic factors refer to general economic conditions, such as interest rates, inflation, economic growth and exchange rates, which may affect the accounting and tax accounting of accounts receivable;
- social factors refer to the influence of social trends, cultural norms, and demographic changes on accounting;
- technological factors, in turn, relate to the impact of technological advances and innovations on accounts receivable (such innovations include, e.g., the use of electronic payment systems and online invoicing);
- environmental factors of influence are most relevant for farms.

The selected methodological base corresponds to the main tasks and goals of the current research, forming a comprehensive approach, within the framework of which, the construction of an improved approach to accounting for receivables is carried out.

Notably, the current study is limited to a generalized analysis of the issue of improving the accounting and tax accounting of receivables of enterprises of the Khmelnytskyi region of Ukraine and does not focus on an in-depth analysis of particular commercial enterprises.

Results

Accounts receivable accounting refers to the process of recording and managing money owed to a company by its customers for goods or services. That is, accounts receivable starts from the moment when goods or services have been sold, but have not yet been paid for (Sydorenko, 2019; Marusych & Sharmanska, 2022). On the other hand, tax accounting for receivables is the process of accounting for the tax consequences of receivables (Gudzenko & Lysak, 2019). It involves tracking the tax liabilities associated with the receivables (penalties, fines) and ensuring that the appropriate tax is paid on the income received from the receivables.

Accounting for receivables is important for managing the company's cash flows and ensuring the availability of sufficient working capital for efficient operation, and for minimizing the risks of financial difficulties and bank-ruptcy (Dubinina *et al.*, 2023). Thus, it can be concluded that the main difference between accounts receivable accounting and tax accounting is that the former deals with the day-to-day management of a company's receivables, while the latter focuses on the tax implications of those receivables.

However, there are also certain similarities between these two types of accounts receivable accounting. Both involve tracking customer payments and outstanding balances, and both require attention to detail and accuracy in record keeping. Furthermore, both types of accounting are necessary to maintain the financial stability of the company

and ensure compliance with relevant regulations and tax legislation of Ukraine.

It is essential to understand that in the Ukrainian research space, accounts receivable refers not only to current assets, but also to non-current ones (Kolevatova, 2022). From the standpoint of accounting of receivables of enterprises, which must be reflected in the Balance Sheet (Statement of Financial Position), current assets include (Order of the..., 1999):

- accounts receivable for products, goods, works, services (line code 1125);
- accounts receivable (line code 1130);
- accounts receivable based on calculations of accrued income (line code 1140);
- internal calculations (line code 1145): on issued advances (line code 1130), from the budget (line code 1135), from income tax (line code 1136);
- other current receivables (line code 1155).

Receivables belong to the current assets of the enterprise since they can be repaid or converted into cash within a short period of time (up to one year). In turn, non-current assets of the enterprise include long-term receivables (line code 1040). Such debt must also be reflected in each company's balance sheet. Receivables belong to non-current assets of the enterprise, provided that the debt has not been paid, and all collection periods have passed (Order of the..., 1999).

Accounting for receivables should become one of the key areas of analysis for enterprises seeking to carry out their activities effectively. In today's world, accounting is a key tool for achieving sustainable business intelligence (Lin *et al.*, 2022). Receivables are usually checked according to the established audit scheme and is mandatory for every enterprise. However, the technology used to perform some of these jobs has been changing and evolving recently. Thus, for instance, at one time, the use of software was introduced (Andiola *et al.*, 2022), which considerably reduced the time for conducting the audit, and reduced the level of inaccuracy and errors.

To manage receivables and reflect them in accounting, enterprises can use different methods of calculating reserves for doubtful debts and writing off debts. In each case, accounts receivable plays a vital role in the analysis of liquidity and profitability of the enterprise (Konovalchuk *et al.*, 2022). That is why one should pay attention to the study of both articles of the financial statements of the analysed enterprises to achieve a more accurate analysis.

Within the framework of the current study, receivables belonging to both current and non-current assets of the state-owned enterprise "Khmelnitskyi Forestry" (Financial information, 2023) and the municipal utility "Khmelnitskvodokanal" (Company reports, 2023) were considered. Thus, data on the total amount of receivables of the state enterprise (SE) "Khmelnitskyi Forestry" (Financial information, 2023), which belongs to current assets for the past 5 years, are presented in Figure 1.

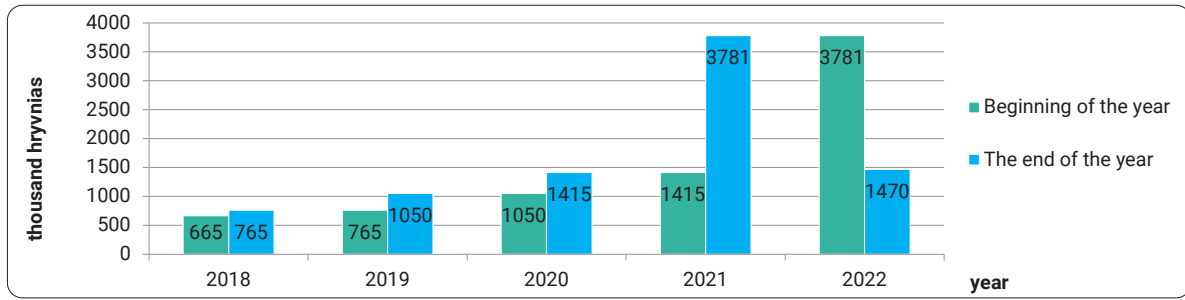


Figure 1. The total volume of receivables of SE “Khmelnytskyi Forestry”

Source: compiled by the author based on Financial Information (2023)

The obtained data indicates that over the past 5 years, the company faced a constant increase in the amount of receivables. Thus, according to the given financial data, the amount of receivables belonging to the company’s current assets has grown by more than 92% (according to the data for the end of 2018 and the end of 2022). However,

the company’s current assets include accounts receivable for several items. To understand which of the articles is the most vulnerable, an analysis of receivables of SE “Khmelnytskyi Forestry” was conducted (Financial information, 2023). The results at the beginning of the reporting period are presented in Figure 2.

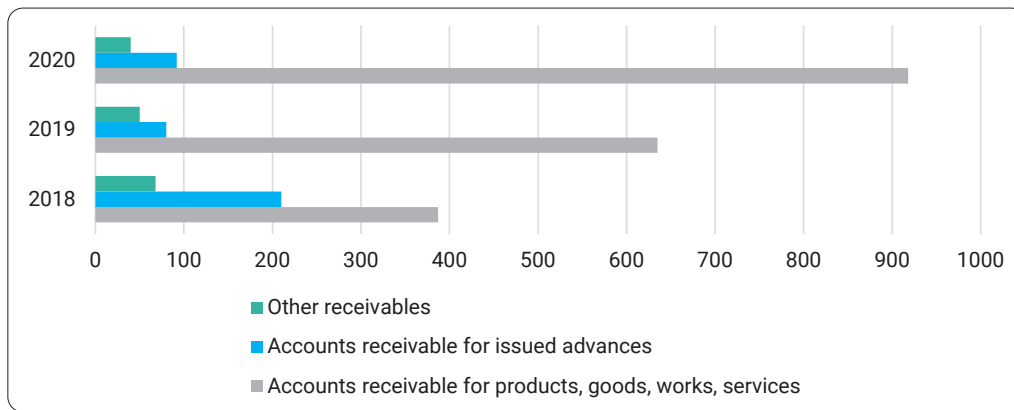


Figure 2. Accounts receivable of SE “Khmelnytskyi Forestry”, in thousand UAH

Source: compiled by the author based on Financial Information (2023)

According to the data, the largest receivables of the enterprise in recent years are debts for services rendered and goods sold. And this indicates that the company does not work efficiently enough with clients and allows the appearance of large debts. However, it is not possible to analyse exclusively the results at the beginning of the reporting

period, to identify the effectiveness of debt collection work, it is necessary to analyse the data at the end of the reporting period and, comparing them with the initial ones, identify trends. Thus, within the framework of the full analysis, the company’s receivables belonging to current assets at the end of the reporting period were also examined (Fig. 3).

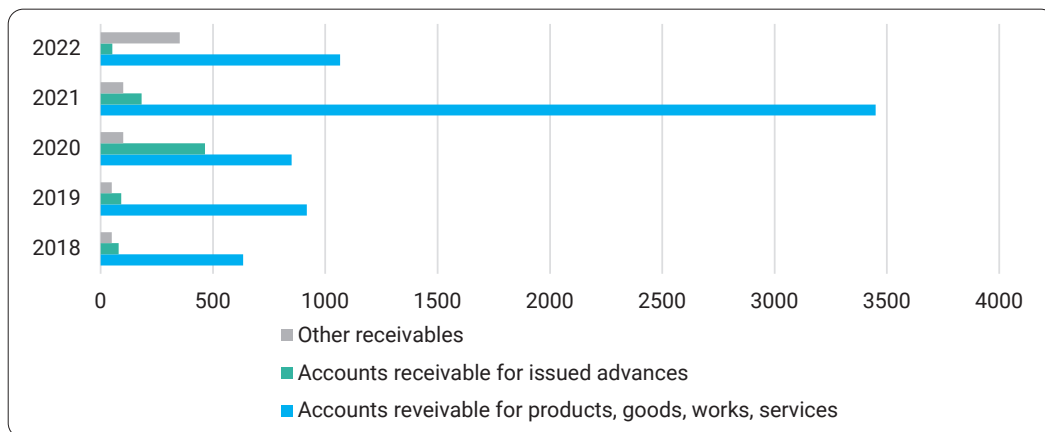


Figure 3. Accounts receivable of SE “Khmelnytskyi Forestry”, in thousand UAH

Source: compiled by the author based on Financial Information (2023)

Such a situation indicates that the company does not always manage to reduce the receivables, but the current work with it is quite effective. According to the analysis, over the last year, the work with the company's receivables helped to reduce the amount of debt under the items "For advances" (line code 1130), which can be evidenced, for instance, by a reduction in employee business trips (Order of the..., 1999), which due to the beginning of a full-scale invasion of Ukraine by the Russian Federation in February 2022.

Accounts receivable for issued advances often indicate funds issued to employees of the enterprise, the expenses of which have not yet been confirmed by the provision of checks and reports (Holzhauer, 2023). However, the company failed to control the accounts receivable effectively under the article "For products, goods, works, services", which may also be caused by the start of a full-scale war. However, speaking about the existence of long-term debt belonging to non-current assets at SE "Khmelnyskyi Forestry" (Financial information, 2023), it should be noted that the enterprise manages to prevent such debt from arising. This is

also evidenced by the company's Balance sheet data for the last 5 years.

This indicator demonstrates that the company does not lose control and tries to maintain high-quality accounting and tax records of receivables, preventing the occurrence of critical situations that can lead to the imposition of large fines and, even, bankruptcy. However, the company can increase the level of control and reduce the amount of receivables, in case of implementing certain changes in the accounting process.

The second enterprise that was analysed to determine the main features of accounting for receivables of enterprises of the Khmelnytskyi region was the city utility enterprise (CUE) "Khmelnyskyvodokanal" (Company reports, 2023). Within the framework of the analysis of the enterprise, an analysis of the total amount of receivables, which belongs to current assets for the last 5 years, is provided. The results of the analysis, according to the data of the official financial reporting of MCP "Khmelnyskyvodokanal" (Company reports, 2023), are presented in Figure 4.

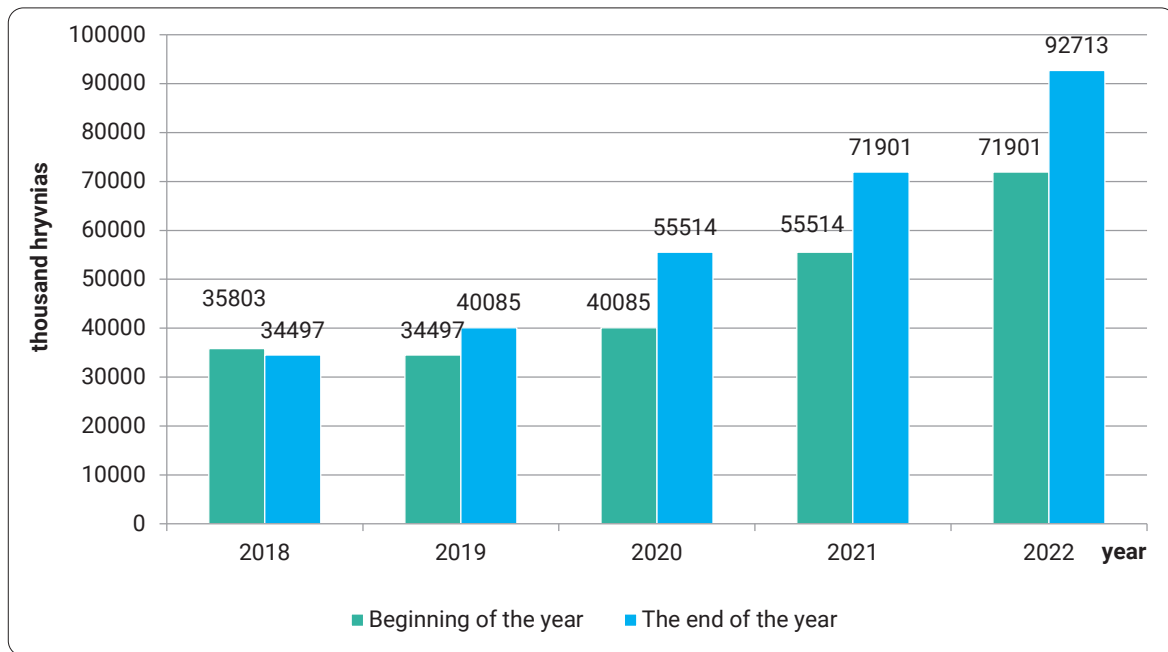


Figure 4. Total amount of receivables CUE "Khmelnyskyvodokanal"

Source: compiled by the author based on Company reports (2023)

The obtained data suggest that the CUE "Khmelnyskyvodokanal" works much worse with receivables than the SE "Khmelnyskyi Forestry". Thus, in the last 5 years alone, the amount of receivables belonging to the company's current assets has grown by more than 169% (according to data for the end of 2018 and the end of 2022). Such an indicator is critical, it demonstrates that the company cannot work effectively with accounts receivable. Furthermore, the company allows an increase in the amount of debt almost every year (from 2019 to 2022). However, when talking about receivables belonging to non-current

assets, the situation is less critical. It was determined that the company also does not allow such debt to arise, which indicates the potential effectiveness of accounting within the framework of the CUE "Khmelnyskyvodokanal" (Company reports, 2023).

To conduct a more accurate and detailed analysis, the accounts receivable indicators of MCP "Khmelnyskyvodokanal" (Company reports, 2023) were considered by individual articles (line codes: 1125, 1130, 1135). The amounts of receivables of the enterprise at the beginning of the reporting period for the last 5 years are presented in Figure 5.

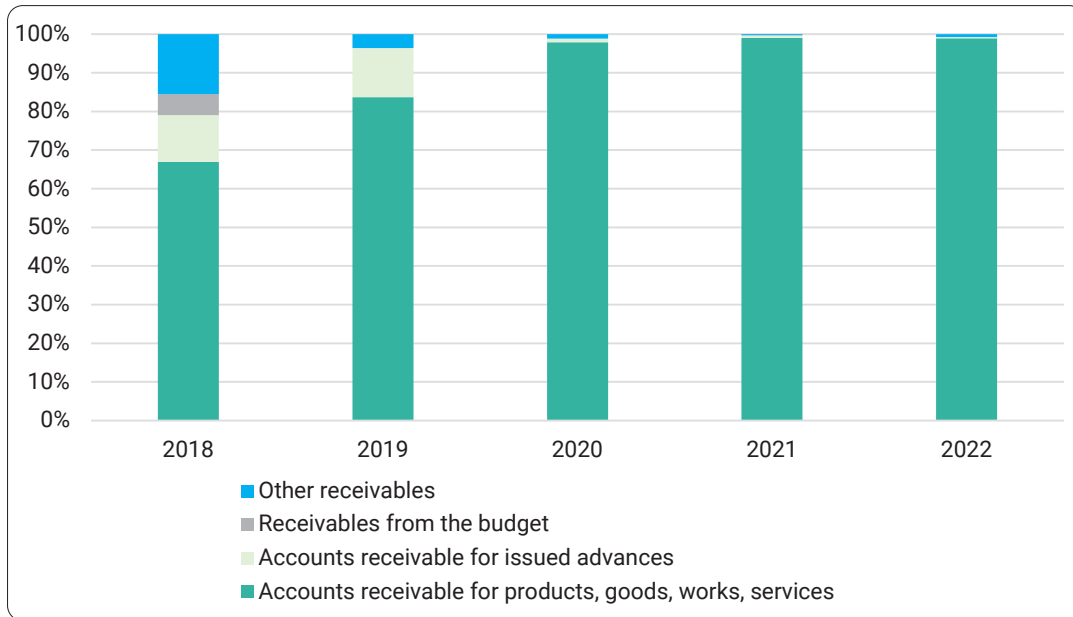


Figure 5. Accounts receivable of MCP "Khmelnytskvodokanal", in thousand UAH

Source: compiled by the author based on Company reports (2023)

According to the given data, the main part of the company's receivables is receivables for products, goods, works, and services. In general, the percentage of debt growth in this category is about 196%. This can indicate potential problems with timely payments and accounts receivable management. While in the "Other receivables" category, a gradual decrease in debt was noted by about 90% from 2018 to 2022. In turn, the value of receivables for issued advances fluctuated constantly, but in general, the indicator stayed at a relatively stable level.

Such a situation at CUE "Khmelnytskvodokanal" (Company reports, 2023), according to official documents on the financial situation of the enterprise, relates to the fact that during its activity, most of the receivables are owed by buyers or customers for the services reserved by them water supply and drainage. The largest part of receivables

is allocated to the consumption of services by the population. But this indicator continues to grow, in 2022, the debt of the population for services received without considering the reserve for depreciation amounted to more than 78 thousand UAH, which is 18% more than the previous indicator (over 66 thousand UAH).

It is difficult to reduce the level of receivables according to this indicator. The main problem is not in internal factors of influence (poor accounting, careless attitude towards consumer choice, inability to work with debt), but in external factors of influence. As of the end of the year, the situation with debt under the article "For products, goods, works, services" only increased. The analysis of receivables of CUE "Khmelnytskvodokanal" (Company reports, 2023) for the same period at the end of the year is presented in Figure 6.

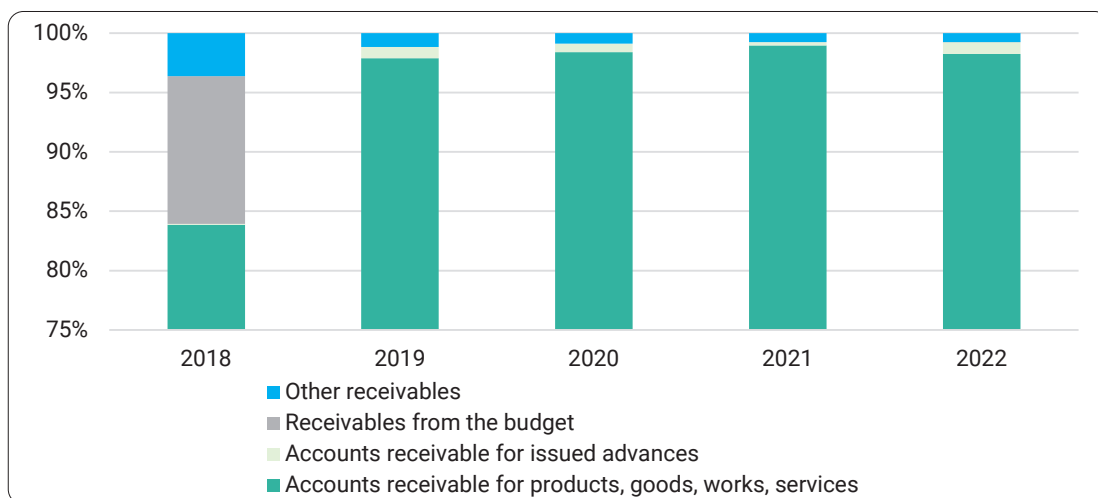


Figure 6. Accounts receivable of SE "Khmelnytskyi Forestry", in thousand UAH

Source: compiled by the author based on Financial Information (2023)

The obtained results emphasize the problem in the work of the enterprise with receivables. As in the CUE “Khmelnyskyvodokanal”, the greatest growth was found in the category of receivables for products, goods, works, and services. The indicator of this growth is equal to 215%, while the debt from the budget decreased by 99.98% for 2018-2022. A decrease in the value of receivables was also found in the “Other receivables” category. Debt for advances has fluctuated over the analysed 5 years, increasing by 2,745.45%.

To find optimal areas for improving this process, it is necessary to understand the current state of the Ukrainian

market and possible factors of external influence, which depend on the work of enterprises located both in the Khmelnytskyi region and throughout the territory of Ukraine. Currently, the activities of most enterprises are affected by quite significant and uncontrollable events. Within the framework of this stage of the analysis, a PESTEL analysis was conducted (Colgrove, 2022) (Table 1). In a general sense, the PESTEL analysis is one of the most useful tools for analysing external factors of the macro environment that can affect both the activity of the enterprise and its accounting, and the provision of appropriate reporting.

Table 1. PESTEL analysis of external factors of the macro environment

PESTEL elements	Factors of influence
P – Political factors	<ol style="list-style-type: none"> 1. State policy on accounting and auditing activities. 2. Creation and appointment of governing authorities. 3. Wars and crises. 4. Cooperation with other countries.
E – Economic factors	<ol style="list-style-type: none"> 1. Considering the development of the state economic market. 2. Considering the level of inflation, which directly affects the value of existing receivables. 3. Tracking interest rates for lending. 4. For businesses, environmental responsibility is one of the main factors in building an image and attracting loyal customers. 5. Tracking fluctuations in exchange rates, which can lead to currency risk.
S – Sociocultural factors	<ol style="list-style-type: none"> 1. Considering the social behaviour of consumers and intermediaries, which can affect the difficulty of collecting receivables. 2. Demographic changes affecting the size and type of the company's receivables.
T – Technological factors	<ol style="list-style-type: none"> 1. Implementation of technological and digital accounting systems. 2. Spreading the use of electronic payment systems. 3. Development of data analytics programs.
E – Environmental factors	<ol style="list-style-type: none"> 1. Changes in natural and climatic factors. 2. Considering the current global environmental agenda. 3. Setting up activities per environmental standards. 4. For businesses, environmental responsibility is one of the main factors in building an image and attracting loyal customers.
L – Legislative factors	<ol style="list-style-type: none"> 1. Changes to normative documents. 2. Changes in tax legislation. 3. Legislative regulation of the accounting and reporting process by the enterprise.

Thus, a considerable number of factors affect the activity of the enterprise, as well as the process of accounting and tax accounting of its receivables. Moreover, understanding all factors, both external and internal, helps enterprises not only to increase their efficiency in reducing the amount of receivables, but also to avoid fraudulent actions related to falsification of internal documentation (Yang

et al., 2017). And although some scholars consider receivables as an indicator of increasing sales volumes and reducing the company's inventory (Ochoa *et al.*, 2022), such a situation can easily get out of control, and current receivables can become problematic in the long term. Thus, the research showed that in accounting and tax accounting of receivables of enterprises, it is necessary to consider both internal and

external influencing factors. Considering external factors of influence is especially relevant in modern times.

As for ways to improve the accounting and tax accounting of receivables of enterprises of the Khmelnytskyi region, several potential advantages can be identified for enterprises that decide to implement them. Foremost, improving the accounting of receivables can help identify any shortcomings or inefficiencies in the current accounting and tax accounting practices of receivables, which can lead to an improvement in the overall financial management of these enterprises. Conducting this type of analysis will help determine whether the company's internal reporting and accounting controls are sufficient. Furthermore, improving the current accounting system can help avoid risks related to non-compliance with current rules and regulations, as well as tax legislation of Ukraine.

In turn, the following can be attributed to practical recommendations for improving the accounting and tax accounting of receivables of enterprises:

1. Implementation of the latest technologies and the use of accounting software, which can improve the accounting and tax accounting of receivables, thanks to the more accurate accounting of all transactions related to receivables (e.g., tracking the date and amount of the sale, terms of payment and the date of the required payment, processing payments and reconciliation of accounts, etc.).

2. Timely invoicing, which ensures that customers are aware of their payment obligations and payment terms. This is a quality tool to reduce the risks of disputes and payment delays.

3. Control over the compliance and quality of the classification of receivables, to ensure proper tax accounting.

4. Issuing invoices immediately after the sale of goods or services, to ensure timely payment and reduce the risk of payment delay or non-payment, as well as for the quality management of cash flows, to avoid the need of the enterprise for short-term credit borrowings.

5. Use of electronic payment methods to accelerate settlement transactions and reduce fraud risks.

An additional recommendation for improving accounts receivable accounting is the possibility for enterprises to contact companies that provide professional accounting and tax accounting services to obtain advice or conclude a cooperation agreement. Notably, the proposed recommendations are of a general nature and can be adjusted to the requirements of particular enterprises.

Discussion

Carrying out accounting and tax accounting of receivables is a major area of activity of enterprises. Businesses urgently need to accurately record and manage their accounts receivable to ensure financial stability and improve operational efficiency.

Both Ukrainian and foreign researchers investigated the issue of improving accounts receivable accounting and determining the degree of importance of this process for enterprise activity. A. Okungbowa (2022), R.P. Singh *et al.*

(2021), Y. Lin *et al.* (2022), L.M. Andiola *et al.* (2022), L.P. Konovalchuk *et al.* (2022), A. Kolevatova (2022), A.P. Makarenko & D.Y. Levitska (2021) and many others.

Thus, scientists N. Štangová and A. Výchová (2021) emphasize that the report on the financial condition of the company can be built on the analysis of the company's ability to pay its obligations and receive payment for receivables. Scientists emphasize that accounts receivable is an asset of the enterprise and demonstrates that the enterprise has a prominent level of sales, which means a prominent level of liquidity. They believe that to increase the company's liquidity, it is necessary to reduce liabilities and increase the amount of receivables. The author of this study agrees with the opinion of scientists, although it is necessary to establish a process for reducing the repayment terms of receivables. That is, to ensure that receivables become the main short-term asset of the enterprise, which ensures a prominent level of liquidity.

Other foreign scientists hold a similar opinion. Thus, C.A.O. Ochoa *et al.* (2022) also believe that accounts receivable can help companies increase sales and reduce inventory balances at the company, thereby reducing storage costs, etc.

This approach to accounts receivable is inherent in many foreign enterprises. C.A.O. Ochoa *et al.* (2022) and A. Okungbowa (2022) attribute receivables to the current assets of the enterprise and believe that an increase in the amount of receivables indicates a high turnover and leads to an increase in the level of liquidity of the enterprise. The author of this study believes that in the context of Ukraine, such opinions may be inappropriate due to several factors. These include credit policy, financial spending in general, inventory management, and economic instability, especially during wartime. Given these factors, businesses in Ukraine must be careful in managing receivables, assessing the risks and costs associated with increasing receivables, and ensuring effective inventory management to ensure sales and financial stability.

The current study demonstrated that, given the high risks of moving from current receivables (which is a current asset) to the category of long-term receivables (which is a non-current asset), businesses that do not have absolute confidence in their customers, as well as in the economic and political situation in the country, it is better not to allow the volume of current debt to grow. Thus, spreading analogous foreign practices to the Ukrainian market is currently irrelevant.

However, both Ukrainian and foreign researchers emphasize the need for timely and accurate accounting of receivables (Ochoa *et al.*, 2022). Researchers M. Sangeeta and Monika (2020) note the correlation between payables and receivables of the enterprise. The authors highlighted the need to create an effective process of accounting and management of receivables, to reduce the volume of credit obligations of enterprises.

H. Holzhauer (2023) analyses the management of receivables and determines the relationship between the time

of registration of receivables and the increase in financial efficiency of the company. The author found that the timely registration of receivables leads to the improvement of the company's financial indicators, as it allows better management of cash flows and increases the ability of managers to make more informed business decisions, reducing the risks of fines. The author of the current study agrees with the opinion of H. Holzhauser (2023), and notes that effective management of receivables allows balancing expenses and income, avoid excessive delay of payments, and ensure a stable cash flow.

Thus, E.L. Hamilton and J.L. Smith (2021) focus their attention on the fact that most situations, with the provision of an inaccurate estimate and the conduct of accounting and auditing, can be associated exclusively with the human factor and the inattention of employees. E.L. Hamilton and J.L. Smith (2021) argue that auditors do not always identify accounting errors as deliberate, planned illegal activity. The authors note that auditors often, during their inspection, attribute mistakes in the accounting process to the consequences of inattention of employees, especially when it comes to processing a large amount of data. The author of this study agrees with the opinion that errors in assessment and accounting may be related to the human factor. Still, the author emphasizes that it is impossible to exclude the occurrence of fraud at the enterprise and the deliberate "admission" of valuable information regarding transactions and cash flow management.

To reduce cases of careless accounting of receivables, increasingly more scientists have been paying attention to researching technologies for improving accounting and tax accounting of receivables. In general, many studies cover the topic of improving accounting through the implementation of artificial intelligence. Thus, L. Chan *et al.*, (2022) highlight the topic of introducing artificial intelligence technologies into the process of accounting for receivables. The scientists' research is aimed at analysing the current use of artificial intelligence systems during accounting and finding ways to improve these processes. Researchers believe that artificial intelligence can be used by enterprises to improve the quality of the general accounting of the company's payables and receivables, procurement, debt collection, payment processing, generation and invoicing (Chan *et al.*, 2022).

Furthermore, this topic is investigated by H. Han *et al.* (2023). In their paper, they discuss the benefits of using technologies such as automation and artificial intelligence to improve accounts receivable management. The authors claim that the implementation of blockchain technology and artificial intelligence in the accounting process can reduce errors and increase efficiency, which will lead to improved financial performance.

Thus, the introduction of the latest computer systems and artificial intelligence into the accounting process not only reduces the time for accounting and provides an opportunity to increase the accuracy of calculations by storing and structuring large volumes of information, but also

ensures a reduction in internal violations and the occurrence of fraud. This has immense potential for application in the studied enterprises, considering the existence of enterprises in conditions of war and the transition of a certain part of the business to online (some employees continue to work, but in remote mode) (Financial information, 2023; Company reports, 2023). The author of the present paper agrees with the opinion that the use of artificial intelligence can improve work with computational operations. However, it must be noted that the use of such systems requires additional research to determine the possibility of risks associated with their use (for example, data leakage).

Possibilities of implementing improved accounts receivable accounting systems should also be regulated legislatively. Recently, many efforts have been made to improve accounting and tax accounting of receivables (Order of the..., 1999; Tax Code of Ukraine, 2010). According to the author of this paper, understanding the processes of accounting and tax accounting of receivables of Ukrainian enterprises is critically important not only for increasing their efficiency, but also for the economic development of the country. Governments also rely on accurate accounts receivable reporting to properly collect taxes and monitor economic activity.

In general, the latest studies aimed at investigating this issue emphasize the importance of implementing technology (for example, the use of blockchain technologies, the use of artificial intelligence, etc.), achieving accuracy, completeness, and correctness of records, compliance with the rules of tax accounting and regulatory oversight to improve accounts receivable accounting. Provided that the management of the analysed enterprises is not sure about the construction of the optimal algorithm for the implementation of artificial intelligence and blockchain technology during accounting for receivables, it will be appropriate to contact specialized companies for consultation and construction of the main tasks.

Thus, the results of this study demonstrated that when improving accounting and tax accounting of receivables, one should consider all possible factors of influence, and look for optimal accounting mechanisms. Improvement of accounts receivable accounting is relevant for companies operating in various industries and jurisdictions, which leads to the selection of accounting mechanisms separately for each enterprise, depending on its tasks. However, there should be a clear understanding of the importance of correct accounting and tax accounting of accounts receivable for the adoption of reasonable business decisions and compliance with regulatory requirements and legislation of Ukraine.

Conclusions

The results of the study demonstrated the difference in the foreign and Ukrainian understanding of the accounting and tax accounting of the company's receivables. In Ukraine, the tax accounting of receivables involves the recognition of income for tax purposes only when the

receivables are collected, not when they arise. This differs from accounting, which recognizes revenue when it is generated, regardless of whether payment has been received. Furthermore, within the framework of Ukrainian practice, receivables can refer to both current and non-current assets of the enterprise.

More often, Ukrainian enterprises seek to reduce the volume of current receivables due to the assumption of the possibility that it may move to the category of long-term debt and harm the financial stability of the enterprise. The analysis of the enterprises that served as the basis for the current study showed that in recent years, the work with receivables has become much more difficult. This is caused by the unfavourable economic situation in the country, which is caused by a protracted crisis, which affects the level of income, the number of profitable enterprises, demographic changes, as well as the level of inflation. However, despite the difficult conditions, Ukrainian enterprises continue to work, trying to restore their level of efficiency. One of the primary areas of achieving liquidity and efficiency of the enterprise is precisely the work with accounting of receivables. Thus, within the framework of this study, it was established that modern approaches to accounting for receivables of enterprises of the Khmelnytskyi region are insufficiently effective. The main areas that enterprises

should pay attention to are the involvement of professional companies in the field of accounting and work on the implementation of the latest technologies. This can considerably impact the efficiency of work with receivables, to reduce those debts that enterprises can influence.

Thus, based on the researched information, several practical recommendations have been proposed to improve the accounting and tax accounting of receivables of enterprises. These recommendations include the use of the latest technologies and software; timely invoicing; control over compliance and quality of accounts receivable; work with professional firms in the field of accounts receivable; use of electronic payment methods; control over compliance with tax legislation; carrying out regular reconciliation of receivables and tracking the terms of repayment of receivables.

In general, the results of the study emphasize the need to pay priority attention to the improvement of accounting and tax accounting of receivables both for enterprises of the Khmelnytskyi region and for other enterprises of Ukraine.

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None.

Conflict of Interest

None.

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грошовими потоками, забезпечувати своєчасну оплату послуг та товарів від клієнтів, покращувати дотримання податкового законодавства України, що призводить до підвищення їхньої економічної ефективності. Облік дебіторської заборгованості враховує також й облік кредитного рейтингу клієнтів, що дає підприємствам уявлення про напрями розвитку, та слугує основою роботи по управлінню коштами. Більш того, добре налагоджений процес роботи підприємств, з точки зору уникнення появи заборгованостей через удосконалення податкового та бухгалтерського обліку, також може допомогти уряду Хмельницької області більш ефективно (своєчасно та в повному обсязі) збирати податки та сприяти розвитку громадської інфраструктури та наданню послуг у регіоні. Значущість отриманих результатів полягає у потенційному сприянні побудови більш міцної та сталої фінансової системи Хмельницької області

Ключові слова: надходження грошових коштів; уникнення банкрутства; економіка; фінансова стабільність; кредитування

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History of state regulation of financial markets: Foreign practices and lessons for Ukraine

*Iana Feniuk**

Postgraduate Student

Taras Shevchenko National University

01033, 60 Volodymyrska Str., Kyiv, Ukraine

<https://orcid.org/0000-0002-2219-9378>

Abstract. State regulation of financial markets is important for the country's economic policy, and its historical assessment helps identify factors of success or failure and best global practices for application in Ukraine. The purpose of this study was to investigate the history of state regulation of financial markets and to analyse the practices of forming the financial system of different countries. The main scientific methods used were analysis, abstraction, deduction, historical method, forecasting, comparison. During the study, the history of state regulation of financial markets of four countries was evaluated: the United States of America, Germany, China, and Hong Kong (as a separate administrative region of China) and Poland. It was shown that all of them have certain features in terms of their historical formation and three selected characteristics, namely the level of centralization, the openness of the financial system and the role of the state in it. Based on the analysed information, relevant conclusions were formed regarding what the control over the financial system in Ukraine should be. The level of corruption of state structures is one of the key aspects that must be considered when developing the country's financial policy. Considering the elevated level of corruption in Ukraine, it is recommended to reduce the role of the state in regulating the financial system, implement its decentralization, and free access to the market. These measures will minimize corruption, establish competitive relations between institutions, and delegate responsibilities. This will contribute to the achievement of more effective regulation of the financial system in Ukraine, considering the needs of the country's reconstruction after the end of the war. Given the geographical and historical proximity, the regulatory principles used in Poland can be a valuable experience for improving the Ukrainian system. The study brings new knowledge in terms of the theory of financial markets, and offers a more profound understanding of the specific features of the development of the economy of Ukraine

Keywords: economic policy; securities; banking sector; institutionalism; investment

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*Corresponding author

Introduction

Financial markets include stock exchanges, markets of monetary instruments, markets of financial services and some others. They ensure the relationship between entrepreneurs and investors: some have an idea, while others have funds. Such automation of relations between these two subjects allows increasing the efficiency of the functioning of the economy. More importantly, financial markets are conducive to ensuring the inflow of foreign capital. This is especially important in the field of the latest technologies, where the creation of a project may require multi-billion-dollar investments. However, with such a significant role, financial markets also carry certain threats: the biggest of them are financial crises arising from problems related to their internal processes. As a tool for capital redistribution, they create conditions for increasing social inequality, which also adversely affects the country's economic development in the long term. That is why the formation of high-quality state regulation of financial markets in the country is indispensable, and consideration of the history of its implementation in different states is relevant. The fact that government regulation is essential in financial markets is stated specifically by V.S. Lai & X. Ye (2020) and D.G. Demekas & P. Grippa (2021).

According to D.S. Lucas & C.J. Boudreaux (2020), the development of qualitative principles of state regulation plays a leading role in ensuring the country's economic well-being in any field. According to E.A. Mendez-Morales & C.A. Yanes-Guerra (2019), its main purpose is to ensure economic stability, balanced development of economic sectors, protection of the rights of consumers and other market participants, as well as to support economic growth and social equality. It allows forming institutions; furthermore, the possibility of state intervention is a certain guarantee for investors, increasing confidence in the country's economy. The main thing in such a case is to support a certain balance so that state regulation does not turn into an obstacle for entrepreneurs.

A considerable number of scientists have investigated the specific features of the formation of state regulation of the financial system in Ukraine. Namely, M.A. Krutko (2022) considered the features of legislation in terms of regulating this system and emphasized that it needs to be updated to meet international norms and standards, to be capable of coping with global challenges. N.B. Novikov (2022) also considered state regulation in Ukraine from the standpoint of legislation, describing in detail the shortcomings and imperfections of the existing system. V.V. Korovii (2019) covered the importance of regulating economic cycles and ensuring the adaptation of financial mechanisms to changes in the economic environment, i.e., ensuring the flexibility of the financial system through methodical state intervention.

M. Iorgachova *et al.* (2021) investigated the current state of the main segments of the Ukrainian stock market. They identify a significant number of problems that characterize the securities market: mistrust on the part of the

population, imperfection of the insurance system, underdeveloped infrastructure, imperfection of the legislative framework, etc. N.B. Tataryn *et al.* (2020), assessing the current state of the securities market in Ukraine, provided some advice on improving the efficiency of its functioning. The basis of these recommendations was the creation of such a system of increasing trust in financial institutions, which would give confidence to potential investors (including individuals) to take an active part in the financial activities of the country.

The main purpose of this study was to analyse the history of the formation of the system of state regulation in certain countries of the world and to formulate recommendations for its improvement in Ukraine, which will help increase the efficiency of the functioning of financial institutions.

Materials and Methods

Within the framework of the study, the specific features of regulation of the financial system in four countries of the world were analysed: Poland, Germany, the United States of America, China, and Hong Kong as a separate autonomous district within China. The reason for choosing these countries is that they differ significantly in terms of financial regulation and have distinctive characteristics of the state's influence on the system. Poland is a country remarkably close to Ukraine both in terms of economic development and geographical location. Germany is a representative of the systems inherent in the member states of the European Union. Consideration of the US system was mandatory, given the level of development of financial institutions in the country. Furthermore, it was decided to pay attention to the Chinese system, as a representative of the socialist economy, and the Hong Kong system, as its complete opposite. To investigate the regulatory framework in these countries, the components of their legislative framework were used, specifically the texts of the Gramm-Leach-Bliley Act (1999), Kapitalanlagegesetzbuch (Investment act) (2013), Securities and Futures Ordinance (1986), Banking Ordinance (2003).

It was also important to evaluate the Ukrainian principles of regulation of the financial system: some components of Ukrainian legislation in this area were analysed, namely Law of Ukraine No. 679-XIV "On the National Bank of Ukraine" (1999), Law of Ukraine No. 2664-III "On Financial Services and State Regulation of Financial Services Markets" (2002), Law of Ukraine No. 2121-III "On Banks and Banking Activities" (2001), Law of Ukraine No. 85/96-BP "On Insurance" (1996). The main characteristics based on which countries are compared are the role of the state in regulation (significant or insignificant), which system in terms of centralization of regulation (centralized or decentralized) and what is the openness of the system/markets (high or low).

The main scientific methods that were applied during the study include analysis, abstraction, deductive approach, historical analysis, forecasting and comparative method. The analysis helped evaluate the main processes

that characterized the development of the system of state regulation in different countries of the world and draw a conclusion on this matter based on available sources of information. A vital role was also played by the historical method, which helped consider the processes of development of the financial system in some countries of the world, evaluate their strengths and weaknesses, as well as draw conclusions for the use of these practices for Ukraine. The deduction method has become essential for assessing the factors influencing the systems of financial regulation in the countries of the world. Abstraction was also used to avoid the influence of minor factors on the assessment of financial systems. Using forecasting, expectations were built regarding the future consequences for the economy of Ukraine and its financial system when implementing certain principles. The comparison helped conclude on the strengths and weaknesses of the regulation of the financial system in selected countries of the world.

Results

The history of state regulation of financial markets is one of the longest in the United States of America. The reason for its formation was a series of bankruptcies at the end of the 19th century. The first steps towards this were taken in 1913 due to the financial crisis of 1907, after which the Federal Reserve System (FRS) was created (Ainsley, 2021). Currently, one of its main responsibilities is the regulation of monetary policy, specifically the establishment of the

interest rate at which commercial banks can receive loans. Increased government regulation was associated with the Great Depression and its adverse consequences for the country (Pells & Romer, 2023). In 1933, the first laws related to the reform of the banking system were passed, which included the creation of the Federal Reserve Bank of the United States, the division of banks into commercial and investment banks, the registration of securities and the regulation of stock exchanges. In 1934, the Securities and Exchange Commission (SEC) (n.d.) was created to ensure the efficient functioning of the securities market, protect investors, and prevent price manipulation or any other type of fraud. Furthermore, some rules were formed regarding the registration of the company, its financial characteristics, before it received the right to issue its securities to the market. Currently, it is factually one of the key bodies in the USA that governs the securities market. Now the SEC is adapting to the new financial realities and trying to formulate rules for regulating the cryptocurrency market. In general, it is the bodies described above that comprise the main state regulation of the financial system in the USA. Similarly, in the 1970s, 1990s, 2000s (specifically after the financial crisis of 2008 (Groll *et al.*, 2021)) and 2010s, some new legislative acts to strengthen the influence of the state on financial markets were formed: mainly these took place in the post-crisis period as a response to the discovery of new gaps in the system. It is possible to highlight several features of the system of state regulation in the USA (Table 1).

Table 1. Inherent features of the system of state regulation in the USA

Feature	Description
System decentralization	Regulation of the financial sector is carried out not only at the federal level, but also at the level of individual states; each state has its own regulatory bodies for the financial system
Competition between regulators	Since there are several bodies that govern financial markets in the US, there is often competition between them, which contributes to the improvement of the quality of their work
High autonomy of the FRS	The Federal Reserve System can independently decide on future monetary policy, which leads to a more efficient functioning of the system
Focus on consumer protection	The legislative framework of the USA is aimed at protecting consumers of financial services

Source: Groll *et al.* (2021)

Table 1 shows the features that characterize the state regulation of the financial system in the USA. It is worth paying attention to the decentralization of regulation and the existence of competition between the relevant bodies, which arises in such a case. This is the reason for its prominent efficiency.

The history of the formation of the system of state regulation in Germany dates back to the period after the Second World War, when the country was experiencing an economic and social crisis. In 1951, the Bundesbank, the country's central bank, was founded in Germany (Federal Republic of Germany) (Hackethal *et al.*, 2006). In the 1980s, during the global crisis, it proved to be one of the most effective in terms of coordinating economic policy

and developing strategies to ensure the stability of the economy. As regards the regulation of financial markets, the main body in this area is BaFin (n.d.) (German Federal Financial Supervisory Authority). It was created in 2002 as a result of the merger of three separate regulators responsible for the banking, insurance, and securities markets (Lesch, 2021). This body is entitled to establish requirements for licensing financial institutions, supervise their activities, control financial instruments, investigate possible violations of financial laws and take measures to stop them. It also cooperates with some international financial regulatory bodies. Notably, a feature of the functioning of the financial system in Germany is the existence of the so-called Finanzplatz, or centres where a considerable number

of financial institutions, such as banks, insurance companies, stock exchanges and other financial institutions, are concentrated. These include Frankfurt am Main, Munich, Hamburg, and Düsseldorf, of which Frankfurt am Main is considered the largest.

Thus, the key feature of the regulation of the financial system in Germany is a relatively high proportion of the role of the state in it. In contrast to the USA, the mechanism formed by the country is quite centralized since all power is really found in two main institutions: Bundesbank and BaFin. Its main goal is to ensure the stability of the financial system; therefore, attention is paid to ensuring that the relevant institutions (banks, insurance companies or other institutions) have sufficient capital and reserves to withstand crises. Considering the specific features of the regulation of the German banking system, some of its features could be used in Ukraine to improve the efficiency of the sector.

The development of state regulation of the Chinese financial system begins with the revolution of 1949, when the communists gained power in the country. With the introduction of a planned economy, the financial system factually began to be fully subordinated to the state (Kim & Kim, 2022). Some important reforms in terms of the financial system began in 1978: their significance was that they contributed to the development of entrepreneurship in the country and increased production productivity (Khan *et al.*, 2022). Furthermore, the country has become more open to the outside world due to the creation of special economic zones. One of the key among them was the creation of The People's Bank of China (n.d.) – the country's central bank. The following Chinese reforms, which began in the 1990s, were aimed at creating a modern and competitive financial system that could meet the needs of the rapid development of the Chinese economy and international competition. One of the main initiatives promoted at the time was the creation of a national body that would regulate the control over the functioning of financial services (Jia *et al.*, 2021). Thus, at this time, the China Securities Regulatory Commission (n.d.) (CSRC) was created, which was to regulate the activity of the securities market and ensure its stability, and the China Banking Regulatory Commission (CBRC), which was to handle the activities of banks and insurance companies. In 2018, the China Banking Regulatory Commission and the China Insurance Regulatory Commission (CIRC) merged to create the China Banking & Insurance Regulatory Commission (n.d.) (CBIRC), which handles the regulation and supervision of financial services in the country. A stock exchange was also established in Shanghai and some other regions of the country for trading shares and bonds, which contributed to the development of capital investments and support for the development of the private sector. At the same time, strict exchange rate controls were introduced, and restrictions were placed on the yuan to support the country's exports (Chen & Tao, 2022).

Thus, the key feature of state regulation of China's financial system is the dominant role of the state in the economy, much greater than in Germany; it also means that it is

highly centralized. The Chinese government keeps control over banks and other financial institutions (as well as most businesses in general) to a certain degree. It is highly dependent on banks: thus, companies often turn to them for financing (loans), while in developed countries other mechanisms are more often used, such as the issue of shares or bonds. There are significant risks in the country related to the loss of solvency of banks, which require constant financial support. Even inflows and outflows of foreign investments into the country are strictly regulated. And although over time there is a noticeable trend to loosen existing restrictions, it is difficult to predict how the situation will develop further.

Particular attention should be paid to the specific features of the regulation of the financial system in Hong Kong, which is a separate administrative region of China with significant differences in terms of economic development and a prominent level of autonomy. The history of state regulation begins earlier, with the colonial history and occupation of Hong Kong by Great Britain. In 1865, the first banking institution was founded – Hong Kong & Shanghai Banking Corporation (HSBC) (Fong *et al.*, 2022). For a considerable time, financial regulation in Hong Kong was shared between the British authorities and local bankers, which allowed the local financial sector to operate freely, but much has changed since it was returned to China and received the status of a special administrative zone within it; therewith, it was decided that Hong Kong would have its own financial sector regulatory system. In 1989, the Securities and Futures Commission (SFC) (n.d.) was established to ensure the efficiency and reliability of local financial markets, as well as protect the rights of investors and maintain confidence in the market; this institution cooperates with the regulators of various countries of the world (namely the USA, and Great Britain), and international regulators, e.g., the International Organization of Securities Commissions (IOSCO) (Li *et al.*, 2022). There were the Financial Services and the Treasury Bureau (n.d.), which handled the development of financial policy and supervised its implementation. The main feature of state regulation in Hong Kong is that the state in the country does not have significant control over the financial sector, and the system itself is quite open and liberalized. Despite this, the regulatory system itself is quite centralized, since the SFC plays the largest role in this process. The Ukrainian authorities should pay attention to the level of openness of Hong Kong's markets and the types of interaction between the country and foreign investors.

Finally, it is worth considering state regulation in Poland. Its origin dates to 1918 after independence, the Securities Commission was created to control the trading of stocks and bonds, and in 1945, Bank Centralny (n.d) was formed. However, since the country became socialist after the end of the Second World War, the financial system was nationalized, and the management of the financial system was taken over by the state (Sęk, 2021). After restoring the market foundations of the economy, these institutions were restored in the country, namely Narodowy Bank Polski –

NBP, which at that time was the main regulator in the field of monetary policy. After Poland became part of the European Union, the country was forced to strengthen laws on financial supervision, which were supposed to determine the structure and competences of state regulatory bodies. In 2006, the Commission for Supervision of the Financial Sector Komisja Nadzoru Finansowego (n.d.) (KNF) was established, which became the main body in terms of regulation in this area, taking over part of the responsibilities of the NBP. In fact, it handles the regulation and supervision of the markets and monitors compliance with the legislation on them, prevents money laundering and terrorist financing, and is also responsible for the activities

of banks and financial institutions. The major features of state regulation in Poland are that the country's financial management system is fairly decentralized, and markets are open to investment. The state still plays a significant role in regulating the country's financial system, but its main role is not to influence the activities of private companies, but to promote the development of the financial sphere by creating favourable conditions for business and investors. Furthermore, active measures are taken to increase the level of financial literacy of the population. Based on the considered features of state regulation of the financial system in the countries under study, a table characterizing them can be constructed (Table 2).

Table 2. Brief description of the features of state regulation of the financial system in the analysed countries

Country/ region	USA	Germany	China	Hong Kong	Poland
Role of the state	Significant	Significant	Insignificant	Insignificant	Moderately significant
Centralized or decentralized system	Decentralized	Centralized	Very centralized	Centralized	Decentralized
Market openness	High, with a significant level of internationalization and foreign capital, but many regulatory restrictions	High, but the national capital still plays a leading role in the country's economy and, specifically, the banking sector	Low, considerable influence of the state in terms of control of capital movements, regulatory limitations of foreign investment	High, prominent level of internationalization and attraction of foreign investments	High, there are state instruments for increasing the attractiveness of foreign investment in the country

Source: compiled by the author

As Table 2 shows, different countries have quite distinct characteristics regarding their financial regulatory systems. Based on them, we can conclude on what should be changed in the respective area in Ukraine. Considering the common features of functioning with the Polish economy, it is worth paying special attention to the construction of the system in this country. Moreover, they coincide strongly with the prospects of post-war reconstruction, for which the best option is to provide easy access to the financial system. Considering the existing issues in terms of the effectiveness of public administration in the country and the elevated level of corruption that is still present (Rasiuk, 2022), it is also important to ensure a minor role of the state in terms of managing the financial system. For the same purpose, it is worth increasing the level of decentralization of regulation in this area, since it is quite centralized.

Discussion

Changes in the financial sector considerably affect the development of a country and, specifically, the welfare of its citizens, and countries with more developed financial systems tend to have higher GDP growth rates. This is confirmed by G. Azarenkova *et al.* (2022), who within the framework of their study evaluated the role of the

development of the financial system as a whole. Scientists have shown that providing greater access to financial products and services to individuals and individual companies can significantly increase the efficiency of the economy and contribute to its growth. This suggests that developing countries should implement suitable changes in the social, political, and economic spheres to stimulate the development of the financial system. This also applies to Ukraine, where the financial system and financial market are at the initial stage of their evolution. M. Prochniak & K. Wasiak (2017) investigated the relationship between economic development and the financial system. In their paper, the authors considered the relationship between the development of the financial system and economic growth, addressing the impact of global crises based on data for 1993-2013 for 28 EU countries and 34 OECD countries (Organization for Economic Cooperation and Development). The researchers also prove that the size and efficiency of the financial system considerably affect the economic growth: however, the strength of this interaction can be different. For instance, stock market capitalization or stock turnover have a strong non-linear relationship with economic growth, while domestic credit has a somewhat weaker relationship.

S. O'Halloran *et al.* (2018) assessed the changes in the regulation of the financial system in the European Union in recent years. Scientists indicate that there is currently a certain delegation of regulatory powers from state bodies of EU member states to the European Commission and other bodies of the organization. This suggests that the management of the financial system within these countries is becoming more centralized, which can have both positive and negative consequences. For instance, it can lead to an increase in inefficiency in the financial markets of individual countries of the union, but it can make their functioning more synergistic, which creates positive economic effects in the long term. Notably, the paper described the history of state regulation of the financial system in Germany, and it was shown that the local system is also quite centralized; this desire of countries to concentrate power over management within the framework of several bodies instead of delegation of powers suggests that the German government considers the positive effects of this process to be more important than the negative ones.

The study of L. Weidner (2022), where the scientist compared gambling and the financial market from the perspective of its regulation, turned out to be interesting. It indicated that some aspects of the financial markets are addictive, and that individuals involved in the trade show signs of gambling issues. However, the principles of regulation of these two spheres are different. Specifically, financial regulators are concerned with ensuring equal access to information for all bidders, while the gambling sector focuses on protecting players. Therefore, the author concludes that individuals prone to addiction are better protected in a regulated gaming environment than in markets. This probably suggests that financial market regulators should reconsider some of their approaches to the organization of trade within these institutions from the standpoint of protecting individuals. B. Eichengreen (2023) assessed changes in the regulation of the financial system in connection with the development of the latest technologies. The scientist notes that the use of the latest technologies in the financial industry has created more opportunities for competition between banks and institutions and moved it to other dimensions, namely the information one. Big Tech companies have a significant amount of data about their users, while previously only banks had this privilege. Such changes in the field of the latest technologies and their impact on the financial sphere can both complicate regulatory processes (due to the need to establish norms for a higher number of processes) and simplify them (due to greater openness of information, simplification of obtaining data, etc.).

In a study by J. Begenau & T. Landvoigt (2021), the impact of regulation on the activities of banks was studied. Scientists have shown that tighter regulation leads to the replacement of the shadow banking system. This leads to several negative consequences, namely, a lack of tax revenues, a real decrease in the number of available financial resources, an increase in the riskiness of their activities, a possible start of their support for criminal groups, etc.

However, R.D. Nath & M.A.F. Chowdhury (2021) found that this did not reduce the stability of the financial system: they conclude that, although increased bank regulation increases the number and size of shadow banks, increased regulation still increases the stability of the system as a whole. If one applies the results of this study to Ukraine, they can conclude that the regulation of the financial system must be extremely strict to prevent possible fluctuations and crises that can have a severely adverse impact on economic development. However, it is worth remembering that in the current conditions of the country, the problem of corruption and improper use of state power is very widespread, which may cause the effect to vary. Thus, it is necessary to carefully approach decisions regarding the increase in regulation of this area.

Therefore, each of the countries evaluated within the framework of this study formed their approaches to the management of the financial system, which were formed during their development, historical processes that took place on their territory. Thus, the Ukrainian system should be formed in such a way as to adapt to the local specific features of the functioning of enterprises, markets, and social features of the local population. Since Poland is the closest to Ukraine both geographically, historically, and culturally, it would be logical to take its principles as a basis. Moreover, the principles it adheres to in many respects suit Ukrainian realities. The state authorities should conduct more work on this issue to accurately understand what changes in society can be formed by this transition and how it can be better implemented: not only the principles of the functioning of the financial system management system are important, but also their implementation.

Conclusions

Within the framework of this study, the specific features of regulation of the financial system in the USA, China, Hong Kong, Germany, and Poland were analysed. It was shown that each of them has its features in terms of three main characteristics: level of openness, centralization, and the role of the state. In the USA, Germany, and especially China, the role of the state in regulating the financial system was quite high, while in Hong Kong and Poland it was low; the USA and Poland had decentralized systems, while other countries had centralized systems; all countries had a prominent level of financial system openness, while China had a low level.

It is quite difficult to assess which of these systems is more effective. Furthermore, it also depends on how it is implemented. Still, based on the specific features of the functioning of the economy of Ukraine, it is possible to conclude on which of them are more suitable for Ukraine. Thus, considering the elevated level of corruption in Ukraine, which is still a significant issue, it is worth ensuring a minimal role of the state in regulating the financial system, as it is implemented in Hong Kong and Poland. For the same reason, it is also relevant to ensure the maximum decentralization of the system, to create competition between institutions, delegate responsibilities, and minimize

opportunities for corruption, as implemented in the United States of America and Poland. From the standpoint of access to the market, it is worth ensuring its high openness, as it is implemented in all countries except China. This is related to the prospects and needs for the reconstruction of the country after the end of the war. It is this correlation of the characteristics described above that will achieve the most effective regulation of the financial system in Ukraine.

One can also offer general advice regarding the future of the financial system in Ukraine. For instance, the government should ensure the improvement of the situation in terms of state institutions, specifically – the judiciary. It is also important to improve the functioning of the country's securities market, which does not perform the functions that rely on it (providing financing for individual projects or enterprises, wealth redistribution, the opportunity for

long-term wealth accumulation, etc.). Considering the regulation of the banking sector separately, it is essential to develop the transparency and openness of the system, ensuring more effective control over the activities of entities, increasing the standards of business behaviour of these institutions, etc.

The relevant area of further research is to find opportunities to improve the conditions of the functioning of the stock market in Ukraine, specifically the stock market, which does not perform the functions entrusted to it.

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Conflict of Interest

None.

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Історія державного регулювання фінансових ринків: зарубіжний досвід та уроки для України

Яна Костянтинівна Фенюк

Аспірант

Київський національний університет імені Тараса Шевченка

01601, вул. Володимирська, 60, Київ, Україна

<https://orcid.org/0000-0002-2219-9378>

Анотація. Державне регулювання фінансових ринків є важливим для економічної політики країни, а його історична оцінка допомагає виявити фактори успіху або невдачі та найкращі світові практики для застосування в Україні. Мета дослідження – вивчення історії державного регулювання фінансових ринків та аналіз досвіду формування фінансової системи різних країн. Основними науковими методами, що використовувалися, стали аналіз, абстрагування, дедукція, історичний метод, прогнозування, порівняння. Під час роботи була проведена оцінка історії державного регулювання фінансових ринків чотирьох країн світу: Сполучених Штатів Америки, Німеччини, Китаю та Гонконгу (як окремого адміністративного регіону Китаю) та Польщі. Було показано, що всі вони мають певні особливості в розрізі свого історичного становлення та трьох вибраних характеристик, а саме рівня централізації, відкритості фінансової системи та ролі держави в ній. На основі проаналізованої інформації були сформовані відповідні висновки з приводу того, яким має бути контроль за фінансовою системою в Україні. Рівень корумпованості державних структур є одним із ключових аспектів, які необхідно враховувати при розробці фінансової політики країни. Зважаючи на високий рівень корупції в Україні, рекомендується зменшити роль держави в регулюванні фінансової системи, впровадити її децентралізацію, а також відкритий доступ до ринку. Ці заходи дозволять мінімізувати корупційну діяльність, встановити конкурентні відносини між установами та здійснити делегування обов'язків. Це сприятиме досягненню більш ефективного регулювання фінансової системи в Україні з урахуванням потреб у відбудові країни після закінчення війни. Зважаючи на географічну та історичну близькість, принципи регулювання, які використовуються в Польщі, можуть бути цінним досвідом для поліпшення української системи. Дослідження приносить нові знання в розрізі теорії фінансових ринків, а також дозволяє краще зрозуміти особливості розвитку економіки України

Ключові слова: економічна політика; цінні папери; банківський сектор; інституціоналізм; інвестування

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Мукачівський державний університет
89600, вул. Ужгородська, 26, м. Мукачево

Закарпатська область, Україна

тел./факс: (03131) 2-11-09, (03131) 2-11-09

E-mail: info@economics-msu.com.ua

www: <https://economics-msu.com.ua/uk>