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IMPROVEMENT OF FINANCIAL SUPERVISION ON THE BASIS OF INTERNATIONAL PRINCIPLES IMPLEMENTATION

Abstract. The article is devoted to the problem of financial supervision system compliance in the countries with the international principles and the best world practices.

The main international principles of effective banking supervision, insurance and regulation of the securities market are analyzed.

We developed a scientific and methodological approach to assessing the country's financial supervision compliance with international principles, which allows to determine the dynamics of development and improvement of financial supervision in banking, insurance and securities segments of the financial sector. A scale for translating financial supervisory compliance assessments into international principles was developed and statistical tools of arithmetic weighted and geometric mean were used to summarize the implementation of Core Principles for Effective Banking Supervision, Insurance Core Principles and Objectives and Principles of Securities Regulation.

The average level the implementation of each of the principles of Effective Banking Supervision, Insurance Core Principles and Objectives and Principles of Securities Regulation is determined. Banking Supervision has been assessed to international principles in countries such as Austria, Bulgaria, Canada, Germany, Denmark, United Kingdom, Georgia, Hong Kong, Republic of Korea, Moldova, New Zealand, Russian Federation, Turkey, United States of America, South Africa, Insurance Supervision — Canada, Denmark, Hong Kong, Ireland, New Zealand, Turkey, United States of America, South Africa, securities market surveillance and financial supervision in general — Canada, Hong Kong, United States of America, South Africa. The work identifies key areas of modern and innovative development of the financial supervision system.

The paper identifies key areas of modern and innovative development of the financial supervision. Our results showed that increasing the compliance of financial supervision with international standards can be ensured primarily through the introduction of risk-oriented financial supervision, improvement of corporate governance and disclosure of financial reporting by financial intermediaries.

Keywords: financial supervision, international principles, banking supervision, regulation of the securities market, insurance supervision.

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УДОСКОНАЛЕННЯ ФІНАНСОВОГО НАГЛЯДУ НА ОСНОВІ ВПРОВАДЖЕННЯ МІЖНАРОДНИХ ПРИНЦИПІВ

Анотація. Розглянуто питання відповідності системи фінансового нагляду в країнах світу міжнародним принципам фінансового нагляду і найкращим світовим практикам.

Проаналізовано основні принципи ефективного банківського нагляду, страхування і регулювання ринку цінних паперів. Розроблено науково-методичний підхід до оцінювання відповідності фінансового нагляду країни міжнародним принципам, що дозволяє визначати динаміку розбудови і поліпшення фінансового нагляду в різних сегментах фінансового сектору — банківському, страховому та цінних паперів. Для узагальненого оцінювання впровадження Основних принципів ефективного банківського нагляду, Ключових принципів страхування та Цілей і принципів регулювання цінних паперів розроблено шкалу переведення оцінок відповідності фінансового нагляду міжнародним принципам у бали та використано статистичний інструментарій середньої арифметичної зваженої та середньої геометричної

Визначено середній рівень дотримання кожного з принципів ефективного банківського нагляду, страхування і регулювання ринку цінних паперів. Здійснено оцінювання відповідності банківського нагляду міжнародним принципам у таких країнах, як Австрія, Болгарія, Канада, Німеччина, Данія, Велика Британія, Грузія, Гонконг, Республіка Корея, Молдова, Нова Зеландія, Російська Федерація, Туреччина, Сполучені Штати Америки, Південна Африка, страхового нагляду — Канада, Данія, Гонконг, Ірландія, Нова Зеландія, Туреччина, Сполучені Штати Америки, Південна Африка, нагляду на ринку цінних паперів і фінансового нагляду в цілому — Канада, Гонконг, Сполучені Штати Америки, Південна Африка. Ідентифіковано ключові напрями сучасного та інноваційного розвитку системи фінансового нагляду.

Визначено, що підвищення відповідності фінансового нагляду міжнародним стандартам може бути забезпечене передусім за рахунок упровадження ризик-орієнтованого фінансового нагляду, удосконалення корпоративного управління та розкриття фінансової звітності фінансових посередників.

Ключові слова: фінансовий нагляд, міжнародні принципи, банківський нагляд, регулювання ринку цінних паперів, страховий нагляд.

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СОВЕРШЕНСТВОВАНИЕ ФИНАНСОВОГО НАДЗОРА НА ОСНОВЕ ВНЕДРЕНИЯ МЕЖДУНАРОДНЫХ ПРИНЦИПОВ

Аннотация. Рассмотрен вопрос соответствия системы финансового надзора в странах мира международным принципам эффективного банковского надзора, страхования и регулирования рынка ценных бумаг. Проанализированы основные международные надзора. Разработан научно-методический подход оценки принципы финансового соответствия финансового надзора страны международным принципам, который позволяет определять динамику развития и улучшения финансового надзора как в различных сегментах финансового сектор, так и в целом, а также идентифицировать ключевые направления дальнейшего развития системы финансового надзора. Определено, что повышение соответствия финансового надзора международным стандартам может быть обеспечено счет внедрения риск-ориентированного финансового совершенствования корпоративного управления и раскрытия финансовой отчетности финансовых посредников.

Ключевые слова: финансовый надзор, международные принципы, банковский надзор, регулирование рынка ценных бумаг, страховой надзор.

Формул: 4; рис.: 1; табл.: 4; библ.: 14.

Introduction. The economic development and sustainability of the world financial market requires the development and functioning of an effective financial supervision system that takes into account high level of financial integration and financial convergence in national and international markets in the conditions of globalization. The task of international community can be the key to unifying the principles of financial supervision in different countries. For example, for the banking sector, the Basel Committee on Banking Supervision (BCBS) developed the «Core Principles for Effective Banking Supervision» (BCPs), the International Association of Insurance Supervisors (IAIS) — «Insurance Core Principles» (ICPs), the International Organization of Securities Commissions (IOSCO) – «Objectives and Principles of Securities Regulation». All this necessitates an integrated and comprehensive study of international principles of financial supervision and the development of a scientific and methodological approach for assessing the compliance of the country's financial supervision with international principles. It will allow to assess the dynamics of the development and improvement of financial supervision in general and in various segments of financial sector. Taking into account the financial upheavals and crises that are increasingly occurring both at the national and international levels, the complexity of financial sector structure, the difficulties in assessing systemic risks and threats to financial institutions, the mixed impact of strengthening financial supervision requirements on economic growth, imperfect supervision procedures ensuring financial stability — all this require new, modern and innovative approaches to financial supervision development. In view of this, the information basis for determining the directions of innovative development of financial supervision should be, first of all, an objective assessment of the implementation level of the principles developed by international practice.

Literature review and the problem statement. Existing research is mainly focused on adherence to the «Core Principles for Effective Banking Supervision». World Bank researchers A. Demirgüç-Kunt, E. Detragiache and T. Tressel conducted a comparative assessment of compliance with the «Core Principles for Effective Banking Supervision» in different regions of the world, splitting them into the following groups: the prerequisites for effective supervision, licensing and structure, prudential regulation and requirements, methods of ongoing supervision, information requirements, official authority of supervisors, cross-border banking. In the analytical part of the study, the authors identified the relationship between the observance of «Core Principles for Effective Banking Supervision» and the reliability of the country's banking system. The sovereign ratings of Moody's and Z-score banking system were used as indicators of the reliability of the banking system [4].

In 2014, the IMF experts prepared a publication entitled «A Macrofinancial Approach to Supervisory Standards Assessments», which compared the implementation of the «Core Principles for Effective Banking Supervision», «Insurance Core Principles», «Objectives and Principles of Securities Regulation» in different counries. Also among them were selected the most important for ensuring the financial stability, which were taken as the basis for econometric analysis [5].

F. Delgado and M. Meza devoted their research to the development of financial supervision and the use of macro-prudential measures in Central America. The authors compared the level of implementation of the «Core Principles for Effective Banking Supervision» in Costa Rica, Honduras, El Salvador, Guatemala, the Dominican Republic, Panama (2007—2010), with the principles adherence level in Canada (2008) and Spain (2006 p.). Also they identified the prospects for enhancing the use of macroprudential tools for the development of financial supervision practices [6].

M. Čihák and A. Tiemen investigated adherence to the «Core Principles for Effective Banking Supervision», «Insurance Core Principles» and «Objectives and Principles of Securities Regulation» in the countries of the world for 2000—2007, by dividing them into the following groups: regulatory impact, prudential structure, regulatory practice, financial integration and security network. The authors also assessed the level of compliance with international financial supervision principles in countries with different income per capita and world regions. In addition, the study presented the results of a regression analysis of the impact of the compliance with international financial supervision principles and the level of GDP per capita and the assessment of the quality of financial supervision in world regions and groups of international principles [7].

U. Das, M. Quintyn, and K. Chenard have provided empirical evidence that the quality of regulatory regulation of public administration, adopted by the regulatory authorities of the financial system and managers, is important for the reliability of financial system. The authors calculated the reliability of the financial system and regulatory control based on country data collected by the Financial Sector Assessment Program (FSAP). The authors concluded that the regulatory control significantly affects on the stability of financial system, as well as on variables that reflect macroeconomic conditions, the structure of banking system and the management of public sector. Also, the parameters of financial stability as a function of regulatory control were determined by researches [8].

B. Adamyk assessed the effectiveness of the principles of effective banking supervision in Ukraine, taking into account the conditions and risks of the domestic banking system. He proposed directions for the development of the banking supervision system in Ukraine [9].

Investigating the stability of the banking system, Zh. Dovhan suggested to calculate the quality control and supervision index of the banking system as a weighted average assessment of the «Core Principles for Effective Banking Supervision» (Basel Committee on Banking Supervision) and the «Rules of Transparency of Monetary and Financial Policies» (IMF) implementation. The author proved that the quality of supervision in the banking system significantly influences its financial stability level [10].

The scientific work of S. Lieonov and O. Isaieva was devoted to the assessment of the quality of regulatory management and its impact on the stability of the Ukrainian financial market. The authors took into account the observance of IOSCO's «Objectives and Principles of Securities Regulation», Group 30 «Recommendations on Securities Market Standards and Procedures», the OECD «General Principles of Financial Services Consumer Protection», the Basel Committee's «Core Principles for Effective Banking Supervision», the IMF «Rules of Monetary and Financial Policies Transparency», the IAIS «Insurance Core Principles». In addition, the authors evaluated the interconnection between calculated index of regulatory quality and a number of the financial market functioning and development indicators, which characterize market stability [11].

K. Tsytsyk, in her scientific work devoted to the peculiarity of prudential risk-oriented banking supervision was justified the scientific and methodological approach of grouping «Core Principles for Effective Banking Supervision» in accordance with the criteria of functional, institutional and operational efficiency and the calculation of aggregate indicator [12].

Despite the diversity and depth of studies on financial supervision, the issues of compliance of financial supervision of the country with international principles remain insufficiently studied.

The purpose of the article is to develop a scientific and methodological approach to assess the compliance of the country's financial supervision with international principles. It makes possible to evaluate the dynamics of the development and improvement of financial supervision in general and in different segments of the financial sector, as well as the basis for determining the key directions for financial supervision innovative development.

Research results. In contrast from domestic practice, the supervisory principles defined by international organizations serve as the basis for the formation and maintenance of the effectiveness of national systems of supervision after the activities of financial intermediaries and the achievement of the basic level of dependable financial supervision practices. The international principles of financial supervision are designed in such a way that they can be implemented according to different models of an institutional organization of financial supervision (sectoral, two vertices or mega-regulator).

The first edition of the «Core Principles for Effective Banking Supervision» appeared in 1997, according to which principles should serve as benchmarks for assessing the quality of their supervisory systems by the countries and identifying future measures of financial supervision reconstruction. The basic principles of effective financial supervision were reviewed twice: in 2006 and 2011 due to the need to strengthen supervisory practices in the banking sector [1].

The «Insurance Core Principles» were adopted in October 2011, since the changes were introduced in the autumn of 2012, 2013, and 2015. «Key Principles of Insurance» are the framework program of supervision for the insurance sector adopted worldwide. As stated in the introductory part of the «Insurance Core Principles», a rationally organized system of financial supervision is a prerequisite for ensuring a fair, safe and stable insurance sector and maintaining the stability of the financial system [2]. The objectives and principles of securities regulation, implemented in supervisory practices, are designed to ensure investor protection, to reduce systemic risk, to stimulate functioning of a fair, efficient and transparent market [3].

An assessment of the implementation of supervisory practices and international compliance by countries has been carrying out since 1999 within the framework of a joint mission of the IMF and the World Bank which was called «Financial Sector Assessment Program» (FSAP). Countries reports usually are being made public on official sites of these organizations.

For the 29 principles of effective banking supervision, the Basel Committee established the main and additional criteria that show their compliance [1]. The founding document of the International Association of Insurance Supervisors provides that the assessment of the compliance of supervisory practices with principles is based on the application of standards for each principle [2]. The approach of the International Organization of the Securities Commission is based on the definition of the basic aspects of supervision over the issue of securities, which result on the compliance assessment of each from 38 principles [13] (*Table 1*).

The main international principles of financial supervision

Table 1

Core Principles for Effective Objectives and Principles Insurance Core Principles Banking Supervision of Securities Regulation P.1. Responsibilities, objectives P.1. Objectives, powers P.1 — P.8. Presence of powers, resources and operational and powers and responsibilities P.2. Independence, accountability, of the supervisor independence of the regulator. P.2. Supervisor resourcing and legal protection P.9 Self-regulatory organizations P.3. Information exchange and should be subject to regulatory supervisors confidentiality requirements supervision and comply with P.3. Cooperation and collaboration P.4. Licensing the standards of justice and P.4. Permissible activities P.5. Suitability of persons confidentiality when carrying P.5. Licensing criteria P.6. Changes in control out their delegated responsibilities. P.6. Transfer of significant ownership and portfolio transfers P.10 — P.12. Comprehensive powers P.7. Major acquisitions P.7. Corporate governance of the regulator to conduct

| P.8. Supervisory approach | P.8. Risk management and internal | inspections, investigations | | |
|---------------------------------------|---|---------------------------------------|--|--|
| P.9. Supervisory techniques and tools | controls | and market surveillance. | | |
| P.10. Supervisory reporting | P.9. Supervisory review and P.13 — P.15. Full access to | | | |
| P.11. Corrective and sanctioning | reporting information on the activities | | | |
| powers of supervisors | P.10.Preventive and corrective | of national and foreign partners | | |
| P.12. Consolidated supervision | measures | and assistance to foreign regulators. | | |
| P.13. Home—host relationships | P.11.Enforcement | P.16 — P.18. Fair and equitable | | |
| P.14. Corporate governance | P.12.Winding—up and exit from | treatment of holders of securities | | |
| P.15. Risk management process | the market | P.19 — P.23. Supervision over | | |
| P.16. Capital adequacy | P.13.Reinsurance and other forms | the independence of auditors, credit, | | |
| P.17. Credit risk | of risk transfer | rating agencies in assessing | | |
| P.18. Problem assets, provisions | P.14. Valuation | the activities of the issuer. | | |
| and reserves | P.15.Investment | P.24 — P 28. Standards | | |
| P.19. Concentration risk and large | P.16.Enterprise risk management | of conformity, management, | | |
| exposure limits | for solvency purposes | organization and operational behavior | | |
| P.20. Transactions with related | P.17.Capital adequacy | for persons who wish to carry out | | |
| parties | P.18.Intermediaries | market operations or manage | | |
| P.21. Country and transfer risks | P.19.Conduct of business | collective investment schemes. | | |
| P.22. Market risk | P.20.Public disclosure | P.29 — P.32. Minimum standards | | |
| P.23. Interest rate risk in the | P.21.Countering fraud in insurance | for entry into the market of market | | |
| banking book | P.22.Anti-money laundering | intermediaries, to their initial | | |
| P.24. Liquidity risk | and combating the financing | and current size of capital. | | |
| P.25. Operational risk | of terrorism | P.33 — P.38. Supervision over | | |
| P.26. Internal control and audit | P.23.Group-wide supervision | the establishment of trading systems, | | |
| P.27. Financial reporting and | P.24.Macroprudential surveillance | stock exchanges, clearing and | | |
| external audit | and insurance supervision | settlement systems, and securities | | |
| P.28. Disclosure and transparency | P.25.Supervisory cooperation | trading and trade transparency | | |
| P.29. Abuse of financial services | and coordination | | | |
| | P.26.Cross-border cooperation | | | |
| | and coordination on crisis | | | |
| | management | | | |
| Cources: based on [1 3: 13] | | | | |

Sources: based on [1—3; 13].

For the purpose of conducting a study, we propose the criteria for evaluating the implementation of principles in a country (in accordance with the BCBS, IAIS and IOSCO guidelines), to transfer into ballistic assessments (*Table 2*).

Table 2
The transfer scale of financial supervision compliance with international principles assessments into points

| Assessment | Characteristics | Point | | | |
|---|--|-------|--|--|--|
| Core Principles for Effective Banking Supervision | | | | | |
| Compliant, C | The main criteria are carried out without significant disadvantages | | | | |
| Largely compliant, LC | There are only insignificant shortcomings that do not cause concern | 0,75 | | | |
| | about the ability and intentions of the supervisor to achieve full | | | | |
| | compliance with the principle over a set period of time | | | | |
| Materially Non-Compliant, | There are serious shortcomings, despite the existence of formal rules and | | | | |
| MNC | procedures, and the evidence that the practice of supervising is weak and | | | | |
| | ineffective, or there are doubts about the ability of the supervisor | | | | |
| | to achieve compliance with the principle | | | | |
| Non-compliant, NC | There is no substantive implementation of the principle, the main criteria | 0,25 | | | |
| | are not carried out, or supervision is obviously ineffective | | | | |
| Not applicable, NA | The principle is not in use taking into account the structural, | | | | |
| | legal and institutional features of the country | | | | |
| | Insurance Core Principles | | | | |
| Observed, O | The basic standards are carried out | 1,00 | | | |
| Largely observed, LO | There are only minor shortcomings that do not cause concern about the | 0,75 | | | |
| | ability of the supervisor to achieve full compliance with the principle | | | | |
| Partly observed, PO Despite progress, the disadvantages are significant in order to | | 0,5 | | | |
| | on the ability of the supervisor to enforce the principle | | | | |
| Not observed, NO | There is no significant progress in using the standards of the principle | 0,25 | | | |
| Not applicable, NA | The principles of the principle are not in use | 0,00 | | | |

| Objectives and Principles of Securities Regulation | | | | |
|--|--|------|--|--|
| Fully implemented, FI | | 1,00 | | |
| Broadly implemented, BI | It is determined by the number of positive responses to the question | 0,66 | | |
| Partly implemented, PI | of the principle implementation | 0,33 | | |
| Not implemented, NI | | 0,00 | | |

Sources: based on [1-3; 13].

Next step, we propose to use the formula of the arithmetic average weighted for a generalized assessment of the international principles implementation:

-into banking supervision:

$$I_{BCPs} = \frac{1,00 \cdot bcp_{C} + 0,75 \cdot bcp_{LC} + 0,50 \cdot bcp_{MNC} + 0,25 \cdot bcp_{NC}}{bcp_{C} + bcp_{NA} + bcp_{NC} + bcp_{MNC} + bcp_{LC}},$$
(1)

– into insurance supervision:

$$I_{ICP} = \frac{1,00 \cdot icp_O + 0,75 \cdot icp_{LO} + 0,50 \cdot icp_{PO} + 0,25 \cdot icp_{NO}}{icp_O + icp_{LO} + icp_{PO} + icp_{NO} + icp_{NA}},$$
(2)

- into securities financial supervision:

$$I_{IOSCO} = \frac{1,00 \cdot iosco_{FI} + 0,66 \cdot iosco_{BI} + 0,33 \cdot iosco_{PI}}{iosco_{FI} + iosco_{BI} + iosco_{PI} + iosco_{NI}},$$
where I_{BCPs} — the index of banking supervision compliance with international principles;

 I_{ICP} — the index of insurance supervision compliance with international principles;

 I_{MOSCO} — the index of securities market supervision compliance with international principles;

 bcp_{C} , bcp_{LC} , bcp_{MNC} , bcp_{NC} i bcp_{NA} — the number of criteria that are Compliant, Largely compliant, Materially Non-Compliant, Non-compliant and Not applicable with the Core Principles for Effective Banking Supervision;

 icp_{o} , icp_{NA} , icp_{NO} , icp_{PO} i icp_{LO} — the number of criteria that are Observed, Largely observed, Partly observed, Not observed, Not applicable with the Insurance Core Principles;

 $iosco_{FI}$, $iosco_{BI}$, $iosco_{PI}$ i $iosco_{NI}$ — the number of criteria that are Fully implemented, Broadly implemented, Partly implemented, Not implemented with the Objectives and Principles of Securities Regulation.

A generalized assessment of the country's financial supervision compliance with international principles can be defined by the formula:

$$I_{FSPs} = \sqrt[3]{I_{BCPs} \cdot I_{ICP} \cdot I_{IOSCO}} , \qquad (4)$$

Calculation I_{BCPs} , I_{ICP} , I_{IOSCO} and I_{FSPs} constructed in such a way that the index values were in the range [0; 1]. In view of this, it is possible to conduct a ranking of the country's financial supervision compliance with international principles — in general, and according to the segments of the financial sector (Table 3).

Table 3 Calculation of the country's financial supervision compliance with international principles (own results)

| Range of values I_{BCPs} , I_{ICP} , I_{IOSCO} , I_{FSPs} | Compliance level with international principles | | |
|---|--|--|--|
| [0,90;1,00] | Very high | | |
| [0,75;0,90] | High | | |
| [0,50;0,75] | Medium | | |
| [0,10;0,50] | Low | | |
| [0;0,10] | Very low | | |

Our research is based on the results of the IMF and World Bank experts assessing compliance with the «Core Principles for Effective Banking Supervision», «Insurance Core Principles» and the «Objectives and Principles of Securities Regulation» (starting in 2014).

According to the average estimates of compliance with the international principles of financial supervision (BCPs, ICP and IOSCO) in selected countries for 2014-2017 (Fig.), the highest level of principles implementation was observed in the sphere of banking – the average implementation index was 0.83. The implementation of the «Insurance Core Principles» and «Objectives and Principles of Securities Regulation» were lower – 0.76 and 0.75.

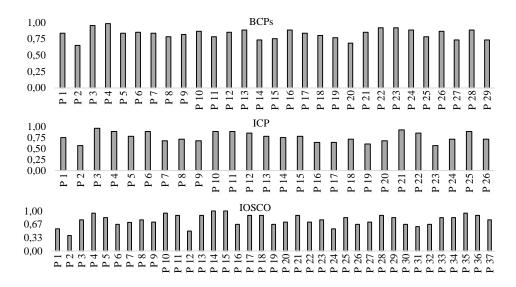


Fig. The average level of the country's financial supervision compliance with international principles in 2014—2017

Source: own results based on [14].

The highest level of compliance was observed with such «Core Principles for Effective Banking Supervision» as «Cooperation and collaboration» (principle 3), «Permissible activities» (principle 4), «Interest rate risk in the banking book» (principle 23) and «Market Risk» (principle 24). Based on the average estimates, in general one way or another, but absolutely all principles of effective banking supervision were mainly implemented in the practice of financial supervision in the countries under observation – scores below 0.5 were absent.

At the same time, 6 from 29 principles had an evaluation score less than 0.75. They are «Independence, accountability, resourcing and legal protection for supervisors» (principle 2), «Corporate governance» (principle 14), «Risk management process» (principle 15), «Transactions with related parties» (principle 20), «Financial reporting and external audit» (principle 27) and «Abuse of financial services» (principle 29). Among the above-mentioned principles, the greatest problems are observed with the independence and accountability of independent institutions, because nowadays it is not a priority to format optimal structure of financial supervision bodies. More important is ensuring their institutional, operational and financial independence and the use of effective mechanisms of their accountability. Among all the countries under research, only in the United States this principle was rated «Compliant» (C).

The highest level of «Insurance Core Principles» implementation was observed with such principles as «Information exchange and confidentiality requirements» (principle 3), «Licensing» (principle 4), «Changes in control and portfolio transfers» (principle 6), «Preventive and Corrective Measures» (principle 10), «Countering fraud in insurance» (principle 21) and «Supervisory cooperation and coordination» (principle 25).

Simultaneously, in countries were discovered many problems with implementation of following principles: « Objectives, powers and responsibilities of the supervisor» (principle 1), «Corporate governance» (principle 7), «Risk management and internal controls» (principle 8),

«Supervisory review and reporting» (principle 9), «Enterprise risk management for solvency purposes» (principle 16), «Capital adequacy» (principle 17), «Intermediaries» (principle 18), «Conduct of Business» (principle 19), «Public Disclosure» (principle 20), «Group-wide supervision» (principle 23), «Macroprudential surveillance and insurance supervision» (principle 24) and «Cross-border cooperation and coordination on crisis management (principle 26). The most complicated situation is connected with the implementation of the supervisory body principle. In accordance to the IAIS recommendations, supervisory institution should be functionally independent, accountable and transparent, must protect sensitive information, have adequate legal protection, have sufficient resources, and comply with high professional standards [2].

Quite complex is the implementation of the group supervision principle. According to the IAIS, the supervisor should determine the essence of the group of companies, taking into account active and inactive holding companies (including intermediaries), insurers, other regulated organizations (banks and investment companies), special purpose companies, etc. In addition, the supervisor in supervisory procedures should take into account the following aspects of insurance activity: direct and indirect participation, influence and other contractual obligations, interconnectivity, riskiness, concentration and risk transfer, as well as transactions and risks within the group [2]. The «Supervisory body» implementation principle characterized as «Largely observed» (LO) only in New Zealand and Turkey. The «Group Supervision» principle is only observed in Denmark and Turkey — the highest grade among the studied countries.

The analysis of compliance with the IOSCO securities regulation principles in the countries showed that the best level of compliance was observed with the following principles:

- «The Regulator should adopt clear and consistent regulatory processes» (principle 4);
- «The Regulator should have comprehensive enforcement powers» (principle 11);
- «The Regulator should have authority to share both public and non-public information with domestic and foreign counterparts» (principle 13);
- «Regulators should establish information sharing mechanisms that set out when and how they will share both public and non-public information with their domestic and foreign counterparts» (principle 14);
- «The regulatory system should allow for assistance to be provided to foreign Regulators who need to make inquiries in the discharge of their functions and exercise of their powers» (principle 15);
- «Holders of securities in a company should be treated in a fair and equitable manner» (principle 17);
- «Accounting standards used by issuers to prepare financial statements should be of a high and internationally acceptable quality» (principle 18);
 - «Audit standards should be of a high and internationally acceptable quality» (principle 21);
- «Regulation should ensure that hedge funds and/or hedge funds managers/advisers are subject to appropriate oversight» (principle 28);
 - «Regulation should promote transparency of trading» (principle 35);
- «Regulation should be designed to detect and deter manipulation and other unfair trading practices» (principle 36).

The bad situation with the implementation IOSCO securities regulation principles was connected with such principles as: «The responsibilities of the Regulator should be clear and objectively stated» (principle 1), «The Regulator should be operationally independent and accountable in the exercise of its functions and powers» (principle 2), «The regulatory system should ensure an effective and credible use of inspection, investigation, surveillance and enforcement powers and implementation of an effective compliance program» (principle 12) and «The regulatory system should set standards for the eligibility, governance, organization and operational conduct of those who wish to market or operate a collective investment scheme» (principle 24).

The worst situation was revealed with the principle of operational independence and accountability of the supervisor (Regulator) for decision-making, implementation of core functions

and powers — among the six countries surveyed, only in Canada this principle was characterized as «Broadly implemented» (BI).

The results of calculations for I_{BCPs} , I_{ICP} , I_{IOSCO} , I_{FSPs} for the countries of the world, FSAP-reports which are published on the official website of the IMF are given in the *Table 4*.

Table 4 Indices of the countries' financial supervision compliance with international standards in 2014-2017

| | I_{BCPs} | I_{ICP} | I _{IOSCO} | I_{FSPs} | | I_{BCPs} | I_{ICP} | I _{IOSCO} | I_{FSPs} |
|-----|------------|-----------|--------------------|------------|-----|------------|-----------|--------------------|------------|
| AUT | 0,88 | | | | IRL | | 0,81 | | |
| BGR | 0,76 | | | | KOR | 0,75 | | 0,80 | |
| CAN | 0,91 | 0,85 | 0,86 | 0,87 | MDA | 0,66 | | | |
| DEU | 0,78 | | | | NZL | 0,71 | 0,65 | | |
| DNK | 0,81 | 0,77 | | | RUS | 0,77 | | 0,49 | |
| GBR | 0,92 | | | | TUR | 0,84 | 0,70 | | |
| GEO | 0,78 | | | | USA | 0,91 | 0,78 | 0,84 | 0,84 |
| HKG | 0,97 | 0,79 | 0,85 | 0,87 | ZAF | 0,93 | 0,72 | 0,66 | 0,76 |

Source: own results based on [14].

According to results, the highest level of banking supervision compliance with international principles was observed in Canada, the United Kingdom, Hong Kong, the USA and South Africa. It should be noted that there was no high compliance in insurance supervision as well as supervision in the field of securities among the studied countries revealed.

The high level of compliance with international banking supervision was documented in Austria, Bulgaria, Germany, Denmark, Georgia, Republic of Korea, Russia and Turkey; insurance supervision — in Canada, Denmark, Hong Kong, Ireland and the United States; securities supervision — in Hong Kong, Canada, The Republic of Korea and the United States. The average level of compliance of banking supervision with international principles was discovered in Moldova and New Zealand, insurance supervision — in New Zealand, Turkey and South Africa, securities market supervision — in South Africa. The low level of compliance with international standards was observed only with the securities supervision in Russia. Concerning the general assessment, all countries for which this calculation was possible (Canada, Hong Kong, the United States and South Africa) were defined as countries with high levels of financial supervision compliance with international principles.

Conclusions. Thus, the assessment of the compliance of the country's financial supervision with international principles on the basis of the proposed scientific and methodological approach allows to assess the dynamics of the financial supervision development and improvement in general and in various segments of the financial sector. Increasing the financial supervision compliance with international standards can be ensured primarily through the introduction of risk-oriented financial supervision, improvement of corporate governance and disclosure of financial intermediaries financial statements. In addition, among all the «Core Principles for Effective Banking Supervision», «Insurance Core Principles» and «Objectives and Principles of Securities Regulation», the most problematic is the practical implementation of the principles related to ensuring an adequate level of institutional, operational and financial independence, as well as accountability of supervisory bodies.

The next stage of the study concerning the compliance of financial supervision with international principles should be the assessment of the dynamics of this compliance in different countries, and also review of the world's experience of improving supervisory practices in accordance with identified problems in terms of ensuring financial sector sustainability.

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