Economics

Huang Yufeng

Student of Accounting and Auditing

National Aerospace University «Kharkiv Aviation Institute»

COMPARATIVE ANALYSIS OF FINANCIAL MECHANISM

Summary. *Based on current research on financial mechanisms, this article analyzes and compares different studies on financial mechanisms in the East and the West and compares methods for measuring the effectiveness of financial mechanisms. Based on the results of the comparison, differences are drawn and suggestions are made for financial research in both East and West.*

Key words: *financial mechanisms, comparative analysis, hierarchical analysis, fuzzy analysis.*

Introduction. In real life, poor business operations, low profitability, high indebtedness and high tax burden are common problems in some enterprises, and in order to solve these problems, it is necessary to look for the causes in all aspects of the enterprise. These reasons may be the existence of inadequate corporate development strategies, low financial management capabilities and imperfect risk warning systems and etc. These reasons may lead to the above problems in enterprises.

This paper starts from the financial mechanism, comparing and analysing the financial mechanism of each country, analyzing the reasons affecting the development of the enterprise from the perspective of the financial mechanism, and evaluating the effectiveness of the financial mechanism on the development of the enterprise using the comprehensive analysis method.

Analysis of recent research and publications. The study of financial management in Western countries has been positioned at the level of the financial manager and has gone through the early stages of financial management of financing, the stage of financial management of internal control from the 1920s and 1930s and the stage of financial management of investment in the post-war period, but there has been no specific study of financial mechanism, and the term financial mechanism rarely appears in the financial management literature. However, Western research findings in the areas of financing, investment and profit distribution, as well as in financial objectives, financial markets, corporate governance structures and organizational behavior, are still integral components of the theoretical framework for financial mechanisms.

A number of scholars in Ukraine have proposed studies on "financial mechanisms".

Zinoviev, V.A. [1] have mentioned it in his paper: The existing definitions of a financial mechanism can be divided into two broad groups. The definitions of the first group consider the financial mechanism for the level of the state, regions and regions, i.e. at the macro level. Definitions of the second group are considering the financial mechanism of enterprises, i.e. micro level. In our opinion,the financial mechanism exists both at the macro and micro levels; in general, the process of its functioning can be represented in the form of a block diagram. In this case, the financial mechanism can be considered as an information machine designed to process and transform incoming information.

Based on the above, Kurilov K.Yu. [2] adjusted the understanding of financial mechanism. He think, it is possible to define the financial mechanism as part of the economic mechanism, which is a system of financial relations using methods and tools for the formation and distribution of financial resources, functioning for a specific purpose.

The goal of research. is to compare different financial mechanism and set a way to exam the effectiveness of financial mechanism, at last to provide better suggestions to financial mechanism in the process of enterprises development.

Results of research. The east countries have done their research about financial mechanism a few decades ago and have already formed its own understanding system of financial system, which is different with the West system.

In 1990,Li Xianghua [3] came up with the thought that the main factors of building financial mechanism was to deepen reform. It meant more attention must be paid to raising fund、operating and profit distribution. And studying financial mechanism started with capital movement.

And Yang Shue and Zhang Tianxi [4] suggested that the main task of financial mechanism should be construct self-balance、self-restraint and self-expansion mechanism.

Research about financial mechanism stopped for many years until researcher came over many problems in late 1990 s.

The leader in financial field Go Fuchu [5] pointed out the financial mechanism consist of three parts: financial principal mechanism, financial motivation mechanism, financial balance mechanism.

First, the financial principal mechanism refers to the capital input activities, including the system of regulation of capital appropriation and the system of regulation of costs.

Financial motivation mechanism refers to the income activities of the principal, including the system of regulation of financial income and the system of regulation of profits.

Financial balance mechanism includes the financial balance control system, the financial progress control system and the principal profitability control system).

Financial mechanism regulation includes four links, determining financial regulation objectives, establishing financial regulation organization system, transmission and feedback of financial information, and correcting financial deviations.

The regulation methods of financial mechanism include interest rate regulation, limit regulation, ratio regulation and regional regulation, etc.

In a word, researches in China has not done enough research on financial mechanism, it is on the beginning stage.

At the same time Song Xianzhong [6] wrote in his book that the financial mechanism consist of three parts: financial motivating system、financial operating system and financial restraint system.

Financial motivating system are divided into material and spiritual incentives.

Material incentive refers to the financial resources as a source of stimulation through financial allocation, so that the material motivation becomes the motivation to operate financial activities, which requires the harmonisation of fairness and efficiency.

Spiritual motivation refers to the formation of an atmosphere of mutual understanding between the manager and the managed within the enterprise, to increase the sense of responsibility of people and to satisfy their social needs.

The financial operation mechanism includes four sub-systems: financial budgeting, financial decision-making, financial regulation and control, and risk management.

The financial discipline mechanism is to influence financial activities through various economic levers such as the legal system, taxes and interest in order to obtain a desired outcome. As well as organisational structure, organisational departments, etc. to constrain financial activities.

From then on, the research about financial system have processed almost the same path and same direction.

Studies on financial mechanisms by scholars from other countries, such as

Ukraine, Russia and the United States, are selected as comparisons to analyse the strengths and weaknesses of each.

Countries such as the United States have studied financial mechanisms less, focusing more on areas such as financial management, financing and profit distribution.

However, there is a lot of research on financial mechanisms by scholars in Ukraine.

For example, the two scholars mentioned above pointed the essence of financial mechanism.

To add a point of Kurilov K. Yu’s research result [2], he also mentioned that financial mechanism should be noted that the financial mechanism at the macro level has a direct impact on the financial mechanism of the enterprise at the micro level, determining its structure and the relationship between the elements. It should also be noted that the financial mechanisms of enterprises have an opposite effect on the financial mechanism at the level of the country (region, oblast). Consequently, the financial mechanism of enterprises is one of the elements that make up the structure of the financial mechanism at the macro level (state, region, region).

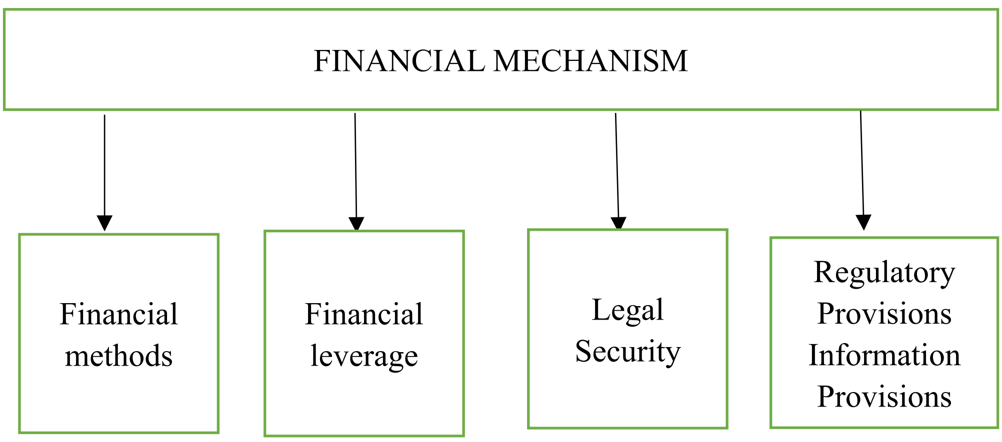
Similarly, there are studies showing that the financial mechanism of an enterprise includes methods and procedures for the formation of financial resources, their planning and ensuring the financial stability of the enterprise under market conditions of economic management. It covers all forms of financial activities, namely: optimisation of fixed and current assets, profit formation and distribution, monetary settlements [7].

Some researchers connect financial mechanism with the necessity of managing financial activities of enterprises.

Bazilevich V.D., Balastrik L.O., Vasilik O.D. [8; 9; 10] think financial system is a set of economic, organizational and legal forms and methods of managing the financial activities of the state in the process of creating and using funds of financial resources to meet the needs of government agencies, businesses and the population.

Fedosov V.M., Ogorodnik S. Ya., Sutormina V.M. [11] defined financial mechanism as set of economic, organizational and legal forms and methods of managing the financial activities of the state, which operate in the process of formation, distribution and use of targeted centralized and decentralized funds of monetary resources to meet the needs of society.

A more specific understanding come with the structure of financial mechanism (Pic. 1).



Source： developed by author and [13]

In this picture, we can clearly tell that the component of financial mechanism is totally different with the component of financial mechanism in China. In this structure the financial mechanism is composed of instrumental elements that help mechanism has better function and protection and regulation elements.

Up to here, we can drew conclusion that there are indeed some common points and differentiates in the understanding system and components between Ukraine and China.

The first thing that Chinese and Ukrainian studies of financial mechanisms have in common is the financial instruments they use, including economic levers such as taxes and interest to make financial adjustments to achieve desired goals. There are also legal systems, organisational structures, and information security that constrain and protect the financial mechanism (what Chinese scholars call the financial restraint mechanism).

Secondly, scholars in both countries agree that financial mechanisms are a set of tools to meet the needs of the subject, and that financial mechanisms operate dynamically and have their own operational logic and regulatory functions, which is a difference from financial systems. The financial system is a static system in which the parties need to comply with it in order to achieve their objectives, without relying on the initiative of the financial system.

There are more points of difference in the understanding of financial mechanisms by scholars in both countries.

This is reflected in the level of understanding. While Chinese scholars focus on financial mechanisms in enterprises, Ukrainian scholars divide the application of financial mechanisms into macro and micro levels. The macro level is the financial mechanism applied at the national and regional levels, while the micro level is the financial mechanism applied by enterprises and individual households. The latter provides a richer level of understanding of financial mechanisms.

Chinese and Ukrainian scholars study financial mechanisms with different deep logic. Ukrainian scholars study financial mechanisms according to the logic of their operation. According to the logic of the operation of the financial mechanism, the content of the first link determines the tasks of the second link, the results of the second link determine which measures are taken in the third link, and the results of the third link influence the content of the fourth link, which operates like a production line, with interlocking links.

But Chinese scholars are different. They classify financial mechanisms according to the environment in which they operate (within the enterprise, involving capital movements, management activities, etc.).

Different environments require different measures in terms of financial work or financial management. For example, raising funds requires financial budgeting, allocating resources according to the development strategy of the enterprise, and even the whole set of processes requires the establishment of a risk management system to prevent serious losses from financial mistakes.

In a word, Chinese scholars divide the components of the financial mechanism according to the environment, integrate elements according to their functions, and finally form the financial mechanism.

It is difficult to distinguish which approach to the study of FAMs is more effective and therefore requires a different rubric for measurement.

The mainstream methods of measuring financial mechanisms are also different in the two countries.

After reviewing the literature, I found that for comprehensive systems such as financial mechanisms Chinese scholars or researchers use integrated analysis methods such as AHP hierarchical analysis and FAHP fuzzy analysis. There are of course other methods of analysis, but this is the only mainstream method presented here, as many scholars in the international community also use these methods for their analysis.

The analytic hierarchy process (AHP for short) was formally introduced in the mid-1970s by the American operations researcher T.L. Saaty. It is a combination of qualitative and quantitative, systematic and hierarchical analysis. It quickly gained worldwide attention due to its practicality and effectiveness in dealing with complex decision-making problems. Its applications have spread across the fields of economic planning and management, energy policy and distribution, behavioural sciences, military command, transport, agriculture, education, human resources, healthcare and the environment.

The steps for its use are as follows.

1) Build a hierarchical model. The upper level factors always dominate the lower level factors. The uppermost level is the target level, usually with only 1

factor, the lowermost level is usually the solution or object level, and there can be one or several levels in between, usually the criterion or indicator level. When there are too many criteria (e.g. more than 9) the sub-criteria layer should be further decomposed.

2) Construct a pairwise comparison array. Starting from the second level of the hierarchical model, for each factor in the same level that belongs to (or influences) each factor in the previous level, use the pairwise comparison method and the 1-9 comparison scale to construct a pairwise comparison array up to the lowest level.

3) Calculate the weight vectors and do consistency checks. For each pairwise comparison array, the maximum feature root and the corresponding feature vector are calculated, and the consistency test is done using the consistency index, random consistency index and consistency ratio.

4) Calculate the combination weight vector and do the combination consistency test. Calculate the combined weight vector of the lowest level to the target and do the combined consistency test according to the formula, if the test passes, then the decision can be made according to the result expressed by the combined weight vector.

The biggest problem with AHP, however, is that when there are many indicators (more than four) at a given level of evaluation, consistency of thinking is difficult to ensure, hence FAHP method is needed.

The FAHP solution steps are broadly the same as the AHP, but with minor differences.

(1) Analyse the problem, determine the causal relationships between the factors in the system, and model the multi-level (multi-level) recursive structure of the various elements of the decision problem.

(2) The elements of the same level (hierarchy) are compared two by two using the elements of the previous level as criteria, and their relative importance is determined according to the rating scale, and finally a fuzzy judgement matrix is established accordingly.

(3) Through certain calculations, the relative importance of each element is determined.

(4) Through the calculation of the overall importance, all alternatives are prioritized, thus providing a scientific basis for decision makers to select the optimal solution.

This is the mainstream method of measuring financial mechanisms in Chinese society.

In his article, В.В.Баліцька[14]proposes a system of indicators to assess the effectiveness of financial mechanisms（Table.1）.

Table 1

Index system of evaluation mechanism

No.	Indexes	Threshold values
1.	Coefficient of financial autonomy (independence) of enterprises (share of equity in total liabilities of economic entities)	For countries with developed economies> 0.7, the optimal value> 0.5
2.	Bankruptcy risk ratio	Valid value is not more than 0.3, critical value is not more than 0.4

3.	Absolute liquidity ratio (ratio of cash to current liabilities)	The optimal value is 0.2-0.35
4.	Return on Equity	The optimal value is 0.15-0.39
5.	Working capital (net working capital),	Critical value of 30% of current assets, optimal -50%

Source: developed by author and [12]

According to above index, the following formula are listed:

1) Financial autonomy = Equity / Assets

2) Bankruptcy risk ratio=$0.063X_1 + 0.092X_2 + 0.057X_3 + 0.001X_4$

X_1 : ratio of working capital to all assets;

X_2 : ratio of profit from sales to all assets;

X_3 : ratio of retained earnings to all assets

X_4 : ratio of equity to loan capita

3) Absolute liquidity ratio = ("Cash and cash equivalents") / (Current liabilities and collateral + "Liabilities related to non-current assets held for sale")

4) ROE= Net profit/net assets

Net profit= rofit after tax + profit distribution;

Net assets = total assets – liabilities

5) Net working capital=total current assets-total current liabilities.

By calculating the above formula, a certain degree of effectiveness of the financial mechanism can be derived, as the above data results will perform well if the financial mechanism is effective and underperform if it is not. However, the above indicators are not a complete indication of the effectiveness of the financial mechanism, as they are constantly changing and so are the indicators used to determine the effectiveness of the financial mechanism as the management model of modern companies is constantly changing.

Conclusion. A comparative analysis of Chinese and Ukrainian scholars' research on financial mechanisms has led to some differences and commonalities, from which we identify points to learn.

In the case of Ukraine, the study of financial mechanisms is combined with specific contexts, such as the requirements for the development of the subject of financial mechanisms, the object of their implementation, the relationship between financial mechanisms and people ....

In the case of China, studying the financial mechanism in terms of the logic of the operation of the mechanism itself will make it work more smoothly.

For the measurement method, it is impossible to judge the validity of the measurement method, therefore, the next step will be to study the measurement method suitable for judging the financial mechanism.

Literature

1. Zinoviev.V.A. (1972). Course of the theory of mechanisms and machines. Moscow: Nauka, 10.
2. Kurilov K.Yu. (2011). Financial mechanism, its content and main components. *Economy and business,* 2, 2.
3. Li Xianghua (1990). Financial conceptual framework reconstruction. URL: https://www.1mishu.com/lunwen/jjgl/kuaiji/201706/810074.html
4. Yang Shue, Zhang Tianxi (1991). Deepen corporate internal financial

management. *Finance and Economics,* 24. P. 246-247.

5. Guo Fuchu (1997). Development and Enlightenment of Financial Management in Modern China and Western Countries. *Sichuan Accounting.* 7. 15.
6. Song Xianzhong (1997). Financial Theory and Mechanism. Beijing: Nauka, 52.
7. Dekhtyar N.A, Lyuta O.V, Pigul N.G. (2011). Financial Mechanism of Business Entities. Sumy: Nauka, 13.
8. Bazilevich V.D. (2002). State finance. Kyiv: manual. 368 p.
9. Balabanov I.T. (1995). Fundamentals of Financial Management. How do you manage your capital? Moscow: Finance and statistics. 384 p.
10. Bernstein L.A. (1996). Financial reporting analysis: theory, practice and interpretation. Moscow: Finance and statistics. 624 p.
11. Fedosov V. M., Ogorodnik S. Ya., Sutormina V. N. (1991). Public finance: study guide. Lybid: Hauka. 247 p.
12. Balitska V.V. (2007). Financial Mechanism: Scientific and Practical Aspects of Advancement. *Science and Science Studies*, 2. P. 10.
13. Metelenko N.G. Shulga O.P. (2016). Concept Of Financial Mechanism. *Black Sea Economic Studies.* 10. 173 p.