



# МЕНЕДЖМЕНТ ТА ПІДПРИЄМНИЦТВО: ТРЕНДИ РОЗВИТКУ

Електронне наукове фахове видання

## MANAGEMENT AND ENTREPRENEURSHIP: TRENDS OF DEVELOPMENT

ELECTRONIC SCIENTIFIC EDITION

eISSN: 2522-1566

**JOIN THE DISCUSSION!**

[www.management-journal.org.ua](http://www.management-journal.org.ua)

**ВИПУСК 4 (10)  
ISSUE NO. 4 (10)**

**ГРУДЕНЬ 2019 / DECEMBER 2019**



Міністерство освіти і науки України  
Запорізький національний університет

**МЕНЕДЖМЕНТ ТА ПІДПРИЄМНИЦТВО:  
ТРЕНДИ РОЗВИТКУ**

*ЕЛЕКТРОННЕ НАУКОВЕ ФАХОВЕ ВИДАННЯ*

ВИПУСК 4 (10) 2019

Запоріжжя  
2019

Ministry of Education and Science of Ukraine  
ZAPORIZHZHIA NATIONAL UNIVERSITY

**MANAGEMENT AND ENTREPRENEURSHIP:  
TRENDS OF DEVELOPMENT**

*ELECTRONIC SCIENTIFIC JOURNAL*

ISSUE 4 (10) 2019

Zaporizhzhia  
2019

## РЕДАКЦІЙНА КОЛЕГІЯ

### ГОЛОВНИЙ РЕДАКТОР:

**Бухаріна Людмила Михайлівна** – доктор економічних наук, професор, завідувач кафедри підприємництва, менеджменту організацій та логістики, Запорізький національний університет, Україна

### ВІДПОВІДАЛЬНИЙ РЕДАКТОР:

**Онищенко Оксана Анатоліївна** – кандидат наук з державного управління, доцент, доцент кафедри підприємництва, менеджменту організацій та логістики, Запорізький національний університет, Україна

### ЧЛЕНИ РЕДАКЦІЙНОЇ КОЛЕГІЇ:

**Антонюк Дмитро Анатолійович** – доктор економічних наук, доцент, професор кафедри підприємництва, менеджменту організацій та логістики, Запорізький національний університет, Україна

**Артюх Тетяна Миколаївна** – доктор технічних наук, професор, професор кафедри екологічного менеджменту та підприємництва Київського національного університету імені Тараса Шевченка, Україна

**Гуржій Наталія Миколаївна** – доктор економічних наук, доцент, професор кафедри підприємництва, менеджменту організацій та логістики, Запорізький національний університет, Україна

**Карпенко Андрій Володимирович** – доктор економічних наук, доцент, доцент кафедри управління персоналом і економіки праці, Запорізький національний технічний університет, Україна

**Матвейчук Людмила Олександрівна** – доктор наук з державного управління, кандидат економічних наук, доцент, професор кафедри туризму та готельно-ресторанної справи, Кам'янець-Подільський національний університет ім. Івана Огієнка, Україна

**Меліхова Тетяна Олегівна** – доктор економічних наук, доцент, завідувач кафедри обліку, аналізу, оподаткування та аудиту Інженерного інституту Запорізького національного університету, Україна

**Метеленко Наталя Георгіївна** – доктор економічних наук, професор, завідувач кафедри фінансів, банківської справи та страхування, інженерний інститут Запорізького національного університету, Україна

**Сагайдак Михайло Петрович** – доктор економічних наук, професор, в.о. завідувача кафедри менеджменту, ДВНЗ «Київський національний економічний університет імені Вадима Гетьмана», Україна

**Шавкун Ірина Григорівна** – доктор філософських наук, професор, декан факультету менеджменту, Запорізький національний університет, Україна

**Шмиголь Надія Миколаївна** – доктор економічних наук, професор, завідувач кафедри обліку та оподаткування, Запорізький національний університет, Україна

**Дибчинська Яна Станіславівна** – кандидат філологічних наук, доцент, завідувач кафедри ділової комунікації, Запорізький національний університет, Україна

**Волкова Валерія Володимирівна** – кандидат педагогічних наук, доцент, доцент кафедри ділової комунікації, Запорізький національний університет, Україна

**Гончаренко Наталія Володимирівна** – кандидат економічних наук, доцент кафедри екологічного менеджменту та підприємництва, Київський національний університет імені Тараса Шевченка, Україна

**ЧурикANOVA Олена Юріївна** – кандидат економічних наук, доцент, доцент кафедри економіки та економічної кібернетики, Національний технічний університет «Дніпровська політехніка», Україна

**Шишкін Віктор Олександрович** – кандидат економічних наук, доцент, доцент кафедри підприємництва, менеджменту організацій та логістики, Запорізький національний університет, Україна

**Andreas Urbich** – засновник та керуючий директор комунального освітнього закладу (Kommunales Bildungswerk e.V.), м. Берлін, Федеративна Республіка Німеччина

**Atanas Dimitrov Georgiev** – доцент, доктор філософії, завідувач кафедри промислової економіки та менеджменту, заступник декану факультету економіки та бізнес адміністрування, Софійський університет ім. Климента Охридського, Софія, Болгарія

**Sébastien Ménard** – доцент, доктор філософії, факультет права, економіки та управління, Університет міста Ле-Ман, м. Ле-Ман, Франція

**Рекомендовано до поширення через мережу Інтернет Вченою радою ЗНУ**

**Офіційний сайт видання: <http://www.management-journal.org.ua>**

*ISSN (Online): 2522-1566*

Електронний науковий фаховий журнал «Менеджмент та підприємництво: тренди розвитку» започатковано кафедрою підприємництва, менеджменту організацій та логістики Запорізького національного університету з метою досягнення якісно нового рівня повноти й оперативності задоволення інформаційних потреб суспільства в знаннях, одержаних у процесі науково-дослідної діяльності українських та зарубіжних учених і фахівців галузей управління та адміністрування, сучасного менеджменту, підприємництва та маркетингу.

В журналі публікуються оригінальні статті вітчизняних та зарубіжних авторів високого наукового рівня.

Відповідальність за зміст, оригінальність та переклад тексту статей, науковий рівень, точність наведених відомостей несуть автори.

## EDITORIAL TEAM

### EDITOR-IN-CHIEF

**LIUDMYLA BUKHARINA** – Doctor of Science (Economics), Professor, Head of the Department of Entrepreneurship, Management of Organizations and Logistics, Zaporizhzhia National University, Ukraine

### EXECUTIVE EDITOR

**OKSANA ONYSHCHENKO** – PhD in Public Administration, Associate Professor at the Department of Entrepreneurship, Management of Organizations and Logistics, Zaporizhzhia National University, Ukraine

### EDITORIAL BOARD

**DMYTRO ANTONIUK** – Doctor of Science (Economics), Professor at the Department of Entrepreneurship, Management of Organizations and Logistics, Zaporizhzhia National University, Ukraine

**TETYANA ARTYUKH** – Doctor of Technical Sciences, Professor, Professor at the Department of Environmental Management and Entrepreneurship, Taras Shevchenko National University of Kyiv, Ukraine

**NATALIA HURZHII** – Doctor of Science (Economics), Associate Professor, Professor at the Department of Entrepreneurship, Management of Organizations and Logistics, Zaporizhzhia National University, Ukraine

**ANDRII KARPENKO** – Doctor of Science (Economics), Associate Professor at the Department of Human Resources Management and Labour Economics, Zaporizhzhia National Technical University, Ukraine

**LIUDMYLA MATVEICHUK** – Doctor of Science (Public Administration), Ph.D. in Economics, Professor at the Department of Tourism and Hotel and Restaurant Business, Kam'ianets'-Podil's'kyi Ivan Ohiienko National University, Ukraine

**TETIANA MELIKHOVA** – Doctor of Science (Economics), Associate Professor, Head the Department of Accounting, Analysis, Taxation And Audit, Engineering Institute of Zaporizhzhia National University, Ukraine

**NATALIA METELEENKO** – Doctor of Science (Economics), Professor, Head of the Department of Finance, Banking and Insurance, Engineering Institute of Zaporizhzhia National University, Ukraine

**MYKHAILO SAHAIDAK** – Doctor of Sciences (Economics), Professor, Acting Head of Department of Management, Kyiv National Economic University named after Vadym Hetman, Ukraine

**IRYNA SHAVKUN** – Doctor of Science (Philosophy), Professor, Dean of the Faculty of Management, Zaporizhzhia National University, Ukraine

**NADIYA SHMYHOL** – Doctor of Science (Economics), Professor, Head of the Department of Accounting and Taxation, Zaporizhzhia National University, Ukraine

**YANA DYBCHINSKA** – Ph.D. in Philology, Associate Professor, Head of the Department of Business Communication, Zaporizhzhia National University, Ukraine

**VALERIYA VOLKOVA** – Ph.D. in Pedagogical Sciences, Associate Professor at the Department of Business Communication, Zaporizhzhia National University, Ukraine

**NATALIYA GONCHARENKO** – Ph.D. in Economics, Associate Professor at the Department of Environmental Management and Entrepreneurship, Taras Shevchenko National University of Kyiv, Ukraine

**OLENA CHURIKANOVA** – Ph.D. in Economics, Associate Professor at the Department of Economy and Economic Cybernetics, Dnipro University of Technology, Ukraine

**VIKTOR SHYSHKIN** – Ph.D. in Economics, Associate Professor at the Department of Entrepreneurship, Management of Organizations and Logistics, Zaporizhzhia National University, Ukraine

**ANDREAS URBICH** – Founder and Managing Director of the Municipal Educational Institution (Kommunales Bildungswerk e.V.), Berlin, Federal Republic of Germany

**ATANAS DIMITROV GEORGIEV** – Ph.D. in Economics, Associate Professor, Head of the Department of Industrial Economics and Management, Vice-Dean of the Faculty of Economics and Business Administration, Sofia University "St. Kliment Ohridski", Sofia, Bulgaria

**SÉBASTIEN MÉNARD** – Assistant Professor of Economics, Director of International Relations – Erasmus coordinator, Faculty of Law, Economics and Management at University Du Maine, Le Mans, France, Member of the French Economics Association, Member of the Canadian Economics Association

**Recommended for electronic distribution by ZNU Academic Council**

**Electronic page of journal: <http://www.management-journal.org.ua>**

*ISSN (Online): 2522-1566*

The electronic scientific journal **MANAGEMENT AND ENTREPRENEURSHIP: TRENDS OF DEVELOPMENT (METHOD)** founded by the Department of Entrepreneurship, Management of Organizations and Logistics (ZAPORIZHZHIA NATIONAL UNIVERSITY) offers a dynamic international forum for the publication of high quality research on all aspects of Management & Entrepreneurship and their further widespread dissemination.

The journal issues academic articles, reviews on academic works and information on scientific events to promote the exchange of knowledge and experience among academicians, scholars and practitioners in the field of management and entrepreneurship.



CONTENTS

---

ACCOUNTING AND TAXATION

---

**TUCHAK, T.** ACCOUNTING TOOLS AND TAX OPTIMIZATION SCHEMES..... 8

---

FINANCE, BANKING AND INSURANCE

---

**RAMSKYI, A., SOBOLIEVA-TERESHCHENKO, O. & ZHARNIKOVA, V.** COMPARISON  
WORLDWIDE AND UKRAINIAN PRACTICE OF BANK STRESS TESTING..... 19

---

MANAGEMENT

---

**SHYSHKIN, V., ONYSHCHENKO, O., PETROV, V. & ALIEVA-YAROSHENKO, T.**  
CORPORATE SOCIAL RESPONSIBILITY SYSTEM MANAGEMENT OF THE MODERN ENTERPRISE... 29

---

PUBLIC ADMINISTRATION

---

**MUNAWWAROH, S., LARASATI, E., SUWITRI, S. & WARSONO, H.** POLICY  
IMPLEMENTATION OF WORKING CULTURE DEVELOPMENT IN MINISTRY OF  
RELIGIOUS AFFAIRS..... 43

---

MARKETING

---

**CHRISTINA, I. D., FENNI & ROSELINA, D.** DIGITAL MARKETING STRATEGY IN  
PROMOTING PRODUCT..... 58

---

ENTREPRENEURSHIP, TRADE AND EXCHANGE ACTIVITIES

---

**SAPUTRO AHMAD, B. G. & UTAMI, W.** A STUDY OF RAMADAN EFFECT ON THE  
INDONESIA STOCK EXCHANGE..... 67

**VOROBIOV, K., HURZHIL, N. & LYSENKO, M.** SAFETY OF COFFEE PRODUCTION AS  
THE MAIN COMPETITIVE ADVANTAGE OF THE COMPANY IN THE MARKET..... 79

---

LOGISTICS AND SUPPLY CHAIN MANAGEMENT

---

**ONYSHCHENKO, O., BUKHARINA, O. & TUPIKINA, A.** FEATURES OF INVENTORY  
MANAGEMENT IN LOGISTICS SYSTEM OF A TRADING ENTERPRISE..... 94

---

ЗМІСТ

---

ОБЛІК І ОПОДАТКУВАННЯ

---

ТУЧАК Т. В. ОБЛІКОВІ ІНСТРУМЕНТИ ТА СХЕМИ ПОДАТКОВОЇ ОПТИМІЗАЦІЇ..... 8

---

ФІНАНСИ, БАНКІВСЬКА СПРАВА ТА СТРАХУВАННЯ

---

РАМСЬКИЙ А. Ю., СОБОЛЄВА-ТЕРЕЩЕНКО О. А., ЖАРНИКОВА В.В. ПОРІВНЯННЯ СВІТОВОЇ Й УКРАЇНСЬКОЇ ПРАКТИКИ БАНКІВСЬКОГО СТРЕСС ТЕСТУВАННЯ ..... 19

---

МЕНЕДЖМЕНТ

---

ШИШКІН В. О., ОНИЩЕНКО О. А., ПЕТРОВ В. М., АЛІЄВА-ЯРОШЕНКО Т. Е. УПРАВЛІННЯ СИСТЕМОЮ КОРПОРАТИВНОЇ СОЦІАЛЬНОЇ ВІДПОВІДАЛЬНОСТІ ПІДПРИЄМСТВА..... 29

---

ПУБЛІЧНЕ УПРАВЛІННЯ ТА АДМІНІСТРУВАННЯ

---

MUNAWWAROH, S., LARASATI, E., SUWITRI, S. WARSONO, H. РЕАЛІЗАЦІЯ ПОЛІТИКИ РОЗВИТКУ ТРУДОВОЇ КУЛЬТУРИ В МІНІСТЕРСТВІ У СПРАВАХ РЕЛІГІЇ..... 43

---

МАРКЕТИНГ

---

CHRISTINA, I. D., FENNI, ROSELINA, D. ЦИФРОВА МАРКЕТИНГОВА СТРАТЕГІЯ ДЛЯ ПРОСУВАННЯ ПРОДУКЦІЇ..... 58

---

ПІДПРИЄМНИЦТВО, ТОРГІВЛЯ ТА БІРЖОВА ДІЯЛЬНІСТЬ

---

SAPUTRO AHMAD, B. G., UTAMI, W. ВИВЧЕННЯ ВПЛИВУ РАМАДАНУ НА ДІЯЛЬНІСТЬ ІНДОНЕЗІЙСЬКОЇ ФОНДОВОЇ БІРЖИ..... 67

ВОРОБІЙОВ К. С., ГУРЖІЙ Н. М., ЛИСЕНКО М. О. УПРАВЛІННЯ БЕЗПЕКОЮ КАВОВИХ ТОВАРІВ ЯК ГОЛОВНА КОНКУРЕНТНА ПЕРЕВАГА КОМПАНІЇ НА РИНКУ..... 79

---

ЛОГІСТИКА

---

ОНИЩЕНКО О.А., БУХАРІНА О.О., ТУШКІНА А. С. ОСОБЛИВОСТІ УПРАВЛІННЯ ЗАПАСАМИ В ЛОГІСТИЧНІЙ СИСТЕМІ ТОРГОВЕЛЬНОГО ПІДПРИЄМСТВА..... 94

---

---

ACCOUNTING AND TAXATION

---

Received:  
5 November, 2019  
1st Revision:  
5 December, 2019  
Accepted:  
9 December, 2019

UDC: 336.74:336.76

DOI <https://doi.org/10.26661/2522-1566/2019-4/10-01>

ACCOUNTING TOOLS AND TAX OPTIMIZATION SCHEMES

**Tetiana Tuchak**

*University of the State Fiscal Service of Ukraine*

*Irpin, Ukraine*

*ORCID ID: [0000-0003-4696-924X](https://orcid.org/0000-0003-4696-924X)*

*Corresponding author email: [asol75@bigmir.net](mailto:asol75@bigmir.net)*

**Abstract.** The evolution of taxes and the increasing role of public financial resources in the life of modern society have contributed to the transformation of taxation into an important, complex, specific area of activity with their own laws of development. First of all, these include the classical principles of taxation – equality, neutrality, convenience, simplicity, etc. Last but not least, the principle of non-taxation takes place in this list. Since the state's existence is not limited by any calendar, let alone tax terms, the state still has a constant need for tax revenues and is obliged to take into account the need to renew its financial resources in the future, recognizing that this is real only if there is normal production. By re-taxing the economy today, the state is depriving itself of future revenues with all the ensuing consequences. Therefore, a competent definition of the boundaries of the tax burden involves the development of production and ensuring conditions for the growth of tax revenues. Oppressing the economy, suppressing the taxpayer, the tax destroys its own foundation and itself. The ongoing reformation of the tax system as a whole today in the conditions of the modern Ukrainian economy is the desire of the state systems to determine the optimum limits of the tax burden, which can satisfy the financial interests of the state and not break the delicate fragile balance of social and economic conditions of modern society. The **aim** of research is determining the features of tax planning formation for tax optimization purposes and to improve the economic management system at the enterprise through the use of special optimization schemes and the use of accounting tools. **Methodology:** the theoretical justification is based on observations, groupings, analytical work in determining the organization of tax planning. Methodological and general scientific principles of complex researches became the theoretical basis. The **scientific importance** of the work lies in the fact that results is the systematization of theoretical and practical provisions of tax optimization of the enterprise. The **value** of the research is that the materials of the conducted research will be useful for further study of the specifics of tax optimization at enterprises.

**Key words:** taxes, taxation, tax optimization, tax optimization schemes, tax planning, tax accounting, tax analysis.

**JEL Classification:** H20, H21, H22, H26, H30.

INTRODUCTION

The problem of determining the limits of the tax burden has always existed. Since the time of existence of the state is not limited to any calendar, and even more so tax terms, the state has a



constant need for tax revenues, and it is obliged to take into account the need to restore its financial resources in the future, knowing that this is real only in the presence of normal production. The competent determination of the limits of the tax burden implies the development of production and the provision of conditions for the growth of tax revenues. Depressing the economy, depressing the taxpayer, the tax destroys its own basis. The problem of determining the optimal tax burden is relevant to any state structure and any economic system, and each time the solution to this problem will be different, depending on the peculiarities of functioning and intended goals of development of a special economic education. The ongoing reform of the tax system as a whole today in the conditions of the modern Ukrainian economy represents the desire of the state systems to determine the optimum limits of the tax burden, which can satisfy the financial interests of the state and not undermine the fragile balance of social and economic conditions of the modern Ukrainian society. Therefore, the search for approaches to solving the problem of determining the tax burden optimization criteria in today's economy seems especially relevant. Given the fundamental restructuring of the social and economic foundations of the economy, the role of taxes and tax policy of our country is growing. The latter is a focused activity in the field of tax collection. Regulation and optimization of the tax burden is an urgent issue for the Ukrainian economy at the present stage of development, as it is an indicator of the efficiency of the tax system of the country as a whole.

## **LITERATURE REVIEW**

The issue of tax optimization and the tools and schemes for its implementation as a field of scientific research has received considerable attention from many authors, including: Baranov, S.O. (2015), Grabchuk, I.L., Lajchuk, S.M. (2017), Yevtushenko, N.O. (2016), Kirdina, O.G. (2018), Matvienko, T.O. (2012), Melnik, O.I. (2017), Rybina, L.O. (2015) and others.

However, it should be noted that a number of theoretical developments and problems require further systematic investigation.

## **PAPER OBJECTIVE**

The purpose of the study was to determine the features of tax planning formation for tax optimization purposes and to improve the economic management system at the enterprise through the use of special optimization schemes and the use of accounting tools.

## **RESULTS AND DISCUSSION**

Taxes have a significant impact on the financial and economic activities of business entities. Payment of taxes causes the withdrawal of enterprise's cash, which leads to a deterioration of its financial condition through a decrease in capital maneuverability and a decrease in liquidity of assets, which is why the current challenges to the development of domestic economic entities are to generate cash and confirm their sums as a subject to compliance with applicable legislation with a focus on minimizing taxes and payments. Tax planning is the most common way of reducing the tax burden on an enterprise. There are other ways to optimize taxation, but not all of them are legitimate in law. Domestic and foreign scientists have been proposed to consider tax planning as a process of optimizing tax payments, effectively choosing or changing the tax regime and reducing tax risks of the enterprise in the context of current tax legislation, which maximizes profitability and market value of the enterprise in the present.

The purpose of this is the correct calculation and payment of tax payments, the avoidance of fines, the timely formation and submission of tax statements and finding ways to reduce the tax burden on the company. Therefore, it is necessary to pay attention to the differentiation of categories (concepts), such as tax evasion and tax planning. Proper planning organization allows

you to forecast future tax payments and develop their optimization policies. Depending on the goals of the enterprise and the specifics of its business activity, there are different criteria for the establishment and criteria and limitations of tax optimization (Fig. 1).

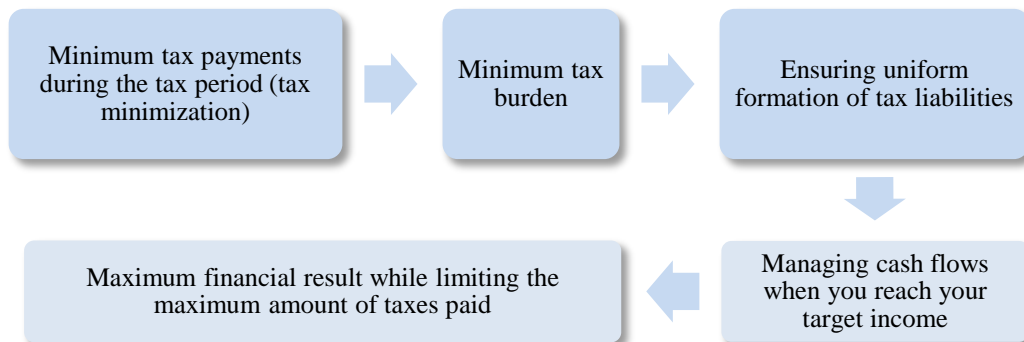


Fig. 1 Approaches to setting tax optimization criteria and limitations

Source: own study

In addition, the tax system has several mechanisms for preferential taxation of enterprises:

- reducing tax rates;
- exemption from the taxation of certain elements of the tax object;
- tax exemptions of individual taxpayers;
- targeted tax benefits, including tax credits (tax deferral).

By using this list of preferential tax treatment, a business can significantly reduce its tax burden and adjust its tax policy. Analysis of scientific works on taxation makes it possible to identify three behaviors of taxpayers (Fig. 2).

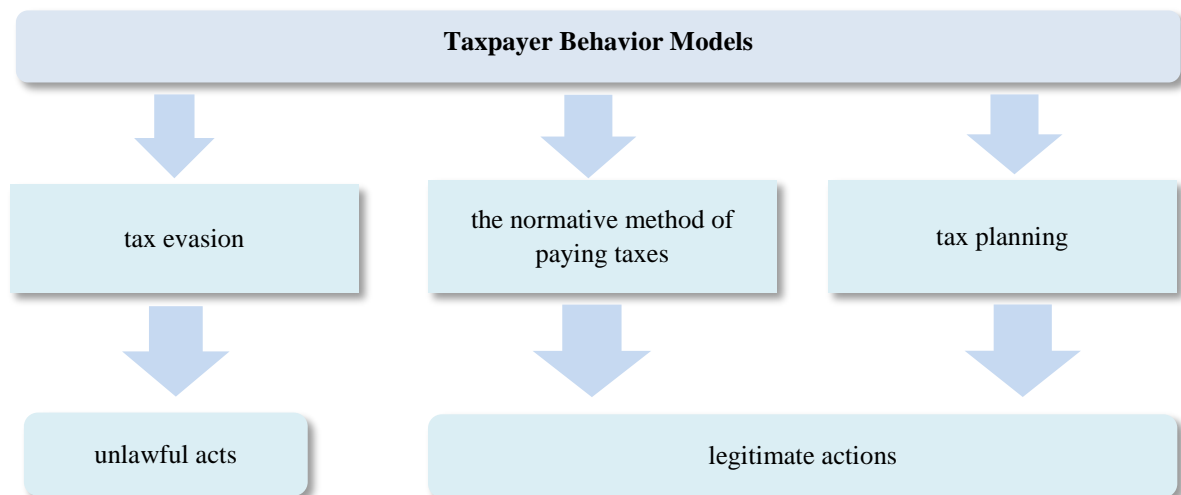


Fig. 2 Taxpayer Behavior Models

Source: own study

According to Article 212 of the Criminal Code of Ukraine for deliberate tax evasion, fees, payments is punishable by a fine, or deprivation of the right to occupy certain positions or engage in

certain activities for up to three years. Therefore, tax evasion is attributed not only to criminal liability, but also to tax offenses.

The normative method of tax payment provides for the accrual and payment of tax payments by legal entities and individuals in accordance with the law, without selecting alternative options for optimizing tax payments.

The complexity of the tax planning mechanism is that on the one hand there is an opportunity to significantly reduce the amount of tax payments to the budget, and on the other – the danger of paying a much larger amount in the budget and put the company on the verge of bankruptcy.

That is, an enterprise under tax planning means the use by the taxpayer of all permissible legal means to minimize tax liabilities.

Being able to know and control the level of tax burden for any business is an important tool for making financial decisions. Tax burden optimization is a rational multivariate minimization of tax payments. The result of this savings, additional tax revenues and their effective investment in the development of the enterprise. The following legal methods of tax optimization can be used within enterprise management:

- replacement of relations;
- deferral of payment;
- change of jurisdiction;
- separation of relations;
- reduction of the object of taxation;
- delegation of responsibility;
- use of privileges and preferences;
- accounting policies.

The essence of the method of replacement of relations is to replace the business legal relations of the enterprise with its partner, the taxation of the results of which occurs at elevated rates, to close, homogeneous legal relationships with a preferential tax regime. The basis of the deferred payment method is the assumption that the majority of taxes are due when the taxable entity arises, and therefore the enterprise can move part of its sales from the end of one quarter to the beginning of another. The change of jurisdiction is characterized by the transfer of the registration of an enterprise or its branches in the territory where tax benefits exist. Reduction of the object of taxation is a method whose purpose is to waive certain transactions that are taxed without harming the enterprise. Delegation of responsibility means that responsibility for the payment of basic taxes is transferred to the special organization. As for the method of using privileges and preferences, it implies the transition of enterprises to the industry or to the production of products for which a preferential taxation is imposed. Accounting policy is characterized by the preparation of the tax budget of the enterprise so that there is no fluctuation in the amount of tax payments in different tax periods. Current tax optimization allows for a set of methods to reduce the tax burden for the taxpayer on a case-by-case basis. Prospective tax optimization is based on the application of such methods and methods that reduce the tax burden of the taxpayer in the course of his activity, having a long-term nature due to possible changes in both external and internal factors affecting the level of taxation.

Building a productive tax system helps to address one of the main issues in the enterprise's activity – the assessment and prevention of the boundary between the ability to pay taxes and fees on conditions of ensuring the development of entrepreneurship and evasion (or not fully computing). It is advisable to present the organizational model of analysis of company calculations with taxes and fees in the form of interrelated modules:

- 1) assessment of organizational and economic efficiency of tax system (first of all, choice of alternative systems);
- 2) analysis of completeness and accuracy of determination of tax objects. Assessment of resource provision for timely budgetary calculations;

3) analysis of the motivational impact of the tax system on the development of entrepreneurial activity.

One of the components of tax optimization at the enterprise should be the organizational support of the stages of creation of information resource, the results of accounting of economic transactions, which are the objects of taxation, and data of financial and tax reporting (Fig. 3).

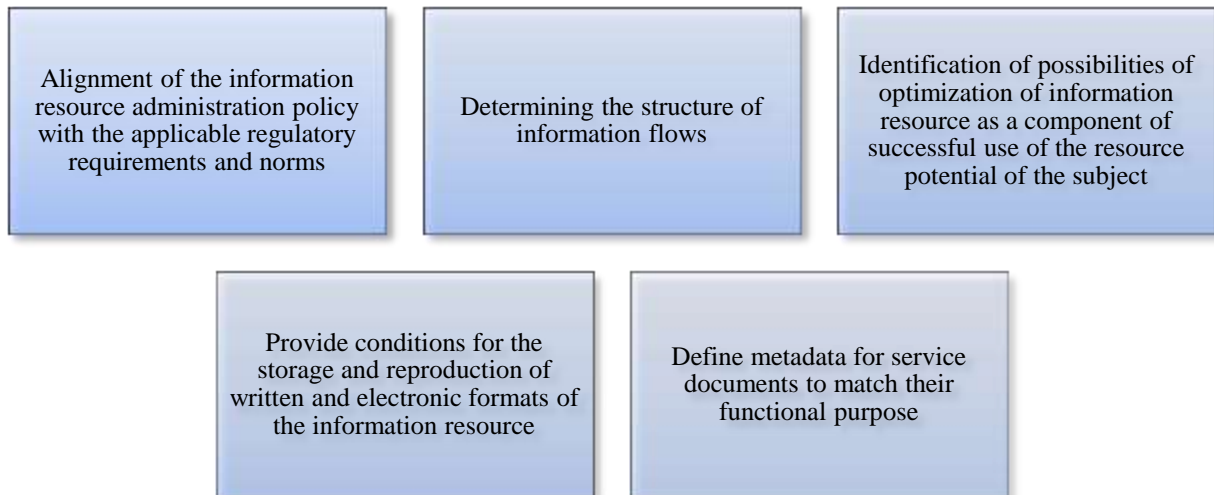


Fig. 3 Requirements for tax optimization information resource

Source: own study

These are elements that are consolidated into a single information and analytical database of taxes, as well as practical skills in the formation of schemes for the implementation of transactions that can lawfully optimize tax payments. However, so-called «gray schemes» are more common for Ukrainian businesses when the taxpayer does not formally violate tax laws using tax optimization, but at the same time reduces tax obligations to the state compared to other enterprises. All optimization paths can be divided into three groups:

1. cash out of taxation;
2. transfer of funds to a region with a lower level of taxation;
3. deferral of tax payments – carry forward.

The first scheme of «*Cash out of taxation*» is characterized by the use of fictitious contracts and fictitious firms. Nominal directors and founders are often involved to anonymize true owners. The following groups of schemes are:

1) scheme that increases the cost of the optimizer by transferring funds to «gray» and «black» firms: increases company expenses, allows to get free cash, to «bring» to the turnover of the company, goods bought for cash;

2) scheme for inventory reduction as an alternative to sales: involves the sale of the company at a reduced cost through damage or sham destruction of the stock, with the stock being sold for cash;

3) optimization in which tax liabilities are shifted from one company to another: to implement it is a triple company willing to sell a tax credit or expenses.

However, tax evasion schemes have an increased risk for the optimizer, they are illegal and short-lived, and can be quickly detected by fiscal officials, to maximize criminal prosecution.

The scheme «*Transfer of funds to a region with a lower level of taxation*» differs from the previous one in that the funds are not withdrawn from legal circulation and can be reverted if necessary:

- 1) transferring cash to other countries with less taxation (offshore is an example);

- 2) transfer of funds to other companies with different tax system (simplified tax system);
- 3) transfer of funds to other fields of activity or to other companies with preferential taxation (mainly temporary).

This optimization path is less risky than the previous one, though it cannot be considered perfect. Such schemes are possible to detect when agreements are executed on the basis of fictitious documents, when there are insufficient labor and property resources, agreements are conducted at inflated or low prices.

*Deferral of tax payments* – deferrals – this optimization path allows you to adjust your tax burden in the near future, with further increases in the burden, only those companies that carry out long-term planning can choose this path:

- 1) incomplete operations to transfer tax liabilities: replacement of taxable transactions with non-taxable transactions;
- 2) carrying out operations with their subsequent cancellation: used to increase tax credit and expense at the end of the reporting period, with a subsequent return on transactions in subsequent reporting periods (when appropriate resources are available);
- 3) use of intermediaries to widen the time gap between counterparties' actions and the emergence of tax liabilities: it is possible to legally delay the offensive of tax obligations (use of contracts of commission, commissions).

The main characteristic of this type of optimization is the lowest level of risk among other optimization schemes. Such schemes can be detected if the optimizer has made the following shortcomings: did not bother to hide in time separate business optimization operations, does not use a variety of schemes, incorrectly drawn up documents are used in a single format. Tax optimization is connected with all processes of enterprise management and is based on tax planning, analysis, accounting and control, which is a mechanism of realization of tax policy of enterprise in economic activity (Fig. 4).

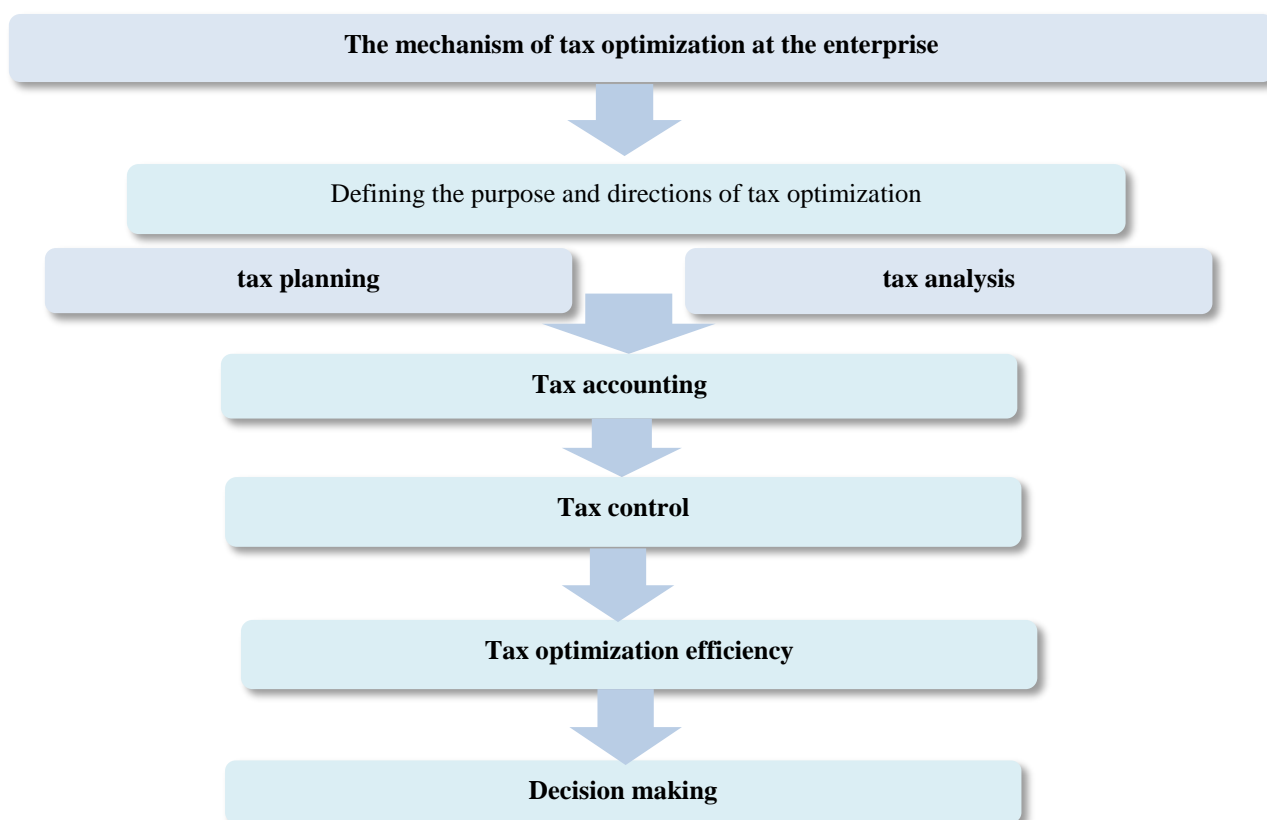


Fig. 4 The mechanism of tax optimization implementation

Source: own study

The introduction of a tax optimization mechanism at the enterprise is the main condition for its stable development. Choosing the best option for taxation will allow the company to pay tax payments in a burdensome for him, to direct the saved money for further development and to reduce tax risks. Such an element of enterprise tax flow management balances relations between fiscal authorities and economic entities, which, in turn, provides the state with full assurance of tax payments to the budget.

## **CONCLUSION**

Tax savings are the most important task of every business. Therefore, in practice, with the correct setting of tax planning and control, the company can pay taxes in the minimum amount. Competent optimization of tax payments is an important factor in optimizing the formation of profits of the enterprise.

The tax planning model is characterized by the fact that the taxpayer on the one hand does not violate the rules of tax legislation, and on the other reduces the amount of tax payments by applying the legal rules in his model of activity.

The purpose of tax planning is to increase revenues and profits by optimizing tax payments and reducing the tax burden. It is based on the maximum use of all statutory tax benefits, alternative tax solutions.

According to the results of the study of tax optimization at the enterprise, its role for development and the main criteria that make up its essence and features that help distinguish between tax planning and tax evasion are determined.

It is established that the determination of tax planning activity depends on the financial capacity of the enterprise, as well as the amount of taxes paid during the period.

Among the optimization schemes that have been considered in certain situations will be tax evasion. While optimizing tax payments, other financial tasks that are intended not to reduce taxes but to increase an entity's income after taxes have been solved may also be solved. Optimization of some taxes can lead to an increase in others, and subsequently to penalties from the tax authorities. In other words, penalties can exceed the planned effect of tax optimization. Consequently, optimization schemes involve a multivariate approach to considering the effects of reducing the tax burden, which implies the effectiveness of their use depending on the situation.

The purpose of modeling tax optimization strategies is to study the impact of various management decisions on the choice of one or another method that affects the performance indicators and the state of the enterprise as a whole. Identify long-term and short-term strategies to reduce the tax burden, taking into account the potential risks and without violating legal requirements.

Summarizing the above, we can say that such methods and models, which take into account all the necessary information about the object of study, adapt flexibly to the changes, allow us to identify the most favorable development scenarios.

## **REFERENCES**

- Andrushchenko, V.L. and Tuchak, T.V. (2016). *Tax State: Monograph*. Kyiv: Aletra. 304 p. (in Ukrainian).
- Baranov, S.O. (2015). "Tax evasion is a major factor in the shadow economy", *Collection of scientific papers of the National Academy of Public Administration under the President of Ukraine*. Vol. 2. pp. 65-79 (in Ukrainian).
- Grabchuk, I.L. and Laichuk, S.M. (2017). "Tax planning: peculiarities of organization at the enterprise", *Problems of theory and methodology of accounting, control and analysis*. Vol 2



Tuchak, T. (2019) "Accounting tools and tax optimization schemes", *Management and entrepreneurship: trends of development*, 4 (10), pp. 8-18. Available at: <https://doi.org/10.26661/2522-1566/2019-4/10-01>

- (37). pp. 30-34. Available at: <http://eztur.ztu.edu.ua/123456789/7144> (accessed 28 October 2019), (in Ukrainian).
- Evtushenko, N.O. (2016). "Taxation risks and the system of their management", *European Journal of Management Issues*. № 6. pp. 68-77. Available at: <https://doi.org/10.15421/191607> (accessed 28 October 2019), (in Ukrainian).
- Kirdina, E.G. and Frolova, A.V., (2018). "Optimization of the tax burden at the macro and micro level", *The bulletin of transport and industry economics*. № 64. pp. 126-134. Available at: <https://doi.org/10.18664/338.47:338.45.v0i64.149923> (accessed 18 October 2019), (in Ukrainian).
- Kramarenko, O.A. (2013). "Methods of tax evasion in Ukraine". *Scientific notes. Economics*. Vol 23. pp. 165-168. Available at: [http://nbuv.gov.ua/UJRN/Nznuoa\\_2013\\_23\\_34](http://nbuv.gov.ua/UJRN/Nznuoa_2013_23_34). (accessed 20 October 2019), (in Ukrainian).
- Marinchuk, S.G. (2016). "Modeling of tax optimization mechanism based on fuzzy logic". *Efektivna ekonomika*. Available at: <http://www.economy.nayka.com.ua/?op=1&z=3873> (accessed 18 October 2019), (in Ukrainian).
- Matvienko, T.O. (2012). "Improvement of information support of tax planning of processing enterprises". *Ekonomika ta derzhava, issue 8*, pp. 32-35. Available at: [http://www.economy.in.ua/pdf/8\\_2012/11.pdf](http://www.economy.in.ua/pdf/8_2012/11.pdf) (accessed 17 October 2019), (in Ukrainian).
- Melnik, O.I. (2017). "Modern approaches to tax optimization". Available at: <https://finance.mnau.edu.ua/files/conference/2017-melnyk-spop.pdf> (accessed 17 October 2019), (in Ukrainian).
- Rybina, L.O. (2015). "Optimization of taxation as a component of the enterprise budget system", *Skhidna Yevropa: ekonomika, biznes ta upravlinnia*, issue 4 (09), pp. 215-218. Available at: <https://chmnu.edu.ua/wp-content/uploads/2019/07/Ribina-L.O..pdf> (accessed 18 October 2019), (in Ukrainian).
- Sviatash, S.V. (2017). "Tax planning and tax optimization in the context of maximizing the benefits of taxpayers and the state", *Scientific Bulletin of Uzhhorod University. Series "Economics"*, issue 2 (50). pp. 280-285. Available at: [https://doi.org/10.24144/2409-6857.2017.2\(50\).280-285](https://doi.org/10.24144/2409-6857.2017.2(50).280-285). (accessed: 17 October 2019), (in Ukrainian).
- Tytenko, L.V. and Bohdan, S.V. (2019). "Accounting and information support of risk management of tax consulting", *Economy and society*. Vol. 20. pp. 721-729.
- Tytenko, L.V. and Bohdan, S.V. (2019). "Analytical instruments of risk management of tax counseling", *Market infrastructure*. No. 28. pp. 359-366. Available at: [http://www.market-infr.od.ua/journals/2019/28\\_2019\\_ukr/56.pdf](http://www.market-infr.od.ua/journals/2019/28_2019_ukr/56.pdf) (accessed: 27 October 2019), (in Ukrainian).
- Tuchak, T.V. and Bohdan, S.V. (2019). "Conceptual principles of providing and functioning of the tax advice institute", *Eastern Europe: Economics, Business and Management*. No. 1 (18). pp. 312-316. Available at: [http://www.easterneurope-ebm.in.ua/journal/18\\_2019/51.pdf](http://www.easterneurope-ebm.in.ua/journal/18_2019/51.pdf) (accessed: 27 October 2019), (in Ukrainian).
- Weston, S.F. (2013). *Principles of Justice in Taxation*. HardPress Publishing.

## СПИСОК ВИКОРИСТАНИХ ДЖЕРЕЛ

- Андрущенко В.Л., Тучак Т.В. Податкова держава: монографія. Київ: Алетра, 2016. 304с.
- Баранов С.О. Ухилення від сплати податків як основний чинник тіньової економіки. *Збірник наукових праць Національної академії державного управління при Президентові України*. 2015. Вип. 2. С. 65-79
- Грабчук І.Л., Лайчук С.М. Податкове планування: особливості організації на підприємстві. *Проблеми теорії та методології бухгалтерського обліку, контролю і аналізу*. 2017. №2 (37). С. 30-34
- Євтушенко Н.О. Податкові ризики та система управління ними. *Вісник Дніпропетровського університету. Серія: Менеджмент інновацій*. 2016. Т.24. Вип. 6. С. 68-77.

- Кірдіна О.Г., Фролова А. В. Оптимізація податкового навантаження на макро- та мікрорівні. *Вісник економіки транспорту і промисловості*. 2018. №64. С. 126-134
- Крамаренко О. А. Способи ухилення від сплати податків в Україні. *Наукові записки. Економіка*. 2013. № 23. С. 165-168.
- Маринчук С. Г. Моделювання механізму податкової оптимізація на засадах нечіткої логіки. *Ефективна економіка*. 2016. URL: <http://www.economy.nayka.com.ua/?op=1&z=3873> (дата звернення: 18.10.2019).
- Матвієнко Т. О. Удосконалення інформаційного забезпечення податкового планування переробних підприємств. *Економіка та держава*. 2012. № 8. С. 32-35 URL: [http://www.economy.in.ua/pdf/8\\_2012/11.pdf](http://www.economy.in.ua/pdf/8_2012/11.pdf) (дата звернення: 17.10.2019).
- Мельник О.І. Сучасні підходи до оптимізації податків. URL: <https://finance.mnau.edu.ua/files/conference/2017-melnyk-spop.pdf> (дата звернення: 17.10.2019).
- Рибіна Л.О. Оптимізація оподаткування підприємства як складник бюджетування підприємства. *Східна Європа: економіка, бізнес та управління*. 2017. Випуск 4 (09). С. 215-218. URL: <https://chmnu.edu.ua/wp-content/uploads/2019/07/Ribina-L.O..pdf> (дата звернення: 17.10.2019).
- Святаш С.В. Податкове планування та оптимізація оподаткування в контексті максимізації вигод платників податків та держави. *Науковий вісник Ужгородського університету. Серія : Економіка*. 2017. Вип.2. С. 280-285. URL: [https://doi.org/10.24144/2409-6857.2017.2\(50\).280-285](https://doi.org/10.24144/2409-6857.2017.2(50).280-285) (дата звернення: 17.10.2019).
- Титенко Л.В., Богдан С.В. Аналітичний інструментарій управління ризиками податкового консультування. *Інфраструктура ринку*. 2019. Вип. 28. С. 359-366.
- Титенко Л.В., Богдан С.В. Обліково-інформаційне забезпечення управління ризиками податкового консультування. *Економіка та суспільство*. 2019. Вип. 20. С. 721-729
- Тучак Т.В., Богдан С.В. Концептуальні засади становлення та функціонування інституту податкового консультування. *Східна Європа: економіка, бізнес та управління*. 2019. Вип. 1 (18). С. 312-316.
- Weston S.F. Principles of Justice in Taxation. HardPress Publishing, 2013. 316 p.

## ОБЛІКОВІ ІНСТРУМЕНТИ ТА СХЕМИ ПОДАТКОВОЇ ОПТИМІЗАЦІЇ

**Тучак Тетяна Володимирівна**

*Університет державної фіскальної служби України  
м. Ірпінь, Україна*

Проблема визначення меж податкового тягаря існувала завжди. Оскільки час існування держави не обмежується ніякими календарними, а тим більше податковими термінами, у держави зберігається постійна потреба в податкових доходах і вона зобов'язана брати до уваги необхідність відновлення своїх фінансових ресурсів в майбутньому, усвідомлюючи, що це реально лише при наявності стійкого виробництва. Тому грамотне визначення меж податкового навантаження передбачає розвиток виробництва і забезпечення умов зростання податкових надходжень. Пригнічуючи ж економіку, пригнічуючи платника податків, податок знищує власну основу і самого себе. В контексті цього стає актуальним дослідження питання оптимізації оподаткування. Метою є визначення особливостей формування податкового планування для цілей оптимізації оподаткування та підвищення системи економічного управління на підприємстві. Матеріали та методи: теоретичне обґрунтування базується на спостереженнях, групуваннях, аналітичній роботі під час визначення організації податкового планування. Теоретичною основою стали методологічні і загальнонаукові принципи проведення комплексних досліджень. В ході роботи було визначено чіткий перелік облікових інструментів та схем податкової оптимізації. Встановлено, що визначення

діяльності податкового планування залежить від фінансових можливостей підприємства, а також від суми податків, що сплачуються протягом періоду. Серед схем оптимізації, які були розглянуті в певних ситуаціях будуть ухиленням від сплати податків. При оптимізації податкових платежів можуть вирішуватися й інші фінансові завдання, метою яких є не зниження податків, а збільшення доходів суб'єкта господарювання після сплати податків. Адже оптимізація одних податків може призвести до збільшення інших, а згодом до штрафних санкцій з боку податкових органів. Інакше кажучи, штрафні санкції можуть перевищити плановий ефект від оптимізації податків. Отже, оптимізаційні схеми передбачають багатоваріантний підхід до розгляду наслідків зменшення податкового навантаження, що передбачає ефективність їх використання залежно від ситуації. Наукова значущість роботи полягає у систематизації теоретичних та практичних положень податкової оптимізації підприємства. Цінність проведеного дослідження полягає у тому, що його матеріали стануть у нагоді для подальшого вивчення специфіки оптимізації податків на підприємствах.

**Ключові слова:** податки, оподаткування, податкова оптимізація, схеми податкової оптимізації, податкове планування, податковий облік, податковий аналіз.

## УЧЕТНЫЕ ИНСТРУМЕНТЫ И СХЕМЫ НАЛОГОВОЙ ОПТИМИЗАЦИИ

Тучак Татьяна Владимировна

*Университет государственной фискальной службы Украины  
г. Ирпень, Украина*

Проблема определения границ налогового бремени существовала всегда. Поскольку время существования государства не ограничивается никакими календарными, а тем более налоговыми сроками, у государства сохраняется постоянная потребность в налоговых доходах, и оно обязано принимать во внимание необходимость восстановления своих финансовых ресурсов в будущем, осознавая, что это реально только при наличии устойчивого производства. Поэтому грамотное определение границ налоговой нагрузки предусматривает развитие и обеспечение условий роста налоговых поступлений. Подавляя же экономику, подавляя налогоплательщика, налог уничтожает собственную основу и самого себя. В контексте этого становится актуальным исследование вопроса оптимизации налогообложения. Целью является определение особенностей формирования налогового планирования для целей оптимизации налогообложения и повышения системы экономического управления на предприятии. Материалы и методы: теоретическое обоснование базируется на наблюдениях, группировках, аналитической работе при определении организации налогового планирования. Теоретической основой стали методологические и общенаучные принципы проведения комплексных исследований. В ходе работы были определены четкий перечень учетных инструментов и схем налоговой оптимизации. Установлено, что определение деятельности налогового планирования зависит от финансовых возможностей предприятия, а также от суммы налогов, уплачиваемых в течение периода. Среди схем оптимизации, которые были рассмотрены в определенных ситуациях будут уклонением от налогов. При оптимизации налоговых платежей могут решаться и другие финансовые задачи, целью которых является не снижение налогов, а увеличение доходов предприятия после уплаты налогов. Ведь оптимизация одних налогов может привести к увеличению других, а затем штрафных санкций со стороны налоговых органов. Иначе говоря, штрафные санкции могут превысить плановый эффект от оптимизации налогов. Итак, оптимизационные схемы предусматривают многовариантный подход к рассмотрению последствий уменьшения налоговой нагрузки, что предполагает эффективность их использования в зависимости от ситуации. Научная значимость работы заключается в систематизации теоретических и практических положений налоговой

оптимизации предприятия. Ценность проведенного исследования заключается в том, что его материалы будут полезны для дальнейшего изучения специфики оптимизации налогов на предприятиях.

**Ключевые слова:** налоги, налогообложения, налоговая оптимизация, схемы налоговой оптимизации, налоговое планирование, налоговый учет, налоговый анализ.

---

## FINANCE, BANKING AND INSURANCE

---

Received:  
8 October, 2019  
1st Revision:  
12 November, 2019  
Accepted:  
15 November, 2019

UDC: 336.7: 339.7

DOI <https://doi.org/10.26661/2522-1566/2019-4/10-02>

### COMPARISON WORLDWIDE AND UKRAINIAN PRACTICE OF BANK STRESS TESTING

**Andrii Ramskyi**  
*Boris Grinchenko University*  
*Kyiv, Ukraine*

**Olena Sobolieva-Tereshchenko**  
*Boris Grinchenko University*  
*Kyiv, Ukraine*

**Valeriia Zharnikova**  
*Kyiv National University of*  
*Trade and Economics*  
*Kyiv, Ukraine*

ORCID: [0000-0001-7368-697X](https://orcid.org/0000-0001-7368-697X)

ORCID: [0000-0002-1086-1192](https://orcid.org/0000-0002-1086-1192)

ORCID: [0000-0002-4335-5149](https://orcid.org/0000-0002-4335-5149)

\*Corresponding author email: [o.tereshchenko@kubg.edu.ua](mailto:o.tereshchenko@kubg.edu.ua)

**Abstract.** Early stress tests, used primarily as risk management tools, date back as far as the 1990s. Programs conducted by the IMF, Bank of England, Dodd-Frank Act, Bank of Japan, Swiss Financial Market Supervisory Authority and the World Bank promoted the used of stress tests. The basic idea the introduction of stress testing was to ensure that banks have sufficient capital to cover their risks, and to ensure that banks and banking systems are more resilient to economic and financial shocks. This paper provides an overview of the recent implementation of stress testing by regulatory agencies in the United States, the United Kingdom, Japan, Switzerland and the European Union. This article also gives an overview of the stress testing methodology developed by the National Bank of Ukraine and in accordance with Basel III recommendations. The **aim** of research is comparative evaluation of key aspects of system-wide stress tests in different finance systems: Euro area, United Kingdom, Switzerland, Japan, the United States and Ukraine, identifying identification of similarities and differences and prospects for the development in our country. To substantiate the theoretical positions and reasoning of the conclusions general scientific **methods** are used, including system, abstract-logical approach, as well as methods of formalization, analysis and synthesis of information, comparative analysis. During the study, a comparative analysis of the stress-testing methodology in six countries was conducted. The **scientific importance** of the work lies in the fact that on the basis of the conducted research it is possible to improve stress-testing of Ukrainian banking system based on best practices from developed countries. The **value** of the research is that it is increasingly necessary to used best practices of stress tests as a powerful tool in risk management, in micro prudential and macroprudential policies. Results of researches can to used not only in development methodology of stress-testing, but also in case-study of banking.

**Key words:** financial stability, Basel III, core capital, regulatory capital

**JEL Classification:** E37, E44, G10, G21, G28

## INTRODUCTION

The Basel Committee on Banking Supervision (BCBS) requires banks to conduct their own stress tests as an important risk management tool, earning bank management to adverse unexpected outcomes related to various risks and estimating capital that may be needed to weather a storm (BIS

Working Paper, 2009). Additionally, in Worldwide practice, stress tests came to be recognized as a powerful tool not only in risk management, but also in micro prudential and macroprudential policies. Despite the existence of studies of stress testing programs in various countries, few studies have been conducted on their comparative evaluation. This paper is one of the few studies.

## **LITERATURE REVIEW**

The issues of assessing the financial stability of a banking system are studied by a sufficient number of foreign and domestic scholars. In particular, foreign experts as Frame, Scott, Kristopher Gerardi, and Paul Willen (2015), Hirtle, Beverly, Anna Kovner, James Vickery, and Meru Bhanot (2016) effectively described research of the top-down methodologies, which actually applied to stress testing. The research on the bottom-up methods is limited but the models used at regulatory agencies still use “extreme yet plausible” exogenous macroeconomic scenarios to obtain stress-driven results using the loan-level data.

The policy of the stress-testing in the US, the UK, and the EU area wide describes in researches Wall, Larry (2014), Goldstein, Morris (2017), Kapinos, Pavel, Oscar Mitnik, and Christopher Martin (2018).

Domestic researchers in the sphere of risk management and in particular in the field of stress testing are represented by such scientists as I. M. Posokhov, O.O. Khodyreva (2018), Ramskyi A., Loiko V., Sobolieva-Tereshchenko O., Loiko D., Zharnikova V. (2017), Krykliy O., Luchko I., (2018). However, the fact that the use of stress testing is not wide-spread, makes it possible to judge about certain problems of the adaptation of the proposed methods to the current realities of the banking sector of the Ukrainian economy.

The purpose of the article is the study of special features and approaches to conducting stress testing of the banks in Ukraine, in the comparison with Worldwide practice.

## **PAPER OBJECTIVE**

The stress tests as a powerful tool in risk management, in micro prudential and macroprudential policies is important direction of the world economy financial stability. The purpose of the article is identifying of similarities and differences of system-wide stress tests in finance systems Euro area (EU), United Kingdom (GBR), Switzerland (CHE), Japan (JPN), the United States (USA), Ukraine (UA) and determining prospects for the financial stability improvements in our country.

## **RESULT AND DISCUSSION**

The purpose of stress testing is to assess to what extent an individual bank, group of banks or the banking system as a whole are resistant to exceptional, but plausible shocks. Stress tests are aimed at determining the sensitivity of a bank's portfolio or the whole banking system to negative shocks, carrying out a forecast impact assessment of the effects of these shocks on financial indicators and capital of banks, and further defining measures to enhance the resilience of the banking system to such shocks.

The comparison of country practices showed that authorities design stress tests in different ways, additionally some employing more than one type of test. For better understand these differences and their niches covered practices on system-wide stress tests for banks in the Euro area, United Kingdom, Switzerland, Japan and the United States. In general, a stress test is composed of various modelling blocks, which interact with one another to produce the overall results. The practices on system-wide stress tests has been researched in the few main blocks, which identifies in the setup of any stress test. These blocks are governance (essence and coverage of



exercise), implementation (scenario and disclosure). Each block comprises various elements, they are detailed in the tables below. The essence and coverage of exercise in system-wide stress tests for banks in the Euro area, United Kingdom, Switzerland, Japan, United States and Ukraine are summarized in table 1.

Table 1

*Comparison of key aspects of system-wide stress tests (ST)*

<b>GOVERNANCE (ESSENCE AND COVERAGE OF EXERCISE)</b>	
<b>Essence</b>	
EU	Bottom-up micro prudential exercise using individual bank data to primarily assess solvency risk.
GBR	Bottom-up micro prudential exercise. Banks submit their projections, Bank of England uses those submissions as a starting point for the stress test, with its own adjustments.
CHE	Top-down exercise mainly to assess the solvency risk of the two Swiss global systematically important banks and bottom-up micro prudential exercise using individual bank data and bank-internal models.
JPN	Top-down exercise using individual bank data, mainly to assess solvency risk. Bottom-up exercise for micro prudential risk assessment and for financial stability risk assessment for a macroprudential perspective.
USA	Dodd-Frank Act Stress Test top-down micro prudential exercise using individual bank and industry level data to assess the impact of stressful economic and financial market conditions on the solvency of banks with \$100 billion or more in total assets.
UA	Bottom-up micro prudential exercise using individual bank data. Individual stress-testing assessment of large exposures and portfolio- based assessment for other.
<b>Coverage of exercise</b>	
EU	Institutions 123 banking groups from 22 countries Sample of banks covering at least 50% of the national banking sector in each EU Member State in terms of total assets.
GBR	Include all PRA-regulated banks and building societies with total retail deposits greater than £50 billion. Institutions 7 major UK banks and building societies
CHE	Banks covered represent roughly about 80% of total assets in the Swiss banking sector and covers two Swiss G-SIBs on the basis of their systemic relevance to the global financial system and the Swiss economy.
JPN	Covers a total of roughly 370 financial institutions, G-SIBs banks (roughly about 70% of total assets in the banking sector), small community orientated banks, representing roughly 80 to 90% of total credit outstanding.
USA	35 banks represent approximately 80% of domestic bank assets. Among them, 6 banks with large trading operations and 8 banks with substantial trading or processing operations. 31 holding companies with total assets of \$50 billion.
UA	34 banks, 79% of assets in 2014, 20 of the largest banks in 2017, 25 banks, 93% of assets in 2018, 24 banks, 90% of assets in 2019, 29 banks, 93% of assets in 2020

*Source: compiled by the authors according to the ST source (EU, GBR, CHE, JPN, USA, UA).*

Typically, coverage of exercise in stress testing, which of the supervisory authority or the central bank represent roughly 80% of the total bank’s assets. However, in each case, the central bank and supervisors run a stress test exercise different number of institutions (for example, in UK 7 major banks and building societies, in Euro area in 123 banking groups from 22 countries).

As a rule, the supervisor or the central bank conduct stress testing. In some countries, the central bank and supervisors both run a stress test exercise, but independently of each other, with the central bank taking a mainly macroprudential perspective, and the supervisory authority - primarily a micro-prudential (for example, Switzerland and Japan). In other countries, the system-wide exercises are run by a single authority, which assumes both micro- and macroprudential functions (for example, Euro area, United Kingdom and United States). According to BCBS (2017), most supervisory authorities do not have a formal process for coordinating supervisory stress testing frameworks with other domestic authorities.

The number of banks covered and the overall share of total banking assets they represent; resources, both in terms of number of staff and their technical skills; data accessibility and access are crucial. Resources that can be devoted to stress exercises can impact sample coverage, the number of stress scenarios and modelling approaches.

The scenario and disclosure of exercise in system-wide stress tests for banks in the Euro area, United Kingdom, Switzerland, Japan, United States and Ukraine are summarized in table 2.

*Table 2*

*Comparison of key aspects of system-wide stress tests (ST)*

<b>IMPLEMENTATION (SCENARIO AND DISCLOSURE)</b>	
<b>Scenario</b>	
EU	One adverse scenario as well as a common baseline scenario
GBR	Baseline scenario, annual cyclical scenario, and an additional scenario intended to probe the resilience of the system to risks
CHE	Consists of a baseline and multiple stress scenarios (in the range of 3 to 5), which are evaluated in parallel, in order to avoid ex ante focus on a specific stress scenario.
JPN	Two stress scenarios are compared against a baseline scenario: a “tail event” scenario, assessing the stability of the banking system under severely adverse economic and financial conditions, and a “tailored event” scenario, which to investigate the vulnerability of the financial system under specific circumstances.
USA	Consists of one baseline and two adverse scenarios (adverse and severely adverse). The scenarios are based on narratives published by the Federal Reserve and the baseline scenario does not represent official forecasts.
UA	In 2014 two stress scenarios: baseline and pessimistic, during 2015-2017 baseline and macroeconomic scenarios, after 2018 - baseline and adverse scenarios
<b>Disclosure</b>	
EU	Banks have access to the assessment of their results during the QA phase, their final results are made public. Banks and the public get the same information, i.e. euro area level results with no country-specific or bank-specific results released.
GBR	Detailed disclosure of aggregate bank results (consolidated for the whole banking sector), capital-ratio data on individual banks.
CHE	Neither the scenarios nor the results of the exercises themselves are disclosed in quantitative terms to banks or the public. Results of the exercise are summarized in qualitative terms and disclosed to participating banks only, not to the public.
JPN	Results are publicly disclosed with no difference in disclosure between the banks and the public. Results of the exercise is to benchmark against individual banks’ stress test results from a micro prudential perspective.
USA	Both post-stress capital ratios and adjust them planning capital distributions are publicly disclosed at bank level. Also, information about its scenario design framework and detailing materials about model changes are published.
UA	In 2014 not made public, during 2015-2017 public only participating banks public, after 2018 - public with no difference in disclosure between the banks and the public.

*Source: compiled by the authors according to the ST source (EU, GBR, CHE, JPN, USA, UA).*

The script can be developed in at least three different ways. The first approach is to focus on macroeconomic variables. This requires the inclusion of shocks in some key macroeconomic variables (for example, asset prices, unemployment) that suffered the most during a recession. Shocks for other macro-financial variables are set consistently in terms of magnitude and direction, also in accordance with the narrative. The second approach to determining the shocks underlying the scenario is to obtain them by aggregating information about individual bank portfolios and the corresponding granular risk factors. This approach is typically used in bottom-up stress tests, and its applicability largely depends on the availability of relevant data. The third approach is reverse stress testing, in which the scenario is calibrated in such a way as to provide a given estimated probability

or the expected capital ratio after stress (for example, Breuer et al (2010)). While useful for identifying additional vulnerabilities in the future, this approach is difficult to implement and interpret (for example, due to the diversity and complexity of the interactions between types and risk factors).

The publications on the results of the stress testing exercise are very important for used as a risk management tool and an instrument of informing about business decisions. In most cases, information about stress testing results disclosure consolidated for the whole banking sector and summarized in qualitative terms. Usually, the results of the macroprudential stress testing are publicly disclosed with no difference in disclosure between the banks and the public. More disclosure information in Euro area and little disclosure information in Switzerland: in Euro area banks and the public get the same information with no country-specific or bank-specific results released. Traditionally, in Switzerland results of the stress testing exercise are only disclosed to participating banks, not to the public.

In Ukrainian practice, NBU disclose results of stress testing exercises and high-level methodologies and scenario specifics. In addition to disclosure by the authorities, the banks themselves can also decide to publish their results. The integration of Ukraine into the European banking system requires implementation effective tool for cleaning the Ukrainian banking system in accordance with compliance with the Basel III regulations. Since 2015 according to level disclosure stress testing exercise in Euro area Ukraine started to publish their results.

The macroeconomic stress testing of the Ukrainian banking system was first carried out in 2008 (with the participation of 17 banks), then in 2010. However, the results of these tests were not made public. We only know that the capital of 61 out of 176 banks had to be increased by a total of 40 billion UAH. However, the need for active use of stress-testing process arose in early 2014 due to a number of internal and external factors. Approaches to stress testing in the period from 2014 to 2020 are presented in Table 3.

Table 3

*History of stress testing of Ukrainian banking system*

Indicators	Stress testing					
	2014	2015-2016	2017	2018	2019	2020
Auditors	AC	NBU	NBU	AC, NBU	AC, NBU	AC, NBU
Date of diagnosis evaluation	01.01.14	01.04.15, 01.01.16, 01.04.16	01.01.17	01.01.18	01.01.19	01.01.20
Individual stress test	No	large borrowers	large borrowers	large borrowers	large borrowers	large borrowers
Portfolio stress test	Loans	Loans	Loans	Loans	Loans	Loans
Risks that are being analyzed	Credit, currency	Credit, currency	Credit, currency	Credit, market	Credit, interest, currency	Credit, interest, currency
Result	9 banks passed stress testing. Need of capital > 50 billion UAH.	34 banks needed capitalization. 5 banks are not solvent.	20 largest banks had to bring to positive value the capital adequacy ratio.	The NBU imposed on banks 15 fines > 67.6 million UAH.	13 banks needed capitalization of 42.1 billion UAH under the adverse scenario.	-
Liquidated banks	33	32	22	9	1	-

Source: compiled by the authors according to the ST source (NBU).

According to the historical retrospective data, in the formation of the strategy of banking stress testing in Ukraine two stages of assessing the financial stability of the banking system are distinguished as follows: the first stage – 2014-2017 and the second stage – 2018 to date.

The first stage is characterized by a set of diverse approaches to assessing the financial stability of banks using the basic macroeconomic scenario of stress tests. For the first time, the banking system for assessing the financial sustainability of banks began to analyze not only the banks' compliance with banking standards, but also to assess the macroeconomic environment. The specific features of this stage were significant fluctuations in the number of banks subject to stress testing, floating dates for assessing the diagnosis of banks, analysis of credit and currency risks. But the most important factor was practical non-disclosure of the results of stress testing for wide public.

The second stage of banking stress testing strategy in Ukraine is linked to the NBU Board Resolution No. 141 as of December 22, 2017, which approved “The Regulations on the Evaluation of the Resilience of Banks and the Banking System of Ukraine” (NBU, 2017). The second stage is characterized by a higher consistency compared with the first stage of the banking stress testing strategy in Ukraine. An annual assessment of the resilience of banks and the banking system of Ukraine initiated by the NBU unified the size of the banks' sample for research, the general approach to selecting auditors, the dates and periods of assessment of diagnosis, macroeconomic scenarios, individual and portfolio stress testing, types of risks analyzed. But the most important was the legislative approval of the publication of the results of stress testing.

## CONCLUSION

Asset quality assessment and stress testing are a permanent practice of leading international financial organizations. It provides an opportunity to prevent excessive accumulation of systemic risks and prepare banks for possible future crises.

The study of specific features and approaches to stress testing of banks in Ukraine with comparison worldwide practice, permitted to identify the following aspects of formation of the strategy of banking stress testing:

- Stress testing methodology developed by the NBU in accordance with the implementation stages of Basel III recommendations and similar to the EU system.
- Stress testing models, results and frameworks should be reviewed regularly in accordance with the worldwide best practices, especially United Kingdom, Switzerland.
- Stress testing results should be made public and used as a risk management tool and an instrument of informing about business decisions.

Reliable and detailed information on banks' resilience via stress tests can help anchor market assessment of banks, provided that comprehensive and sufficiently severe adverse scenarios are used. Combined with robust follow-up for banks that do poorly in the stress test and credible and well-funded support tools, disclosure can make stress tests useful tools for respond to a crisis.

The conclusions and proposals received on the basis of the study of Ukraine's and worldwide experience will not only improve the financial stability of Ukrainian banking system, but ultimately contribute to overall financial stability.

## REFERENCES

- Bank for International Settlements (2009). “Principles for sound stress testing practices and supervision”. Available at: <http://www.bis.org/publ/bcbs155.pdf> (accessed 07 October 2019).
- Bank of England (2017). “Stress testing the UK banking system: 2017 results”. Available at: <https://www.bankofengland.co.uk/-/media/boe/files/stress-testing/2017/stress-testing-the-uk-banking-system-2017-results> (accessed 07 October 2019).

Ramskyi, A., Sobolieva-Tereshchenko, O. and Zharnikova, V. (2019) “Comparison worldwide and Ukrainian practice of bank stress testing”, *Management and entrepreneurship: trends of development*, 4 (10), pp. 19-28. Available at: <https://doi.org/10.26661/2522-1566/2019-4/10-02>

- Bank of Japan (2017), “Macro stress testing in the financial system report”. Available at: <https://www.boj.or.jp/en/research/brp/fsr/data/fsrb170421a.pdf> (accessed 07 October 2019).
- Basel Committee on Banking Supervision (2011). “Basel III: A global regulatory framework for more resilient banks and banking systems”. Available at: <https://www.bis.org/publ/bcbs189.htm> (accessed 07 October 2019).
- Breuer, T., Mencia, J., Jandacka, M. and Summer, M. (2010). “A Systematic Approach to Multi-Period Stress Testing of Portfolio Credit Risk”, *Journal of Banking & Finance*, issue 2(36), pp. 332-340.
- NBU (2019). “Description of stress testing banks in 2019”. Available at: [https://old.bank.gov.ua/control/uk/publish/article?art\\_id=89024933](https://old.bank.gov.ua/control/uk/publish/article?art_id=89024933) (accessed 07 October 2019), (in Ukrainian)
- Decree of Board Of National Bank Of Ukraine (2017) “On approval of Regulation on carrying out of assessment of stability of banks and banking system of Ukraine”. Available at: <https://zakon.rada.gov.ua/laws/show/v0141500-17> (accessed 07 October 2019), (in Ukrainian)
- Board of Governors of the Federal Reserve System (2016). “Dodd-Frank Act Stress Test 2016: Supervisory Stress Test Methodology and Results”, [Online], (in English), available at: <https://www.federalreserve.gov/newsevents/pressreleases/files/bcreg20160623a1.pdf> (Accessed 07 October 2019).
- Frame, W.S., Gerardi, K. and Willen, P. (2015). “The Failure of Supervisory Stress Testing: Fannie Mae, Freddie Mac, and OFHEO”, *SSRN Electronic Journal*. Available at: <http://dx.doi.org/10.2139/ssrn.2637090> (accessed 07 October 2019).
- Hirtle, B. et al. (2016). “Assessing financial stability: The Capital and Loss Assessment under Stress Scenarios (CLASS) model”, *Journal of Banking & Finance*, 69, pp.S35-S55. Available at: <http://dx.doi.org/10.1016/j.jbankfin.2015.09.021> (accessed 07 October 2019).
- Kapinos, P.S., Mitnik, O.A. and Martin, C.A. (2015). „Stress Testing Banks: Whence and Whither?”, *SSRN Electronic Journal*. Available at: <http://dx.doi.org/10.2139/ssrn.2710846> (accessed 07 October 2019).
- Krykliy, O. et al. (2018). “Model of Stress-testing of Banks’ Liquidity Risk in Ukraine”, *Financial Markets, Institutions and Risks*, issue 2 (2), pp.123-132. Available at: [http://dx.doi.org/10.21272/fmir.2\(2\).123-132.2018](http://dx.doi.org/10.21272/fmir.2(2).123-132.2018) (accessed 08 October 2019).
- Posohov, I.M. and Khodyrieva, O.O. (2018). “Stress-testing as the actual tool of risk management in the modern banking system of Ukraine”, *Financial and credit activity: problems of theory and practice*, 1(24), pp.53-62. Available at: <http://dx.doi.org/10.18371/fcaptop.v1i24.127803> (accessed 08 October 2019), (in Ukrainian).
- Ramskyi, A., Loiko, V., Sobolieva-Tereshchenko, O., Loiko, D., and Zharnikova, V. (2017). “Integration of Ukraine into the European banking system: cleaning, rebooting and Basel III”, *Journal of Banks and Bank Systems*, issue 12(4), 163-174. Available at: [http://dx.doi.org/10.21511/bbs.12\(4-1\).2017.05](http://dx.doi.org/10.21511/bbs.12(4-1).2017.05) (accessed 07 October 2019).
- Wall, L.D. (2013). “Measuring Capital Adequacy Supervisory Stress Tests in a Basel World”, *SSRN Electronic Journal*. Available at: <http://dx.doi.org/10.2139/ssrn.2579897> (accessed 08 October 2019).

## СПИСОК ВИКОРИСТАНИХ ДЖЕРЕЛ

- Bank for International Settlements (2009), “Principles for sound stress testing practices and supervision”, URL: <http://www.bis.org/publ/bcbs155.pdf> (дата звернення: 07.10.2019).
- Bank of England (2017), “Stress testing the UK banking system: 2017 results”, URL: <https://www.bankofengland.co.uk/-/media/boe/files/stress-testing/2017/stress-testing-the-uk-banking-system-2017-results> (дата звернення: 07.10.2019).
- Bank of Japan (2017), “Macro stress testing in the financial system report”, URL: <https://www.boj.or.jp/en/research/brp/fsr/data/fsrb170421a.pdf> (дата звернення: 07.10.2019).

- Basel Committee on Banking Supervision (2011), "Basel III: A global regulatory framework for more resilient banks and banking systems", URL: <https://www.bis.org/publ/bcbs189.htm> (дата звернення: 07.10.2019).
- Breuer, T., Mencia, J., Jandacka, M. and Summer, M. (2010). "A Systematic Approach to Multi-Period Stress Testing of Portfolio Credit Risk", *Journal of Banking & Finance*, issue 2(36), pp. 332-340, (in English).
- НБУ. Національний банк оприлюднив підхід до стрес-тестування банків у 2019 році. URL: [https://old.bank.gov.ua/control/uk/publish/article?art\\_id=89024933](https://old.bank.gov.ua/control/uk/publish/article?art_id=89024933) (дата звернення: 07.10.2019).
- НБУ. "Про здійснення оцінки стійкості банків і банківські системи України", URL: <https://zakon.rada.gov.ua/laws/show/v0141500-17> (дата звернення: 07.10.2019).
- Board of Governors of the Federal Reserve System (2016), "Dodd-Frank Act Stress Test 2016: Supervisory Stress Test Methodology and Results", URL: <https://www.federalreserve.gov/newsevents/pressreleases/files/bcreg20160623a1.pdf> (дата звернення: 07.10.2019).
- Frame, Scott, Kristopher Gerardi, and Paul Willen (2015). "The Failure of Supervisory Stress Testing: Fannie Mae, Freddie Mac, and OFHEO", URL: <https://www.frbatlanta.org/research/publications/wp/2015/03.aspx> (дата звернення: 07.10.2019).
- Hirtle, B. et al. (2016). "Assessing financial stability: The Capital and Loss Assessment under Stress Scenarios (CLASS) model", *Journal of Banking & Finance*, 69, pp.S35-S55. Available at: <http://dx.doi.org/10.1016/j.jbankfin.2015.09.021> (accessed 07 October 2019).
- Beverly, H., Kovner, A., Vickery, J., and Bhanot M. (2016). "Assessing financial stability: The Capital and Loss Assessment under Stress Scenarios (CLASS) Model", *Journal of Banking and Finance*, issue 69, pp.35-55. (in English).
- Kapinos, P., Oscar M., and Christopher M. (2018). "Stress Testing Banks: Whence and Whither", *Journal of Financial Perspectives*, issue 5(1), pp. 68-87. (in English).
- Krykliy O., Luchko I., (2018). "Model of Stress-testing of Banks' Liquidity Risk in Ukraine", *Financial Markets, Institutions and Risks*, issue 2 (2), pp.123-132 (in English).
- Посохов І. М., Ходирєва О. О. Стрес-тестування як актуальний інструмент ризик менеджменту сучасної банківської системи України. Фінансово-кредитна діяльність: проблеми теорії та практики. 2018. Вип.24. С. 53-61.
- Ramskyi A., Loiko V., Sobolieva-Tereshchenko O., Loiko D., and Zharnikova V. (2017). "Integration of Ukraine into the European banking system: cleaning, rebooting and Basel III", *Journal of Banks and Bank Systems*, issue 12(4), 163-174, URL: [http://dx.doi.org/10.21511/bbs.12\(4-1\).2017.05](http://dx.doi.org/10.21511/bbs.12(4-1).2017.05) , (дата звернення: 07.10.2019).
- Wall, Larry (2014). "Measuring Capital Adequacy: Supervisory Stress-Tests in a Basel World". *Journal of Financial Perspectives*, issue 2(1), pp. 85-94. (in English).

## ПОРІВНЯННЯ СВІТОВОЇ Й УКРАЇНСЬКОЇ ПРАКТИКИ БАНКІВСЬКОГО СТРЕС ТЕСТУВАННЯ

**Рамський Андрій  
Юрійович**

*Університет Бориса Грінченка  
Київ, Україна*

**Соболева-Терещенко Олена  
Анатоліївна**

*Університет Бориса Грінченка  
Київ, Україна*

**Жарникова Валерія  
Владиславівна**

*Київський національний  
торгово-економічний  
університет, Київ, Україна*

Перші стрес-тести, які використовувалися переважно в якості інструментів управління ризиками, датуються 1990-ми роками. Програми, впроваджені МВФ, Банком Англії, Законом Додда-Франка, Банком Японії, Швейцарським органом з нагляду за фінансовим ринком і



Світовим банком, сприяли подальшому використанню стрес-тестів. Основна ідея введення стрес-тестування полягала в забезпеченні банків достатнім капіталом для покриття своїх ризиків і зростанні стійкості банків і банківських систем до економічних і фінансових потрясінь. У даній статті узагальнено досвід стрес-тестування регулюючими органами в Сполучених Штатах, Великобританії, Японії, Швейцарії та Європейському союзі. У цій статті також дається огляд методології стрес-тестування, розробленої Національним банком України відповідно до рекомендацій Базель III. Метою дослідження є порівняльна оцінка ключових аспектів загальносистемних стрес-тестів в різних фінансових системах: зоні євро, Великобританії, Швейцарії, Японії, США та України, виявлення подібностей, відмінностей і перспектив подальшого розвитку. Для обґрунтування теоретичних положень і висновків використовуються загальнонаукові методи, в тому числі системний, абстрактно-логічний підхід, а також методи формалізації, аналізу та узагальнення інформації, порівняльний аналіз. В ході дослідження було проведено порівняльний аналіз методології стрес-тестування в шести країнах. Наукова значимість роботи полягає в систематизації передового досвіду стрес-тестування розвинених країн та розробці на їх основі рекомендацій щодо поліпшення методики стрес-тестів банківської системи України. Цінність дослідження полягає в обґрунтуванні необхідності використовувати кращі методи стрес-тестів в якості потужного інструменту управління ризиками в мікропруденціальній і макропруденційних політиці. Результати досліджень можуть бути використані не тільки в розробці методології стрес-тестування, але і в тематичному дослідженні банківської справи.

**Ключові слова:** фінансова стійкість, Базель III, основний капітал, регулятивний капітал

## СРАВНЕНИЕ МИРОВОЙ И УКРАИНСКОЙ ПРАКТИКИ БАНКОВСКОГО СТРЕСС ТЕСТИРОВАНИЯ

**Рамский Андрей  
Юрьевич**

*Университет Бориса  
Гринченко  
Киев, Украина*

**Соболева-Терешенко Елена  
Анатольевна**

*Университет Бориса  
Гринченко  
Киев, Украина*

**Жарникова Валерия  
Владиславовна**

*Киевский национальный  
торгово-экономический  
университет, Киев, Украина*

Ранние стресс-тесты, используемые в основном в качестве инструментов управления рисками, датируются 1990-ми годами. Программы, проводимые МВФ, Банком Англии, Законом Додда-Франка, Банком Японии, Швейцарским органом по надзору за финансовым рынком и Всемирным банком, способствовали использованию стресс-тестов. Основная идея введения стресс-тестирования состояла в обеспечении банков достаточным капиталом для покрытия своих рисков и сделать так, чтобы банки и банковские системы были более устойчивыми к экономическим и финансовым потрясениям. В данной статье обобщен опыт недавнего стресс-тестирования регулирующими органами в Соединенных Штатах, Великобритании, Японии, Швейцарии и Европейском союзе. В этой статье также дается обзор методологии стресс-тестирования, разработанной Национальным банком Украины и в соответствии с рекомендациями Базель III. Целью исследования является сравнительная оценка ключевых аспектов общесистемных стресс-тестов в различных финансовых системах: зоне евро, Великобритании, Швейцарии, Японии, США и Украине, выявление сходств, различий и перспектив дальнейшего развития. Для обоснования теоретических положений и выводов используются общенаучные методы, в том числе системный, абстрактно-логический подход, а также методы формализации, анализа и обобщения информации, сравнительный анализ. В ходе исследования был проведен сравнительный анализ методологии стресс-тестирования в шести странах. Научная значимость работы

состоит в систематизации передового опыта стресс-тестирования развитых стран и разработке на их основе рекомендаций по улучшению методики стресс-тестов банковской системы Украины. Ценность исследования заключается в обосновании необходимости использовать лучшие методы стресс-тестов в качестве мощного инструмента управления рисками в микропруденциальной и макропруденциальной политике. Результаты исследований могут быть использованы не только в разработке методологии стресс-тестирования, но и в тематическом исследовании банковского дела.

**Ключевые слова:** финансовая устойчивость, Базель III, основной капитал, регулятивный капитал

---

## MANAGEMENT

---

Received:

15 October, 2019

1st Revision:

17 November, 2019

Accepted:

20 November, 2019

UDC: 331.1

DOI <https://doi.org/10.26661/2522-1566/2019-4/10-03>

### CORPORATE SOCIAL RESPONSIBILITY SYSTEM MANAGEMENT OF THE MODERN ENTERPRISE

**Viktor Shyshkin**

*Zaporizhzhia National University*

*Zaporizhzhia, Ukraine*

ORCID: [0000-0001-8620-4722](https://orcid.org/0000-0001-8620-4722)

**Oksana Onyshchenko**

*Zaporizhzhia National University*

*Zaporizhzhia, Ukraine*

ORCID: [0000-0002-3009-3856](https://orcid.org/0000-0002-3009-3856)

**Vadym Petrov**

*Kharkiv National Agrarian University named*

*after V.V. Dokuchaev*

*Kharkiv, Ukraine*

ORCID: [0000-0002-1693-2545](https://orcid.org/0000-0002-1693-2545)

**Tamila Aliieva-Yaroshenko**

*Zaporizhzhia National University*

*Zaporizhzhia, Ukraine*

ORCID: [0000-0002-3682-236X](https://orcid.org/0000-0002-3682-236X)

\*Corresponding author email: [oksana.onishchenko.znu@gmail.com](mailto:oksana.onishchenko.znu@gmail.com)

**Abstract.** The article **aims** to define the role of corporate social responsibility (CSR) system management in entrepreneurial activity; it analyzes the main directions and levels of corporate social responsibility and proposes measures for the phased implementation of CSR and ways to increase the level of corporate social responsibility of Ukrainian enterprises. It is proved that the state of development of corporate social responsibility has a direct influence on the efficiency of functioning of business processes of the enterprise and the level of staff satisfaction with work in the organization. As a **result**, it was determined that the prerequisite for creating an effective system of implementation of corporate social responsibility in Ukraine is to create the conditions for effective communication between government, society and business, to develop a national overall strategy for the development of corporate social responsibility, to create common information resource to ensure awareness of business entities in the field of practical issues of corporate social responsibility. **The practical value** of implementing a corporate social responsibility strategy in Ukraine lies in its resource potential, which, in the context of the domestic business environment, is a significant reserve for ensuring the functioning of the entire social sphere. As the experience of domestic entrepreneurship shows, organizations are ready to take part in solving social problems if the state directs its efforts and resources to create a system of support for social activity of business and appropriate infrastructure.

**Keywords:** corporate social responsibility, social development, stakeholders, business reputation, charity, personnel management, consumer loyalty, environmental safety.

**JEL Classification:** A14, D64, D71

### INTRODUCTION

In the globalization process the most competitive companies in the world are those for whom corporate social responsibility is one of the priority corporate strategies for successful business development. The global model of social responsibility is based on ethical business behavior. In

Ukraine the main impetus for the implementation of corporate social responsibility policy among domestic enterprises is moral considerations, and the main obstacles to the implementation of social responsibility policy are the lack of finance, unstable political situation in the country, tax pressure from the Ukrainian authorities, armed conflict in Eastern Ukraine and the imperfection of the legal framework that could facilitate the effective implementation of this activity.

Therefore, the need for further development of CSR by domestic companies due to the deepening of globalization processes and the intensification of competition in the domestic market, as well as the benefits of forming and using this concept in the economic entrepreneurship of small and medium-sized businesses in Ukraine is currently particularly important.

## **LITERATURE REVIEW**

Theoretical questions on the use of the modern concept of social responsibility in international business are covered in the works of V.P. Mazurenko and O.Yu. Zasenka (2012), V. Rovenskaya and V. Linnik (2016), O.P. Gogula and I.P. Kudina (2008). Barriers and perspectives for the development of corporate social responsibility of Ukrainian business were considered in the research by L. Bukharina and O. Onyshchenko (2019), V. Shyshkin (2019), A. Zinchenko and M. Saprykina (2017).

## **PAPER OBJECTIVE**

The purpose of the study is to analyze the main tendencies, barriers and prospects of development of corporate social responsibility in the management system of the modern Ukrainian enterprises and to substantiate the expediency of using CSR experience in domestic business.

## **RESULTS AND DISCUSSION**

The concept of “corporate social responsibility” was formulated by UN Secretary-General Kofi Annan in 1999. There is no single definition for this term. In the scientific literature, corporate social responsibility is regarded as the application of responsible business practices that bring beneficial effects to society and business, contributing to social, economic and environmentally sustainable development by minimizing the negative and maximizing the positive impact of business on society.

It also means the achievement of business success in ways that are environmentally friendly and that take into account the moral and ethical principles of the community. In addition, corporate social responsibility is the responsible attitude of an enterprise to its products, staff, consumers and partners, an active social position of the company, which is expressed in the constant maintenance of a balance between the needs of society and the activity of the organization – i.e. harmonious coexistence, interaction and constant dialogue with society in addressing the most pressing social issues.

In general, CSR should be understood as a policy that is purposefully and deliberately chosen by an organization to not only function and make profit, but also to promote voluntarily the development of modern society (V. Mazurenko and O. Zasenka, 2012). Therefore, the importance of corporate social responsibility in the management system of a modern enterprise cannot be underestimated. Recent research identifies five types of systemic representations of CSR (Table 1):

Table 1

*Typology of system representations of CSR*

Type of system representation	Basic conception
Microscopic	Understanding the system as a set of observable and indivisible quantities (elements)
Functional	Understanding the set of actions (functions) that must be performed to fulfil the goals of the system's functioning
Macroscopic	Characterization of the system as a whole, which is in the "system surroundings" (environment)
Hierarchical	Understanding the whole system as a collection of hierarchically linked subsystems
Procedural	Characteristic of the change of the system state over time

*Source: compiled by authors*

When building an effective corporate social responsibility management system, it is advisable to identify requirements for evaluating the degree of its organization. These requirements include:

- system dynamism;
- determinability of system elements;
- availability of managing and managed parameters in the system;
- presence of channels of communication and feedback.

Dynamics in the CSR system means the ability to remain in a certain stable state under the influence of external and internal factors of influence. Determinability of system elements is expressed in the ability to interact by the managing bodies (departments), in which the activity of one element affects other elements of the system.

A managing parameter in the CSR system is considered to be an element that enables the coordination of the activities of individual elements and the system as a whole. The controlling parameter does not affect the management influence of the entity, but constantly controls its status.

The presence of direct and feedback channels in the corporate social responsibility system regulate the activities of the management apparatus for receiving and transmitting the information flow in the development of management decisions.

The availability of feedback channels is a fundamental requirement, as CSR is firstly and foremost a system based on continuous communication between the organization and stakeholders.

Main areas of corporate social responsibility are:

- 1) organizational management;
- 2) human rights;
- 3) labor practices;
- 4) environment;
- 5) honest business practices;
- 6) problems related to consumers;
- 7) participation in the life of communities and their development.

Therefore, should be noted that the phenomenon of social responsibility gives socially-oriented entrepreneurship a moral and ethical right to exercise public authority, and the legislative regulation of social and economic activity of enterprises legitimizes the corresponding legal status. Accordingly, social enterprises aiming at meeting the needs of the society and participating in the process of self-management of the social system are endowed with public authority not only by

legislative acts, but also by their very essence (O. Onyshchenko and V. Shyshkin, 2019).

The results of international studies show that corporate social responsibility enables organizations to enhance the image of the company and its business reputation, establish trusting relationships with society and the state. According to a Cone / Roper survey, 78% of consumers surveyed say they are more likely to buy products that are associated with a social initiative they care about, and 66% are ready to change their mind about their brand. According to the Corporate Social Responsibility Monitor, CSR factors shape the company's image by 49%, its brand by 35%, and its financial position by only 10% (L. Bobko, 2016)

As a result of the activities of the Advisory Council on the drafting of the CSR National Strategy in Ukraine under the Verkhovna Rada Committee on Industrial and Regulatory Policy and Entrepreneurship, which was formed in 2009 after the committee hearings on “Development of CSR: Ukrainian Perspectives”, the process of formalizing understanding corporate social responsibility in our country has become the driving force behind the change in the social perception of this concept. There are many approaches to classifying CSR stages in the organization, but there are two main ones. In Fig. 1 the classification of stages of corporate social responsibility of business according to the first approach is presented:

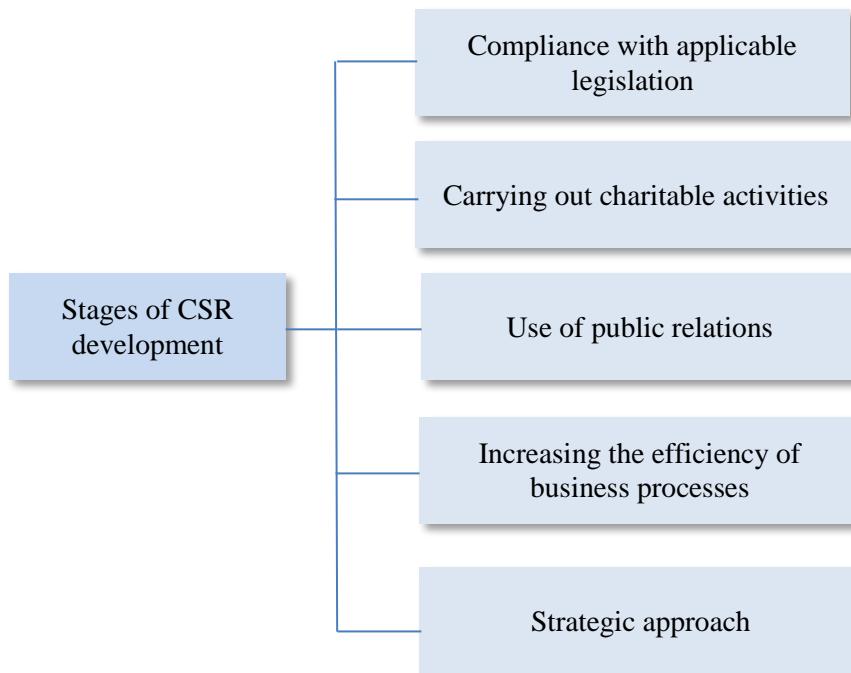


Fig. 1. Stages of CSR development in enterprises

Source: modified after A. Kretova and N. Berezovskaya (2011)

Today, domestic enterprises are at different stages of developing the concept of corporate social responsibility, but most of them are in the second out of five possible stages – the stage of charitable activity (see Fig. 1.). This means that CSR in Ukraine needs to be developed until domestic enterprises are at the stage of strategic CSR development, when companies define their own social responsibility strategy, which covers the main business processes, medium and long-term goals, establishes an appropriate monitoring system, provides tools for achieving the goals and reporting on this activity.

The implementation of CSR policies and programs provides the development and implementation of a deliberate strategy for managing the organization, monitoring business processes and compiling open corporate social reporting.



Experience has shown that it will take more than five years to achieve the high impact of implementing a CSR strategy in the enterprise.

Another approach to classifying the stages of corporate social responsibility development is presented in Fig. 2:

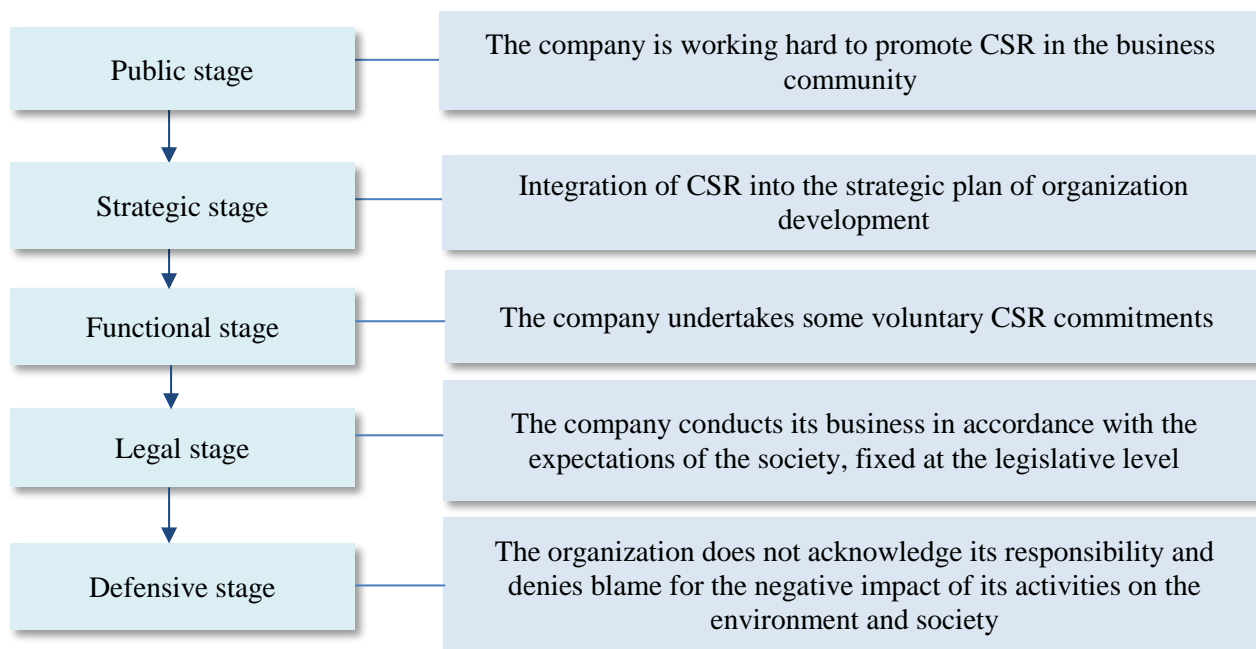


Fig. 2. Stages of CSR organization development

Source: modified after Vneshjekonombank, 2011.

In the practices of Ukrainian enterprises the stages of development of the corporate social responsibility system are the set of interrelated components and their elements, each of which performs a certain set of operations, whose influence of synergistic effect under certain conditions ensures achievement of the purpose of this mechanism (see Fig. 2).

Having analysed corporate social responsibility classification systems, it may be concluded that the formation of an effective CSR policy management system is a complex process that takes a long period of time and requires focused efforts by the company.

The stages of implementation of the CSR system at Ukrainian enterprises are shown in Fig. 3.

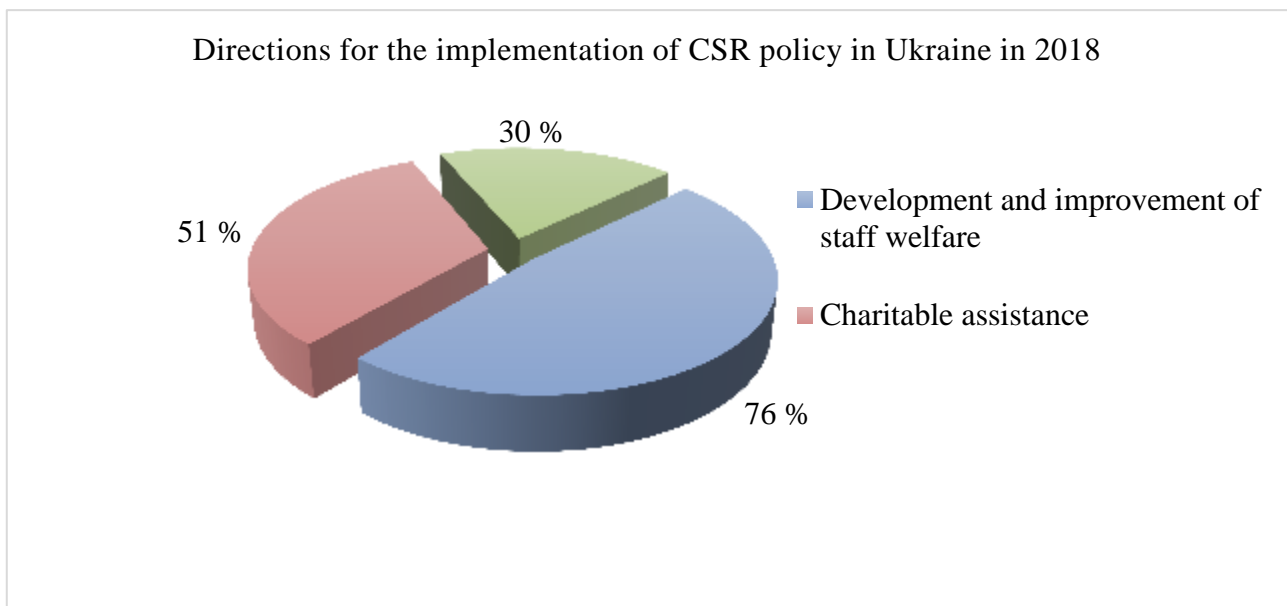
According to the Corporate Social Responsibility Business Survey conducted by the Kiev International Institute of Sociology, it was determined that the most important impetus for the implementation of CSR programs and activities is moral considerations, and the main obstacles to the implementation of CSR policy are the lack of funds, unstable political situation in the country, the imperfection of the legal framework that would facilitate this activity, and the tax pressure (O.Onyshchenko, 2017).

According to N. O. Shira and A. I. Ivashchenko (2013) the stages of implementation of the CSR system at the Ukrainian enterprise are:

1. Stakeholder decision making on CSR strategy at the enterprise.
2. Correlation of CSR development strategy with the general enterprise strategy and the state social strategy.
3. Identification of stakeholder groups involved in corporate social relations (enterprise, state, society).

4. Formation of support mechanism and implementation of CSR functioning. That includes:
  - 4.1 Development and approval of CSR implementation directions.
  - 4.2 Developing and approving drafts of the CSR implementation mechanism.
  - 4.3 Realization of CSR implementation measures.
  - 4.4 Development and approval of necessary documentation.
  - 4.5 Monitoring of CSR implementation activities.
  - 4.6 Determination of persons responsible for the implementation of CSR.
  - 4.7 Training and consultation of responsible persons.
5. Monitoring the realization of CSR implementation directions. That includes:
  - 5.1 Formation of a set of criteria for assessing the quality and efficiency of CSR implementation.
  - 5.2 Evaluation of the effectiveness of CSR directions.
  - 5.3 Preparation and submission of CSR implementation reports.
  - 5.4 Publication of CSR implementation reports.

At the present stage of domestic business development, 83% of enterprises implement CSR policy. According to a survey of the popularity of CSR practices in Ukraine for the period of 2010-2018, the most common directions of CSR policy implementation in our country are the policy of development and improvement of staff welfare (76%), charitable assistance (51%) and assistance to the soldiers, displaced persons and residents of the area of anti-terrorism operation (ATO) in Ukraine (30%) (Fig. 3):



*Fig. 3. Directions for the implementation of CSR policy in Ukraine in 2018*

*Source: modified after M. Zinchenko and K. Saprykin (2017)*

According to business representatives in Ukraine, corporate social responsibility policy should focus on three key aspects: developing and improving staff welfare, investing in regional development and protecting and supporting consumers.

Corporate social responsibility is unfortunately not yet integrated into the organizational management system of Ukrainian companies, because only 50% of organizations that practice CSR have a well-defined corporate social responsibility strategy, 25% have the financial means to implement an effective system of CSR management and most organizations are looking for CSR

ideas and developing the strategy for their implementation.

The most common practices for implementing CSR programs and activities in Ukraine are presented in Table 2.

Table 2

*Practices for implementing CSR programs and activities in Ukraine*

Functional sphere	Activities	Main challenges and prospects for development
Labour relations	pay raise, white pay and bonuses	About 50% of companies provide employees with the ability of the flexitime or part time work and implement career development programs
Anti-corruption research	funding the anti-corruption measures, organization of an effective system for monitoring compliance with the Ukrainian legislation on corruption	More than a third of companies did not bribe to solve business problems, and as many of them are ready to donate a share of profits to fight corruption effectively
Environmental responsibility	implementation of energy-saving technologies and a waste sorting and recycling program	One third of Ukrainian enterprises did not take environmental measures
Consumer Relations	assuring the quality of the company's product, providing true information and advertising, staff training on customer service	Most companies have already developed a complaint management system and a hotline (contact centre) for consumers.
Development of regions	fundraising for charity and assistance in landscaping	51% of respondents take charity events

Thus, most multinational organizations that implement CSR consider moral considerations, increasing staff loyalty, increasing sales and parent company requirements the main impetus for the implementation of CSR measures. The main obstacles for companies that do not implement a corporate social responsibility strategy are the lack of incentives of public authorities and the lack of financial resources to implement CSR activities.

Most Ukrainian public and private companies understand CSR as:

- 1) assistance to ATO soldiers, residents and displaced persons from the ATO area;
- 2) support and protection of consumers;
- 3) investments in the development of the region;
- 4) combating corruption;
- 5) implementation of environmental safety measures.

The level of awareness of domestic enterprises with the OECD guidelines for multinational companies and awareness of the creation of a National Contact Point (NCP) at the Ministry of Economic Development and Trade of Ukraine is 15.5% and 8% respectively. Only a third of national companies that are aware of the existence of NCPs believe that it should consider stakeholder complaints about irresponsible business conduct. Despite this, the willingness to cooperate with the NCP when the company is complained is high enough (75% of companies that are aware of the NCP have declared their willingness to cooperate) (M. Zinchenko and K. Saprykin 2017).

Therefore, in order to create an effective system of implementation of corporate social responsibility in Ukraine, first of all, it is necessary to create conditions for effective communication between the government, society and business, to develop a national overall strategy for CSR development and to create a common information site to ensure the awareness of business entities in the field of practical CSR issues (V. Rovenska and V. Linnik, 2016).

According to the Strategy for Promoting the Development of Corporate Social Responsibility in Ukraine for the period up to 2020, the strategic value of CSR development of Ukrainian companies is determined by the following factors:

1. Low level of public awareness of the role of business.
2. Legal nihilism and the deformation of legal consciousness.
3. Low level of development of corporate culture of domestic organizations.
4. Terminological ambiguity.
5. Reporting of Ukrainian companies to the general public.
6. Controversial consideration of the interests of CSR.

The European experience in implementing CSR measures proves that the concept of corporate social responsibility not only enhances the reputation of the organization, but also opens up more opportunities for entry into new markets and provides a competitive advantage in the long run.

The development of a corporate social responsibility system in Ukrainian business will provide a number of benefits (Table 3).

*Table 3*

*Advantages of using CSR policy for Ukrainian enterprises*

Positive effect	The practice of foreign companies
Increasing financial stability of the enterprise	A large number of foreign studies have justified the direct relationship between the level of CSR policy and the improvement of financial performance of the organization. According to the observation of companies that have been practicing CSR programs and activities for 10 years, investment income increased by 9.8%, asset income – by 3.55%, sales revenue – by 2.79%, profit – by 63.5% in comparison with the socially irresponsible enterprises of the same sphere of activity
Increasing business reputation	A great variety of the product range on the market create the conditions under which the consumers' product choice is influenced not only by its quality and price, but also by the image of the organization as a socially responsible corporation
Increased sales and customer loyalty	Surveys conducted by European companies have shown that a significant proportion of buyers are ready to change manufacturer and a brand that would be associated with charitable causes. This figure is significant in many countries around the world. For example, in the UK, 86% of such consumers were found, in Belgium – 65%, in Australia – 73%. In 1998, 28% of Britons boycotted manufacturers' products with irresponsible corporate social policies
Reducing staff turnover, increasing staff loyalty	You are more likely to hire professionals to work in an organization that practices effective CSR policies. Reducing staff turnover makes it possible to reduce staff training costs
Reduction of pressure by inspection bodies	Being open to access to information about company principles and policies regarding its staff, environment and suppliers greatly enables the public authorities to understand the company's attitude to many topical issues. Therefore, those organizations that maintain openness and transparency in their activities have a more stable position in relations with public authorities

*Source: modified after O.P. Hohulia and I.P. Kudinova (2008)*

Therefore, in order to accelerate the development and modification of the CSR system of Ukrainian entrepreneurship, the following measures are necessary:

- 1) formation of a permanent body with the competence to analyze the current state of CSR of Ukrainian business and to promote its development;
- 2) to establish regional advisory councils on the implementation of the national strategy of corporate social responsibility of Ukrainian business or to authorize already existing regional

councils for such activity;

3) development of a national strategy for the development of corporate social responsibility of business in the country;

4) normalization of the system of preferences for organizations that implement CSR policy and implement directions of socially important programs;

5) modification of corporate governance and dissemination of CSR strategies at domestic state and non-state enterprises;

6) creation of a single corporate social responsibility portal to ensure awareness of the implementation of the national CSR strategy in Ukraine.

Thus, the Concept of the CSR National Strategy in Ukraine has competitive theoretical and practical value, given the low social efficiency of public spending, combined with the disadvantages of economic regulation.

The practical value of implementing a strategy lies in its resource potential, which, in the context of the domestic business environment, is a significant reserve for ensuring the functioning of the entire complex of social sphere. Domestic enterprises are ready to take part in solving social problems if the state directs its efforts and resources to create a system of support for social activity of business (O. Buben, 2011).

Today the business community in Ukraine is increasingly drawing attention to social projects that is expressed in venture investment and social investing. Furthermore, the sphere of social projects receives a greater response from the private sector. But it should be noticed that, in a crisis economic situation, such a financial model cannot be considered stable. This led to a rethinking of approaches to the implementation of private social projects in the country and gave impetus to the development of social entrepreneurship in Ukraine (L. Bukharina and O. Onyshchenko, 2019).

## CONCLUSION

Ukrainian enterprises are at different stages of CSR development, but most of them are in the stage of charitable activities.

Corporate social responsibility in Ukraine needs to be developed to the level of CSR strategic development, when companies define their own social responsibility strategy, covering the main business processes, medium and long-term goals, implement an appropriate monitoring system, provide tools for achieving the goals and reporting on these activities.

The main impetus for the implementation of CSR programs and activities is moral considerations, and the main obstacles called by company are: lack of funds; unstable political situation in the country; imperfection of the legal framework that would facilitate this activity; tax pressure.

In order to create an effective system of implementation of corporate social responsibility in Ukraine, first of all, it is necessary to create conditions for effective communication between the government, society and business, to develop a national overall strategy for CSR development, to create a single information resource for ensuring awareness of business entities in CSR practical issues.

## REFERENCES:

- Alter, S. K. (2006). *Social Enterprise Typology*. Virtue Ventures LLC, Washington, D.C. Available at: <https://canvas.brown.edu/courses/1073328/files/61028038> (accessed 22 September 2019).
- Bielefeld, W. (2009). "Issues in Social Enterprise and Social Entrepreneurship", *Journal of Public Affairs in Education*, 15(1), pp. 69-86. Available at: <https://www.tandfonline.com/doi/abs/10.1080/15236803.2009.12001544> (accessed 22 September 2019).
- Bobko, L.O. (2016). "Corporate social responsibility: current state of development in Ukraine",

- Economy. Management. Innovation*, issue 2 (17). Available at: [http://nbuv.gov.ua/UJRN/eui\\_2016\\_2\\_3](http://nbuv.gov.ua/UJRN/eui_2016_2_3) (accessed 12 November 2019), (in Ukrainian).
- Buben, O. (2011). "Polityka z korporatyvnoi sotsial'noi vidpovidal'nosti "Prykarpattiaoblenerho" na 2011-2014 r." [Prykarpattiaoblenergo Corporate Social Responsibility Policy 2011-2014]. Available at: <http://uadocs.exdat.com/docs2/index-593865.html> (accessed 18 September 2019) (in Ukrainian).
- Bukharina, L. and Onyshchenko, O. (2019). "Development of the impact investing ecosystem in Ukraine", *Investment Management and Financial Innovations*, 16(3), pp.217-228. Available at: [http://dx.doi.org/10.21511/imfi.16\(3\).2019.20](http://dx.doi.org/10.21511/imfi.16(3).2019.20) (accessed 12 October 2019).
- Gelbmann, U. (2010). "Establishing strategic CSR in SMEs: an Austrian CSR quality seal to substantiate the strategic CSR performance," *Sustainable Development*, 18(2), pp.90-98. Available at: <http://dx.doi.org/10.1002/sd.448>. (accessed 22 October 2019).
- Gidron, B. and Hasenfeld, Y. (Eds.) (2012). Introduction. In *Social Enterprises: An Organizational Perspective*. Basingstoke: Palgrave Macmillan.
- Gutsche, R. (2016). "Firm-Value Effects of CSR Disclosure and CSR Performance", *SSRN Electronic Journal*. Available at: <http://dx.doi.org/10.2139/ssrn.2821691>. (accessed 22 October 2019).
- Hohulia, O.P. and Kudinova, I.P. (2008), *Sotsialna vidpovidalnist biznesu* [The social responsibility of business], Vydavnytstvo Natsionalnoho universytetu bioresursiv ta pryrodokorystuvannya Ukrainy, Kyiv, Ukraine, 79 p. (in Ukrainian).
- Kickul, J., Gras, D., Bacq, S. and Griffiths, M. D. (2013). *Social Entrepreneurship*. An Elgar research collection. The international library of entrepreneurship, Edward Elgar Publishing Limited, Cheltenham, UK, Northampton, MA, USA.
- Korotkova, E. (2013). *Korporativnaya socialnaya otvetstvennost* [Corporate Social Responsibility]. Moscow: Izdatelstvo Yurajt, (in Russian)
- Kretova, A.V. and Berezovskaya, N (2011), "Development of corporate social responsibility in Ukraine with participation of the state: the mechanism of interaction", *Zbirnyk naukovykh prats' Donets'koho derzhavnoho universytetu upravlinnia*, vol. 194, pp. 115-123, (in Ukrainian).
- Mazurenko, V.P. and Zasenka, O. Yu. (2012). "The modern concept of corporate social responsibility in international business", *Efektivna ekonomika*, no. 6. Available at: <http://www.economy.nayka.com.ua/?op=1&z=1199>. (accessed 12 September 2019), (in Ukrainian).
- Onyshchenko, O. (2017). "The concept of public management for social enterprises in Ukraine", *Management and Entrepreneurship: Trends of Development*, 2(02), pp. 57-65. Available at: <https://management-journal.org.ua/index.php/journal/article/view/28> (accessed 12 October 2019).
- Onyshchenko, O. and Shyshkin, V. (2019). "A study of the socio-demographic portrait of a social entrepreneur as a representative of modern management", *Business Risk in Changing Dynamics of Global Village 2: Monograph* / Edited by Nataliia Marynenko, Pradeep Kumar, Iryna Kramar. Nysa: Publishing Office University of Applied Sciences in Nysa, Poland. pp.378-386. Available at: <http://elartu.tntu.edu.ua/handle/lib/29283> (accessed 11 November 2019).
- Rovenska, V. and Linnik, V. (2016) "Features of implementation of corporate social responsibility of business in Ukraine and Turkey", *Bulletin of the Azov State Technical Universit*, issue 32, T. 1, pp. 209-215. Available at: <http://eir.pstu.edu/handle/123456789/13136> (accessed 17 September 2019) (in Ukrainian).
- Shira, N. O. and Ivashchenko, A. I. (2013). "Directions of implementation of the system of corporate social responsibility in the practice of Ukrainian enterprises", *Efektivna ekonomika*, issue 11. Available at: <http://www.economy.nayka.com.ua/?op=1&z=2502> (accessed 11



Shyshkin, V., Onyshchenko, O., Petrov, V. and Aliieva-Yaroshenko, T. (2019) "Corporate social responsibility system management of the modern enterprise", *Management and entrepreneurship: trends of development*, 4 (10), pp. 29-42. Available at: <https://doi.org/10.26661/2522-1566/2019-4/10-03>

November 2019) (in Ukrainian).

Strategy for Promoting the Development of Corporate Social Responsibility in Ukraine for the period up to 2020. Available at: [http://svb.ua/sites/default/files/201309\\_strategiya\\_spriyannya\\_rozvitku\\_svb\\_v\\_ukrayini.pdf](http://svb.ua/sites/default/files/201309_strategiya_spriyannya_rozvitku_svb_v_ukrayini.pdf) . (accessed 12 October 2019) (in Ukrainian)

The Verkhovna Rada of Ukraine (2015). The Draft Law on Social Enterprises. Available at: [http://w1.c1.rada.gov.ua/pls/zweb2/webproc4\\_2?pf3516=2710&skl=9](http://w1.c1.rada.gov.ua/pls/zweb2/webproc4_2?pf3516=2710&skl=9) (accessed 12 October 2019) (in Ukrainian)

Ukrainian Social Investment Fund (2019). Official website. Available at: <http://usif.org.ua/en/aboutus.html> (accessed 10 October 2019).

Visser, W. (2012). "The Future of CSR: Towards Transformative CSR, or CSR 2.0", *SSRN Electronic Journal*. Available at: <http://dx.doi.org/10.2139/ssrn.2208101>. (accessed 12 October 2019)

Vneshjekonombank (2011), "Korporativnaja social'naja otvetstvennost. Novaja filosofija biznesa" [Corporate social responsibility. New business philosophy]. Available at: <http://www.veb.ru/common/upload/files/veb/kso/ksobook2011.pdf> (accessed 16 September 2019), (in Russian).

Zinchenko, M. and Saprykina, K. (2017). CSR Development in Ukraine: 2010-2018. Kyiv: Juston Publishing House, 52 p. Available at: [http://csr-ua.info/csr-ukraine/wp-content/uploads/2018/10/CSR\\_2017\\_research-1.pdf](http://csr-ua.info/csr-ukraine/wp-content/uploads/2018/10/CSR_2017_research-1.pdf) (accessed 16 September 2019) (in Ukrainian).

## СПИСОК ВИКОРИСТАНИХ ДЖЕРЕЛ

Alter, S. K. Social Enterprise Typology. 2006. Virtue Ventures LLC, Washington, D.C, available at: <https://canvas.brown.edu/courses/1073328/files/61028038> (дата звернення 22.09.2019).

Bielefeld, W. Issues in Social Enterprise and Social Entrepreneurship, *Journal of Public Affairs in Education*, 2009, 15(1), pp. 69-86, available at: <https://www.tandfonline.com/doi/abs/10.1080/15236803.2009.12001544> (дата звернення 22.09.2019).

Бобко Л. О. Корпоративна соціальна відповідальність: сучасний стан розвитку в Україні. *Економіка. Управління. Інновації. Серія : Економічні науки*. 2016. № 2 URL: [http://nbuv.gov.ua/UJRN/eui\\_2016\\_2\\_3](http://nbuv.gov.ua/UJRN/eui_2016_2_3) (дата звернення: 12.11.2019).

Бубен О. Політика з корпоративної соціальної відповідальності «Прикарпаттяобленерго» на 2011-2014 р. URL: <http://uadocs.exdat.com/docs2/index-593865.html> (дата звернення: 18.09.2019).

Bukharina, L. and Onyshchenko, O. Development of the impact investing ecosystem in Ukraine. *Investment Management and Financial Innovations*, 2019, 16(3), pp.217-228, URL: [http://dx.doi.org/10.21511/imfi.16\(3\).2019.20](http://dx.doi.org/10.21511/imfi.16(3).2019.20) (дата звернення: 12.10. 2019).

Gelbmann, U. "Establishing strategic CSR in SMEs: an Austrian CSR quality seal to substantiate the strategic CSR performance," *Sustainable Development*, 2010, 18(2), pp.90-98. URL: <http://dx.doi.org/10.1002/sd.448>. (дата звернення: 22.10.2019).

Gidron, B., Hasenfeld, Y. (Eds.) Introduction. In *Social Enterprises: An Organizational Perspective*. 2012. Basingstoke: Palgrave Macmillan.

Gutsche, R. "Firm-Value Effects of CSR Disclosure and CSR Performance", *SSRN Electronic Journal*, 2016. URL: <http://dx.doi.org/10.2139/ssrn.2821691> . (дата звернення: 22.10.2019)

Гогоуля О.П., Кудінова І.П. Соціальна відповідальність бізнесу. Київ: Видавництво Національного університету біоресурсів та природокористування України, 2008. 79 с.

Kickul, J., Gras, D., Bacq, S., & Griffiths, M. D. *Social Entrepreneurship*. An Elgar research collection. The international library of entrepreneurship, 2013, Edward Elgar Publishing Limited, Cheltenham, UK, Northampton, MA, USA.

- Корпоративная социальная ответственность: учебник для бакалавров / под ред. Э.М. Короткова. Москва : Издательство Юрайт, 2013. 444 с.
- Кретьова А.В., Березовська Н. Розвиток корпоративної соціальної відповідальності в Україні за участі держави: механізм взаємодії. *Збірник наукових праць Донецького державного університету управління*. 2011. Вип. 194. С. 115-123.
- Мазуренко В.П., Засенко О.Ю. Сучасна концепція корпоративної соціальної відповідальності у міжнародному бізнесі. *Ефективна економіка*. 2012. № 6. URL: <http://www.economy.nayka.com.ua/?op=1&z=1199>. (дата звернення: 12.09.2019).
- Onyshchenko, O. The concept of public management for social enterprises in Ukraine. *Management and Entrepreneurship: Trends of Development*, 2017, 2(02), pp. 57-65. URL: <https://management-journal.org.ua/index.php/journal/article/view/28> (дата звернення: 12.10.2019).
- Onyshchenko, O. and Shyshkin, V. "A study of the socio-demographic portrait of a social entrepreneur as a representative of modern management", *Business Risk in Changing Dynamics of Global Village 2: Monograph* / Edited by Nataliia Marynenko, Pradeep Kumar, Iryna Kramar. Nysa: Publishing Office University of Applied Sciences in Nysa, Poland, 2019, pp.378-386. URL: <http://elartu.tntu.edu.ua/handle/lib/29283> (дата звернення: 11.11.2019)
- Ровенська В., Лінник В. Особливості впровадження корпоративної соціальної відповідальності бізнесу в Україні та Туреччині. *Вісник Приазовського державного технічного університету*. 2016. Вип. 32. Т. 1. С. 209-215. URL: <http://eir.pstu.edu/handle/123456789/13136> (дата звернення: 17.09.2019).
- Шира Н. О., Івашенко А. І. Напрями впровадження системи корпоративної соціальної відповідальності в практику українських підприємств. *Ефективна економіка*. 2013. Вип. 11. URL: <http://www.economy.nayka.com.ua/?op=1&z=2502> (дата звернення: 11.11.2019)
- Стратегія сприяння розвитку соціальної відповідальності бізнесу в Україні на період до 2020 року. URL: [http://svb.ua/sites/default/files/201309\\_strategiya\\_spriyannya\\_rozvitku\\_svb\\_v\\_ukrayini.pdf](http://svb.ua/sites/default/files/201309_strategiya_spriyannya_rozvitku_svb_v_ukrayini.pdf) . (дата звернення: 17.09.2019).
- The Verkhovna Rada of Ukraine. The Draft Law on Social Enterprises, 2015, available at: [http://w1.c1.rada.gov.ua/pls/zweb2/webproc4\\_2?pf3516=2710&skl=9](http://w1.c1.rada.gov.ua/pls/zweb2/webproc4_2?pf3516=2710&skl=9) (дата звернення: 12.10.2019) (in Ukrainian)
- Ukrainian Social Investment Fund. Official website, available at: <http://usif.org.ua/en/aboutus.html> (дата звернення: 10.10.2019).
- Visser, W. The Future of CSR: Towards Transformative CSR, or CSR 2.0. *SSRN Electronic Journal*. 2012. URL: <http://dx.doi.org/10.2139/ssrn.2208101>. (дата звернення: 12.10.2019)
- Корпоративная социальная ответственность. Новая философия бизнеса: учебн. пос. Внешэкономбанк. Москва: 2011. 57 с. URL: <http://www.veb.ru/common/upload/files/veb/kso/ksobook2011.pdf> (дата звернення: 16.09.2019).
- Зінченко А., Саприкіна М. Розвиток КСВ в Україні: 2010-2018. Київ: Видавництво «Юстон», 2017. 52 с. URL: [http://csr-ua.info/csr-ukraine/wp-content/uploads/2018/10/CSR\\_2017\\_research-1.pdf](http://csr-ua.info/csr-ukraine/wp-content/uploads/2018/10/CSR_2017_research-1.pdf) (дата звернення: 16.09.2019).

## УПРАВЛІННЯ СИСТЕМОЮ КОРПОРАТИВНОЇ СОЦІАЛЬНОЇ ВІДПОВІДАЛЬНОСТІ ПІДПРИЄМСТВА

**Шишкін Віктор Олександрович**  
*Запорізький національний університет*  
*Запоріжжя, Україна*

**Онищенко Оксана Анатоліївна**  
*Запорізький національний університет*  
*Запоріжжя, Україна*

**Петров Вадим Миколайович**  
*Харківський національний аграрний*  
*університет ім. В.В. Докучаєва*  
*Харків, Україна*

**Алієва-Ярошенко Таміла Ельманівна**  
*Запорізький національний університет*  
*Запоріжжя, Україна*

У статті визначено роль управління системою корпоративної соціальної відповідальності (КСВ) у підприємницькій діяльності, розглянуто основні напрями та рівні корпоративної соціальної відповідальності і запропоновано заходи щодо поетапного впровадження корпоративної соціальної відповідальності в систему управління підприємством та шляхи підвищення рівня корпоративної соціальної відповідальності вітчизняних підприємств. Доведено, що стан розвитку корпоративної соціальної відповідальності має прямий вплив на ефективність функціонування бізнес-процесів підприємства та рівень задоволеності персоналу роботою в організації. В результаті визначено, що необхідною умовою для створення ефективної системи впровадження корпоративної соціальної відповідальності в Україні, перш за все, необхідно створити умови для ефективної комунікації між урядом, суспільством і бізнесом, розробити національну загальну стратегію розвитку корпоративної соціальної відповідальності, створити єдиний інформаційний ресурс для забезпечення обізнаності суб'єктів бізнесу у сфері практичних питань корпоративної соціальної відповідальності. Практична цінність запровадження стратегії корпоративної соціальної відповідальності в Україні полягає у її ресурсному потенціалі, який в умовах вітчизняного бізнес середовища являє собою значний резерв для забезпечення функціонування всього комплексу соціальної сфери. Як свідчить практика вітчизняного підприємництва, організації готові прийняти участь у вирішенні соціальних проблем, якщо держава спрямує свої зусилля та ресурси на створення системи підтримки соціальної активності бізнесу та відповідної інфраструктури.

**Ключові слова:** корпоративна соціальна відповідальність, розвиток суспільства, стейкхолдери, репутація бізнесу, благодійність, менеджмент персоналу, лояльність споживачів, екологічна безпека.

## УПРАВЛЕНИЕ СИСТЕМОЙ КОРПОРАТИВНОЙ СОЦИАЛЬНОЙ ОТВЕТСТВЕННОСТИ ПРЕДПРИЯТИЯ

**Шишкин Виктор Александрович**  
*Запорожский национальный университет*  
*Запорожье, Украина*

**Онищенко Оксана Анатольевна**  
*Запорожский национальный университет*  
*Запорожье, Украина*

**Петров Вадим Миколайович**  
*Харьковский национальный аграрный*  
*университет им. В.В. Докучаева*  
*Харьков, Украина*

**Алієва-Ярошенко Таміла Ельманівна**  
*Запорожский национальный университет*  
*Запорожье, Украина*

В статье определены роль управления системой корпоративной социальной ответственности (КСО) в предпринимательской деятельности, рассмотрены основные направления и уровни корпоративной социальной ответственности и предложены меры по

поэтапному внедрению корпоративной социальной ответственности в систему управления предприятием и пути повышения уровня корпоративной социальной ответственности отечественных компаний. Доказано, что состояние развития корпоративной социальной ответственности имеет прямое влияние на эффективность функционирования бизнес-процессов предприятия и уровень удовлетворенности персонала работой в организации. В результате установлено, что необходимым условием для создания эффективной системы внедрения корпоративной социальной ответственности в Украине, прежде всего, необходимо создать условия для эффективной коммуникации между правительством, обществом и бизнесом, разработать национальную общую стратегию развития корпоративной социальной ответственности, создать единый информационный ресурс для обеспечения осведомленности субъектов бизнеса в сфере практических вопросов корпоративной социальной ответственности. Практическая ценность введения стратегии корпоративной социальной ответственности в Украине заключается в ее ресурсном потенциале, который в условиях отечественной бизнес среды представляет собой значительный резерв для обеспечения функционирования всего комплекса социальной сферы. Как показывает практика отечественного предпринимательства, организации готовы принять участие в решении социальных проблем, если государство направит свои усилия и ресурсы на создание системы поддержки социальной активности бизнеса и соответствующей инфраструктуры.

**Ключевые слова:** корпоративная социальная ответственность, развитие общества, стейкхолдеры, репутация бизнеса, благотворительность, менеджмент персонала, лояльность потребителей, экологическая безопасность.

---

## PUBLIC ADMINISTRATION

---

Received:

25 November, 2019

1st Revision:

29 December, 2019

Accepted:

30 December, 2019

UDC: 339.1

DOI <https://doi.org/10.26661/2522-1566/2019-4/10-04>

### POLICY IMPLEMENTATION OF WORKING CULTURE DEVELOPMENT IN MINISTRY OF RELIGIOUS AFFAIRS

**Salma Munawwaroh**

*Diponegoro University*

*Semarang, Indonesia*

ORCID: [0000-00001-7450-8008](https://orcid.org/0000-00001-7450-8008)

**Endang Larasati**

*Diponegoro University*

*Semarang, Indonesia*

ORCHID: [0000-0001-8412-1827](https://orcid.org/0000-0001-8412-1827)

**Sri Suwitri**

*Diponegoro University*

*Semarang, Indonesia*

ORCID: [0000-0001-8840-2837](https://orcid.org/0000-0001-8840-2837)

**Hardi Warsono**

*Diponegoro University*

*Semarang, Indonesia*

ORCHID: [0000-0002-1370-415X](https://orcid.org/0000-0002-1370-415X)

\*Corresponding author email: [Salmamuna96@gmail.com](mailto:Salmamuna96@gmail.com)

**Abstract.** Indonesia as a religious state has the Ministry of Religious Affairs which has a vision and mission in realizing the Indonesian communities to be obedient, harmonious, intellectually intelligent, emotional and spiritual as well as prosperous aspects of life community. However, ironically, the ministry that should be the front guard of this morality, in 2012 was the ministry with the lowest perception index version of Corruption Eradication Commission known as *KPK*, and in 2014 the only ministry with the value of self under the standard of Corruption Eradication Commission known as *KPK*. Ministry of Administrative and Bureaucratic Reform has published a regulation No. 39 in 2012 on the guidelines for the development of work culture for ministries and institutions in 2012. This research **aims** to identify and analyze the policy implementation of working culture development based on regulation Number 39 in 2012 in the Ministry of Religious Affairs and identify factors affecting the implementation of the development policy of The Ministry of Religious Affairs. This research is a qualitative study using descriptive-analytical **techniques**. This **finding** shows that the Ministry of Religious Affairs has developed neither the structure of its work culture nor the comprehensive and sustainable system of work culture as a whole.

**Keywords:** Ministry of Religious Affairs, Indonesian community, working culture, vision, mission

**JEL Classification:** Z1, K3, L5, L8

### INTRODUCTION

The bureaucracy reform in Indonesia has begun in 2010. There are eight areas of change in bureaucracy reform, namely: organization, governance, regulatory law, human resources apparatus, supervision, accountability, public service, mindset, and working culture. One area of change is the mindset and the culture of work (mindset and culture set). The change of mindset and culture of work has a strategic role in organizing bureaucracy for the better. According to the Grand Design bureaucracy reform 2010-2025, in the wave reform II, namely the year 2010-2014, the bureaucracy in Indonesia makes government to be free from corruption, collusion and nepotism known as *KKN*,

the quality of public services are increasing and capacity at once improved performance accountability.

The Ministry of Religious Affairs has a duty to conduct governance in religious fields. The vision of the Ministry of Religious Affairs is the realization of the Religious Society of Indonesia, peace, intelligent, and prosperous aspects in order to realize Indonesia's as sovereignty, and independence country based on the foundation of communal. However, ironically, the institute gets a black note about corruption. In 2012, the Ministry of Religious Affairs was established as a ministry with the lowest perception index of Corruption Eradication Commission version, and in 2014 only ministry with self-value under Corruption Eradication Commission standardization (KPK, 2015).

From the side of the public complaint, from 2015 to 2017 there was a significant increase annually as shown in the table below.

Table 1

*Community Complaint at the Ministry of Religious Affairs 2015-2017*

No	Years	Amount
1	2015	61
2	2016	295
3	2017	486

*Source: Ministry of Religious Affairs (May 16, 2018)*

The Ministry of Religious Affairs as a religious institution with the lowest integrity became contrary to (Lerner, 1982) opinion of the religious influence on the undisputed manifestations of morality. In addition, spirituality is important to reveal the inner and learn to recognize the impact proposed both for professional and personal lives (S. Robbins, 2013). Malik stated that there is a significant positive relationship between spiritual intelligence and organizational performance (Malik and Tariq, 2016) (Osman-gani, Hashim and Ismail, 2007). Therefore, religious background and the Ministry of Religious Affairs should be holy institutions that uphold integrity as a universal core value.

In 2012, the Ministry of Administrative and Bureaucratic Reform has issued guidelines for the development of the work culture and institutions. In addition, revised in 2012 with the Regulation of Ministry of Administrative and Bureaucratic Reform Number 39 in 2012 was aimed at assisting the development of the culture of work in the implementation of bureaucracy reform. As well as assisting ministries/institutions and local governments to encourage changes in the attitudes and behavior of officials and employees in their respective environment, and provide guidance on planning, implementing and monitoring as well as evaluating the implementation of the development of work culture.

The study of implementation is to understand what the fact shows after a program is declared valid or formulated, while the focus of policy implementation attention, are events and activities arising after the dismissing of the State policy guidelines, which include both efforts to administrate it and to create real consequences/impacts on society or events (Sabatier and Mazmanian, 1980).

## LITERATURE REVIEW

The problem of this research issues are as follows:

1. How the implementation of the working culture of development policy in the Ministry of Religion does?



2. What factors influence the implementation of the development of culture work in the Ministry of Religion?

### **1. Policy Implementation**

Policy implementation in principle is a way of policy achieving its objectives. There is no more and no less. In order to implement public policy, two options exist, namely implementing in the form of a program or through a formulation of derivation policies or derivatives of these public policies. The implementation of a series of policies can be clearly observed, namely starting from programs to projects and activities. Implementation studies have a focus on work programs, operational activities of policy devices and resource allocation (Denzin and Lincoln, 2000), organizing and leadership to achieve policy objectives (Nugroho Riant, 2017). In this implementation, the study aims to analyze the conformity of policy implementation bases on guidelines and procedures (Sugiyono, 2014). Besides, the other goals are to observe how to realize and involve community in responding this policy (Jodi and Stephanie, 2015).

### **2. Development Policy of Working Culture**

The policy of working culture development is established by the Regulation of Ministry of Administrative and Bureaucratic Reform Number 39 in 2012. The goal of this policy is the creation of the mindset and the working culture of the State apparatus into a culture that develops the attitude and behavior of outcome-oriented gained from the productivity of work and high performance to provide service to the community.

The transformation in working culture applies from the highest level to the smallest unit. The success of cultural change is determined by organizational leader behavior. Ministries and institutions are expected to create and develop organizational cultures that are oriented towards improved performance through training, work unit of working evaluation and personnel, socialization, benchmarking and learning laboratories. The development of work culture is a systematic effort to implement the values and norms of ethical work of the State apparatus and executed consistently in its regulation of governance tasks and services to the community. The work culture is formed from values that have been consistently harmonized and have been socialized in the environment of ministries/institutions as well as the internalization results expressed in the conduct of daily work in each employee. The internalized work culture can be seen from the work ethical shown.

The fundamental principle of work culture is the culture of work derived from the organizational culture, the result of the internalization process of organizational values expressed in the behavior of daily work. Culture of work is a mental attitude developed to always look for repairs, enhancements or improvements to what has been accomplished, the work culture is developed with the teachings of religion, Constitution, social and cultural conditions, and change of working culture should go on. A structured, comprehensive and sustainable system with a precise and consistent strategy, the work culture changed through organizational values changes.

The task of changing the mindset and developing a working culture in the Ministry of Administrative and Bureaucratic Reform environment and the local government is the responsibility of the bureaucracy reform teams in each ministry/institution; in particular, the management system is changing. The development of work culture requires three major phases, namely the formulation of values, implementation, and evaluation monitoring.

The formulation of value consists of five steps, namely 1) planning, 2) identifying the value, 3) identifying the sensitive area, 4) assigning the main behavior and 5) formulating how to measure the main behavior. The implementation consists of: 1) Declaration of Value, 2) Phase of the socialization and internalization through communication. Monitoring and evaluation must be applied to observe how effective the progress of the work culture in development process is.

### **3. The Factors Affecting The Implementation Of Cultural Development Work**

Based on various previous journals formulated researchers there are four factors that affect the implementation of cultural development, namely communication (Arianto, Zauhar and Hanafi, 2015; Sani, Mohammed, Misnan and Awang, 2012; Crews, 2013; James, 2014; Warrick, 2017; Van der Voet, 2014; Signé, 2017; Bang, Kusuma and Utomo, 2014; Hanaysha, 2016; Hill, 2003. The second was resources (Signé, 2017; Mattila, 2008). The third was the commitment and leadership (Sani et al., 2012; Smith, 2003; Yuan and Lee, 2011; Signé, 2017; Hill, 2003; Crews, 2013). The last was the value of organization (Hill, 2003; Zainuri, 2016; Wihantoro, Lowe, Cooper and Manochin, 2015; Yaghi and Al-Jenaibi, 2018).

#### **A. Communication**

Research of communication in this study used the theory of implementation of (Lawler III and Worley, 2006), according to (Lawler III and Worley, 2006) in (Widodo, 2007) communication was classified as “the process of delivering communicator information to the communicator”. Information on public policy according to (Lawler III and Worley, 2006) in (Widodo, 2007) need to be communicated to policy perpetrators so that policy players can know what they should prepare and do to run the policy so that the objectives and policy objectives can be achieved in accordance with the target (Widodo, 2007). The theory shows that policy communication has many dimensions, such as transition dimension, clarity and consistency.

i. The dimension of transmission demanded that public policy be delivered not only to the implementation of policies but also to the target groups of policies and other parties concerned either directly or indirectly. Before an official can implement a decision, he must realize that a decision has been made and an order for its implementation has been issued. The most important is how a policy stakeholder's will understand about the policy that has been made by the center and transfigured into various forms of implementation and clear standards of operational procedures so that the executor can carry out duties as policies implementation that have been issued. Signing of the regulatory context of policy become very important for the implementation of the program.

ii. The dimensions of clarity would require that if the policies are implemented as desired, then the policy executor should not only accept the instruction manual but also the communication of the policy should be clear. Often the instructions forwarded to the executor are blurred and do not specify when and how a program is implemented. The obscurity of the communication message with respect to the policy implementation will encourage incorrect interpretation.

iii. The third dimension of policy communication is consistency. If the implementation of the policy intends to be efficient, the execution orders must be consistent and clear. Although the commands presented to the policy executor have elements of clarity, if the order is contradicted then the order will not facilitate the policy executor to perform its duties properly. On the other hand, the commands of inconsistent policies will encourage executor to take very loose actions in interpreting and implementing policies. When this happens, it will result in the ineffectiveness of the policy implementation due to the extremely loose actions that are likely not to be used to implement policy objectives

#### **a. Resources**

In government organizations as a public and implementing organization the administrative policy must have a resource consisting of: “Staff, Information, Authority, Facilities” (Lawler III and Worley, 2006) in (Kadarisman, Gunawan and Ismiyati, 2017).

##### **1) Human Resources (Staffs)**

Implementation of the policy will not succeed without the support of human resources sufficient quality and quantity. The quality of human resources is related to skill, dedication, professionalism, and competence in the field, while the number of human resources is enough to cover the entire target group. Human resources are very influential in the success of implementation, because without human resources, implementation of policies will run slowly.

2) Budgetary

In the policy implementation, the budget is related to the adequacy of capital or investment in a program or policy to guarantee this policy implementation, because, without the supporting budget, the policy will not run effectively in reaching goals and objectives.

3) Facilities

Facility infrastructures become some of the factors that influence the implementation of the policy. Procurement of decent facilities, such as buildings, land and office equipment will support the success of the implementation of a program or policy.

4) Information and Authority

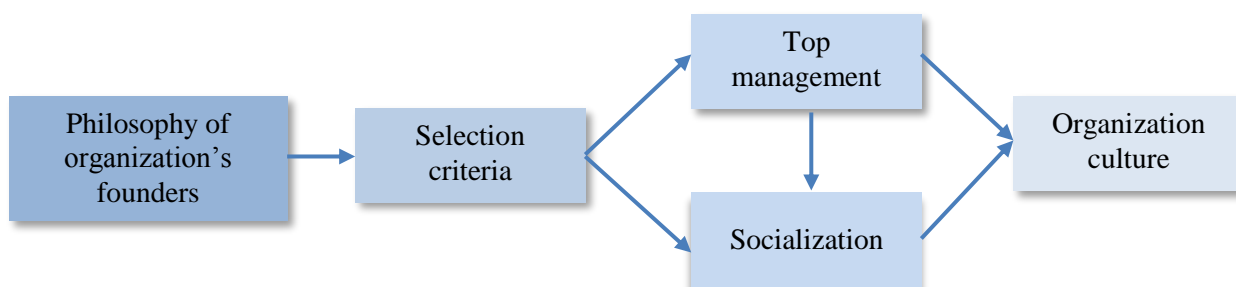
Information is also an important factor in the implementation of policies, especially relevant information. While authority plays a crucial role in assuring and guarantees that, the policy is implemented according to the goal.

**b. Commitment and Leadership**

Commitment and leadership using the first Sabatier theory, the direction and ranking of the objectives at the priority scale of the office. Secondly, the ability of officials in realizing these priorities is namely, how to achieve objectives by deploying available resources (Sabatier & Mazmanian, 1980).

**c. Organization Culture**

From the organizational culture, the theory uses the Robbin theory on elements of organizational culture formation (S. Robbins, 2013) classified as the Organization's founding philosophy, selection, top management, and socialization.



*Fig.1 How Organization's Culture Form Source (S. Robbins, 2013)*

**METHODOLOGY**

This study is a qualitative study with an in-depth interview method, observation, and documentation. The analytical techniques used in this study are descriptive analytical techniques. Interviews (included 15 employees) were conducted in the Minister of Religious Affairs as the supreme leader, central bureaucracy reform team and head of research and development of religious ministries, regions.

**RESULT AND DISCUSSION**

**1. Implementation of Working Culture Development in the Ministry of Religious Affairs**

The Ministry of Religious Affairs is one of the autonomy ministries. The Ministry of Religious Affairs also includes vertical institutions with a total of 4,543 work areas. It is classified into eleven Echelon Unit 1 at the central Religious ministry, 34 provincial offices, 413 Office of the Ministry of Religious Affairs, 99 of the city's Ministry of Religious Affairs, 14 Education and

Training Centre, and 3 Research and Development Halls, which amounted to 563 work areas. Meanwhile, the Education unit status, consisting of 1,690 Madrasah Ibtidaiyah Negeri (MIN), 1,444 Madrasah Tsanawiyah Negeri (MTsN), 765 Madrasah Aliyah Negeri (MAN), 11 Islamic State University (UIN), 32 State Islamic Institute (IAIN), 14 state Islamic religious schools (STAIN), 1 State Catholic High School (STAKATN), 7 State Christian religious Colleges (STAKN), 1 Institute of Hindu Dharma Negeri (IHDN), 3 state Hindu High Schools (STAHN), 2 Buddhist colleges Of the State (STABN), a total of 3969 working units (Kementerian Agama RI, 2017a).

The Ministry of Religious Affairs consists of 2,776 employees at the head office (1.23%) and 223,184 employees in the area (98.77%) (Kementerian Agama RI, 2019). In 2014, the Ministry of Religious Affairs declared that working culture classify into as follows: (1) Integrity, (2) Professionalism, (3) innovative (4) Responsibilities and (5) Lead by example. The formulation of the value is the result of the Focus Group Discussion of Minister of Religious Affairs with Echelon I and II with a consultant of ESQ named Ary Ginandjar. The values formulated are the values required by the Ministry of Religious Affairs in conducting bureaucracy reform.

From the fifth phases of the formulation of value, the Ministry of Religious Affairs has gone through four processes i.e. 1) planning, 2) identifying value, 3) identifying the sensitive area, 4) establishing the main behavior, the Ministry of Religious Affairs passed these stages as formulation in how to measure key behaviors.

## **2. The Policy of the Ministry of Religious Affairs about Working Culture Value**

In 2014, Minister of Religious Affairs issued Decree of the Minister of Religious Affairs No. 582 in 2017 on change the decree of Religious Minister No. 447 in 2015 Road Map of Bureaucracy Reform of the Ministry of Religious Affairs in 2015-2019, which contains five values of working culture. Other policies regarding the implementation strategy of the cultural value of work are KMA No. 504 in 2018 relates to the agent for change in the Ministry of Religious Affairs as well as the Decision of Ministry of Religious Affairs No. 536 in 2018 on the guidelines for implementing bureaucracy reform in the Ministry of Religious Affairs.

From interviews with the bureaucracy reform team of the Ministry of Religious Affairs, the value of the work culture not only declare a statement but also has a special duty of the Decision of Ministry of Religious Affairs that regulates working culture. According to the illustration of working culture, it is not regulated because of its coercive nature.

## **3. Bureaucracy Reform in the Ministry of Religious Affairs**

Religious ministers feel the size of working culture can be seen from the results of the evaluation of bureaucracy reform increasing annually. First in 2018, it obtained a value amount 74.02, rise in 2017 amount 73.27, then in 2016 showed the result value amount 69.14, in 2015 obtained 62.28 and 54.83. The Ministry of Religious Affairs' performance report still focuses on budget absorption (Kementerian Agama RI, 2019).

Bureaucracy reform in the Ministry of Religious Affairs from 2010 to 2017 was an additional task. Only in 2017, described structural regulation handles bureaucratic reform in the Ministry of Religious Affairs. The Ministry of Religious Affairs, the task of the bureaucracy reform team in the provincial office and the Office of the district Ministry of Religious Affairs is an additional task.

Since 2018, DIPA 2019 performance reports there were no specific budgets regarding bureaucracy reform and the development of a working culture (Kementerian Agama RI, 2019). In regional offices and districts, offices formed into bureaucratic teams. Nevertheless, the tasks and functions have not yet run according to guidelines.

## **4. Promotion System**

The process of appointment of officials in the Ministry of Religious Affairs has a new implementing Merit system by way of open bidding on Echelon 1 and 2 in. However, the merit

system does not apply to Echelon 3 to 4. According to the Minister of Religious Trade in the Ministry of Religious Affairs is Caustic.

The Ministry of Religious Affairs has declared a cultural value of work but does not refer to the Regulation of Ministry of Administrative and Bureaucratic Reform Number 39 in 2012 on the guidelines for the development of culture work. This can be seen from the unimplemented system of measurement of work culture and strategy that is fast and precise in the implementation of the development of culture work.

The Ministry of Religious Affairs was able to access bureaucratic reforms. While the evaluation of bureaucracy reform annually that applied to the central Echelon I (11 echelon work units I) in addition, the unit of work in the area under the Ministry of Religious Affairs is 4,532 units of work.

Factors that influence the implementation of cultural development work

#### 1. Communication

The decision of Ministry Religious Number 504 in 2018 about Agent for Change of Ministry of Religious Affairs and the Decision of Ministry Religious No. 536 in 2018 about implementation guidelines of bureaucracy reform at the Ministry of Religious Affairs covering in bureaucracy reform. From the research results, structural bureaucracy reform is only in the central Echelon I., Central Java Provincial Office establish a bureaucratic reform team but only additional tasks. The results of interviews with the bureaucracy reform team in Demak District, only the DECREE of the team to fulfill the application data of bureaucracy reform from the center.

From the transmission dimension, the minister's working culture policy that unspecific ally issue of Decision of Minister of Religious and the detailed rules on the implementation of the cultural value of work will make the transmission process not well received by the implementers and policy objectives. From the dimensions of clarity, without clear guidelines, the communities can misunderstand communication.

As for the consistency side, the five values of the working culture that have been declared are not considered as one of the assessments of personnel or as the code of Ethics of the Ministry of Religious Affairs. The absence of operational indicators and instruments to make State Apparatus does not have objective and measurable standards in carrying out five cultural values of work, making it difficult to do an objective assessment by the leadership of the implementation of five cultural values of work by a State Apparatus individually. In developing the work culture need guidance and enforcement, so the implementation of the development of the culture of planned work, structured systematically, comprehensive and sustainable. Communication strategies may include as follows:

- Minister of Religious Affairs issued a policy on implementing and internalizing the value of the culture of work, so implementation is coercive and has an element of law enforcement with a clear reward system. During these five cultural values are the policy of the Ministry that cannot be confirmed by the required official documents, such as PMA documents, the Decree of Ministry of Religious Affairs, or other official documents related to the program of 5 cultural values of the work.

- Internalizing with education and training.

- Developing a measurement system of work culture achievement.

#### 2. Resources

Development of the working culture in Ministry of Administrative and Bureaucratic Reform Number 39 in 2012 and decree of the Minister of Religious Affairs No. 582 in 2017 was the task of the Management change of bureaucratic reform team. From 2010 to 2017, the reform team of the central Ministry of Religious Affairs as additional authorities, in the Central Java province bureaucratic reform team was formed in 2017, in Demak District bureaucracy reform team was formed in 2018. At the provincial and district level the bureaucracy reform team is still an

additional task. From interviews, the district level of reform team did not yet have a program and was formed based on the demands of applications launched by the central bureaucracy reform team.

Since 2010 had been established bureaucratic reform, and 7 years only focused on Echelon I, bureaucratic reforms are slow in the Ministry of Religious Affairs. This follows the publication of the Ministry of Religious Affairs and Decision of Minister Religious Number 536 in 2018 on the guidelines for implementing bureaucracy reform in the Ministry of Religious Affairs. The decision of Ministry of Religious Affairs No. 504 in 2018 about the change agent guidelines on the Ministry of Religion has not been implemented at the provincial or district level.

From an interview with bureaucracy Reform of the Ministry of Religious Affairs, the Ministry of Administrative and Bureaucratic Reform team did not control the Regulation of Ministry of Administrative and Bureaucratic Reform Number 39 in 2012 on the guidelines for the development of culture work.

### 3. Budgetary

The policy will not run effectively in achieving goals and targets without the compacted budget support. List of Budget Implementation (*DIPA*) states there is no budget on this work.

culture program (Kementerian Agama RI, 2019). At the regional and district level, with a working unit of 8,532 areas, education as well as training so that it will change mindset and culture of apparatus through 14 training halls in Indonesia. This is because there is no budget in the framework of socialization and internalization of work culture in each unit of work.

The strategy taken in socialization and internalization is to communicate five cultural values of work on each activity to the audience as one of the Standard Operating Procedure of activities in the Ministry of Religious Affairs.

### 4. Facilities

The facilities in implementing five cultural values in the Ministry of Religious Affairs are banners. In the selection of change agents, the bureaucratic reform team has created a computer-based application to facilitate the establishment of change agents. Currently, it has not been applied to all agents, but hopefully, the application can facilitate the selection of agent changes in each unit of work.

As the largest vertical organization, the development of work culture needs to be facilitated with a work culture laboratory. These policies and strategies that are applied can run effectively and efficiently.

#### 1) Information and Authority

Relevant and adequate information are about how to implement a policy. While authority plays a crucial role in assuring and guarantees that, the policy is implemented according to desiring. In terms of the development of the cultural work in the Ministry of Religious Affairs relates to information and authority, as well as the role of Research and Development empowered. Research on the culture of work will provide valid information regarding the achievement of work culture value.

### 5. Commitment and Leadership

According to (S. Robbins, 2013), the existence of the leader will have an influence on (i) the value he wants to accomplish, (ii) the direction of the Organization's future, (ii) showing how the tasks are resolved. Position leaders in the process of achieving organizational objectives, therefore, associate with the behavior displayed, skills, knowledge, and values. Research Data from the Research and Development Agency of the Ministry of Religious Affairs provides an overview that the leadership of each of the Ministry of religious work units has two opposite sides. In get a record in the implementation of the program 5 (five) cultural value of work is the implementation of the merit system in terms of recruitment, placement, and promotion of employees. It is about the competency aspect, resulting unskilled staff that has position relate to working field (interview results with the head of the Ministry of Religious Affairs of Research and Development in April 27, 2019).



First, the direction and ranking are the goal at office area. Second, the Official's skill in realizing some of priorities (Sabatier and Mazmanian, 1980). According to Nugroho, a top executive (in this case the Minister of Religious Affairs) who has been appointed must bring a vision. The team they lead can only be asked to provide inputs to decode the vision (Nugroho Riant, 2017). The Ministry of Religious Affairs has the vision of "the realization of the Religious Society of Indonesia, the pillars, intelligent and prosperous born inward in the framework of realizing the sovereign, independent and personality based on mutual cooperation" (Kementerian Agama RI, 2017b). One of the missions in fixing the bureaucracy is to realize clean, accountable and trustworthy governance. The objectives related to the improvement quality of development field in religion are the implementation of the development of the effective, efficient, transparent and accountable field of religion. Among others: (a) the Defended Exclusion Reasonable (*WTP*) in the opinion of Audit Board of Indonesia known as *BPK RI* for the financial report of the Ministry of Religious Affairs; (b) Increased results of the Ministry of Religious Affairs performance report; and (c) increasing the Ministry of Religious Affairs of Reform assessment.

The results of interviews with the Minister of Religious Affairs, the supreme Leader internalized the five cultural values of the work by relying on the consciousness of the State Apparatus of Ministry of Religious Affairs and un-coercive. (Interview with the Minister of Religious Affairs, April 24, 2019), the assumption of the Minister of Religious Affairs relates culture work and code of ethics is something that is already built-in in State Apparatus, so that unpublished rules that bind apparatus concerning five cultural values of work and no budget in internalizing the value of working culture.

The Ministry of Religious Affairs as a ministry with the lowest corruption perception index in 2012 and the only ministry with the lowest self-value under the standard of Corruption Eradication Commission known as *KPK* in 2014 had a "task" in fixing the 4543 units. Development of work culture as a strategy in changing mindset and culture will not run well together with plan, program, systematical, comprehensive and sustainable.

## 6. Organizational Culture

Robbin stated that organizational culture created by some elements of the organization's founding philosophy, selection and top management (S. Robbins, 2013). According to Robbins there are some questions relate to working culture in an organization (S. P. Robbins and Coulter, 2016), consists of as follows:

### a. Exploring Background Checks

From the examination of the website of the Ministry of Religious Affairs and websites in some areas, the display of Web pages has been standardized from the central Religious Ministry. Besides showing information on activities and important news about religious affairs, each website presents five values of working culture, the decline of illegal levy and gratification, the movement of the mental revolution and the harmony of religious and nationalism communities. Some websites such as District Areas of Ministry of Religious Affairs of Central Java Province and Ministry of Religious Affairs in Demak District not display the Community complaints menu in this website.

This Ministry's related news is about corruption cases in the Ministry of Religious Affairs. The most popular news is the hand capture operation by Corruption Eradication Commission known as *KPK* related to the selection process of the Ministry of Religious institutions. The party's chair of the Minister of Religious Affairs was held to organize positions both of central and local levels. In addition, the media of corruption cases in the previous Ministry of Religion, the former Minister of Religious Affairs of President Megawati, Said Agil Husein Al Munawar, that is stated by the Assembly of Judges by State Court of Central Jakarta in 2016. Corruption procurement of the Qur'an laboratory equipment *Madrassa* in 2012, and the misuse of BPIH and the operational fund of ministers who drag the name of the Minister of Religious Affairs, Suryadharma Ali in 2014. (The Tribunews, accessed 15 May 2019).

Former Irjen Ministry of Religious Affairs, M Jasin stated that in Minister of Religious Affairs the crisis of integrity and crisis adhere to the prevailing rules. Jasin was appointed in 2012-

2016 at Inspectorate General of Ministry of Religious Affairs after he was no longer there; he taught more officials who get promotion in the neighborhood at the Ministry of Religious Affairs is the people once get precisely a discipline strike caused by such violation.

**b. Observing the physical environment and the corporate symbols**

The Ministry of Religious Affairs has a “charity sincere” logo written on the organization's emblem. The State Apparatus' appearance and dress take an attention for their respective religious learning. The State Apparatus are working in the Ministry of Religious Affairs is regarded by society as a religious figure or a person who understands religious matters.

From the openness between the Offices, the Ministry of Religious Affairs does not have a gap among task executors unit. Ministry of Religious Affairs building is dominated by green color, in Islamic teachings green color is the preferred color of Prophet Muhammad after the color white. Worship facilities are very well built-in the office area. Ministry of Religious Affairs generally has a sports field. This physical condition reflects that the Ministry of Religious Affairs is a religious institution.

**c. How do you classify people you meet**

Civil apparatus of the Ministry of Religious Affairs that I have encountered are to be formal and self-defense in collecting information. The organizational hierarchy looks strict. This indicates that the organization is a type of cultural hierarchy.

**d. Observing the Guidance of Human Resource Organization itself**

From the observation, the Ministry of Religious Affairs does not provide specific Human Resources guidance to the ministry, which includes the code of conduct. Personnel development is based on Government Regulation No. 53 in 2010. This indicates that there is no claim on the State Apparatus at the Ministry of Religious Affairs, which differs from other ministries of the employment Regulation.

**e. Asking questions about people you meet**

From the interview, the Ministry of Religious Affairs imposed open bidding for Echelon 1 and Echelon 2 beginning in 2018. Such as in, Echelon 3 and 4 that have not been treated merit system correctly. From one of the informants, these are still based on consideration of superior position. From the results of interviews with the head of Research and Development of the Ministry of Religious Affairs that research Data from Research and Development provides an overview that the leadership of each of the Ministry of Religious Affairs units has two opposite. Implementation of the merit system in terms of recruitment, placement, and promotion of employees who are judged does not take an attention to the competency aspect, resulting in employees who are in a certain position has no competency and taking care of the industry.

From the explanation above, it is concluded that the Ministry of Religious Affairs has not fully implemented the merit system in its promotional process. Of these five, the culture of the Ministry of Religious Affairs can be concluded, namely, the Ministry of Religious Affairs is an institution that needs attention in integrity, institutions with a type of cultural hierarchy, religious, and yet to fully implement the merit of the system.

The development of the working culture in the Ministry of Religious Affairs has a strategic role to fix the working culture of the institution. On the other hand, the culture of the previous real organization when contrary to new cultural values can lead to resistance. This needs to be identified seriously so that the implementation of the cultural value of work reaches the goal.

## CONCLUSION

Based on the results of the field findings are classified into as follows:

1. Ministry of Religious Affairs is a vertical institution with has working areas amount 4543. The record of accomplishment of integrity issues makes changing mindsets and culture stated into Ministry of Religious Affairs as a necessity.

2. The Ministry of Religious Affairs has not developed a structured, comprehensive and sustainable work culture. The Implementation of 5 Cultural values of the Ministry of Religious Affairs have not guided the Regulation of Ministry of Administrative and Bureaucratic Reform Number 39 in 2012.

3. Factors that influence the implementation of five cultural values of work in the Ministry of Religious Affairs are as follows:

a. Communication

- The absence of regulation and culture guidelines to make work culture that is not implemented in the form of strengthening programs and support activities that are special.

- In the formulation of the value of culture, work at the Ministry of Religious Affairs is formulating measurement of key behavior. Ministry of Religious Affairs also does not make regulations related to the socialization or internalization process and evaluation.

- Five cultural values of work are understood differently by the State Apparatus of the Ministry of Religious Affairs and are considered as slang or mere.

- The absence of operational indicators and instruments of State Apparatus individuals do not have the objective and measurable standards in carrying out the five cultural values of work, making it difficult to do objective assessments by the leadership of the implementation of five cultural values of work by a State Apparatus individual.

b. Resources

- A legally structural reform team is the Ministry of Religious Affairs. The structure of the bureaucratic reform team at the district level is still only an additional task. In addition, at the district level has not been implemented program that is the task of bureaucratic reform team function.

- Ministry of Religious Affairs has not implemented the delegation of implementation authority and budget support, as well as other supporting facilities. So the implementation of the cultural value of work does not work systematically.

c. Commitment and Leadership

The development of work culture in the Ministry of Religious Affairs has not been a priority scale. In addition, the Ministry of Religious Affairs' opinion that internalization of work culture is not done in a cohesive, making the development of work culture understood only as a mere and jargon. Even in List Contents of Budget, known as *DIPA* was not estimated the development program of work at Ministry of Religious Affairs

d. Organizational Culture

The Ministry of Religious Affairs is, in fact, an institution that needs attention in integrity, institutions with a type of cultural hierarchy, being religious and not yet fully implementing the merit system. The culture is, in fact, contrary to the value of the working culture that is declared as integrity and professionalism. This affects the implementation of the value of cultural work in the Ministry of Religious Affairs.

## SUGGESTIONS

According to the research results above, the advice for the Ministry of Religious Affairs are as follows:

1. The Ministry of Religious Affairs issue a structured and comprehensive regulation on the work culture that includes the implementation of the working culture that a valuation indicator of occupational culture.

2. Planning, implementing socialization and internalization of 5 cultural values of work on all State Apparatus of Ministry of Religious Affairs so that there are changing mindset and working culture in past.

3. Developing an implementation strategy of the cultural value of work in this case involving research and development agency, so that the policy of the Ministry of Religious Affairs is ongoing based on the organization's necessity. The results should be considered in various policies of the Ministry of Religious Affairs.
4. Empowering the bureaucracy reform team at each level aims to implement the delegation of implementation authority and budget support as well as other supporting facility.
5. The Ministry of Religious Affairs enforces a merit system at all levels of Echelon's position and assess this office so that the leader in the Ministry of Religious Affairs classify as individual that has integrity, professional, innovative, responsible and exemplary Religious values of the Ministry of Religion.
6. Recruiting new employees with a culture-oriented value of organizational work

## REFERENCES

- Arianto, A., Zauhar, S. and Hanafi, I. (2015). "FAKTOR-FAKTOR YANG MEMPENGARUHI IMPLEMENTASI PROGRAM PENGEMBANGAN BUDAYA KERJA DI SEKRETARIAT DAERAH KABUPATEN PATI", *Reformasi : Jurnal Ilmiah Ilmu Sosial dan Ilmu Politik*, 5(1), pp. 204-217 (in Indonesian).
- Bang, C. A. D., Kusuma, A. R. and Utomo, H. S. (2014). "KAJIAN BUDAYA KERJA DALAM KABUPATEN KUTAI BARAT", *Journal Administrative Reform*, 2(3), pp. 2089-2101 (in Indonesian).
- Crews, D. (2013). "Aligning Culture with Human Resource Strategies", *International Journal of Business and Social Science*, 4 (15), pp. 71-75.
- Denzin, N. K. and Lincoln, Y. S. (2000). *Handbook of Qualitative Research*. California: Sage Publication.
- Hanaysha, J. (2016). "Examining the Effects of Employee Empowerment, Teamwork, and Employee Training on Organizational Commitment", *Procedia – Social and Behavioral Sciences*, 229, pp. 298-306. Available at: <https://doi.org/10.1016/j.sbspro.2016.07.140> (accessed 4 November 2019).
- Hill, H. C. (2003). "Understanding Implementation: Street-Level Bureaucrats' Resources for Reform", *Journal of Public Administration Research and Theory*, 13(3), pp. 265-282. Available at: <https://doi.org/10.1093/jopart/mug024> (accessed 17 November 2019).
- James, P. S. (2014). "Aligning and Propagating Organizational Values", *Procedia Economics and Finance*, 11(14), pp. 95-109. Available at: [https://doi.org/10.1016/S2212-5671\(14\)00180-4](https://doi.org/10.1016/S2212-5671(14)00180-4) (accessed 14 November 2019).
- Jodi, S. and Stephanie, M. (2015). *Effective Implementation in Practice Integrating Public Policy and Management*. USA: Jossey Bass.
- Kadarisman, M., Gunawan, A. and Ismiyati, I. (2017). "IMPLEMENTASI KEBIJAKAN SISTEM TRANSPORTASI DARAT DAN DAMPAKNYA TERHADAP KESEJAHTERAAN SOSIAL DI JAKARTA", *JURNAL MANAJEMEN TRANSPORTASI DAN LOGISTIK*. Available at: <https://doi.org/10.25292/j.mtl.v2i1.129> (accessed 14 November 2019), (in Indonesian).
- Kementerian Agama RI. (2017). *Kementerian Agama dalam Angka 2016 Ministry of Religious Affairs in Figures 2016*. Jakarta, (in Indonesian).
- Kementerian Agama RI. *KMA 582 Tahun 2017* (2017), (in Indonesian).
- Kementerian Agama RI. (2019). *Laporan Kinerja Kementerian Agama 2018*. Jakarta, (in Indonesian).
- KPK. (2015). *Integritas Sektor Publik Tahun 2014 Fakta Korupsi dalam Layanan Publik*. Jakarta: Direktorat Penelitian dan Pengembangan Kedeputan Bidang Pencegahan Komisi Pemberantasan Korupsi (in Indonesian).

Munawwaroh, S., Larasati, E., Suwitri, S. and Warsono, H. (2019). "Policy implementation of working culture development in ministry of religious affairs", *Management and entrepreneurship: trends of development*, 4 (10), pp.43-57. Available at: <https://doi.org/10.26661/2522-1566/2019-4/10-04>

- Lawler III, E. E. and Worley, C. G. (2006). *Designing Organizations That Are Built to Change*. MIT Sloan Management Review.
- Lerner, M. P. (1982). *Stress in the workplace*. Issues in Radical Therapy.
- Malik, M. S. and Tariq, S. (2016). "Impact of Spiritual Intelligence on Organizational Performance", *International Review of Management and Marketing*, 6(2), pp. 289-297.
- Mattila, M. (2008). "Values in organizations: difficult to understand, impossible to internalize?", *Social Responsibility Journal*, 4 (1/2), pp. 24-33. Available at: <https://doi.org/10.1108/17471110810856802> (accessed 11 November 2019).
- Nugroho Riant. (2017). *Public Policy* (6th ed.). Jakarta: PT Elex Media Komputindo.
- Osman-gani, A. M., Hashim, J. and Ismail, Y. (2007). "Effects of Religiosity, Spirituality, and Personal Values on Employee Performance: A Conceptual Analysis", 9th International Conference of the Academy of HRD (Asia Chapter), November 11 – November 14, 2010. Available at: [http://irep.iium.edu.my/2787/1/Shanghai2010-Religiosity%26Spirituality-AAhad%26Jun-1.doc\\_-\\_EDITED\\_to\\_6000\\_words.pdf](http://irep.iium.edu.my/2787/1/Shanghai2010-Religiosity%26Spirituality-AAhad%26Jun-1.doc_-_EDITED_to_6000_words.pdf) (accessed 10 November 2019).
- Robbins, S.P. and Judge, T.A. (2013). *Organisational Behavior*. 15th edition, Pearson, Boston.
- Robbins, S. P. and Coulter, M. (2016). *Management*. England: Pearson Education Limited.
- Sabatier, P. and Mazmanian, D. (1980). "The Implementation of Public Policy", *Policy Studies*, Januari (4), pp. 538-560.
- Sani, S. I. A., Mohammed, A. H., Misnan, M. S. and Awang, M. (2012). "Determinant Factors in Development of Maintenance Culture in Managing Public Asset and Facilities", *Procedia - Social and Behavioral Sciences*, 65(ICIBSoS), pp. 827-832. Available at: <https://doi.org/10.1016/j.sbspro.2012.11.206> (accessed 12 November 2019).
- Signé, L. (2017). *Policy Implementation – A Synthesis of the Study of Policy Implementation and the Causes of Policy Failure*. OPC Policy Center, PP-17/03(March), pp. 9-22.
- Smith, M. E. (2003). "Changing an organisation's culture: correlates of success and failure", *Leadership & Organization Development Journal*, 24(5), pp. 249-261. Available at: <https://doi.org/10.1108/01437730310485752> (accessed 12 November 2019).
- Sugiyono. (2014). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: Alfabeta (in Indonesian).
- Van der Voet, J. (2014). "The effectiveness and specificity of change management in a public organization: Transformational leadership and a bureaucratic organizational structure", *European Management Journal*, 32(3), pp. 373-382. Available at: <https://doi.org/10.1016/j.emj.2013.10.001> (accessed 12 November 2019).
- Warrick, D. D. (2017). "What leaders need to know about organizational culture", *Business Horizons*, 60(3), pp. 395-404. Available at: <https://doi.org/10.1016/j.bushor.2017.01.011> (accessed 12 November 2019).
- Widodo, J. (2007). *Analisis Kebijakan Publik*. Malang: Bayumedia Publishing (in Indonesian).
- Wihantoro, Y., Lowe, A., Cooper, S. and Manochin, M. (2015). "Bureaucratic reform in post-Asian Crisis Indonesia: The Directorate General of Tax", *Critical Perspectives on Accounting*, 31, pp. 44-63. Available at: <https://doi.org/10.1016/j.cpa.2015.04.002> (accessed 15 November 2019).
- Yaghi, A. and Al-Jenaibi, B. (2018). "Happiness, Morality, Rationality, and Challenges in Implementing Smart Government Policy", *Public Integrity*, 20(3), pp. 284-299. Available at: <https://doi.org/10.1080/10999922.2017.1364947> (accessed 8 November 2019).
- Yuan, C.-K. and Lee, C.-Y. (2011). "Exploration of a construct model linking leadership types, organization culture, employees performance and leadership performance", *Procedia – Social and Behavioral Sciences*, 25, pp. 123-136. Available at: <https://doi.org/10.1016/j.sbspro.2011.10.534> (accessed 8 November 2019).
- Zainuri, A. (2016). "Strategi Penerapan Lima Nilai Budaya Kerja di Kementerian Agama Menuju Pelayan Prima", *Median-Te: Jurnal Studi Islam*, 14(1), pp. 1-14 (in Indonesian).



**РЕАЛІЗАЦІЯ ПОЛІТИКИ РОЗВИТКУ ТРУДОВОЇ КУЛЬТУРИ В  
МІНІСТЕРСТВІ У СПРАВАХ РЕЛІГІЇ**

**Salma Munawwaroh**  
*Університет Діпонегоро  
Семаранг, Індонезія*

**Endang Larasati**  
*Університет Діпонегоро  
Семаранг, Індонезія*

**Sri Suwitri**  
*Університет Діпонегоро  
Семаранг, Індонезія*

**Hardi Warsono**  
*Університет Діпонегоро  
Семаранг, Індонезія*

В Індонезії як релігійній державі діє Міністерство у справах релігії, місією якого є координіація і розвиток гармонійних, інтелектуальних, емоційних і духовних аспектів життя спільноти. Однак, за іронією долі, міністерство, яке мало стояти на сторожі цієї моралі, в 2012 році було відзначено як державний орган з найнижчою версією індексу сприйняття Комісією щодо викорінення корупції, відомої як КПК, а в 2014 році – єдиним міністерством з показником індексу нижче встановленого Комісією стандарту. Міністерство адміністративної та бюрократичної реформи опублікувало в 2012 році постанову № 39 про керівні принципи розвитку культури праці для центральних органів виконавчої влади в 2012 році. Мета представленого наукового дослідження – виявити і проаналізувати реалізацію політики розвитку трудової культури на основі положення № 39 в 2012 році в Міністерстві у справах релігії і виявити фактори, що впливають на реалізацію політики розвитку Міністерства у справах релігії. Наукова стаття є якісним дослідженням з використанням описово-аналітичних методів об'єкта дослідження. За результатами дослідження доведено, що Міністерство у справах релігії не розробило а ні структуру трудової культури свого відомства, а ні будь-якої всеосяжної й стійкої системи трудової культури в цілому.

**Ключові слова:** Міністерство у справах релігії, індонезійська громада, робоча культура, бачення, місія.

**РЕАЛИЗАЦИЯ ПОЛИТИКИ РАЗВИТИЯ ТРУДОВОЙ КУЛЬТУРЫ В  
МИНИСТЕРСТВЕ ПО ДЕЛАМ РЕЛИГИИ**

**Salma Munawwaroh**  
*Университет Дипонегоро  
Семаранг, Индонезия*

**Endang Larasati**  
*Университет Дипонегоро  
Семаранг, Индонезия*

**Sri Suwitri**  
*Университет Дипонегоро  
Семаранг, Индонезия*

**Hardi Warsono**  
*Университет Дипонегоро  
Семаранг, Индонезия*

В Индонезии как религиозном государстве действует Министерство по делам религии, миссией которого является координация и развитие гармоничных, интеллектуальных, эмоциональных и духовных аспектов жизни сообщества. Однако, по иронии судьбы, министерство, которое должно было стоять на страже этой морали, в 2012 году было отмечено в качестве государственного органа с самой низкой версией индекса восприятия Комиссией по искоренению коррупции, известной как КПК, а в 2014 году – единственным министерством с показателем индекса ниже установленного Комиссией стандарта. Министерство административной и бюрократической реформы опубликовало в 2012 году постановление № 39 о руководящих принципах развития культуры труда для министерств и



Munawwaroh, S., Larasati, E., Suwitri, S. and Warsono, H. (2019). "Policy implementation of working culture development in ministry of religious affairs", *Management and entrepreneurship: trends of development*, 4 (10), pp.43-57. Available at: <https://doi.org/10.26661/2522-1566/2019-4/10-04>

ведомств в 2012 году. Цель представленного исследования – выявить и проанализировать реализацию политики развития рабочей культуры на основе положения № 39 в 2012 году в Министерстве по делам религии и выявить факторы, влияющие на реализацию политики развития Министерства по делам религии. Научная статья представляет собой качественное исследование с использованием описательно-аналитических методов объекта исследования. В качестве результатов исследования доказано, что Министерство по делам религии не разработало ни структуру трудовой культуры своего ведомства, ни какую-бы то ни было всеобъемлющую и устойчивую систему трудовой культуры в целом.

**Ключевые слова:** Министерство по делам религии, индонезийская община, рабочая культура, видение, миссия.

---

MARKETING

---

Received:  
29 November, 2019  
1st Revision:  
29 December, 2019  
Accepted:  
30 December, 2019

UDC: 339.1

DOI <https://doi.org/10.26661/2522-1566/2019-4/10-05>

DIGITAL MARKETING STRATEGY IN PROMOTING PRODUCT

**Imelda Debby Christina**

*London School of Public Relations  
Jakarta, Indonesia*

ORCID: [0000-0003-2300-7048](https://orcid.org/0000-0003-2300-7048)

**Fenni**

*London School of Public Relations  
Jakarta, Indonesia*

ORCID: [0000-0003-1163-2591](https://orcid.org/0000-0003-1163-2591)

**Devia Roselina**

*London School of Public Relations  
Jakarta, Indonesia*

ORCID: [0000-0002-9701-696X](https://orcid.org/0000-0002-9701-696X)

\*Corresponding author email: [imeldebbby@gmail.com](mailto:imeldebbby@gmail.com)

**Abstract.** A rapid internet development and its function has become one of the most important technologies in the world since it is very influential for human life. Considering this, one of the paid television companies makes an integrated marketing communication using internet as a tool for promoting its product. This study **aims** to know the role and strategy of various digital marketing channels, including website, search engine marketing (SEM), online PR, display advertising, email marketing and social media marketing in promoting product. The **methodology** is descriptive qualitative using interview and participant observation. The data were collected through documents and literature which related to digital marketing. This study **found** that digital marketing strategy has important role in promoting product. The whole digital marketing strategy, either in its planning, implementation, or evaluation, has its own uniqueness. It showed that digital marketing strategy has been run well within the company.

**Keywords:** digital marketing, integrated marketing communication, promotion, marketing communication strategy.

**JEL Classification:** M31, M37, M39.

INTRODUCTION

Technology has rapid development and continuous improvement which cannot be separated with the aspect of human's life. Technology has strong relation with internet as the most useful technology in the world. Based on the Indonesian Internet Service Provider Associations data, internet user keeps increasing year by year. As in 2014, the internet user had reached 88 million people and increased for 51.8% or 132.7 million people in 2016 (Widiartanto, 2016). This showed that most of Indonesian has already known about internet and the user will continue to increase in future.

Technology also affects people fulfilling their desire in getting entertainment, such as in television. Television is becoming a choice when people are getting bored or tired of their daily routines. This lead to the appearance of paid or subscription television as a tempting business. It is proved on the development of subscription television in Indonesia which already had various kinds of subscription television companies, such as Nexmedia, Indovision, UseeTV (Indihome), BigTV, K-Vision, First Media, MyRepublic, DensTV, Transvision, TopasTV, TopTV, Okevision, Skynindo, and so on, since 90s until now.

The competition between subscription televisions in Indonesia is very fierce. Some companies are survived until now but some are not. Even if the market enthusiast on subscription television is a lot but the amount of subscription television companies is also varies. They are offering their own strength and benefit to customers due to compete with their competitors. This intense competition makes them show their product's ability and strength and try to create a new strategy to make public choose their product by doing an integrated marketing communication strategy. Realizing that, a digital era is a suitable era to start focusing on enhancing marketing communication strategy through digital marketing or usually called as internet marketing. Internet marketing uses internet as a business tool in which a company can give special service and user can get his needs. Internet is not only functioned as searching and spreading information machine but more and wider than that. The power and diversity in digital marketing will keep on developing following the creativity and technology advance in future.

Seeing through the effectiveness and efficiency aspect, internet facilitates people to search information easily. Meanwhile, for company, internet facilitates in operational thing or uses as company marketing technique development. The uniqueness and the differentiation in other communication strategy within digital marketing are rated to become a right strategy to promote any kind of products. Therefore, this study aims to know about the digital marketing strategy in promoting product, including website, search engine marketing (SEM), online PR, display advertising, email marketing and social media marketing in promoting product.

## LITERATURE REVIEW

### a) Communication strategy

Pearce and Robinson (2008) define strategy as a group of decision and action that produce formula and plan designed to reach organization and company targets. Roland stated that the communication strategy is an activity or campaign which informational and persuasive in building understanding and support on an idea, thought, or structured service. The purpose of communication strategy according to Pace and Faules (2010) are;

- Secure understanding: to make sure the messages are delivered
- Establish acceptance: to keep building the delivered messages in a good way
- Move action: to motivate the next action

### b) Integrated marketing communication

The American Association of Advertising Agency or known as the 4As claimed that the definition of integrated marketing communication is a marketing communication planning concept that aware with additional value from comprehensive plan. It evaluates the strategic role of various communication disciplines such as common advertising, direct response, sales promotion and public relation. Also, it combines some disciplines to give maximum clarity, consistency, and communication influence (Belch and Belch, 2015). Integrated marketing communication is a strategy which consists of various activities to deliver consistent message to public due to create long term relationship and product value. Moreover, an exact strategy which runs through integrated marketing communication will produce profit for company.

### c) Promotional mix

Integrated marketing communication refers to the marketing communication tool. The basic tool used within integrated marketing communication is called as promotional mix, which in traditional concept it consists of some elements such as, advertising, sales promotion, public relation and personal selling. However, in modern concept, the element is added with direct marketing and digital marketing (Belch and Belch, 2015).

### d) Digital marketing

Digital marketing nowadays holds important role in the development of integrated marketing communication and often used in modern era. According to Chaffey and Chadwick (2012), digital

marketing can be defined as a tool for reaching marketing target through digital technology application which encompasses desktop, cellular phone, tablet, and other digital platform. Digital marketing is a modern communication which uses internet and digital technology and has relationship with traditional communication to achieve the goal. Therefore, in order to create a good integrated message, digital marketing should be followed with promotional mix to make it more optimal. Zahay defines digital marketing as a digital technology used to facilitate the marketing process with final purpose to create customers' involvement and interaction (Zahay, 2015). Some media channel of digital marketing should be optimized due to reach a beneficiary result can be seen as below;

1. Website

Dan Morley in his article entitled "The 6 Fundamentals of digital Marketing 2016" claimed that website is a final result from all the things done within social media, search engine and online advertising to attract potential customer. Website is a place in which potential customer looks for something or decides to buy for something. Kotler and Armstrong, (2012) stated that website is a first step in doing online marketing. Website can be optimal if it owned a good hosting along with effective link. The effective link can be rated whether it presents the company and product or it can be remembered easily by people. Furthermore, it needs to see the content within the website since it can attract visitor to visit the website continuously.

2. Search engine marketing

Besides website, Chaffey and Chadwick (2012) claimed that there is another digital marketing channel which needs to be optimized due to support the digital marketing activity. Search engine marketing or SEM is a message placement in search engine to push user visit the website. It has function to optimize the search engine such as Google due to show the recommended website through keywords.

3. Online PR

In integrated marketing communication strategy, public relation has role to enhance brand message credibility and influence leader opinion or trendsetter. While online PR is public relation who does all the things above via online. Chaffey and Chadwick (2012) said that online PR in digital marketing means maximizing the name of company brand or in other word, letting the public know about the product information through website, social media or third party blog. Online PR also responds to negative news and does public relation through social media or blog.

4. Display advertising

Display advertising or known as display ads is the use of advertising in online media such as banner advertising either in static or dynamic to enhance brand awareness. Through display ads, internet user is pushed to click on the ads which then lead to the company website which has more complete information on the ads (Chaffey and Chadwick, 2012). Display ads can be used to create awareness that involve people into the direct marketing object. Display ads have various kinds and sizes such as leader's boards, rectangles, side panels, skyscrapers or verticals, also the form of display ads is static, animated or ads with fast display (Belch and Belch, 2015).

5. E-mail marketing

According to Chaffey and Chadwick, e-mail marketing is usually applied in outside communication from company to customer to push the buying demand or branding. E-mail marketing is often used to customer within the mail list (Chaffey and Chadwick, 2012). The use of e-mail as a promotion media can move internet user with the content inside the e-mail. The e-mail can be filled with promotion offering which then lead the user to the website for more information

6. Social media marketing

Social media marketing is an activity to monitoring and facilitates customer's interaction and participation in website to push positive involvement with the company and brand. Social media marketing is an important category of digital marketing which includes communication to customer through social network, blog or forum (Chaffey and Chadwick, 2012). Social media is a tool that

facilitates the communication between individuals or groups to be able to interact and exchange information on a product. Through social media, a company can deliver message to target audience and make a viral marketing or campaign in social media. Hence it could increase the interest of other social media user to follow on the campaign.

## **METHODOLOGY**

The methodology uses in this study is qualitative using descriptive approach to explain on the digital marketing strategy used by PT.X as one of the subscription televisions in Indonesia. This study report on the result with systematic, factual, and accurate description on facts related to digital marketing strategy. This study uses study case to learn intensively on background problem of condition and position that is happening and the environment interaction within. This study observes in a very detail way on digital marketing strategy done by PT. X to promote its product optimally. The subject is digital marketing division of PT.X. The technique on data collection is done using primary and secondary data. The primary data is consisted of semi-structured interview with 3 internal interviewee related with digital marketing strategy. While the secondary data is obtained through documents, report, and various literature studies along with research article on digital marketing. The data is analyses using reduction, display and verification technique. The data are validated by triangulation source. Triangulation source is a digital marketing practitioner who had experience on digital marketing for 5 years long or more.

## **RESULT AND DISCUSSION**

The result showed that PT. X uses various kind of digital marketing channels to promote its television subscription program to public. The digital marketing channels are consisting of website, search engine marketing, online PR, display advertising, e-mail marketing and social media marketing which describe as below;

### **1. Website**

Kotler and Armstrong (2012) stated that website is the early phase in doing online marketing. Similar to informant's opinion who said that website is the first step to start digital marketing. Website is made with the name of brand as the link address in order to facilitate user to mention and remember the brand. It also facilitate user to search on search engine to look for the brand website. Some available features in company website are filled with top program, special events, and package. It is also filled with menu options such as channel, package, promotion, subscription and about us until menu for registering to the subscription program. These features make website fulfill the needs of customer and customer candidate to find out on product. The completeness of information, start from available channels, package price, available promo and the feature to subscribe help customer candidate easy to know about the brand. Then, after the candidate is clicked on the product offered, the candidate can directly subscribe on television channel through website. This will influence on the enhancement of product sales amount. For customer, website feature also made to make customer feel comfortable by proving the whole information in a website. From the website feature called Top Program is filled with the synopsis of best program that is airing or will be airing soon. All features are made to make customer visit the website regularly.

In an article entitled, "Digital Marketing and Social Media: Why Bother?" Tiago and Verissimo (2014) said that website can be a useful tool for market in creating brand power and get competitive profit. PT. X is not only creating complete and detail information on its product but also provides subscription feature within the website. Thus, it can be a marketing channel. The evaluation process done by PT. X toward the website is can be seen from the produced website traffic. The total conversion or sales can be seen through this website. However, based on the internal company data, PT. X has not yet reached its target on website traffic. But it does not

happen in website conversion. PT. X has reached 1100 website conversion from 800 conversions per month. Traffic and conversion are also help by the other digital marketing channel. Therefore the evaluation which done by PT. X is rated as good since it showed the other types of digital marketing channel that support the website traffic and it can be optimized more in future.

#### 2. Search engine marketing

One of the digital marketing channels that has biggest role in contributing website traffic is search engine marketing. It has function to optimize the spread of information and promotion in internet. The search engine marketing in PT.X uses persuasive sentence along with promotional description to attract internet user to click the ads in search engine. The search engine marketing planning is started by defining the keywords to be input in search engine machine. PT. X has used its brand name as a keyword and the other keyword is something that related with television subscription such as television subscription, paid television, television with no satellite, and other. According to Zahay (2015) search engine marketing is divided into two types, namely non-paid through search engine optimization (SEO) and paid through pay per click. PT. X also uses both of the SEM types. In SEO, PT. X optimize the blog within website and social media to increase the keyword relevance that often used by internet user while searching on television subscription. Meanwhile, in pay per click, PT. X uses Google AdWords which formed using persuasive sentence to optimize the product promotion strategy.

In doing evaluation on SEM, PT. X uses real time evaluation in which every implementation will be evaluated together with the effectiveness on keyword performance to help enhance the website traffic. The result showed that SEM can contribute 80% traffic of the whole channels. Thus, SEM is the biggest channel that helps website traffic. PT. X also exceed the target for 70% in SEM which mean that the strategy of SEM has run well and succeed in supporting digital marketing goal through website. In accordance with triangulation source that real time evaluation and testing trial and error are evaluation that should be done in doing the digital marketing strategy due to optimize the estimation budget.

#### 3. Online PR

PT. X optimizes online PR as one of the digital marketing channels to support the promotion of its product. If according to Chaffey and Chadwick online PR means maximizing the brand names or product in website or social media, blog and third party media (Chaffey and Chadwick, 2012), PT. X do online PR in social media and blog only. Moreover, PT. X runs offline PR such as media relations, press conference or press release to support positive news of its brand in news portal. PT. X also do media monitoring on positive and negative news on internet. If there is negative news, as what happen on one of the digital marketing portal, then the customer care will handle the complaint as soon as possible.

PT. X do online PR based on Chaffey's and Chadwick's opinion that is responding to negative news in internet (Chaffey and Chadwick, 2012). If the target on complaint service is 70%, PT. X has been handling 80% of complaint in very good way. By doing media monitoring regularly, it will be able to handle the negative news faster. Thus it will minimize the negative news in internet on the product and the company.

#### 4. Display advertising

Besides online PR, another important digital marketing channel used to promote product is display ads. Display ads have also big contribution in promoting product. Ivanova (2012) claimed that there is positive point for integrated marketing communication if it uses internet for full media application support, in which internet provides picture and font until voice and video in one unity of internet advertising. Display ad is one of the digital marketing channels that adapt on it. Display ad is delivering message or information with interesting visualization designed by PT. X. In display ad planning through google display network or news portal website, PT. X promotes its product by giving information on shows in its channel and makes it as an interesting visualization promotion. PT. X also makes design visualization by using promotional price as the main design seen within



the display ad. Therefore, it will make internet user pushed to click on the ad which then directed to the company website that provide detail information about the product.

PT. X uses bright color for its display ads supported with interesting content image such as soccer player to promote Sports Platinum package or cartoon to promote Kids package. PT. X also put the price as the noticeable picture within the display ad to strengthen the promotion. It encourages people who see the ads, interest to subscribe on the product. The effectiveness of display ads can be seen through how much people aware and click on the ads. If the intensity produced through display ads is big then it means that the image that carried is right and interesting. Display ad has target on 20% traffic and PT. X has exceeded the target for 30% traffic. This can be the standard to do other strategy in the future.

#### 5. E-mail marketing

In e-mail marketing, PT. X uses it as interlace with customer. As Chaffey and Chadwick said that e-mail marketing is the most used channel to inform customer about the product. By using mail list, PT. X can directly send e-mail to its customers. Mail list in PT. X which owned by portfolio team can be adjusted based on the customer's target segmentation. In running e-mail marketing, PT. X has already had planning by defining on what kind of information that will be sent through e-mail. Then it defines the target segmentation of e-mail receiver that suit the information. For example, information on the opening of all channels can be sent to customer who has subscribed for a year. The portfolio team will sort the customer based on their subscription duration, thus the e-mail which sent to them will be match with their subscription duration. After that, PT.X evaluates the open rate from e-mail marketing to know the amount of e-mail received by customer. The target of e-mail marketing is the open rate reach 20% but PT.X has reached 40% in open rate. This open rate result will be the standard to fix and enhance the content creativity on e-mail to make the open rate increase optimally in the future.

#### 6. Social media marketing

Social media marketing is also become the digital marketing channel to promote product. In doing social media marketing, PT. X uses three kinds of platform, namely Facebook, Twitter and Instagram. These platforms have similar content but different posting time. The number of post is 4 times a day in each social media, except on Twitter. It happens since twitter should update continuously in order to make the timeline read by follower. If there is an event or promotion, the number of post will be multiply to increase the promotion. Social media has role in spreading various kind of information and promote the product. Through three kinds of posting that are #Guide, #Show and #Info, PT. X has formed consistent information. #Guide as a content that give information on product details such as how to solve troubleshooting, information on customer care phone number, the program schedule, and the tutorial on how to make the payment. #Show is interesting information filled with program showed in channels while #Info is the news info nowadays. All of these information becomes the guidelines for digital marketing team to make content in each day. These can be the standard to reach target engagement in the form of likes for about 8 likes for each post.

A journal entitled, "The Internet's Impact on Integrated Marketing Communication" claimed that one of the benefit in using internet as marketing communication strategy is can build an interactive relationship with customer (Ivanova, 2012). As in social media, the customer can communicate with customer care to complaint or ask for product information. Hartiningsih in her article entitled, "*Internet Advertising sebagai Media Komunikasi Pemasaran Interaktif*" stated that one of the internet advertising function is to build customer relationship management (Hartiningsih, 2013). PT. X has been build customer relationship management through social media by handling customer's complaint until help customer solve the problem. Therefore, customer will be satisfied and spread positive issue on brand to their friend or their followers.

PT.X has been given interesting and advantage information to its customer through digital marketing strategy via social media. By giving information on product promotion will make people interest with to buy the product. An article entitled, "The Effects of Social Media Marketing on

Online Consumer Behavior” explained that the involvement of customer means focus on the customer commitment not on the transaction (Vinerean, Cetina, Dumitrescu and Tichindelan, 2013). Hence, PT. X makes promotion on soft selling and prioritizes on the content to build interest to customer and customer candidate to the product. Arifah (2015) stated that there are some strategies that can be implemented within social media. One of the strategies is by holding a giveaway or quiz. PT. X has been done one of the strategies to run social media marketing in promoting the product. The quiz is made as attractive as possible to enhance customer’s trust toward the brand. It is proved that quiz makes the number of follower increased. However, there is still deficiency on target engagement. Most of the posts do not reach the target engagement.

## **CONCLUSION**

Based on the analysis on digital marketing communication strategy in PT.X, it can be concluded that PT. X has run its strategy in a right stages, including planning, implantation, and evaluation to reach the company’s target and goal. PT. X uses various kind of digital marketing media channel to get beneficial result to promote the product optimally, such as website, search engine marketing, online PR, display advertising, e-mail marketing, and social media marketing. Therefore, the strategy on digital marketing in PT.X is declared as running well since it has succeeded in reaching the target goal. Public can get information on the product very well through internet. This information enhances their knowledge on product and its specialty which makes them interest and do the subscription. Digital marketing is not only giving information to the customer but also to customer candidate. This will support the purpose of integrated marketing communication to produce and increase the product sales. Digital marketing has uniqueness in its ability to get public attention faster. This makes digital marketing an exact strategy in running integrated marketing communication in present and in future.

For further research the same topic with different objects or programs and methods are suggested to consider. Quantitative methodology is recommended to be seen as a method that shows how significant is the impact of digital marketing activity done by the company on public desire to buy a product or service.

## **REFERENCES**

- Arifah, F. N. (2015). “Analisis Sosial Media sebagai Strategi Marketing dalam Bisnis Online”, *TRANSFORMASI Jurnal Informasi & Pengembangan Iptek*, 11(2), pp. 143-149. Available at: <https://docplayer.info/48986086-Analisis-sosial-media-sebagai-strategi-marketing-dalam-bisnis-online.html> (accessed 3 November 2019), (in Indonesian).
- Belch, G. E. and Belch, M. A. (2015). *Advertising and promotion: an integrated marketing communications perspective*. New York: McGraw-Hill.
- Chaffey, D. and Chadwick, F. E. (2012). *Digital Marketing: Strategy, Implementation and Practice*. London: Pearson.
- Hariningsih, E. (2013). “Internet Advertising sebagai Media Komunikasi Pemasaran Interaktif”, *JBMA*, Vol. I, No. 2, pp. 12-16. Available at: [http://www.amaypk.ac.id/download/jurnal/Internet\\_Advertising\\_Sebagai\\_Media\\_Komunikasi\\_Pemasaran\\_Interaktif.pdf](http://www.amaypk.ac.id/download/jurnal/Internet_Advertising_Sebagai_Media_Komunikasi_Pemasaran_Interaktif.pdf) (accessed 5 November 2019), (in Indonesian).
- Ivanova, A.E. (2012). “The Internet’s Impact on Integrated Marketing Communication”, *Procedia Economics and Finance*, 3, pp.536-542. Available at: [http://dx.doi.org/10.1016/s2212-5671\(12\)00192-x](http://dx.doi.org/10.1016/s2212-5671(12)00192-x) (accessed 26 October 2019)
- Kotler, P. and Armstrong, G. (2012). *Prinsip-prinsip pemasaran (Edisi 13)*. Jakarta: Erlangga, (in Indonesian).

Christina, I. D., Fenni and Roselina, D. (2019). "Digital marketing strategy in promoting product", *Management and entrepreneurship: trends of development*, 4 (10), pp. 58-66. Available at: <https://doi.org/10.26661/2522-1566/2019-4/10-05>

Pace, W. and Faules, D. F. (2010). *Komunikasi Organisasi: Strategi Meningkatkan Kinerja Perusahaan*. Bandung: Remaja Rosdakarya, (in Indonesian).

Pearce, J. A. and Robinson, R. B. J. (2008). *Manajemen Strategis 10*. Jakarta: Salemba Empat, (in Indonesian).

Tiago, M.T.P.M.B. and Verissimo, J.M.C. (2014). "Digital marketing and social media: Why bother?" *Business Horizons*, 57(6), pp.703–708. Available at: <http://dx.doi.org/10.1016/j.bushor.2014.07.002> (accessed 13 October 2019).

Vinerean, S. et al. (2013). "The Effects of Social Media Marketing on Online Consumer Behavior", *International Journal of Business and Management*, 8(14). Available at: <http://dx.doi.org/10.5539/ijbm.v8n14p66> (accessed 14 October 2019).

Widiartanto, Y. H. (2016). *Pengguna Internet di Indonesia Capai 132 Juta*. Kompas.com. Available at: <https://tekno.kompas.com/read/2016/10/24/15064727/2016.pengguna.internet.di.indonesia.capai.132.juta> (accessed 1 October 2019).

Zahay, D. (2015). *Digital Marketing Management: A Handbook for the Current (or Future) CEO*. New York: Business Expert Press.

## ЦИФРОВА МАРКЕТИНГОВА СТРАТЕГІЯ ДЛЯ ПРОСУВАННЯ ПРОДУКЦІЇ

**Imelda Debby Christina**

*Лондонська школа  
суспільних відносин  
Джакарта, Індонезія*

**Fenni**

*Лондонська школа  
суспільних відносин  
Джакарта, Індонезія*

**Devia Roselina**

*Лондонська школа  
суспільних відносин  
Джакарта, Індонезія*

Швидкий розвиток Інтернету та його функції стали однією з найважливіших технологій у світі, оскільки це дуже впливає на життя людини. Враховуючи це, одна з платних телекомпаній здійснює інтегровану маркетингову комунікацію, використовуючи Інтернет як інструмент просування свого продукту. Це дослідження має на меті визначити роль та стратегію різних каналів цифрового маркетингу, включаючи веб-сайт, маркетинг пошукових систем (SEM), інтернет-PR, медіарекламу, електронний маркетинг та маркетинг соціальних медіа у просуванні товару. Методологія описує використання інтерв'ю та спостереження за учасниками. Дані були зібрані за допомогою документів та літератури, що стосуються цифрового маркетингу. Це дослідження показало, що стратегія цифрового маркетингу відіграє важливу роль у просуванні товару. Вся стратегія цифрового маркетингу, або в його плануванні, реалізації, або оцінці, має свою унікальність. Дослідження виявило, що стратегія цифрового маркетингу добре працює у компанії. Для подальшого дослідження пропонується розглянути ту саму тему з різними об'єктами чи програмами та методами. Кількісну методологію рекомендується розглядати як метод, який показує, наскільки суттєвим є вплив діяльності цифрового маркетингу, здійснюваний компанією на бажання громадськості придбати товар чи послугу.

**Ключові слова:** цифровий маркетинг, інтегрована маркетингова комунікація, просування, маркетингова комунікаційна стратегія

## ЦИФРОВАЯ МАРКЕТИНГОВАЯ СТРАТЕГИЯ ДЛЯ ПРОДВИЖЕНИЯ ПРОДУКЦИИ

**Imelda Debby Christina**

*Лондонская школа  
общественных отношений  
Джакарта, Индонезия*

**Fenni**

*Лондонская школа  
общественных отношений  
Джакарта, Индонезия*

**Devia Roselina**

*Лондонская школа  
общественных отношений  
Джакарта, Индонезия*

Быстрое развитие интернета и его функции стали одной из самых важных технологий в мире, поскольку они очень важны для жизни человека. Учитывая это, одна из платных телевизионных компаний осуществляет интегрированную маркетинговую коммуникацию, используя Интернет как инструмент продвижения своего продукта. Это исследование направлено на то, чтобы узнать роль и стратегию различных каналов цифрового маркетинга, включая веб-сайт, маркетинг в поисковых системах (SEM), онлайн-PR, медийную рекламу, маркетинг по электронной почте и маркетинг в социальных сетях в продвижении продукта. Методология описывает использование интервью и наблюдение за участниками. Данные были собраны с помощью документов и литературы, связанных с цифровым маркетингом. Это исследование показало, что стратегия цифрового маркетинга играет важную роль в продвижении продукта. Вся стратегия цифрового маркетинга, будь то планирование, реализация или оценка, имеет свою уникальность. Это показало, что стратегия цифрового маркетинга хорошо работает внутри компании.

**Ключевые слова:** цифровой маркетинг, интегрированные маркетинговые коммуникации, продвижение, маркетинговые коммуникационные стратегии

---

## ENTREPRENEURSHIP, TRADE AND EXCHANGE ACTIVITIES

---

Received:

28 November, 2019

1st Revision:

28 December, 2019

Accepted:

30 December, 2019

UDC: 336.7

DOI <https://doi.org/10.26661/2522-1566/2019-4/10-06>

### A STUDY OF RAMADAN EFFECT ON THE INDONESIA STOCK EXCHANGE

**Bimo Galuh Saputro Ahmad**

*Universitas Mercu Buana, Jakarta, Indonesia*

ORCID: [0000-0002-8006-4551](https://orcid.org/0000-0002-8006-4551)

**Wiwik Utami**

*Universitas Mercu Buana, Jakarta, Indonesia*

ORCID: [0000-0002-2313-3346](https://orcid.org/0000-0002-2313-3346)

\*Corresponding author email: [bimogaluhsaputro@gmail.com](mailto:bimogaluhsaputro@gmail.com)

**Abstract.** This study aims to test whether there are significant anomalies in stock returns in Shaaban (before Ramadan), Ramadan, and Shawwal (after Ramadan) in the Indonesia Stock Exchange (IDX). Sample was selected based on the listed companies included in the Liquid 45 indices (LQ45). Data collection is based on weekly closing price in the period 2012 till 2017. Research design followed the event studies and assumes that capital market was semi strong. **The analytical method** is the Wilcoxon-test and Paired Sample T-test statistical models with a confidence level of 95% or  $\alpha = 0.05$ . **The results** showed that there was no significant statistical difference between LQ45 returns and abnormal returns in Shaaban, Ramadan, and Shawwal in the research period. It revealed that there was not any anomalies effect of Ramadan in Indonesia Stock Exchange.

**Keywords:** event studies, Ramadan, returns, anomalies, Liquid 45, Indonesia Stock Exchange.

**JEL Classification:** H54, R53.

### INTRODUCTION

The efficient market hypothesis (EMH) starts with the work of Eugene Francis Fama in 1970 who argued that the price of a financial asset had revealed all the information that exists in the value of the asset (Fama, 1970). According to his hypothesis, prices will move automatically following new information obtained by investors or capital market players, on other hand, an investor cannot predict the price movements. However, empirical studies have concluded that there are certain days, months, or certain other periods that appear to conflict with the efficient market hypothesis. Empirical facts that reveal the presence of symptoms or seasonal calendar influencing the movement of prices of financial assets called efficient market anomalies (Bodie, Kane and Marcus, 2011). The results of studies examining efficient market anomalies have discovered day-of-the-week effects, the weekend effect, the January effect, the month-of-the-year effect, the end-of-the-tax-year effect, and the Holiday effect.

Ramadan is fasting month is followed by Muslims around the world which is culminated with the celebration of Eid al-Fitr (Eid). Eid is also a major holiday commemorated by Indonesian with many festives and traditions, one of which is celebrated by homecoming moments of many Indonesians returning to their hometowns to celebrate Eid with families who are separated because they work in big cities like Jakarta and Surabaya. This homecoming event has become very popular among Indonesian Muslims because flocking back home not only as celebration but also as a manifestation of the awareness that humans will always return to the origin (Purwakananta and

Abilawa, 2011). Besides, many Indonesian non-Muslims also use this moment for holiday vacation to stay in touch with relatives (Chotib, 2014).

This sudden migration activity that moves millions of people from big cities to their hometowns also an immense activity that drains the mind and energy of many Indonesian stakeholders (Purwakananta and Abilawa, 2011). Indonesian government estimates that in 2010, as many as 18.5 million people made homecoming, and in 2011, an estimated 26 million people performed the homecoming ritual. Purwakananta and Abilawa (2011) also estimated in 2017 the number of home comers at about 33 million people. This vast human movement is undoubtedly followed by a sizeable economic movement as well. The capitalization figure in 2010 is estimated to reach IDR 84.90 trillion and the remittances from Indonesian migrant workers around IDR 20 trillion. This figure accounts for 56% due to the costs of accommodation, tourism, and philanthropy (alms) and 44% due to the components of transportation, consumption during travel, and souvenirs. This figure is an extraordinary phenomenon for such a brief moment (Purwakananta and Abilawa, 2011).

Every time during Ramadan, the price of daily necessity goods always goes up and economy in general is always heated, as indicated by the increase in inflation rate (IR), consumer price index (CPI) and circulated hard cash or M1 money during Ramadan which has become a regular pattern every year. Statistics from Indonesia Statistic Bureau notes that IR as a tendency of rising prices for goods and services, and CPI as an index that calculates the average change in prices of a package of goods and services consumed by households in a period of a specific time, from 2012 to 2017 illustrate a consistent increase (Badan Pusat Statistik, 2017). Statistics from Bank Indonesia for the same period notes that hard cash M1 money which circulates during Ramadan, except for 2014 and 2015, is always increasing (Bank Indonesia, 2017). The agreeing comparison of month-on-month data between IR, CPI, and M1 during Ramadan and Eid al-Fitr is visible.

*Table 1*

*Data of Month-on-Month Increase of IR, CPI, and M1 during Ramadan and Eid*

<b>Year</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Eid Date	18-Aug-12	7-Aug-13	27-Jul-14	15-Jul-15	5-Jul-16	25-Jun-17
IR ( $\Delta$ %)	0.25	2.26	0.5	0.39	0.42	0.3
CPI ( $\Delta$ index)	1.27	4	1.04	1.12	1.67	0.89
M1 ( $\Delta$ in Billion IDR)	637	21,487	(27,200)	(7,600)	65,500	66,000

*Source: (Badan Pusat Statistik, 2017).*

Given the religiosity of Indonesian Muslims and the vastness of religious celebrations, it is become essential to study whether people's moods affect the macroeconomic level. We notice that Ramadan (as preparation of Eid) gives a shocking effect on the Indonesian economy, one moment of economic activity that moves higher than usual, accelerating the economic turnover which should also be reflected in the movement or performance of Indonesia's stock market. Indonesia Stock Exchange (IDX) serves stock trading with 567 listed companies. IDX has a trading volume of about 1,925 billion shares in 2016 and 1,578 billion as of Semester 1, 2017. The market capitalization value was IDR 5,753 trillion in 2016 and IDR 5,829 trillion as of Semester 1, 2017. Besides, IDX has an LQ45 Index, which is the 45 most listed companies' performance and represents 70% of the value of trade transactions.

Therefore, the purpose of this study is to inspect potential anomalies in IDX, especially in its LQ45 index which should be more sensitive during Ramadan. We analyze weekly average returns in the Gregorian calendar adjusted to Hijri. The objective of this paper is to present an empirical analysis in order to challenge the existence of efficient market anomalies in LQ45. The main question concerning Ramadan's effect is whether there exists any significant difference between



LQ45's return and abnormal return in Ramadan compared with the month before and after Ramadan in the period of 2012 to 2017. This paper is structured as follows: it starts with an overview of theoretical assumptions about EMH anomalies and empirical studies of the effects of Ramadan in the stock market in Muslim majority countries, offers data and methodology, and then presents the results of the research and provides conclusions.

## LITERATURE REVIEW

Investment is a present commitment for a certain period to obtain compensation in the future. There are at least four investment theories that have been established and are with overgrowing support of researches conducted by many economists and investment experts, namely Efficient Market Hypothesis, Portfolio Theory (Markowitz Portfolio Theory), Capital Asset Pricing Model and Arbitrage Pricing Theory (Reilly and Brown, 2012). This paper observes the Efficient Market Hypothesis (EMH), which states that a market is efficient when the price of security adjusts quickly to new information entering the market so that the current price reflects all information related to that security. EMH academic research has been conducted for 30 years, giving a real impact on the investment industry in providing *insight* into market behavior, but also providing the most controversial ones because pieces of evidence found are *mixed* or many are contradictory (Reilly and Brown, 2012). Some conclusions support the efficient market hypothesis, and others do not. The implications of these various conclusions need to be taken into account by investors in measuring the intrinsic value of investment assets, analyzing investment decisions, and forming investment portfolios.

Fama argues that there are three forms of EMH, namely the weak, semi-strong, and strong form (Fama, 1970). The weak form EMH assumes that the current price reflects all historical information related to the stock and the current rates of returns are not related to future profit levels. The strong-form EHM assumes that stock prices reflect all historical, public, and private information so that there are not any market actors that can benefit above the risk-adjusted rate of returns. The half-strong EHM assumes that the stock price reflects all historical and public information. One of research that examines half-strong EHM is event-studies, which examines how quickly stock prices adjust to specific significant economic events, or in other words, whether it is possible to invest in particular stocks after the announcement of important information (for instance; the release of financial statements, corporate actions, fundamental economic data, major news, etc.) and then gain significant profits. The half-strong EMH hypothesis should prove that if investors are unlikely to benefit significantly from the entry of public information into the market, researchers will calculate effects to the market where the return under study is compared to the market reference return in order to identify the abnormal rate of return.

Although EMH theory states that the asset's price value reveals all information, there are empirical studies find that anomalies occur due to fierce competition among market actors which make the price of securities go up too high (over-adjust) or down too low (under-adjust). So, the market needs time to absorb new information. Also, what makes it captivating for many people to always do research on EMH is because the studies provide evidence that supports (and does not support) EMH in the capital markets they study.

Anomalies found in EMH encourages new development to find answers or other explanations for those anomalies, then a new branch in financial economics emerged namely behavioral finance, which considers psychological characteristics that affect how humans act as the market actors. Behavioral finance believes that it can explain better some stock trading phenomena by using a model that recognizes that market actors do not always think thoroughly rationally, it explains the occurrence of "bias" in trading decisions. Behavioral finance assumes that the information structure and characteristics of investors, which forms a specific market community which influences the individual investor's decisions as a member of said community. They assume that emotions

influence the human brain, and it often processes information using “shortcuts” or bias (Reilly and Brown, 2012).

One of the trading phenomena identified using behavioral finance model is noise traders. Studies found that when there was a change in market sentiment, traders tend to move together so that the stock price and volatility increased/decreased sharply. Noise traders tend to make decisions by following the herd without proper or adequate analysis, or they do but adjust them to match to the market sentiment. Their trading decisions tend to be impulsive and based on irrational sentiment, and typically follow trends and overreact to good and bad news. These behavioral finance phenomena may explain why there are some events/moments, which create an impact on market returns.

Research that examines the influence of Ramadan and Eid on the stock market has been widely carried out by previous researchers. Al-Hajieh, Redhead, and Rodgers(2011) found that during 1997 to 2007 research period there were Ramadan effects in Jordan's ASE (Amman Stock Exchange), BIST (Borsa Istanbul) Turkey, EGX (Egyptian Exchange) Egypt, IDX (Indonesia Stock Exchange), KUSE (Kuwait Stock Exchange), but there is no Ramadan effect in TAD (Tadawul) of Saudi Arabia and BASE (Bahrain Bourse). Weber and Nickol found that during 1980 to 2015 study period there were Ramadan effects on the ADX (Abu Dhabi Securities Exchange), BIST (Borsa Istanbul) Turkey, BVMT (Bourse des Valeurs Mobilières de Tunis) Tunisia, CSE (Chittagong Stock Exchange) Bangladesh, DFM (Dubai Financial Market), QE (Qatar Exchange), and TSE (Tehran Stock Exchange) (Weber & Nickol, 2016). As for IDX (Indonesia Stock Exchange), Weber and Nickol did not found the Ramadan effect, but instead, they found that in Shaaban and Zulqida, IDX had a significant stock return (Weber & Nickol, 2016). According to this research, IDX market players seem to have anticipated the economic heat of Ramadan and Eid by buying in Shaaban and taking profit action during Ramadan.

Alturki and Khan (2015) did not found the Ramadan effect in the Tadawul All Share Index (TASI) of the Saudi Stock Exchange (Tadawul) with data from 2000 till 2014. Iqbal, Kouser, and Azeem (2013) found the Ramadan-effect while researched the Karachi Stock Exchange 100 Index (KSE-100 Index) within the period 1992 till 2011. McGowan and Jakob (2010) conducted a study on the Shariah Index (SI) of the Kuala Lumpur Stock Exchange (KLSE) with sample period from 2000 till 2003 concluded that there was no economic stimulus prominent during Ramadan and Eid which may affect the SI index.

Besides those aforementioned Ramadan-effect researches, some other researchers have conducted studies on whether there are abnormal return patterns caused by any event of cultural tradition in other countries. Guo and Wang (2007) examined the Shanghai Stock Exchange during the sample period from 1992 till 2006, concluding that there was a March effect because there was a Chinese New Year when many companies gave their employees the benefits of increasing public consumption during the month, which in turn increased stock performance. Moosa examined the Kuwait Stock Exchange for the 1996-2005 period, revealing that there was significant seasonality in June, that the average return monthly stock that occurred in June was higher than in other months (Moosa, 2010). The main explanation put forward for this phenomenon is that the harsh climatic conditions in the summer of July and August significantly forced the proportion of the population of Kuwait (and hence stock traders) to leave the country for an overseas holiday. Before holiday the traders accumulate shares, causing upward pressure on stock prices and creating the June effect, besides which many issuers issue interim financial reports in June that affect traders' decisions.

Chan, Khanthavit, and Thomas (1996) conducted an intensive research in the Kuala Lumpur Stock Exchange (KLSE) Composite Index during 1972-1992, Stock Exchange of Singapore (SES) Strait Times Industrial Index during 1969-1992, and Stock Exchange of Thailand (SET) Index during 1975-1991, and found that the excess returns in Chinese New Year were positive and statistically significant. The practices of issuing cash bonuses during Chinese New Year may depress stock prices before the holiday with prices returning to normal afterwards.

Perez provides an analysis of Apple Inc. (AAPL) stock return traded on the NYSE, using a sampling period from 2001 to 2010. During these ten years, statistically, the stock return in September was very significant. Apple was known to issue new products in September, which approached several holidays in the United States such as Thanksgiving, Halloween, Black Friday, and Christmas (Perez, 2011). There was a negative return in November and a positive return in May at the Damascus Securities Exchange (DSE) index during 2010 to 2015 due to the fiscal year-end for nearly all firms at DSE is December, and dividends payments which are usually in May. In Bursa Istanbul (BIST) within 2003 to 2012 period, investors seem to take long positions in the middle of the month and release their shares at the end of the month and the beginning of the following month.

Yatiwella and De Silva (2011) claimed that during 1985-2005 All Share The Colombo Stock Exchange Price Index (ASPI) had been significantly affected by domestic political crisis and the global economic crisis. Jakobsson and Henriksson (2010) suspected that during 2003-2010, Swedish tax policy affects the OMXS30 index of Swedish Nasdaq OMX's negative stock return in January. Simonsen and Lifjeld (2015) found classic positive January-effect in the Oslo Stock Exchange (OSE) during 1980-2014, Atsin (2015) did not found January effect in the Johannesburg Stock Exchange in South Africa during 2002-2013, but found significant weekend effect in small and mid-cap stock issuer.

## METHODOLOGY

This study was conducted to determine whether Ramadan has effects on the IDX. The timeline observed in this study is from 2012 till 2017, and were solved LQ45 as the sample with an assumption that this index contains the most actively traded stocks on IDX, hence, the price movements tend to be more sensitive. The methodology used is event studies, designed to detect the Ramadan effects toward the LQ45 movement during Shaaban, Ramadan, and Shawwal. Unlike event studies that examine stock-splits, where one can measure the impact of stock-splits on stock returns by comparing returns on dates before and after stock split announcements; to measure the impact of Ramadan we use a slightly different method. Eid celebration, according to our observations, is a religious process that starts from the beginning of Ramadan, culminates on Eid's day and ends with the tradition of celebrating Eid, therefore, it is presumed that one will not be able to catch upon abrupt changes of the LQ45 movement. Thus, we come to a consideration that the effect of Ramadan (Eid) is more detectable if it is compared the LQ45 returns that occur in the months before the Eid season, to the ones on Eid, and to the ones on the after Eid.

We have designed three models to detect the Ramadan effect. First, stock returns that occur during Shaaban with Ramadan, which means returns that occur during the normal month are compared with those manifested during the month of the economic boom due to Eid's anticipation. Second, returns that occur during Ramadan are compared with Shawwal, where researcher will expose the difference between returns that occur during the economic boom with the months after. Finally, researcher compares the returns between Shaaban and Shawwal, in order to anticipate the findings of Weber and Nickol (2016) that IDX in Shaaban experienced a significant return. Figure 1 illustrates the framework of our methodology. Hypothesis provided as the framework in this particular study is null hypothesis ( $H_0$ ) is that there is no significant difference in LQ45 returns and LQ45 abnormal returns during the month of Ramadan compared to the previous month (Shaaban), during the month of Ramadan compared to the following month (Shawwal), and during the Shaaban compared Shawwal throughout the period 2012 till 2017.

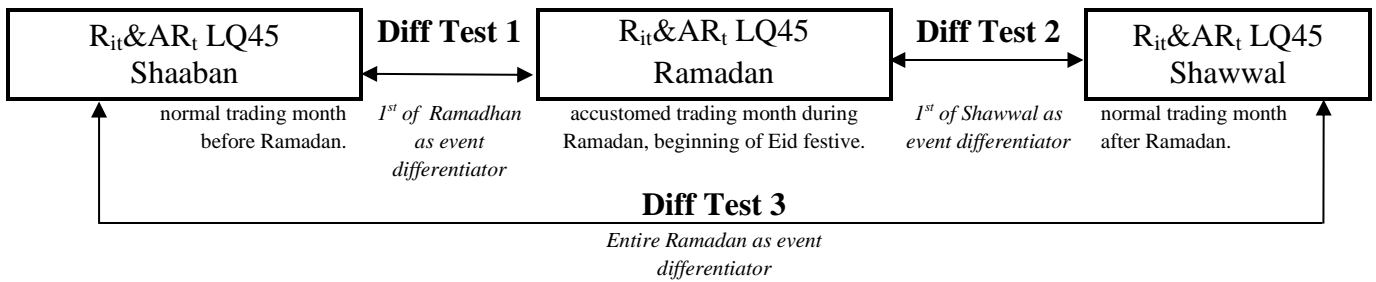


Fig. 1. Framework Methodology

We employ difference-test statistic to find out any significant LQ45 returns, which are contributed from Ramadan moments from 2012 till 2017. We calculate returns  $R_{it}$  (returns of  $i$ , in corresponding period time of  $t$ ) by the natural logarithm of averages of daily returns in week  $w$  ( $P_w$ ) compared to those in week  $w-1$  ( $P_{w-1}$ ) as follows:

$$R_{it} = \ln \left( \frac{P_w}{P_{w-1}} \right) \quad (1)$$

We calculate abnormal returns  $AR_t$  by weighing LQ45 against Indonesia Stock Exchange Composite Index (IHSG) of the corresponding week as follows:

$$AR_t = \left[ \ln \left( \frac{LQ45_w}{LQ45_{w-1}} \right) - \ln \left( \frac{IHSG_w}{IHSG_{w-1}} \right) \right] \times 100 \quad (2)$$

If  $R_{it}$  produces a negative number, we transform that into the smallest positive value, 0.0001.

After that, we classify those  $R_{it}$  and  $AR_t$  according to their respected month Shaaban (SYB), Ramadan (RMD), and Shawwal (SYW). We believe those grouping can be adequate in detecting Ramadan influence in LQ45 returns, in which we will study the stock returns performance before, during, and after Ramadan. We believe that the Eid as the cut-off date for this study will be better observed its influence if we employ a broader examination window. Consumer tends to look forward to Eid-day about two weeks before, and corporations usually anticipate a month before.

We conduct normality testing to ensure that variables used in this research have normal distribution properties using the Kolmogorov-Smirnov test with a significance level of 0.05 ( $p\text{-value} > 0.05$ ) as an indicator that the research variables are normally distributed. Next, we work out hypothesis testing with three paired sample t-test statistical models as follows:

$$t_1 = \frac{\bar{R}_{RMD} - \bar{R}_{SYB}}{\sqrt{\left( \frac{S_{RMD}^2}{n_{RMD}} \right) + \left( \frac{S_{SYB}^2}{n_{SYB}} \right)}}, \quad (3)$$

where  $t_1$  tests the difference between *returns* before Ramadan (Shaaban) and during Ramadan;

$$t_2 = \frac{\bar{R}_{RMD} - \bar{R}_{SYW}}{\sqrt{\left( \frac{S_{RMD}^2}{n_{RMD}} \right) + \left( \frac{S_{SYW}^2}{n_{SYW}} \right)}}, \quad (4)$$

where  $t_2$  tests the difference between *returns* before Ramadan and after Ramadan (Shawwal);

and

$$t_3 = \frac{\bar{R}_{SBN} - \bar{R}_{SYW}}{\sqrt{\left(\frac{S_{SBN}^2}{n_{SBN}}\right) + \left(\frac{S_{SYW}^2}{n_{SYW}}\right)}} \quad (5)$$

where  $t_3$  tests the difference between *returns* during Shawwal and Shawwal. As well the notation  $\bar{R}_{RMD}$ ,  $\bar{R}_{SBN}$ , and  $\bar{R}_{SYW}$  are variable mean of *return* during Shaaban, Ramadan, and Shawwal;  $S_{RMD}^2$ ,  $S_{SBN}^2$ , and  $S_{SYW}^2$  are variants of *returns*; and  $n_{RMD}$ ,  $n_{SBN}$ , dan  $n_{SYW}$  are number of sample observations during the corresponding month.

Then we conduct this research's hypothesis testing, using F-test and t-test. Statistical F-test will show whether all variables included in the model have a mutual influence with level of significance at  $\alpha = 5\%$ . This means that if the p-value (sig) is less than 5%, then all independent variable has a significant effect on the dependent variable. The t-test shows how strong the influence of independent variable individually in explaining the variation of the dependent variable with level of significance at  $\alpha = 5\%$ . This means that if the p-value (sig) is less than 5%, then the independent variables have a significant effect on the dependent variable.

## RESULTS AND DISCUSSION

The Liquid 45 (LQ45) index launched by IDX on February 24, 1997, consists of 45 stocks with the largest capitalization and highest trading volume. Sitting in the ranks of LQ45 is an honor for a company because it signifies the confidence of capital market and recognition of the company's excellent level of liquidity and market capitalization. LQ45 covers at least 70% of the stock market capitalization value and transaction value on the IDX.

During the period of our research from 2012 till 2017, there were 1,458 trading days with 238 to 246 days for each year, with total of 309 weeks, and throughout the observation period, the LQ45 index generally tends to experience a positive trend as Figure 2. We also add several markers to indicate month of Shaaban (checked), Ramadan (flat-line), and Shawwal (diagonal-line). At first glance, except for 2015, all marker shows uptrend for Ramadan.

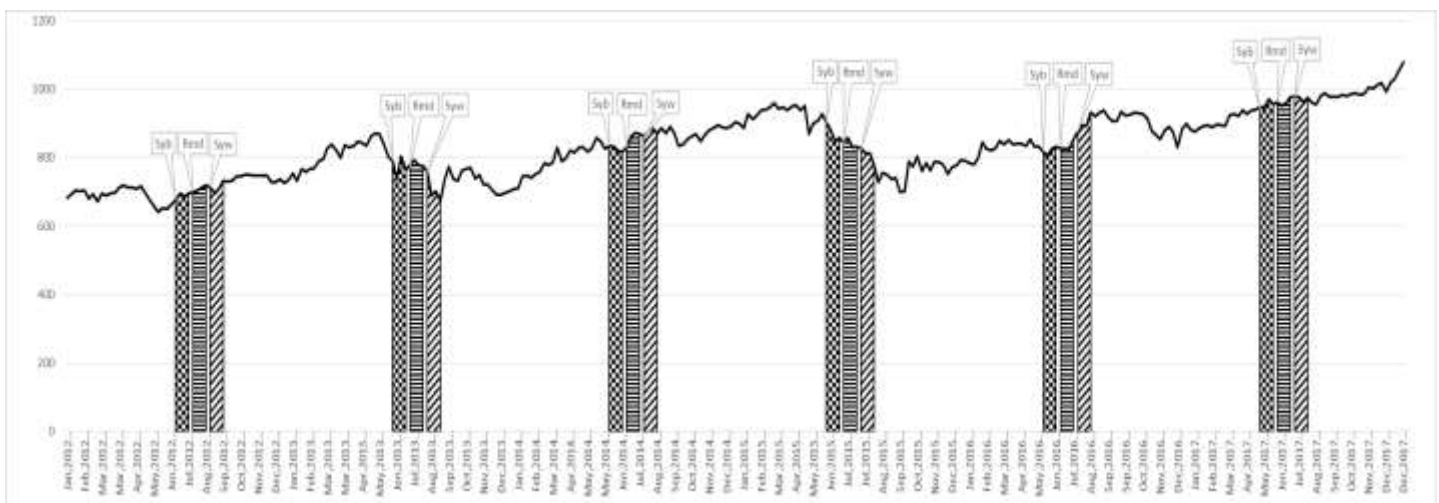


Figure 2. LQ45 Movement 2012-2017

Table 2 presents summary statistics of weekly  $R_{it}$  and  $AR_t$ , which the sample mean, median, minimum, maximum, standard deviation, skewness, and kurtosis are reported. The mean returns are modest, while LQ45's abnormal returns actually underperform against IHSIG; also the mean returns in Shaaban are negative, in Ramadan are positive, and in Shawwal are negative also alike as the abnormal returns.

*Table 2*

*$R_{it}$  and  $AR_t$  LQ45 2012 to 2017 Descriptive Statistic*

	$R_{it}$	$AR_t$	<u>Shaaban</u>		<u>Ramadan</u>		<u>Shawwal</u>	
			$R_{it}$	$AR_t$	$R_{it}$	$AR_t$	$R_{it}$	$AR_t$
Mean	0.001526	-0.000119	-0.000921	-0.000085	0.001326	0.000261	-0.000964	-0.000193
Median	0.002238	-0.000474	-0.001641	-0.000134	0.000704	0.000132	0.000808	-0.000088
Minimum	-0.096201	-0.022769	-0.015098	-0.003523	-0.005518	-0.001548	-0.028432	-0.002496
Maximum	0.117747	0.030950	0.017921	0.004689	0.009178	0.002769	0.009470	0.001749
Std. Dev.	0.024565	0.006143	0.006850	0.001555	0.003584	0.001131	0.007451	0.001056
Skewness	0.034082	0.423622	0.370020	0.681868	0.450165	0.787894	-2.236404	-0.462948
Kurtosis	3.205445	3.076340	2.150515	3.636489	0.154379	0.436782	7.536104	-0.042491
N	309	309	24	24	24	24	24	24

Table 3 presents the Kolmogorov-Smirnov normality test which shows the result for  $R_{it}$  sig as 0,000, therefore,  $R_{it}$  data sample is not normally distributed, consequently we will employ non-parametric Wilcoxon two related sample test for hypothesis testing instead of paired sample t-test statistical model. A different result was obtained for  $AR_t$  with sig. 0.187 which means the data is normally distributed, and we will retain using paired sample t-test statistical model.

*Table 3*

*One-Sample Kolmogorov-Smirnov Normality Test  $R_{it}$  and  $AR_t$  LQ45*

		$R_{it}$	$AR_t$
N		72	72
Normal Parameters <sup>a,b</sup>	Mean	-0.000006	-0.000006
	Std. Dev.	0.001264	0.001264
Most Extreme Differences	Absolute	0.094	0.094
	Positive	0.094	0.094
	Negative	-0.084	-0.084
Test Statistic		0.157	0.094
Asymp. Sig. (2-tailed)		.000 <sup>c</sup>	.187 <sup>c</sup>

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Decision-making for  $R_{it}$  hypothesis based on the significance of Wilcoxon two related sample test in condition whether the  $p\text{-value} > 0.05$ , then  $H_0$  is accepted and if  $p\text{-value} < 0.05$ , then  $H_0$  is rejected. Table 4 shows Pair 1 of  $R_{it}$  Shaaban compared to  $R_{it}$  Ramadan with  $p\text{-value} = 0.072$ , Pair 2 of  $R_{it}$  Ramadan against  $R_{it}$  Shawwal with  $p\text{-value} = 0.241$ , and Pair 3 of  $R_{it}$  Shaaban in contrast to  $R_{it}$  Syawal with  $p\text{-value} = 0.732$ . The  $p\text{-value}$  of all three models produced a number greater than the threshold of a decision in rejecting null hypothesis. Therefore, there is no difference of  $R_{it}$  in Shaaban, Ramadan, and Shawwal, hence the null hypothesis retained.



Table 4

*Related-Samples Wilcoxon Signed Rank Test Result for  $R_{it}$  LQ45*

Models	Null Hypothesis: the median of differences between	Sig.
Pair 1	Sbn – Rmd	.072
Pair 2	Rmd – Syw	.241
Pair 3	Sbn - Syw	.732

The paired sample t-test result significance also in condition whether the p-value > 0.05, then  $H_0$  is accepted and if p-value < 0.05, then  $H_0$  is rejected, and t-test decision making based on t-table criteria in condition whether t-arithmetic < t table, then  $H_0$  accepted and if t-arithmetic > t-table, then  $H_0$  rejected, in this research t table for df = 23 and probability = 0.05 is 1.71387. Table 5 presents Pair 1 of  $AR_t$  Shaaban against  $AR_t$  Ramadan, mean returns that occurs between the two months is only -0.03% with p-value = 0.359, and t value = -0.936. Pair 2 of  $AR_t$  Ramadan compared to  $AR_t$  Shawwal shows mean returns 0.04% with p-value = 0.143 and t-value = 1.515. Pair 3 of  $AR_t$  Shaaban against  $AR_t$  Shawwal shows mean returns 0.01% with p-value = 0.778 and t-value = 0.286. Also, in the test for  $AR_t$ , we found that both p-value and t-value in three models shows a number greater than the threshold of the decision in rejecting the null hypothesis. Therefore, similar as  $R_{it}$  that there is no difference of  $AR_t$  in Shaaban, Ramadan, and Shawwal, hence the null hypothesis retained.

Table 5

*Paired Sample t-test Result for  $AR_t$  LQ45*

$AR_t$		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Sbn - Rmd	-0.000346	0.001809	0.000369	-0.001110	0.000418	-0.936	23	0.359
Pair 2	Rmd - Syw	0.000454	0.001467	0.000300	-0.000166	0.001073	1.515	23	0.143
Pair 3	Sbn - Syw	0.000108	0.001853	0.000378	-0.000674	0.000890	0.286	23	0.778

Based on the results of the hypothesis testing, both  $R_{it}$  and  $AR_t$  from all three pair models do not meet the significance required so that the null hypothesis  $H_0$  accepted and the alternative hypothesis  $H_1$  rejected. The null hypothesis concluded that there was no significant difference in LQ45 returns and abnormal returns during the month of Ramadan compared to the earlier month (Shaaban) and later month (Shawwal) throughout 2012 to 2017 period. The similar condition is experienced by comparison of  $R_{it}$  and  $AR_t$  in Shaaban and Shawwal. This result concludes that Ramadan do not affect the LQ45 stocks price movement. This research suspects that the rising temperature of the economy during Ramadan as preparation for Eid was not reflected in its influence on stock market price movements in Indonesia. Thus, it was found that the quantitative phenomena observed such as the M1 money supply, the inflation rate, and the Consumer Price Index, as well as the qualitative phenomena observed such as the tradition of Eid al-Fitr celebrations and the Eid homecoming tradition were not detected affecting the performance of LQ45. Although we assuming that LQ45 stocks should be directly or indirectly benefited from the increased economic circulation that occurs during Ramadan, the phenomena observed did not attract the attention of market players.

Comparison of  $R_{it}$  and  $AR_t$  in Shaaban against Ramadan, wherein assuming that Shaaban applies regular trade, whereas Ramadan applies trade that increases due to anticipation of Eid did not occur in our study. Then comparison of  $R_{it}$  and  $AR_t$  in Ramadan against Shawwal, where it is

assumed that after Ramadan the market cools down and takes profit in Shawwal also did not happen in our study. Finally, comparison of  $R_{it}$  and  $AR_t$  in Shaaban and Shawwal as anticipation for Weber and Nickol (2016) finding that in Shaaban and Zulqida, IDX had a significant stock return, did not produce significant result as there is no difference between Shaaban against both Ramadan and Shawwal. These conditions found are the same as the result of McGowan and Jacob's (2010) research that did not find significant influence of Eid on the Sharia Index in the Kuala Lumpur Stock Exchange in 2000-2003; accordingly, there are similarities in the behavior of the capital market between Indonesia and Malaysia during Eid. The same condition also occurred in Saudi Arabia, Alturki and Khan (2015) conclude that there was no Ramadan effect in the Tadawul All Share Index (TASI) from 2000 till 2014.

The result of this study supports the half-strong EMH hypothesis which assumes that prices reflect all historical and public information, where the result proves that the future rate of return is impossible to predict using current public information. Besides, the results also unable to support the behavioral finance hypothesis, because there is no behavioral bias which may be influenced by Eid, experienced by market players in buying and selling decisions on IDX. Perhaps Eid has no influence on the information structure and the social-cultural collective character of market participants who jointly invest in IDX. This result means that during Ramadan, the market participants do not have a different behavioral pattern with the other months, or the market trading decision making employs variables other than Eid.

## CONCLUSION

This research is an event study which examines whether prices adjust to specific significant economic events, which in this case is Ramadan. The aim of this study is to give more insight into the perennial question concerning the existence of EMH anomalies. We have chosen the analysis of potential calendar effect on the Indonesian stock market because there is an opportunity to observe the stock market movement by taking into account Ramadan. Also, we want to know whether behavioral finance supports this market, where religious festivals lead to a beautiful feeling among Muslims which will influence investment decision making. In the spirit of Eid which is an essential social-cultural event in Indonesia, we use t-test to examine Eid effect. Our analysis failed to provide empirical result that supports the presence of Ramadan influence in LQ45. Although it appears that Ramadan and Eid's festivals are accompanied by the rising of inflation rate, consumer price indices and the M1 money supply, it is not enough to attract the attention of market player.

These findings can be explained for some reasons. First, Ramadan has been anticipated every year and has already been considered as an annual routine activity and reflected in year-end financial statements. In other words, Ramadan and Eid festivals are expected to happen to provide reasonable profits to the business. Therefore, there are no abnormal returns expected by market players. Second, the Indonesian stock market coverage is still relatively small as many businesses that benefited from Ramadan festivals have not listed the company in stock market, yet. Also, while the stock market is a good barometer for the country economic performance, in Indonesia, the use of stock market index still requires larger room to grow to develop into useful parameter. Last, it is susceptible that companies listed in LQ45 have different return trends, perhaps in the same period, some have positive returns, and the others does not. Thus the combined stock price in LQ45 looked as if there were no significant price movements because there were trade-offs between profited stocks and suffered losses stocks. Hence it is proposed that future research be carried out at a more detailed level which takes samples of individual listed companies in LQ45. In short, the Ramadan and Eid festivals in Indonesia is not a significant event which can open the opportunity to get a substantial profit in Indonesia stock market, or in theory, can lead to an EMH calendar effect anomaly.

Saputro Ahmad, B. G. and Utami, W. (2019). "A study of Ramadan effect on the Indonesia Stock Exchange", *Management and entrepreneurship: trends of development*, 4 (10), pp. 67-78. Available at: <https://doi.org/10.26661/2522-1566/2019-4/10-06>

However, we are aware that our results about Ramadan effect will be different from other research which use different statistical methods and observation windows. The effect of Eid on LQ45 might be more visible if the study uses a broader observation period, for example, more than ten years. Besides, Eid effect might be more detectable if the study looks at the magnitude of trade volumes changes that occur during the observation window. Future research can add other variables such as trading volume to detect differences in Shaaban, Ramadan, and Shawwal, using specific individual stock in LQ45 list as samples might better to detect whether Ramadan has impact to specific companies' business activities, and researchers can using broader windows like month-of-the-year effect and other EMH anomalies such as size effect. Those alternatives are important questions that deserve further research. The result might be useful for investors, as we confirm Ramadan effect to LQ45 so that they are expected could use it as a reference in strategic, timing, and tactical asset allocation planning, and to review the performance of the optimal stocks portfolio.

## REFERENCES

- Al-Hajjeh, H., Redhead, K. and Rodgers, T. (2011). "Investor sentiment and calendar anomaly effects: A case study of the impact of Ramadan on Islamic Middle Eastern markets", *Research in International Business and Finance*. Available at: <https://doi.org/10.1016/j.ribaf.2011.03.004> (accessed 11 October 2019).
- Alturki, F. M. and Khan, A. (2015). *Seasonality in the Saudi stock market*. Jadwa Investment, June. Available at: <http://www.jadwa.com/en/download/seasonality-in-the-saudi-stock-market/research-10-2-1-1> (accessed 13 October 2019).
- Badan Pusat Statistik. (2017). *Data dan Laporan Tahun 2012-2017*. Available at: <https://www.bps.go.id/Publikasi> (accessed 12 October 2019), (in Indonesian).
- Bank Indonesia. (2017). *Data dan Laporan tahun 2012-2017*. Available at: <https://www.bi.go.id/id/publikasi/laporan-tahunan/bi/Default.aspx> (accessed 12 October 2019).
- Bodie, Z., Kane, A. and Marcus, A. (2011). *Investments and portofolio management (Global Edi)*. New York: The McGraw-Hill Companies Inc.
- Chan, M. W. L., Khanthavit, A. and Thomas, H. (1996). "Seasonality and cultural influences on four Asian stock markets", *Asia Pacific Journal of Management*. Available at: <https://doi.org/10.1007/BF01733814> (accessed 13 October 2019).
- Chotib, C. (2014). *Mudik dan arus migrasi*. Kompas.com Available at: <https://nasional.kompas.com/read/2014/07/27/23175561/Mudik.dan.Arus.Migrasi?page=all> (accessed 21 October 2019), (in Indonesian).
- Fama, E. F. (1970). "Efficient Capital Markets: A Review of Theory and Empirical Work", *The Journal of Finance*. Available at: <https://doi.org/10.2307/2325486> (accessed 20 October 2019).
- Guo, S. and Wang, Z. (2007). *Market Efficiency Anomalies: A Study of Seasonality Effect on the Chinese Stock Exchange*. Umea University.
- Iqbal, M. S., Kouser, R. and Azeem, M. (2013). "Conventional and Islamic Anomalies in Karachi Stock Exchange", *Science International Journal Lahore*, 25(4), pp. 999-1007.
- Moosa, I. A. (2010). "Does Climatic Seasonality Produce Seasonality in Stock Returns? Evidence from an Emerging Stock Market", *Journal of Applied Business and Economics*, 11(2).
- Perez, M. (2011). "Efficient Market Hypothesis and Apple Seasonality", *Alhambra Investments*. Available at: <https://alhambrapartners.com/2011/12/11/efficient-market-hypothesis-and-apple-seasonality/> (accessed 20 October 2019).
- Purwakananta, A. and Abilawa, S. (2011). *Ekonomi mudik potret potensi ekonomi mudik lebaran dan gagasan mudik berdayakan desa*. Jakarta: Dompot Dhuafa Press. (in Indonesian).
- Reilly, F. K. and Brown, K. C. (2012). *Investment Analysis & Portfolio Management. 10th ed.* Mason, OH : South-Western Cengage Learning.

Weber, C. S. and Nickol, P. (2016). "More on Calendar Effects on Islamic Stock Markets", *Review of Middle East Economics and Finance*. Available at: <https://doi.org/10.1515/rmeef-2015-0039> (accessed 2 October 2019).

## ВИВЧЕННЯ ВПЛИВУ РАМАДАНА НА ДІЯЛЬНІСТЬ ІНДОНЕЗІЙСЬКОЇ ФОНДОВОЇ БІРЖІ

**Bimo Galuh Saputro Ahmad**  
*Університет Мерку-Буана*  
*Джакарта, Індонезія*

**Wiwik Utami**  
*Університет Мерку-Буана*  
*Джакарта, Індонезія*

Дане дослідження спрямоване на перевірку наявності істотних відхилень в прибутковості акцій в Шаабані (до Рамадану), Рамадані і Шаввалі (після Рамадану) на Індонезійській фондовій біржі (IDX). Дослідження проводилося на основі даних компаній, включених до індексів Liquid 45 (LQ45). Збір і аналіз даних засновані на значеннях щотижневої ціни закриття біржі в період з 2012 по 2017 роки. Методологія дослідження передбачає аналіз відповідних подій за умови помірного впливу ринку капіталу. У дослідженні використані такі аналітичні методи, як: критерій Уїлкоксона і Парний t-критерій з рівнем достовірності 95% або  $\alpha = 0,05$ . Результати виявили відсутність значної статистичної різниці між прибутковістю LQ45 і прибутковістю в Шаабані, Рамадані і Шаввалі в досліджуваній період. В ході дослідження з'ясувалося, що Рамадан не має істотного впливу на діяльність Індонезійській фондової біржі.

**Ключові слова:** дослідження, Рамадан, дохід, відхилення, Liquid 45, Індонезійська фондова біржа

## ИЗУЧЕНИЕ ВЛИЯНИЯ РАМАДАНА НА ДЕЯТЕЛЬНОСТЬ ИНДОНЕЗИЙСКОЙ ФОНДОВОЙ БИРЖИ

**Bimo Galuh Saputro Ahmad**  
*Университет Мерку-Буана*  
*Джакарта, Индонезия*

**Wiwik Utami**  
*Университет Мерку-Буана*  
*Джакарта, Индонезия*

Данное исследование направлено на проверку наличия существенных отклонений в доходности акций в Шаабане (до Рамадана), Рамадане и Шавале (после Рамадана) на Индонезийской фондовой бирже (IDX). Исследование проводилось на основе данных компаний, включенных в индексы Liquid 45 (LQ45). Сбор и анализ данных основаны на значениях еженедельной цены закрытия биржи в период с 2012 по 2017 год. Методология исследования предполагает анализ соответствующих событий при условии умеренного влияния рынка капитала. В исследовании использованы такие аналитические методы, как: критерии Уилкоксона и Парный t-критерий с уровнем достоверности 95% или  $\alpha = 0,05$ . Результаты выявили отсутствие значительной статистической разницы между доходностью LQ45 и доходностью в Шаабане, Рамадане и Шаввале в исследуемый период. В ходе исследования выяснилось, что Рамадан не оказывает существенного эффекта на деятельность Индонезийской фондовой биржи.

**Ключевые слова:** исследование, Рамадан, доход, отклонения, Liquid 45, Индонезийская фондовая биржа

---

## ENTREPRENEURSHIP, TRADE AND EXCHANGE ACTIVITIES

---

Received:

22 November, 2019

1st Revision:

23 December, 2019

Accepted:

25 December, 2019

UDC: **641.87:338.439.63:65.012.8**

DOI <https://doi.org/10.26661/2522-1566/2019-4/10-07>

### SAFETY OF COFFEE PRODUCTION AS THE MAIN COMPETITIVE ADVANTAGE OF THE COMPANY IN THE MARKET

**Kostiantyn Vorobiov**

*Zaporizhzhia National University  
Zaporizhzhia, Ukraine*

ORCID: [0000-0001-5669-4062](https://orcid.org/0000-0001-5669-4062)

**Natalia Hurzhii**

*Zaporizhzhia National University  
Zaporizhzhia, Ukraine*

ORCID: [0000-0002-4955-9548](https://orcid.org/0000-0002-4955-9548)

**Maryna Lysenko**

*Zaporizhzhia National University  
Zaporizhzhia, Ukraine*

ORCID: [0000-0003-1811-9918](https://orcid.org/0000-0003-1811-9918)

\* *Corresponding author email:* [vorobiovks@gmail.com](mailto:vorobiovks@gmail.com)

**Abstract.** The relevance of implementing the principles of product safety management caused by the necessity to implement this standard by the Ukrainian enterprises while forming the image of a safe food producer, thereby expressing a serious attitude to the opinion and health of consumers. An equally important effect of the implementation of this standard is the investment attractiveness of the company and the ability to enter the foreign market. Thus, Ukrainian products will be in demand by consumers in the foreign market due to decent quality and affordable prices. Analysis of the prospects for the implementation of the HACCP standard will allow the company to interest the consumer in the purchase of coffee products, reduce the cost of its production, expand its product portfolio and increase distribution channels. The article **aims to** study the benefits for the company from the application of HACCP, to characterize the process of its implementation and to provide a typical example of real deviations in the designed enterprise models. **Methodology:** during the study, a qualitative analysis of the existing DSTU ISO 22000: 2007 standard was carried out, as well as the analysis of the existing deviations of coffee production. **The scientific significance** of the study lies in the fact that, based on the conducted research results, it is possible to develop typical processes for the accelerated implementation of HACCP standards, which in turn will accelerate the intensity of its high-quality implementation. **The value of the research** is that, based on the implementation of standards for the management of safe coffee products, the consumer receives a quality product, while the state obtains a certified manufacturer and potential exporter.

**Keywords:** HACCP, KKT, verification, critical limits, technological process.

**JEL Classification:** L15, K13, J28.

### INTRODUCTION

In the modern business environment, food poisoning, as well as the appearance of extraneous elements inside the finished goods, became a normal phenomenon, which adversely affected the reputation of enterprises and trust from foreign consumers. Therefore, the state prepared a number of amendments to the law on food safety management for enterprises. Naturally, most of the innovations are pushing market operators to increase their export volumes and increase product



quality, as Ukraine is an exporter of products and services to 190 countries. On September 20, 2017, the norms entered into force in Ukraine, providing the introduction of a hazard analysis and critical point control (HACCP) system for facilities that operate with food products in accordance with part two of subparagraph 1 of paragraph 1 of the final and transitional provisions of the Law of Ukraine “On Introduction amendments to some legislative acts regarding food products” dated July 22, 2016 No. 1602-VII.

Thereby, the legislation warned production facilities and public catering about the beginning of the implementation of food safety control standards and provided a postponement of 3 years before the audit for the physical and documentary implementation of ISO 22000: 2007 (HACCP).

However, most enterprises ignored this requirement, as a result of which the legislative authorities re-warned about the responsibility of the enterprise, which would not pass the food safety audit until January 1, 2020. They will receive warnings from inspection bodies and a fine in the amount of 15 to 30 minimum wages, depending on the severity of the product mismatch and up to the complete withdrawal of products from the Ukrainian market.

On this bases, the issue of implementing the HACCP principles became an acute issue for companies, however, the difficulty of implementation is not only in the physical elimination of production areas where cross-contamination occurs, but also in the documented facts of their presence, as well as in the application of corrective actions with their further monitoring.

Suchwise, the food industry faced the challenge of developing practical steps and instructions for implementing the HACCP principles.

This task is particularly relevant due to the need of enterprises to maintain its throughput, but also to increase its competitiveness. The lack of HACCP implementation restrains the possibility of entering the world market, thereby slowing down the increase of the country's GDP and economic indicators of a particular region.

Consider an example of the implementation of the principles of HACCP on the example of an enterprise producing coffee products.

## **LITERATURE REVIEW**

Today, the following experts have been studying the implementation of the principles of HACCP: O. A. Shutova and A. F. Manukyan (2015) studied the problems of implementation of the principles of HACCP in the food industry, O. A. Golubenko, V. Yu. Slavogorodsky and V.A. Ivanov (2017) considered issues of certification of the HACCP system and the food safety management system and their main differences, V. M. Novikov, I. M. Romanenko and S. V. Fomina (2013) conducted an analysis of existing regulatory documents on the procedures for certification of the SSMS (HACCP) in Ukraine and the search for ways to improve them.

## **PAPER OBJECTIVE**

Development of practical steps and recommendations for the implementation of food safety management standards DSTU ISO 22000: 2007 (HACCP) at all stages of the production of finished products, on the example of the enterprises of coffee products that plan or implement the principles of HACCP and face a number of difficulties.

## **RESULT AND DISCUSSION**

In the modern realities of domestic business, not enough attention is paid to the issue of producing a quality product, namely the creation of a safe product that will not cause irreparable harm to the health of the consumer. To comply with this requirement, the quality of the products must correspond to the properties that the manufacturer declared on his packaging, aimed at



Vorobiov, K., Hurzhii, N. and Lysenko, M. (2019) “Safety of coffee production as the main competitive advantage of the company in the market”, *Management and entrepreneurship: trends of development*, 4 (10), pp. 79-93. Available at: <https://doi.org/10.26661/2522-1566/2019-4/10-07>

attracting and meeting existing needs. However, there are factors that can reduce the properties of a product and make it unsafe.

To eliminate these factors and reduce the threats of their occurrence, the principles of product safety management at all critical points of its production are applied DSTU ISO 22000: 2007 (HACCP) (Molins and Pineiro, 2010; Food safety management system. DSTU ISO 22000: 2007, 2007).

DSTU ISO 22000: 2007 (HACCP), is a risk analysis and critical control point system developed for enterprises that produce food products or enterprises which products and services are used in the food industry and affect food safety. The system does not control the final result, but the entire food production chain, starting from the acceptance of raw materials and ending with the consumption of the finished product.

At all stages of production, in each technological operation, it is necessary to identify hazardous factors which can threaten product safety and ensure process control that eliminates the influence of these factors. To implement the system certain amount of knowledge is required: knowledge of your product, raw materials and processes and understanding of factors that can cause a risk that threatens the health of consumers (Molins and Pineiro, 2010).

Having a number of internal and external benefits from the implementation of the HACCP standard, (Table 1), the organization has all chances to provide safe products to the client, thereby gaining even more trust, as well as entering international markets

*Table 1*

*Internal and external benefits of HACCP*

№	Internal benefit	External benefit
1	Reduction of the defective products in the total amount of production	Increasing consumer confidence in products
		Reduced complaints due to consistent quality
2	Documentary confirmation of safety of the produced goods	Opportunity to enter international markets and expand existing markets
		Improving the competitiveness of products and creating a reputation as a manufacturer of quality and safe products.
3	Integration with other quality management systems	Additional benefits participating in important tenders and increasing investment attractiveness

*Source: Developed by the authors based on the materials (Food safety management system. DSTU ISO 22000: 2007, 2007; International standard ISO 22000: 2018, 2018)*

We are going to conduct a survey of the readiness of enterprises in Ukraine that carry out activities in agribusiness, food production, delivery services and the provision of catering services based on expert opinions of 25 specialists who carry out certification DSTU ISO 22000: 2007 (HACCP) and prepare enterprises for state audits for the availability of physical and documented principles of HACCP: Ukrainian Food Safety Inspection (Inspection portal, 2019), Ukrstandart (Ukr standard. Certification agency ISO 22000, 2019), Ukrekspertiza (Ukr expertize. Certification agency ISO 22000, 2019).

The thoroughness of the received expert assessments should provide for their consistency among themselves. For this issue, it is necessary that the deviation in the expert estimates should correspond to the normal distribution (L. Dovhan', L. Veduta and H. Mokhon'ko, 2019).

Let's make a transcript of the factors by which the assessment will be made and the data obtained from the results of a survey of experts (Table 2).

*Table 2*

*Results of poll of experts of readiness of the enterprises for the state audit*

Experts	Factors of readiness of the enterprises for the state audit					
	GP-1	GP-2	GP-3	GP-4	GP-5	GP-6
1	4	3	5	7	3	6
2	3	4	6	6	2	5
3	3	5	6	6	3	5
4	3	5	6	7	3	4
5	3	5	6	6	3	5
6	3	4	6	6	3	5
7	4	4	6	7	2	5
8	4	4	6	6	3	6
9	3	4	6	7	3	5
10	3	4	5	6	3	4
11	3	4	6	7	3	4
12	3	4	6	6	3	4
13	3	4	8	7	3	5
14	5	4	6	7	3	5
15	3	4	6	7	4	5
16	3	4	6	6	3	5
17	3	5	5	7	4	5
18	3	5	5	7	3	5
19	3	5	6	7	3	4
20	3	5	6	7	4	5
21	4	4	5	7	3	5
22	5	4	5	7	3	5
23	4	2	5	6	3	5
24	4	2	6	6	3	5
25	4	5	6	5	3	5
In total ranks	86	103	145	163	77	122

*Source Developed by the author based on the materials (L. Dovhan', L. Veduta and H. Mokhon'ko, 2019).*

Decryption the factors of readiness of enterprises for state audit:

1) GP-1 - "Sanitation", 2) GP-2 - "Control of KCP", 3) GP-3 - "Cross-contamination", 4) GP-4 - "Violation of the rules for transportation of raw materials and finished products", 5) GP-5 - "State of the external production zone", 6) GP-6 - "State of the internal production zone", "Factor of enterprise readiness for state audit" (L. Dovhan', L. Veduta and H. Mokhon'ko, 2019).

Let's carry out calculation of a mean square deviation according to a number of distribution of expert estimates of factors on basic discrepancies.

The average deviation is calculated by a formula:

$$G = \sqrt{\frac{\sum(x - \bar{x})^2 n}{\sum v}}, \quad (1)$$

The difference between the greatest and smallest value of sign characterizes scope of a variation and is determined by a formula

$$R = x_{\max} - x_{\min}. \quad (2)$$

If the range of variation in the estimates obtained as a result of a survey of experts does not exceed 6 quadratic deviations (the law of normal distribution), then it is considered that the statistical characteristics are interconnected and correspond to the normal distribution (L. Dovhan', L. Veduta and H. Mokhon'ko, 2019).

Let us calculate the standard deviation according to a number of distribution of expert estimates. (Table 3).

First, you need to determine how many experts rated the willingness of enterprises the same way and enter the necessary data in the table. The next step is to multiply the options by the corresponding frequencies. The deviation of the options from the average score is found as the difference between each individual work and the average score in conditional points.

*Table 3*

*The calculation of the mean square deviation according to a number of distribution of expert estimates for factors of readiness of the enterprise for state audit*

Expert score in points, x	Number of people, N	Producing options on frequency xn	$\sum (x - \bar{x})^2 n$	Average assessment in conditional points	Deviation of options from an average	Square deviation
1	2	3	4	5	6	7
GPA-1 "Factor of readiness of enterprises for state audit" (Sanitation)						
3	16	48	32	-	1	1
4	7	28	14	-	0	0
5	2	10	4	-	1	1
In total	25	86	50	4	-	-
G = 1, G6 = 6, R=2						
GPA-2 "Factor of readiness of enterprises for state audit" (Control of KKT)						
4	14	56	42	-	0,5	0,25
5	8	40	24	-	1,5	2,25
3	1	3	3	-	0,5	0,25
2	2	4	6	-	1,5	2,25
In total	25	103	75	3,5	-	-
G – 1.118, G6 – 6,7, R=3						
GPA-3 "Factor of readiness of enterprises for state audit" (Cross contamination)						
6	17	102	51	-	0,33	0,11
5	7	35	21	-	1,33	1,77
8	1	8	3	-	1,66	2,77
In total	25	145	75	6,3	-	-
G – 1,247, G6 - 7,48, R=3						
GPA-4 "Factor of readiness of enterprises for state audit" (Violation of the rules for the transportation of raw materials and finished products)						
7	14	98	28	-	1	1
6	10	60	20	-	0	0
5	1	5	2	-	1	1
In total	25	163	50	6	-	-
G – 0.816, G6 – 4,896, R=2						

*Table 3 continuation on the next page*

*Table 3 continuation*

1	2	3	4	5	6	7
<b>GPA-5 “Factor of readiness of enterprises for state audit” (Condition of an external production zone)</b>						
3	19	57	38	-	0	0
4	4	16	8	-	1	1
2	1	2	2	-	1	1
In total	25	75	50	3	-	-
<b>G – 0.816, G6 – 4,896, R=2</b>						
<b>GPA-6 “Factor of readiness of enterprises for state audit” (Condition of an internal production zone)</b>						
5	18	90	36	-	0	0
4	5	20	10	-	1	1
6	2	12	4	-	1	1
In total	25	122	50	5	-	-
<b>G – 0.816, G6 – 4,896, R=2</b>						

*Source: Developed by the author based on the materials (L. Dovhan', L. Veduta and H. Mokhon'ko, 2019).*

A summary analysis of the scope of expert assessments for the totality of factors of the enterprise’s readiness for state audit is given in (Table 3).

Based on the data table 4, the range of expert estimates does not go beyond the normal distribution (R-6G), therefore, expert estimates can be considered mutually consistent.

*Table 4*

*Results of calculations of a mean square deviation, 6 mean square deviations, the range of variations for the factors of readiness of the enterprise for state audit*

Readiness factor	Mean square deviation		Range of variation
	G	6G	
GPA-1	1	6	2
GPA-2	1,118	6,7	3
GPA-3	1,247	7,48	3
GPA-4	0,816	4,896	2
GPA-5	0,816	4,896	2
GPA-6	0,816	4,896	2

*Source: Developed by the author based on the materials (L. Dovhan', L. Veduta and H. Mokhon'ko, 2019).*

As a result of the expert assessment of the readiness of enterprises for state audit, they scored a certain number of points. Based on this, each readiness factor can be assigned an appropriate rank. According to the theory of rank correlation, the factor that scored the most points is important (L. Dovhan', L. Veduta and H. Mokhon'ko, 2019).

This factor gets the first rank. Factors that score the same number of points should be assigned a standardized rank, the value of which is the average sum of places that shared these factors. After you assign the readiness factor to the appropriate rank, you must determine the sum of the ranks. The sum of the ranks intended by experts of the enterprise readiness factor is determined by the formula (3):

Vorobiov, K., Hurzhii, N. and Lysenko, M. (2019) “Safety of coffee production as the main competitive advantage of the company in the market”, *Management and entrepreneurship: trends of development*, 4 (10), pp. 79-93. Available at: <https://doi.org/10.26661/2522-1566/2019-4/10-07>

$$S = \sum_{i=1}^n i\varphi^R, \quad (3)$$

where  $R_{ij}$  – rank of the assessment given by the  $I$  expert to the  $j$  object

The average value of the sum of the grades of estimates for all factors of enterprise readiness is determined by the formula (4):

$$S = \sum_{j=1}^m \frac{S_j}{m} \quad (4)$$

Distribution of factors of enterprise readiness for state audit according to the ranks is presented in (Table 5).

*Table 5*  
*Distribution of factors of enterprise readiness for state audit according to the ranks*

Unavailability factor	Number of experts	Ri rank	Sum of ranks, S (2*3)	Average rank (S)	Deviations from the average amount of ranks	Quadratic deviation
GPA-1	25	1, 52	38	-	- 38.5	1482.25
GPA-2	25	1,96	49	-	- 14.5	210.25
GPA-3	25	2,92	73	-	38	1444
GPA-4	25	3,88	97	-	55	3025
GPA-5	25	5,02	125,5	-	- 49.5	2450.25
GPA-6	25	5,7	142,5	-	9.5	90.25
-	-	-	525	-	-	8702
			S=8702			
			W = 0.85			

*Source: Developed by the author based on the materials (L. Dovhan', L. Veduta and H. Mokhon'ko, 2019).*

According to the results of the distribution of factors of readiness of enterprises for state audit by rank presented by rank, the concordance coefficient (W) is 0.85, which indicates a high degree of consistency of expert assessments. Such results are characterized by a narrow professional orientation of the respondents.

Based on assessments of expert consistency, enterprises are not ready for the current audit for the availability of DSTU ISO 22000: 2005, nor documentary, nor physically. However, the complexity of implementation lies more in the documentary than in the physical nature, because physical deviations are easier to eliminate than to describe each stage of the movement of products from acceptance of raw materials to transportation to the consumer with a reinforced block of procedures and corrective actions. Transferring the results of the assessed factors into a percentage ratio, we compose the levels of unpreparedness of enterprises for state audit: 1) GP-1 = 15, 2%; 2) GP-2 = 19.6%; 3) GP-3 = 29, 2%; 4) GP-4 = 38.8%; 5) GP-5 = 50, 3%; 6) GP-6 = 57%.

Considering the physical condition, divided into subcategories of the audit checklist verification, we note the following:

1. Practical and documented management of the sanitary condition at the enterprise was implemented only in 15, 2%.

2. Practical and documented management of KKT in the production of products was implemented in only 19.6%.

3. The practically eliminated and documented presence of cross-contamination points was realized only in 29.2% of enterprises.

4. Practical and documented safety management of transportation of raw materials and finished products was implemented only in 38.8% of enterprises.

5. The practical elimination and documentation of unsafe factors of the external production zone, 50.2% were implemented

6. Practical elimination and documentation of unsafe factors of the internal production zone, implemented only in 57% of enterprises

Thereby, the business sectors that deal with the processing, production, transportation of raw materials and products will receive a warning from the inspection authorities in the presence of documentary and physical deviations and a period for their elimination within two months.

Upon the expiration of this period and the presence of the same deviations, the company will be guaranteed to be fined from 15 to 30 minimum wages and will risk getting a ban on the production of finished products and will be forced to withdraw the product from the market until the identified violations are eliminated.

The HACCP system is based on the principles of consistent implementation and tools for successful management of product quality and safety in the enterprise.

An important factor is the management of sanitation at control points, with sufficient fulfillment of the conditions of the product safety management standard in accordance with DSTU ISO 22000: 2007 (HACCP).

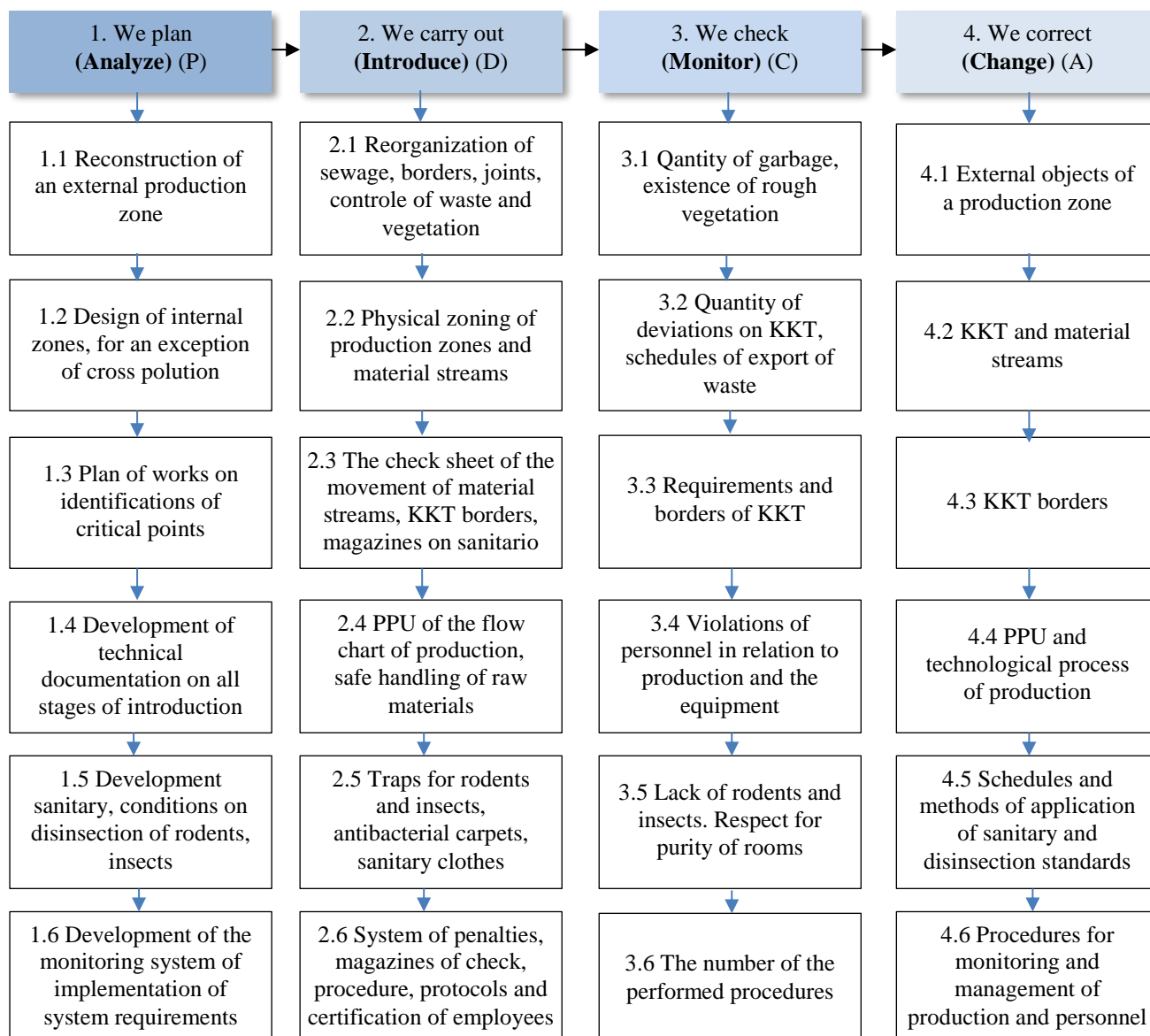
A key step in implementing HACCP is the creation of a HACCP team, to successfully complete the remaining steps. Definitely, the future team will face many difficulties going through the steps of describing the product and the requirements for its production.

One of the most difficult tasks is hazard analysis and the construction of critical control points. Having built critical control points, it is necessary to understand whether there is a possibility with the possibility of their control or whether it is necessary to carry out the correction of an uncontrolled critical control point. It is also necessary to monthly carry out the verification process of control critical points, on the fact of confirming the controllability of the control critical point.

Having verified the critical control points, it is necessary to conduct a validation process and document the established procedures for the fact of system control of the CCP.

Adaptation of the implementation process using the PDCA principle, is formed taking into account the conditions for practical and theoretical audit of enterprises for the presence of HACCP criteria is shown in Fig. 1 (L. Dovhan', L. Veduta and H. Mokhon'ko, 2019).





*Fig. 1. Adaptation of Stages of Introduction by means of the principle of PDCA*

*Source: Developed by the authors based on the materials (Akash, Rajendra, 2017; N. Hurzhii and K. Vorobjov, 2018)*

Ultimately, based on adapted steps using the principles of PDCA, fig. 1, we have the opportunity to build a movement profile of the raw materials of the control critical points of the coffee production enterprise, which in theory understands the importance of implementation and is aimed at making a profit, but has not implemented the principles, and has a small share of manufacturing defects and a high level of product complaints.

However, to build a profile, it is necessary to draw up a risk assessment scale for assessing the occurrence and danger of identified risks (Table 6) and a scale for assessing the severity of harm to human health (Table 7).

*Table 6*

*Scale for assessing the occurrence and danger of identified risks*

Risk scale	Indicator of danger of risk		
Probability of occurrence of risks	Low (1)	Average (2)	High (3)
High (3)	3 (Average)	6 (Average)	9 (High)
Average (2)	2 (Low)	4 (Average)	6 (Average)
Low (1)	1 (Low)	2 (Low)	3 (Average)

*Source: Developed by the author based on the materials (Akash, Rajendra, 2017; N. Hurzhii and K. Vorobjov, 2018)*

To determine the hazardous areas of the coffee production enterprise, we will use the scale for assessing the occurrence and danger of identified risks (Table 6). The appearance of hazardous areas is associated with the occurrence of hazardous factors that increase the severity level inflicted on the human body based on its properties. Hazardous factors are divided into: 1) biological factors appear as a result of infection of the raw materials with insects, larvae and other elements of the vital activity of insects, fungi, microorganisms, which ultimately cause poisoning; 2) physical factors are manifested as a result of contamination of raw materials with garbage, dust, metal elements, stones and, of course, cause damage to raw materials and damage to internal organs of a person; 3) chemical factors are manifested as a result of excess of the chemical solution during harvesting and in the event of a transfusion into a chemical solution on raw materials, which ultimately will cause poisoning or death.

We adapt the scale for assessing the occurrence and danger of identified risks. Tab. 6, to build a scale for assessing the severity of harm to the human body based on the identified hazardous factors in (Table 7):

*Table 7*

*Scales of assessment of weight of the done harm to a human body*

Factor type	Harm to health		
Probability of emergence of a factor	Insignificant (1)	Dangerous (2)	Lethal (3)
High (3)	3 (Average)	6 (Average)	9 (High)
Average (2)	2 (Low)	4 (Average)	6 (Average)
Low (1)	1 (Low)	2 (Low)	3 (Average)

*Source: Developed by the author based on the materials (Akash, Rajendra, 2017; N. Hurzhii and K. Vorobjov, 2018)*

Based on the obtained scales for assessing the occurrence and danger of identified risks (Table 6) and assessing the severity of harm to the human body (Table 7), we construct a profile of the movement of raw materials at critical control points at which the product loses its ability to satisfy consumer requirements and is harmful to human health (N. Hurzhii and K. Vorobjov, 2018).

*Table 8*

*The profile of movement of raw materials at control critical points*

Title	Probability of occurrence	Threat indicator	Health hazard	Factor
1	2	3	4	5
1. Zone of reception and shipment of finished products	2	2	4	Physical
2. Raw materials storage	1	3	3	Biological

*Table 8 continuation on the next page*

*Table 8 continuation*

1	2	3	4	5
3. Green Coffee Sorting Area	2	3	6	Biological, Physical
4. Green Coffee Roasting Area	1	2	2	Physical
5. Roast Coffee Degassing Area	1	1	1	Physical
6. Packing area	3	2	6	Physical, the increased initial pollution
7. Filling and packaging area for roasted coffee	3	2	6	Physical, the increased initial pollution
8. Finished goods storage	1	3	3	Physical
9. Finished product palletizing area	1	2	2	Physical

*Source: Developed by the author based on the materials (N. Hurzhii and K. Vorobjov, 2018)*

Analyzing the profile of the movement of raw materials on the KKT in Table 8 hazardous areas are the roasting and packaging areas for roasted coffee and the packaging area due to physical waste entering the green grain sorting area. No less safe zones are: sorting, since this zone is a spreader of dust and other elements that are part of biological and physical hazards. The reception and shipment zone of the finished product due to the possibility of the formation of fungi, which are biological hazards due to the excess moisture content in the raw materials stored in the storage.

Let's compose Table. 9 with identified conflict zones in the coffee industry based on the movement profile at control critical points in Table. 4. based on the severity parameters for health and the identified factors that, in the first place, affect the safety of products by the entry of waste elements into raw materials and finished products (N. Hurzhii and K. Vorobjov, 2018). This fact occurs due to the close location of the sorting equipment with the reception and dispatch areas of raw materials, the parking of packaging materials, which in turn initially affects the inconsistency of the manufactured products to contamination even before roasting green coffee beans.

*Table 9*

*Identified conflict areas and recommendations for correction*

Title	Enterprise model “Typical”	Factor
1. Zone of reception and shipment of finished products	The conflict of zone 1 with zone 3, 9, the constant risk of contamination of raw materials during transportation to the warehouse. Reconstruction of the pockets of the movement of raw materials and finished products is required.	Physical
2. Raw materials storage	Conflict with zone 9, on the way to send raw materials to the sorting zone. Change the location of zone 9.	Biological
3. Green Coffee Sorting Area	There is no conflict if zone 3 is transferred from zone 4, at least 6 meters.	Biological, Physical
4. Green Coffee Roasting Area	Conflict with zone 3, dust entering the fried grain. There is no conflict if the roasting zone is transferred at least 6 meters	Physical
5. Roast Coffee Degassing Area	No cross contamination	Physical
6. Packing area	No cross-contamination if transfer on 12 meters	Physical, increased initial contamination
7. Filling and packaging area for roasted coffee	No cross-contamination if transfer on 12 meters	Physical, increased initial contamination
8. Finished goods storage	No cross-contamination, when transferring zone 3 to 12 meters from zone 8	Physical
9. Finished product palletizing area	Conflict with zone 3, materials for packaging of finished products are contaminated. Installation of wall ceilings between zone 9 and 3.	Physical

*Source: Developed by the author based on the materials (Warehouse Safety Tips How-To: HACCP Cross Contamination Prevention, 2019)*

When identifying conflict zones by the example of a coffee enterprise Tab. 5, despite the absence of cross-contamination at the manufacturing plant in zones 5 through 7, the product produced has already come under the influence of polluting physical factors. Regarding zones 1, 2, 3, 8, 9, they do not fully comply with the declared requirements of the standard DSTU ISO 22000: 2007 (HACCP), due to the contaminated product. Therefore, recommendations were given for eliminating pollution zones of finished products by moving current equipment, wall ceilings and building new pockets of material flow.

## CONCLUSION

Today, the food industry is one of the most significant sectors in the global economy. However, in Ukraine there are number of problems that hinder the implementation of food safety management standards. The main problems that need to be managed are: the reluctance of company owners to implement quality management standards and product safety management, ineffective warnings and penalties from the state, staff who do not want to adhere to the rules and standards. Therefore, we have developed a step-by-step practical adaptation of the implementation of HACCP, based on the PDCA principle, which, in turn, is a recommendation on the initial elimination of identified conflict zones. A survey was conducted among 25 experts, in which the factors of readiness of enterprises for state audit were classified based on the value of consensus of 0.85. As well as systems for assessing hazardous factors that can cause irreparable harm to the human body with further recommendations for local and low-cost elimination are developed, and a profile of the occurrence of critical situations on the KKT is constructed.

The recommendations provided for the implementation of XACCP will allow the future Ukrainian coffee producer to enter the foreign market and increase the export volume of finished products. Thus, all regional production chains should strive to implement the HACCP food safety control system (DSTU ISO 22000: 2007), as the companies that implement this system will have great advantages over competitors in the market.

## REFERENCES

- Dovhan', L. Ye., Veduta, L. L. and Mokhon'ko, H.A. (2018) *Tekhnolohiy upravlinnya lyuds'kymy resursamy* [Human Resource Management Technologies], KPI im. Ihoria Sikors'koho, Kyiv, Ukraine. Available at: [https://www.google.com.ua/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=2ahUKEwir8piWjrXmAhuAhAIHeFTBt4QFjAAegQIARAC&url=https%3A%2F%2Fela.kpi.ua%2Fbitstream%2F123456789%2F25275%2F1%2FTULR\\_navch\\_posibn.pdf&usq=AOvVaw39S6SJnZq2OhuXQ\\_DFuhdd](https://www.google.com.ua/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=2ahUKEwir8piWjrXmAhuAhAIHeFTBt4QFjAAegQIARAC&url=https%3A%2F%2Fela.kpi.ua%2Fbitstream%2F123456789%2F25275%2F1%2FTULR_navch_posibn.pdf&usq=AOvVaw39S6SJnZq2OhuXQ_DFuhdd) (accessed 11 November 2019), (in Ukrainian).
- Food safety management system. DSTU ISO 22000: 2007. Available at: [https://test1.haccp.center/assets/files/DSTU\\_ISO\\_22000-2007.pdf](https://test1.haccp.center/assets/files/DSTU_ISO_22000-2007.pdf) (accessed: 11 November 2019), (in Ukrainian).
- Golubenko, O. A., Slavogorodsky, V. Yu. and Ivanova, V.A. (2017) "Certification of the HACCP system and food safety management system. The main differences", *The international scientific journal "Symbol of Science"*, issue 4 (2), pp. 56-60 (in Russian).
- Hurzhii, N.M. and Vorobjov, K.S. (2018) "Prospects of implementing a flexible Scrum project management methodology in the practice of domestic enterprises", *Electronic Scientific and Practical Magazine "Market Infrastructure"*, issue 15, 2018. pp. 200-208. Available at: [http://www.market-infr.od.ua/journals/2018/15\\_2018\\_ukr/33.pdf](http://www.market-infr.od.ua/journals/2018/15_2018_ukr/33.pdf) (accessed 12 November 2019), (in Ukrainian).
- Inspection portal. Available at: <https://inspections.gov.ua> (accessed: 11 November 2019), (in Ukrainian).

Vorobiov, K., Hurzhii, N. and Lysenko, M. (2019) “Safety of coffee production as the main competitive advantage of the company in the market”, *Management and entrepreneurship: trends of development*, 4 (10), pp. 79-93. Available at: <https://doi.org/10.26661/2522-1566/2019-4/10-07>

International standard ISO 22000: 2018. Available at: <http://iso-management.com/wp-content/uploads/2018/09/ISO-22000-2018.pdf> (accessed: 11 November 2019), (in Russian).

Kushwah, A. and Kumar, R. (2017). “HACCP – ITS NEED AND PRACTICES”, *Acta Chemica Malaysia*, 1(2), pp. 01-05. Available at: <http://dx.doi.org/10.26480/acmy.02.2017.01.05> (accessed 11 November 2019).

Molins, R. and Pineiro, M. (2010). A guide to food screening based on risk assessment. FAO Food and Nutrition Document. United Nations Agricultural and Food Organization, Rome. Available at: <http://www.fao.org/3/a-i0096r.pdf> (accessed: 11 November 2019), (in Russian).

Novikov, V.M, Romanenko, I.M. and Fomin, S.V. (2013) “Analysis of operating normative documents in relation to procedures of realization of certification of HACCP in Ukraine and search of ways of their improvement”, *Collection of scientific works of the Odesa state academy of technical regulation and quality*, issue 1 (2), pp. 6-13. Available at: <https://drive.google.com/file/d/1q2I9KW7cVVS-i7utjsCFnZ3hOmnJd4h6/view> (accessed 11 November 2019), (in Ukrainian).

PHS Inverter (2019). *Warehouse Safety Tips How-To: HACCP Cross Contamination Prevention*. Available at: <https://phsinverter.com/cross-contamination-prevention/#:~:targetText=The%20dangerous%20exchange%20of%20bacteria,the%20United%20States%20each%20year.&targetText=Salmon%20Hygiene%20Technology%20HACCP%20cleaning%20equipment%20is%20excellent%20for%20cross%20contamination%20prevention>. (accessed 11 November 2019).

Shutova, O. A. and Manukyan, A. F. (2015) “Problems of implementing the principles of HACCP in food industry enterprises”, *The international scientific journal “Symbol of Science”*, issue 11. 2015. pp. 67-69 (in Russian).

Ukr expertize. Certification agency ISO 22000. Available at: <https://ves.in.ua/iso-22000> (accessed: 11 November 2019), (in Ukrainian).

Ukr standard. Certification agency ISO 22000. Available at: <https://ukrstandart.net/ua/> (accessed: 11 November 2019), (in Ukrainian).

Uteka.ua. On the introduction of HACCP in public catering establishments (2018). Available at: <https://uteka.ua/publication/news-14-delovye-novosti-36-o-vvedenii-nassr-v-zavedeniyax-obshhestvennogo-pitaniya> (accessed: 11 November 2019), (in Russian).

## СПИСОК ВИКОРИСТАНИХ ДЖЕРЕЛ:

Технології управління людськими ресурсами / Л. Є. Довгань, Л. Л. Ведута, Г.А. Мохонько; КПІ ім. Ігоря Сікорського. Київ : КПІ ім. Ігоря Сікорського, 2018. 512 с. URL: [https://www.google.com.ua/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=2ahUKEwir8piWjrXmAhuAhAIHeFTBt4QFjAAegQIARAC&url=https%3A%2F%2Fela.kpi.ua%2Fbitstream%2F123456789%2F25275%2F1%2FTULR\\_navch\\_posibn.pdf&usg=AOvVaw39S6SJnZq2OhuXQ\\_DFuhdd](https://www.google.com.ua/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=2ahUKEwir8piWjrXmAhuAhAIHeFTBt4QFjAAegQIARAC&url=https%3A%2F%2Fela.kpi.ua%2Fbitstream%2F123456789%2F25275%2F1%2FTULR_navch_posibn.pdf&usg=AOvVaw39S6SJnZq2OhuXQ_DFuhdd) (дата звернення: 11.10.2019).

Система управління безпечністю харчових продуктів. ДСТУ ISO 22000:2007. URL: [https://test1.haccp.center/assets/files/DSTU\\_ISO\\_22000-2007.pdf](https://test1.haccp.center/assets/files/DSTU_ISO_22000-2007.pdf) (дата звернення: 11.10.2019).

Голубенко О. А., Славогородский В. Ю., Иванова В.А. Сертификация системы ХАССП и системы менеджмента безопасности пищевой продукции. Основные отличия. *Международный научный журнал «Символ науки»*, Выпуск 04 (2).2017. С. 56 -60.

Гуржій Н.М., Воробйов К.С. Перспективи впровадження методології управління проектами Scrum в практику вітчизняних підприємств. Електронний науково-практичний журнал «Інфраструктура ринку», Випуск 15. 2018. С. 200 - 208.

Инспекционный портал. URL: <https://inspections.gov.ua> (дата обращения: 11.10.2019).

Международный стандарт ISO 22000:2018. URL: <http://iso-management.com/wp-content/uploads/2018/09/ISO-22000-2018.pdf> (дата обращения: 11.10.2019).

- Kushwah, A. and Kumar, R. (2017). "HACCP – ITS NEED AND PRACTICES", *Acta Chemica Malaysia*, 1(2), pp. 01-05. Available at: <http://dx.doi.org/10.26480/acmy.02.2017.01.05> (accessed 11 November 2019).
- Молинс Р., Пинеиро М. Руководство по проверке пищевых продуктов на основе оценки рисков. Документ ФАО по пищевым продуктам и питанию. Рим: Сельскохозяйственная и продовольственная организация Объединенных Наций, 2010. URL: <http://www.fao.org/3/a-i0096r.pdf> (дата звернення: 11.10.2019).
- Новіков В. М., Романенко І. М., Фомина С.В. Аналіз чинних нормативних документів щодо процедур проведення сертифікації СУБХП (HACCP) в Україні та пошук шляхів їх удосконалення. Збірник наукових праць Одеської державної академії технічного регулювання та якості, Випуск 1 (2). 2013. С. 6-13. URL: <https://drive.google.com/file/d/1q2I9KW7cVVS-i7utjsCFnZ3hOmnJd4h6/view> (дата звернення: 1.11.2019).
- PHS Inverter (2019). Warehouse Safety Tips How-To: HACCP Cross Contamination Prevention [Online], (in Ukrainian) available at: <https://phsinverter.com/cross-contamination-prevention/#:~:targetText=The%20dangerous%20exchange%20of%20bacteria,the%20United%20States%20each%20year.&targetText=Salmon%20Hygiene%20Technology%20HACCP%20cleaning%20equipment%20is%20excellent%20for%20cross%20contamination%20prevention>. (Accessed 11 November 2019)
- Шутова О. А., Манукян А. Ф. Проблемы внедрения принципов HACCP на предприятиях пищевой промышленности. *Международный научный журнал «Символ науки»*, Випуск 11.2015. С. 67-69.
- Укрэкспертиза. Агентство сертификации ISO 22000. URL: <https://ves.in.ua/dobrovilnij-sertifikat> (дата звернення: 11.10.2019).
- Укрстандарт. Агентство сертификации ISO 22000. URL: <https://ukrstandart.net/ua/> (дата звернення: 11.10.2019).
- Uteka.ua. О введении HACCP в заведениях общественного питания. URL: <https://uteka.ua/publication/news-14-delovye-novosti-36-o-vvedenii-nassr-v-zavedeniyax-obshhestvennogo-pitaniya> (дата звернення: 11.10.2019).

## УПРАВЛІННЯ БЕЗПЕКОЮ КАВОВИХ ТОВАРІВ ЯК ГОЛОВНА КОНКУРЕНТНА ПЕРЕВАГА КОМПАНІЇ НА РИНКУ

**Воробйов Костянтин  
Сергійович**  
Запорізькій національний  
університет  
Запоріжжя, Україна

**Гуржій Наталія  
Миколаївна**  
Запорізькій національний  
університет  
Запоріжжя, Україна

**Лисенко Марина  
Олександрівна**  
Запорізькій національний  
університет  
Запоріжжя, Україна

Актуальність впровадження принципів управління безпекою продукції обумовлено тим, що, впроваджуючи даний стандарт, українські підприємства сформують імідж безпечного харчового виробника, висловлюючи тим самим серйозне ставлення до думки та здоров'ю споживача. Не менш важливим ефектом від впровадження є інвестиційна привабливість компанії і можливість виходу на зовнішній ринок. Таким чином, українська продукція стане цікава споживачу на зовнішньому ринку за рахунок гідної якості і доступної ціни. Аналіз перспектив впровадження стандарту HACCP дозволить компанії зацікавити споживача в покупці кавової продукції, знизити собівартість її виробництва, розширити товарний портфель і збільшувати канали розподілу. Мета дослідження: вивчити вигоди для компанії від застосування HACCP, вказати прості кроки його впровадження і надати типовий приклад реальних відхилень в спроектованих моделях підприємства. Методологія: в ході дослідження було проведено якісний аналіз існуючого стандарту ДСТУ ISO 22000: 2007, а



також аналіз за існуючими відхилень кавових виробництв. Наукова значимість роботи: полягає в тому, що на підставі проведеного дослідження готовності підприємств харчової промисловості до впровадження стандартів НАССР, можна розробити типові програми щодо прискорення цих процесів, що в свою чергу, прискорить інтенсивність і якість їх впровадження. Цінність дослідження в тому, що на підставі впровадження стандартів управління безпечною кавовою продукцією, споживач отримує якісний продукт, а держава сертифікованого виробника і можливого експортера.

**Ключові слова:** НАССР, ККТ, верифікація, критичні межі, технологічний процес.

## УПРАВЛЕНИЕ БЕЗОПАСНОСТЬЮ КОФЕЙНОЙ ПРОДУКЦИИ КАК ОСНОВНОЕ КОНКУРЕНТНОЕ ПРЕИМУЩЕСТВО КОМПАНИИ НА РЫНКЕ

**Воробьев Константин  
Сергеевич**

*Запорожский национальный  
университет  
Запорожье, Украина*

**Гуржий Наталья  
Николаевна**

*Запорожский национальный  
университет  
Запорожье, Украина*

**Лисенко Марина  
Александровна**

*Запорожский национальный  
университет  
Запорожье, Украина*

Актуальность реализации принципов управления безопасностью продукции обусловлена необходимостью внедрения данного стандарта, украинских предприятий при формировании имиджа безопасного пищевого производителя, выражая тем самым серьезное отношение к мнению и здоровью потребителя. Не менее важным эффектом внедрения данного стандарта является инвестиционная привлекательность компании и возможность выхода на внешний рынок. Таким образом, украинская продукция будет востребована потребителем на внешнем рынке за счет достойного качества и доступной цены. Анализ перспектив внедрения стандарта НАССР позволит компании заинтересовать потребителя в покупке кофейной продукции, снизить себестоимость ее производства, расширить товарный портфель и увеличивать каналы распределения. Цель исследования: изучить выгоды для компании от применения НАССР, охарактеризовать процесс его внедрения и предоставить типичный пример реальных отклонений в спроектированных моделях предприятия. Методология: в ходе исследования был проведен качественный анализ существующего стандарта ДСТУ ISO 22000:2007, а также анализ по существующим отклонениям кофейных производств. Научная значимость работы заключается в том, что на основании проведенного исследования готовности предприятий пищевой промышленности к внедрению стандартов НАССР, можно разработать типичные программы по ускорению этих процессов, что в свою очередь, ускорит интенсивность и качество их внедрения. Ценность исследования состоит в том, что на основании внедрения стандартов управления безопасной кофейной продукцией, потребитель получает качественный продукт, а государство сертифицированного производителя и возможного экспортера.

**Ключевые слова:** НАССР, ККТ, верификация, критические пределы, технологический процесс.

---

LOGISTICS AND SUPPLY CHAIN MANAGEMENT

---

Received:  
14 November, 2019  
1st Revision:  
16 December, 2019  
Accepted:  
20 December, 2019

UDC: 658.78

DOI <https://doi.org/10.26661/2522-1566/2019-4/10-08>

**FEATURES OF INVENTORY MANAGEMENT IN LOGISTICS SYSTEM OF A  
TRADING ENTERPRISE**

**Oksana Onyshchenko**  
Zaporizhzhia National University  
Zaporizhzhia, Ukraine  
ORCID: 0000-0002-3009-3856

**Oleksandra Bukharina**  
Zaporizhzhia National University  
Zaporizhzhia, Ukraine  
ORCID: 0000-0003-0310-0069

**Anhelina Tupikina**  
Zaporizhzhia National University  
Zaporizhzhia, Ukraine  
ORCID: 0000-0003-0690-7685

\*Corresponding author email: [oksana.onishchenko.znu@gmail.com](mailto:oksana.onishchenko.znu@gmail.com)

**Abstract.** The article **aims** to define the role of inventory management in the logistics system of a trading enterprise. In the article general theoretical aspects of inventory management have been identified and existing systems of trading enterprises' inventory management have been analyzed. General scientific theoretical and empirical **methods** have been used in the course of the research: observation and comparison, analytical, grouping and generalization of data, structural methods, elements of economic and financial analysis. Having analyzed the existing inventory management systems of trading enterprises and having examined the main directions of improving the inventory management system at domestic trading companies, it was determined that to solve all the tasks on fostering the efficiency of trading companies, it is necessary to create and develop their integrated trading management system, based on synchronized use of existing models. As a **result** the relevance and feasibility of modifying the inventory management system at a trade enterprise are substantiated. It is stated that effective inventory management of a trading enterprise should be based on: the use of powerful information technologies; improving inventory control and supply coordination; ensuring the continuous interaction of the functional subsystems of the whole set of enterprises-producers, consumers and suppliers and establishing effective communication with them; modification of the planning system in the field of sales, procurement, promotion and motivation of staff; optimization of the enterprise marketing system and improvement of order management; reorganization of the warehouse system in accordance with the selected order management system.

**Keywords:** trading enterprise, inventory management system, trading inventories, continuity of logistics operations, fluctuations in demand, warehouse costs.

**JEL Classification:** D24, L 23.

## INTRODUCTION

The main tasks of the inventory management system of modern trading enterprises are to increase profits while reducing inventory costs. Thus, at the present stage of market competition, the improvement of the inventory management system is a particularly relevant trend for the development of trading enterprises. The relevance of the research is due to the necessity of a

Onyshchenko, O., Bukharina, O. and Tupikina, A. (2019) "Features of inventory management in logistics system of a trading enterprise", *Management and entrepreneurship: trends of development*, 4 (10), pp. 94-107. Available at: <https://doi.org/10.26661/2522-1566/2019-4/10-08>

detailed introduction of the basic problems of the inventory management system and the development of the key directions of the optimization process of stock management in trading companies.

## **LITERATURE REVIEW**

There are different perspectives on logistic activities of modern enterprises. The logistical activity of enterprises is regarded as the formation of economic relations; determining the needs for transportation of products, their volumes; the choice of modes of transport, vehicles, routes and technology of transportation; coordination of operational management of supply and transportation of products; optimization of inventory and warehouse; placement and organization of business activities; warehouse network; providing logistics services etc. With respect to inventory management, the theoretical issues of using the modern concept of inventory management and warehousing logistics have been the object of the research of domestic and foreign scientists: Yu.K. Bazhenov et al. (1997), A.M. Hajinsky (2007), I.A. Lenshin and Yu.I. Smolyakov (1996), M.A. Oklander (2004), Y.V. Ponomariova (2003), I.G. Smirnov (2004), V.O. Shyshkin (2019) and others.

Paying attention to these researches, it should be noted that there are still many issues that need further research, one of which are particular features of inventory management in logistics system of a trading enterprise and their role in the effectiveness of domestic enterprises.

## **METHODOLOGY**

General scientific theoretical and empirical methods have been used in the course of the research, such as: analysis and generalization of literature on the topic of the research, methods of observation and comparison, analytical, grouping and generalization of data, structural methods, elements of economic and financial analysis, methods of coordination and formalization, methods of mathematical statistics and logistics, graphical and tabular representation of data are used in the work. The theoretical and practical database on logistics and supply chain management, logistic infrastructure and organization of warehouse economy at the enterprise has been considered as an information base of the research.

## **RESULTS AND DISCUSSION**

During the economic crisis, the economy of the region is more likely to be flooded with the internal economic issues and the shortest period of time for the turnover of the capital. Moreover, it is the responsibility of any organization to take care of the unique market situation at a regional level. All trading companies should take over the turnover of stocks, to take into account the maximal sales axis and, as a result, to bring in the inflow of goods from the state's activities. A perfect system of direct sales is without taking the goods to the warehouse, so that they are immediately delivered. However, in such a way it is not possible to trade a large number of types of products in the product portfolio of the organization, the turnover of stocks is one of the most important directories, which is detailed by the enterprises.

Material reserves are products of tester-technical recognition, which are on the basis of different stages of production and the process of production and public utilities, which should be mentioned in the process of a test or special care. The main function of the material reserves is to ensure the continuity of the process of supplying the goods. Material reserves are a part of the warehouse of the resources of production processes and the need for services (stocks of finished products). In general, it is one of the main reasons why the process of supplying has become

uninterrupted. The function is to preserve a part of the total material stock, including the number of inventories. At the same trading, enterprise goods are stored by a different warehousing state system, which stores a significant part of the company's assets and is the main aspect of its potential resource (N. Vlasova, 2006).

For the efficient performance of the trading company, the number of reserves should be optimal. Level of inventory, nature and quality of stocks and the level of inventory management can be directly exploited due to the scale of production, efficiency, and competitiveness of the enterprise.

The accounting systems of the region are divided into two large groups:

- 1) own stockpile (the company's reserves);
- 2) reserves that are not owned by the company.

The company's own reserves are recorded in its balance sheets and are assets that:

- are stored for their further sale in the course of business activity of the enterprise;
- are in the process of production for the subsequent sale of manufactured products;
- stored for consumption in the production process, service delivery and enterprise management.

management.

According to this, fig. 1 shows the classification of the main types of inventories:

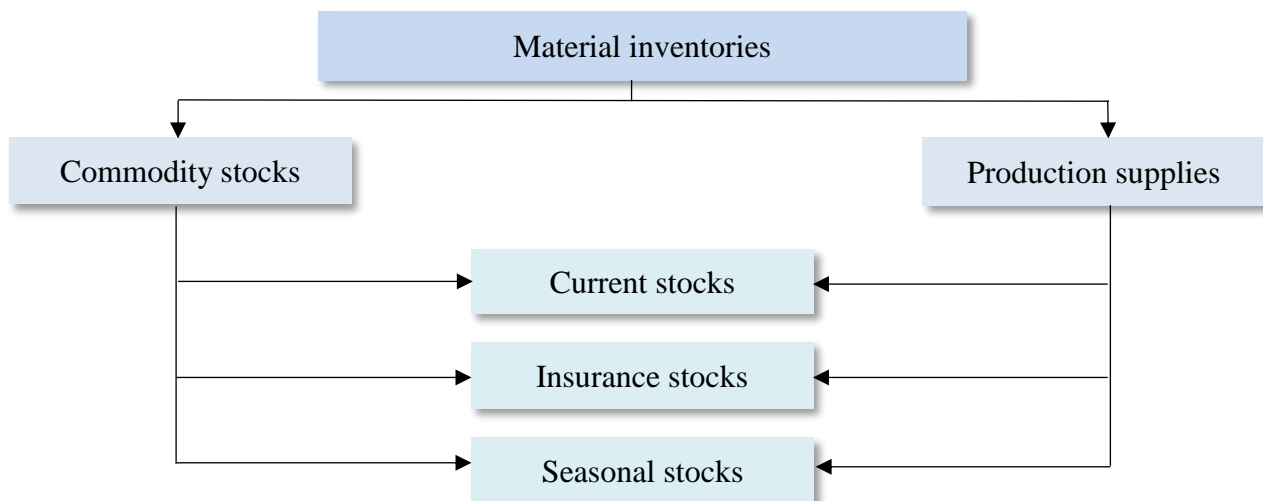


Fig. 1. Basic types of material reserves

Source: modified after (Grebnev et al., 1997)

Thus, in the company's logistic systems inventories are divided into the production supplies, which ensure the continuity of consumption of resources with the discretion of their supply, and commodities, which link the intervals between the supply of products from the supplier and delivery to the buyer.

Production supplies are classified into production inventories and transport inventories that are created in the process of cargo transportation. Therefore, there are three levels of inventories at enterprises (table 1):

Table 1

*Levels of inventories*

Type of inventory	Function
Stocks of finished products	Minimization of supply lines, which is the shortest possible cycle of turnover (without discount on production). Insurance of risks from stoppage of production through repair, strikes and downtime. Regulation of production in case of seasonal changes in demand, which can provide stability of productivity.
Stocks of unfinished production	Transgression of all operational control of the production process through the process control on the front end.
Stocks of purchased material resources and inventories	Reducing the occurrence of infestations, allow the creation of trading tips for the selection of great party material resources and speculation. Moreover, the model provides the safety from the monopolies.

*Source: modified after (Waarst and Reventlow, 1991)*

The demand for spare parts is based on the nature of the manufacturing and production processes. The main reason for the creation of reserves for the company is the separation of the manufactured and serviced products at the same time (Waarst and Reventlow, 1991). Additional reasons for the creation of material stocks on the enterprises are given in table 2:

Table 2

*Reasons for inventories and their roles*

Reason	Role of inventories
1	2
Probability of delay of the established schedule of supplies	In the case of an unpredictable decrease in the intensity of the input material flow, a stock of raw materials is necessary to avoid the loss of the production process, which is especially important for enterprises with an uninterrupted cycle of production.
Possible changes in demand	It is possible to oversupply products with large quantities of goods in bulk. The prognosis will fall on a specific product more than a folding process. In order to understand the situations, if the product is not to shipped, it will be possible to oversupply it with large quantities of goods.
Seasonal changes in the production of goods	In most cases, stocks are created in the logistics system of agricultural enterprises.
Speculations	The price of some goods can increase dramatically. Entrepreneurship, which has been able to foresee this factor, creates inventories to make a profit by increasing the market price.
Discounts for the purchase of a large batch of goods	Inventories are created for a large amount of accumulated material resources.

*Table 2 continuation on the next page*

*Table 2 continuation*

1	2
Expenses related to ordering	The process of placing each new order is accompanied by a number of administrative costs. These costs can be reduced by reducing the number of orders, which is equivalent to an increase in the volume of ordering and an increase in the size of the stock.
Possibility of uniform managing operations with production and distribution	In the case of stock absence, the intensity of material flows in the distribution system fluctuates in accordance with changes in the intensity of production. The presence of stocks in the distribution system allows to carry out the process of realization more evenly, regardless of the situation in production. In turn, the availability of production stocks is smoothing fluctuations in the supply of raw materials and semi-finished products, ensures the uniformity of the production process.
Ability to provide immediate customer service	Orderings for customers in one of the following ways: - develop the ordered product; - to purchase the ordered product; - Issue the ordered goods immediately from the stock available. (The last method is usually the most expensive, as it requires a stock level).
Minimization of production downtime due to the lack of spare parts	Equipment breakdowns and a variety of accidents can lead to production stoppages if additional parts, items are not available. This is especially important for enterprises with a continuous production process, as it can be too costly to shut down a production.
Simplification of production management processes	The availability of these reserves reduces the requirements for the degree of consistency of production processes at different sites, and therefore the associated costs of organizing the management of these processes.

*Source: modified after (Hadzhinsky, 2007)*

Thus, the main aim of inventory creation is to reduce the direct dependence between supplier, producer and consumer, as well as to ensure the continuity of the production process. The availability of stocks provides production with inventories supplied in optimal batches, processing raw materials into finished products in optimal sizes and, most importantly, timely delivery of finished products to customers.

Despite the fact that the process of stock maintenance in the warehouse requires significant costs, enterprises are forced to create them. So more than a third of cumulative public products is spent annually on inventories (Hadzhinsky, 2007).

Inventory functions are not limited to the accumulation and insurance of risks in the event of unanticipated stoppages of the commodity movement process. Other inventory functions are presented in table 3:



Table 3

*Inventory functions*

Function	Value
Regulation of the process	Inventories are necessary to allow time for the completion of one production operation and for the transition it to another.
Economic function	Ensuring the independence of individual workplaces, sites, workshops, simplification of production and/or distribution processes. Reducing these inventories to a minimum requires changes in organization and financing, namely: quality management, maintenance, material updates, staff training.
Warning function	Buffer stocks are necessary if stocks are consumed in a predictable but variable manner and if necessary to smooth fluctuations in stock levels rather than changes in production systems
Insurance of unforeseen risks	Emergency stocks are established to protect against fluctuations in delivery times and demand fluctuations, to ensure the continuity of the production process
Production function	Inventories are needed when there is a need for a period of latent development that is necessary for a chemical reaction or for the conversion of products (e.g. wine maturation).

*Source: modified after (Hadzhinsky, 2007)*

Since the turnover of inventories is directly related to the volume of product sales, the usage of effective ways to stimulate sales to accelerate their turnover. One way to accelerate the turnover of inventories is to invest minimal resources. As turnover increases, so does sales and profits. However, the high volume of inventories leads to large losses due to moral and physical aging and spoilage during storage. Delays due to the placement of orders, transportation and warehouse processing of goods require from the trading company to maintain trade stocks at the necessary level in accordance with the sales forecast for the stability and rhythm of their implementation. As a result, it is impossible to carry out the purchase of goods at the time of receipt of the order from the consumer.

Effective management of trade enterprise inventories should be based on the usage of powerful information technologies, which provide regular control of the state and dynamics of goods movement, automatic implementation of placing orders through the computer network and replenishment of stocks to the optimal level (Yu. Nerush, 2008).

Modern enterprises in order to improve the information system of the enterprise use additional software. The most common automated programs to provide information support for the system of control and inventory management are shown in Fig. 2:

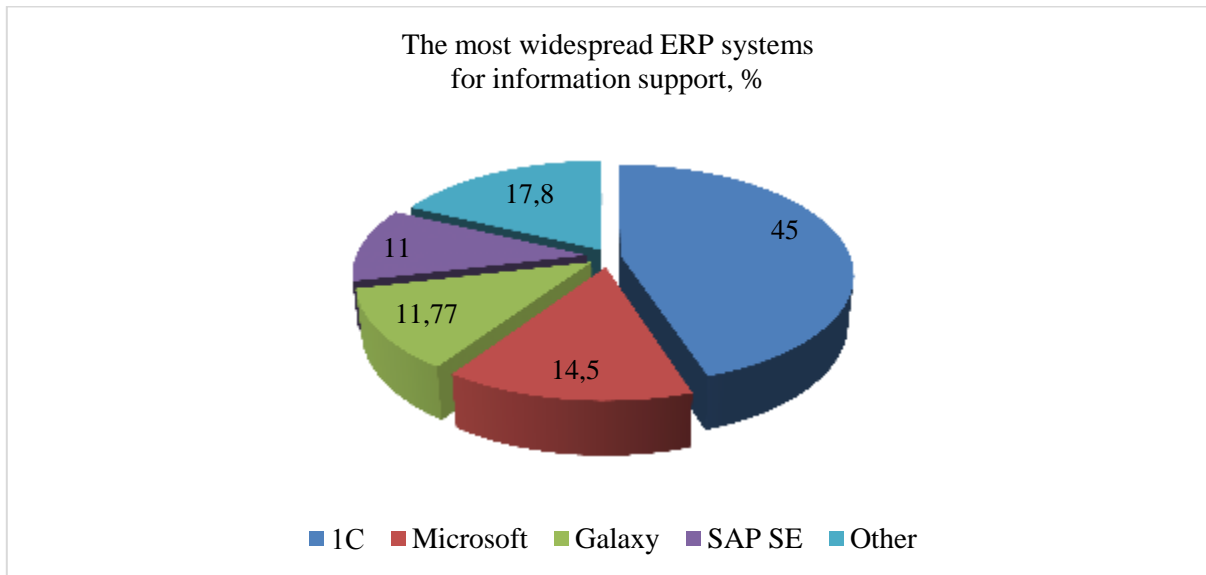


Fig. 2. The most widespread ERP systems for information support, %.

Source: modified after (1C: Enterprise 8. System of programs, 2019)

Thus, the majority of modern domestic trade enterprises use programs based on “1C”, “Galaxy” and others (Fig. 2). Such platforms are the technological environment with the help of which developers create programs (applied solutions). The systems are addressed to medium and large enterprises and have wide functionality for information support of the whole range of strategic planning and operational management tasks, including the enterprise inventory management system. Using the above-mentioned types of information support for inventory management, the trade enterprise solves the following tasks:

- 1) ensuring that the necessary quantity of stock is available in the warehouse;
- 2) achieving an optimal level of customer service;
- 3) minimization of working capital requirements;
- 4) elimination of material resources deficit;
- 5) increasing the turnover rate of goods;
- 6) minimization of expenses of the enterprise for the purchase and storage of stocks;
- 7) liquidation of excess stocks.

In order to fully achieve the objectives above, the application solution allows maintaining an optimal level of stock in the warehouse, to provide the number of goods on current shipping orders and to meet the needs of procurement plans.

The control of inventories is based on the calculation of their level and associated costs, such as current inventory costs.

The main management decisions regarding inventories are to determine the terms and volumes of the order, which affect the cost of purchased goods, the number of costs associated with the order, the storage of stocks and the amount of damage, as well as the possible shortage or absence of stocks.

One of the main problems of modern trade enterprises is the accumulation by the enterprise at the end of the year of a large number of illiquid products in the warehouse, as well as the deficit on the main items. The reason for this is the preliminary order of goods, which is carried out on the basis of preliminary sales plans, which are established by the commercial department of the company based on the archive of information orders. Thus, the enterprise receives losses on the maintenance of warehouse premises and a decrease in the turnover of funds.

The most competitive are those companies that have organized a rational order system based on the following tasks:

1. Costs reduction of stock creation and storage.
2. Minimization of delivery time.
3. Compliance with delivery deadlines.
4. Optimization of sales activities.

In order to achieve the above objectives, the trading company must achieve continuous interaction of functional subsystems of the entire set of manufacturers, consumers, and suppliers and establish effective communication with them.

Foreign experts in the practice of logistics developed and implemented two fundamentally different approaches to the supply of material resources: pull and push systems (Kristianto, 2009; Li and Scheller-Wolf, 2010; Thonemann, U. et al. 2005).

Push and pull systems of material flow management are the basis of the system of inventory management in the logistics system of the enterprise, gives reference points in the management of material reserves, on which, in turn, the efficiency of the logistics chain as a whole depends (Yu. Ponomareva, 2003). Types of push and pull control systems of material flows are given in Table 4:

*Table 4*

*Material flow control systems*

Push systems	Pull systems
MRP	KANBAN
MRP I	OPT
MRP II	ZIPS
DRP	MAN
ERP	DOPS
ERP II	NOT
LRP	LP

*Source: compiled by authors*

The push system is a sales strategy aimed at forming inventories in warehouses of retail wholesalers by outpacing demand. The pushing out models of material flow management are mainly oriented to a constant demand for a long period of time (Wood et al., 1995).

The usage of the information support system has improved its application in the logistics system of the enterprise (Table 5):

*Table 5*

*Characteristics of the push inventory management systems*

Benefits	Drawbacks
1. Minimization of expenses for the ordering organization. 2. Elimination of errors in forecasting demand and errors in the supply of materials, resources, etc. 3. Increasing the level of customer satisfaction. 4. Minimization of dependence on suppliers. 5. Creation of insurance and seasonal stocks that protect against changes in weather and climate conditions.	1. Need for storage space. 2. Increased risk of physical loss. 3. Additional storage costs. 4. Allowed defects in the stock. 5. The need for high-level information support, which requires significant financial resources. 6. Complicated inventory control system through centralized management.

*Source: modified after (I. Smirnov, 2004)*

Pull strategy is a sales strategy aimed at stimulating demand for products in the retail sector by outpacing inventory formation. The advantage of pulling systems is their independence from computerization. However, such systems provide for a high level of labor organization and compliance with all parameters in the supply chain, as well as the responsibility of executors at all levels due to limited centralization in the regulation of logistics processes (Table 6):

*Table 6*

*Characteristics of pulling inventory management systems]*

Benefits	Drawbacks
- ensuring a high quality of stocks. Release of capital from inventories. - minimization of the cost of stock maintenance and reduction of stocks. - eliminating the risk of physical losses. - simplified inventory management system as a result of decentralization.	- risk of errors in demand forecasting and delayed delivery of resources. - order placement costs. - increased dependence on the supplier. - complex synchronization of logistics process timescales with "just in time" principles. - apply the "just in time" principle only in the raw material supply system, not for commercial products.

*Source: modified after (Oklander, 2004)*

It is possible to provide the decision of all tasks set before the trading enterprise only by means of creation of the integrated control system of stocks of the trading enterprise. Such enterprises are based on the synchronized use of separate models (as in case of their application separately there is an imperfection of decisions on stocks), which provide the reaching to logistics high result (Oklander, 2004).

A special role in the organization of the company's activities is played by inventory planning because inventories require significant financial costs for storage, warehousing, and management in the supply chain. So for the reception of competitive advantages and a powerful market position the trading enterprise should plan effectively expenses of activity, to predict stocks for a finding of their optimum level. Such a model will provide the chance to the enterprise in due time to realize delivered lots of the goods and not to accumulate illiquid goods. Improvement of the system of

planning in the sphere of sales, procurement, promotion, and motivation of personnel will provide a trading enterprise with a stable increase in profits and strengthening of market positions (I. Lenshin, 1996).

To ensure the effective usage of circulating assets at the trading enterprise and increase the level of profitability of products it is necessary to minimize the volume of stocks, and therefore to ensure the stability of sales. In such a way the goods will not be delayed in the warehouse.

To accelerate working capital and achieve an optimal level of operation of the enterprise by minimizing overhead costs associated with warehousing and inventory creation, the company must perform the following tasks:

- to optimize the marketing system of the enterprise;
- to optimize and improve the order of management;
- reorganization of the storage system in accordance with the chosen order management system.

By improving the order of management system it is necessary to integrate retraining and professional development of the company's management staff, improving the personnel motivation system and optimization of the company's management as a whole. In order to enhance the quality of customer service and accelerate the order of the execution process, it is necessary to minimize the time and number of components of the cycle through effective coordination and acceleration of deliveries.

## CONCLUSION

The main objective of inventory creation is to reduce the direct dependence between the supplier, producer, and consumer, as well as to ensure the continuity of the production process. In addition, the reasons for the creation of inventories by trade enterprises are the following: the probability of violation of the established schedule of deliveries, the possibility of fluctuations in demand (unpredictable increase in the intensity of the output flow), seasonal fluctuations in demand for some types of goods, discounts for the purchase of large batches of goods, costs associated with the order placement, the possibility of uniform implementation of operations for the distribution of goods, the possibility of immediate customer service.

Moreover, it is crucial to analyze the existing stock management systems of the trading enterprise and study the main directions of improvement of the stock management system at the domestic trading enterprise. It was determined that to solve all the tasks set before the trading enterprise it is necessary to create an integrated stock management system of the trading enterprise, based on the synchronized use of existing individual models.

Furthermore, the effective management of inventories of a trading enterprise should be based on: the use of powerful information technologies; improvement of the system of stock control and coordination of supplies; provision of continuous interaction of functional subsystems of the entire set of enterprises-manufacturers, consumers and suppliers and establishment of effective communication; planning in the sphere of sales, purchases, promotion and motivation of personnel; optimization of the marketing system of the enterprise and improvement of management order; reorganization of the warehousing system in accordance with the selected order management system.

In the current situation, many domestic enterprises work under the order. Such a system is a win-win for the seller, but not always acceptable to the buyer because if the demand is unsatisfied, the buyer can move to another seller. Therefore, in order not to lose customers and not to store a large number of stocks, the company correctly calculates the balance between the accumulation of stocks for rapid response to demand and the system of work under the order.

A trading company must find the optimal solution between the costs and benefits of the chosen level of inventories in order to determine a balanced level of inventories for each commodity group or even positions to meet market demand. Thus, the improvement of the system of determining the optimal level of inventories will allow enterprises not only to minimize the costs of storage and warehousing of inventories, yet it will enable the enterprise to direct financial resources to invest them in other types of entrepreneurial activity, which in turn will bring additional profit.

## REFERENCES

- Grebnev, A. I. et al. (1997). *Ekonomyka torhovoho predpriyatiya* [Economics of the trading enterprise], Izdatelstvo, Moscow (in Russian).
- Hadzhinsky, A.M. (2007). *Logistika* [Logistics]. Data center “Marketing”, Moscow (in Russian).
- Kristianto, Y. (2009). “Selective Inventory Decision by Hybrid Push Pull Supply Chain”, *Logistics*. Available at: [http://dx.doi.org/10.1061/40996\(330\)248](http://dx.doi.org/10.1061/40996(330)248) (accessed 18 November 2019).
- Lenshin, I.A. and Smolyakov, Yu. I. (1996). *Logistika* [Logistics]. Mechanical Engineering. Moscow (in Russian).
- Li, C. and Scheller-Wolf, A. (2010). “Push or Pull? Auctioning Supply Contracts”. *Production and Operations Management*, 20(2), pp.198-213. Available at: <http://dx.doi.org/10.1111/j.1937-5956.2010.01174.x> (accessed 19 November 2019).
- Nerush, Yu. M. and Nerush, A. Yu. (2017). *Lohistyka* [Logistics]. Izdatel'stvo Jurajt, Moscow. Available at: <https://www.biblio-online.ru/bcode/388073> (accessed 24 September 2019), (in Russian).
- Official page of 1C: Enterprise 8. System of programs. Available at: <http://v8.1c.ru> (accessed 26 September 2019), (in Russian).
- Oklander, M.A. et al. (2004). *Promyslova lohistyka* [Industrial Logistics] Center of Educational Literature, Kiev (in Ukrainian).
- Pattison, I. (1988). “System trends in warehouse management”, *Logistics World*, 1(2), pp.65-68. Available at: <http://dx.doi.org/10.1108/eb007418> (accessed 21 November 2019).
- Ponomareva, Yu.V. (2003). *Lohistyka*. [Logistics]. Center of Educational Literature Kiev (in Ukrainian).
- Shyshkin, V. and Nikolayevska, A. (2019). “Design of logistics systems as a composition of effective functioning of enterprise”, *Management and Entrepreneurship: Trends of Development*, 3 (09), pp. 107-116. Available at: <https://management-journal.org.ua/index.php/journal/article/view/130> (accessed 12 November 2019).
- Smirnov, I.G. (2004). *Lohistyka: prostorovo-terytorial'nyj vymir* [Logistics: spatial-territorial dimension]. BGL Horizons, Kiev (in Ukrainian).
- Thonemann, U. et al. (2005). “Supply-Chain-Steuerung: Push, Pull und Promotions”, *Supply Chain Excellence im Handel*, pp.129-149. Available at: [http://dx.doi.org/10.1007/978-3-322-85244-1\\_6](http://dx.doi.org/10.1007/978-3-322-85244-1_6) (accessed 28 November 2019).
- Toomey, J.W. (2000). “Inventory Management Organization”, *Inventory Management*, pp.195-208. Available at: [http://dx.doi.org/10.1007/978-1-4615-4363-3\\_14](http://dx.doi.org/10.1007/978-1-4615-4363-3_14) (accessed 14 November 2019).
- Vlasova, N.A. and Bezginova, L.I. (2006). *Formuvannia optymal'noi struktury kapitalu v pidpriemstvakh rozdribnoi torhivli*. [Formation of the optimal capital structure in the enterprises of the retail trade], Kharkiv: KhDUHT (in Ukrainian).
- Waarst, J. and Reventlow, P. *Opgavesamling til Virksomhedsøkonomi*. Udgivet af Udgivervirksomheden FUHU, 2 udgave, 1991.

Onyshchenko, O., Bukharina, O. and Tupikina, A. (2019) "Features of inventory management in logistics system of a trading enterprise", *Management and entrepreneurship: trends of development*, 4 (10), pp. 94-107. Available at: <https://doi.org/10.26661/2522-1566/2019-4/10-08>

Wild, T. (2017). "Supply chain inventory management", *Best Practice in Inventory Management*, pp.217-237. Available at: <http://dx.doi.org/10.4324/9781315231532-16> (accessed 15 November 2019).

Wood, D.F. et al., 1995. *International Logistics*. Available at: <http://dx.doi.org/10.1007/978-1-4615-2085-6> (accessed 10 November 2019).

## СПИСОК ВИКОРИСТАНИХ ДЖЕРЕЛ

Экономика торгового предприятия / Гребнев А. И., Баженов Ю.К., Габриэлян О.А. и др. Москва: ОАО «Издательство «Экономика», 1997. 238 с.

Гаджинский А. М. Логистика. Москва : ИОЦ «Маркетинг», 2007. 256 с.

Kristianto, Y. (2009). "Selective Inventory Decision by Hybrid Push Pull Supply Chain", *Logistics*. Available at: [http://dx.doi.org/10.1061/40996\(330\)248](http://dx.doi.org/10.1061/40996(330)248) (дата звернення: 18.11. 2019).

Леншин И. А., Смоляков Ю. И. Логистика. В 2 ч. : Ч. 1. Москва : Машиностроение, 1996. 246с.

Li, C. and Scheller-Wolf, A. (2010). "Push or Pull? Auctioning Supply Contracts". *Production and Operations Management*, 20(2), pp.198-213. Available at: <http://dx.doi.org/10.1111/j.1937-5956.2010.01174.x> (дата звернення: 19.11.2019).

Неруш, Ю. М., Неруш А.Ю. Логистика. 5-е изд., перераб. и доп. Москва: Издательство Юрайт, 2017. 559 с. URL: <https://www.biblio-online.ru/bcode/388073> (дата звернення: 24.09.2019).

1С: Предприятие 8. Система программ. URL: <http://v8.1c.ru> (дата звернення: 26.09.2019).

Окландер М. А. та ін. Промислова логістика. Київ : Центр навчальної літератури, 2004. 222 с.

Pattison, I. (1988). "System trends in warehouse management", *Logistics World*, 1(2), pp.65-68. Available at: <http://dx.doi.org/10.1108/eb007418> (дата звернення: 21.11.2019).

Пономарьова Ю. В. Логістика. Київ : Центр навчальної літератури, 2003. 192 с.

Shyshkin, V. and Nikolayevska, A. (2019). "Design of logistics systems as a composition of effective functioning of enterprise", *Management and Entrepreneurship: Trends of Development*, 3 (09), pp. 107-116. Available at: <https://management-journal.org.ua/index.php/journal/article/view/130> (дата звернення: 12.11.2019).

Смирнов І. Г. Логістика: просторово-територіальний вимір : монографія. Київ : ВГЛ Обрії, 2004. 335 с.

Thonemann, U. et al. (2005). "Supply-Chain-Steuerung: Push, Pull und Promotions", *Supply Chain Excellence im Handel*, pp.129-149. Available at: [http://dx.doi.org/10.1007/978-3-322-85244-1\\_6](http://dx.doi.org/10.1007/978-3-322-85244-1_6) (дата звернення: 28.11.2019).

Toomey, J.W. (2000). "Inventory Management Organization", *Inventory Management*, pp.195-208. Available at: [http://dx.doi.org/10.1007/978-1-4615-4363-3\\_14](http://dx.doi.org/10.1007/978-1-4615-4363-3_14) (дата звернення: 14.11.2019).

Власова Н. О., Безгінова Л. І. Формування оптимальної структури капіталу в підприємствах роздрібно́ї торгівлі. Харків : ХДУХТ, 2006. 160 с.

Ворст Й., Ревентлоу П. Экономика фирмы / пер. с датского. Москва: Высшая школа, 1994. 272 с.

Wild, T. (2017). "Supply chain inventory management", *Best Practice in Inventory Management*, pp.217-237. Available at: <http://dx.doi.org/10.4324/9781315231532-16> (дата звернення: 15.11.2019).

Современная логистика: пер. с англ. / Джеймс С. Джонсон, Дональд Ф. Вуд, Дэниэл Л. Вордлоу, Поль Р. Мэрфимл. 7-е изд. Москва: Вильямс, 2002. 615 с.



## ОСОБЛИВОСТІ УПРАВЛІННЯ ЗАПАСАМИ В ЛОГІСТИЧНІЙ СИСТЕМІ ТОРГОВЕЛЬНОГО ПІДПРИЄМСТВА

**Онищенко Оксана  
Анатоліївна**  
*Запорізькій національний  
університет  
Запоріжжя, Україна*

**Бухаріна Олександра  
Олегівна**  
*Запорізькій національний  
університет  
Запоріжжя, Україна*

**Тупікіна Ангеліна  
Сергіївна**  
*Запорізькій національний  
університет  
Запоріжжя, Україна*

Метою представленої наукової статті є аналіз сучасної моделі управління запасами логістичної системи торговельного підприємства та дослідження основних напрямків удосконалення системи управління запасами на вітчизняному торговельному підприємстві. У статті визначено роль управління запасами в логістичній системі торговельного підприємства. Розкрито теоретичні аспекти управління запасами і проаналізовано існуючі системи управління запасами торговельних підприємств. Обґрунтовано актуальність і доцільність модифікації системи управління запасами на торговельному підприємстві. Визначено завдання та мотиви створення запасів торговельними підприємствами. В результаті проведення дослідження визначило необхідність створення інтегрованої системи управління запасами торговельного підприємства, що ґрунтується на синхронізованому використанні існуючих окремих моделей, для досягнення стандартних сучасних задач торговельного підприємства. Доведено, що ефективне управління матеріальними запасами торговельного підприємства повинно базуватись на: використанні потужних інформаційних технологій; удосконаленні системи контролю запасів та координації поставок; забезпеченні безперервної взаємодії функціональних підсистем усієї сукупності підприємств-виробників, споживачів і постачальників та налагодженні ефективної комунікації з ними; модифікації системи планування у сфері збуту, закупівель, просування та мотивації персоналу; оптимізації маркетингової системи підприємства і вдосконаленні управління замовленнями; реорганізації системи складування відповідно до обраної системи управління замовленнями.

**Ключові слова:** торговельне підприємство, система управління запасами, торгові запаси, безперервність логістичних операцій, коливання попиту, складські витрати.

## ОСОБЕННОСТИ УПРАВЛЕНИЯ ЗАПАСАМИ В ЛОГИСТИЧЕСКОЙ СИСТЕМЕ ТОРГОВОГО ПРЕДПРИЯТИЯ

**Онищенко Оксана  
Анатольевна**  
*Запорожский национальный  
университет  
Запорожье, Украина*

**Бухарина Александра  
Олеговна**  
*Запорожский национальный  
университет  
Запорожье, Украина*

**Тупикина Ангелина  
Сергеевна**  
*Запорожский национальный  
университет  
Запорожье, Украина*

Целью представленной научной статьи является анализ современной модели управления запасами логистической системы торгового предприятия и исследование основных направлений совершенствования системы управления запасами на отечественном торговом предприятии. В статье определены роль управления запасами в логистической системе предприятия. Раскрыты теоретические аспекты управления запасами и проанализированы существующие системы управления запасами торговых предприятий. Обоснована актуальность и целесообразность модификации системы управления запасами на торговом предприятии. Определены задачи и мотивы создания запасов торговыми предприятиями. В результате проведенное исследование определило необходимость

Onyshchenko, O., Bukharina, O. and Tupikina, A. (2019) "Features of inventory management in logistics system of a trading enterprise", *Management and entrepreneurship: trends of development*, 4 (10), pp. 94-107. Available at: <https://doi.org/10.26661/2522-1566/2019-4/10-08>

создания интегрированной системы управления запасами торгового предприятия, основанной на синхронизированном использовании существующих отдельных моделей, для достижения стандартных современных задач предприятия. Доказано, что эффективное управление материальными запасами торгового предприятия должно базироваться на: использовании мощных информационных технологий; совершенствовании системы контроля запасов и координации поставок; обеспечении непрерывного взаимодействия функциональных подсистем всей совокупности предприятий-производителей, потребителей и поставщиков и налаживании эффективной коммуникации с ними, модификации системы планирования в сфере сбыта, закупок, продвижение и мотивации персонала; оптимизации маркетинговой системы предприятия и совершенствовании управления заказами; реорганизации системы складирования в соответствии с выбранной системы управления заказами.

**Ключевые слова:** торговое предприятие, система управления запасами, торговые запасы, непрерывность логистических операций, колебания спроса, складские расходы.

Електронне наукове фахове видання

*Включене до Переліку наукових фахових видань України (категорія «Б»),  
відповідно до [Наказу МОН України № 1643 від 28.12.2019 \(Додаток 4\)](#)*

*Рекомендовано до поширення через мережу Інтернет Вченою радою ЗНУ*

## **МЕНЕДЖМЕНТ ТА ПІДПРИЄМНИЦТВО: ТРЕНДИ РОЗВИТКУ**

ВИПУСК 4 (10) 2019

*Зображення обкладинки<sup>©</sup> використовується редакцією на основі права  
власності та захищене авторським правом  
Дизайн та макетування розроблені на платформі графічного дизайну  
інфографіки Canva: <https://www.canva.com/>*

*Верстка і макетування:  
Дизайн обкладинки:*

Онищенко О.А.  
Бухаріна Л.М., Онищенко О.А.

Засновник видання:  
Запорізький національний університет  
Адреса редакції: 69063, м. Запоріжжя, вул. Жуковського, 55а, к. 415  
Телефон: (061)289-41-15  
Офіційний сайт видання: [www.management-journal.org.ua](http://www.management-journal.org.ua)  
Електронна адреса: [znu@management-journal.org.ua](mailto:znu@management-journal.org.ua)