

# A Review of the Enterprise Theory: Formation, Essence, Boundary and Goal

#### Hua Yang\*

Accounting College, Zibo Vocational Institute, Zibo 255400, Shandong Province, China

\*Corresponding author: Hua Yang, yangh218@163.com

**Copyright:** © 2022 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), permitting distribution and reproduction in any medium, provided the original work is cited.

**Abstract:** Based on the formation, essence, boundary and goal of different enterprise theories as the review object, this paper reviews the enterprise theory of neoclassical economics. It is the four mainstream schools of enterprise contract theory and the enterprise theory of stakeholder collective choice. Additionally, it includes a brief and pertinent evaluation and comparison of these views.

Keywords: Enterprise theory; Enterprise contract theory; The enterprise view of stakeholders' collective choice

Online publication: January 20, 2022

#### 1. Introduction

Enterprise theory is a study of what an enterprise is, why an enterprise is formed, how to divide the boundaries of an enterprise, and what is the goal of its survival and development. With the different understanding of the formation, essence, boundary and goal of the enterprise, the development of enterprise theory has also appeared the enterprise theory of neoclassical economics, the enterprise contract theory, the enterprise theory of stakeholder collective choice and etc.

#### 2. Enterprise theory of neoclassical economics and its analysis

Enterprise theory is a study of what an enterprise is, why an enterprise is formed, how to divide the boundaries of an enterprise, and what is the goal of its survival and development. With the different understanding of the formation, essence, boundary and goal of the enterprise, the development of enterprise theory has also appeared the enterprise theory of neoclassical economics, the enterprise contract theory, the enterprise theory of stakeholder collective choice and etc.

The representatives of enterprise theory in neoclassical economics are "Marshall, Knight, Berle, etc. <sup>[1]</sup>." The theory regards the enterprise as a production function, thinks that the enterprise is a specialized production organization which transforms the input of production factors into a certain output and pursues the maximum profit. Production technology determines an enterprise's size; the market is completely competitive, and the market mechanism plays a distinctive function. Enterprises are basic manufacturing units of the same quality, as well as their purpose is to maximize profits within technological and market limits.

The enterprise theory of neoclassical economics skips the development of enterprises, assumes that enterprises already exist, and assumes that transaction costs are zero. Although this technique recognizes the productive character of companies, it ignores their internal structure and the interaction between enterprises and the external (market), resulting in a failure to establish enterprise boundaries in a reasonable manner. As a result, several economists have challenged it.

#### **3.** The main schools of enterprise contract theory and their comments

The emergence and development of new institutional economics have challenged the viewpoint of "enterprise is a production function" in the enterprise theory of neoclassical economics. It began to study the enterprise theory with the concept of contract and developed into the enterprise contract theory.

Contract, commonly known as contract or contract, refers to the commitment of rights and obligations between the parties. The theory of enterprise contract studies the formation, essence and boundary of enterprise, and provides a new perspective for people to understand the internal structure of enterprise and the relationship between enterprise and market.

#### **3.1.** The main schools of enterprise contract theory

Enterprise contract theory includes transaction cost theory, team production theory, asset specificity theory and principal-agent theory, among which the most influential are transaction cost theory and principal-agent theory.

#### **3.1.1. Transaction cost theory**

Coase believes that the existence of bounded rationality, opportunism, uncertainty and small number conditions makes transaction costs high. In order to save the transaction cost, the enterprise is produced as the transaction form of the alternative market. Enterprise and market are two different and alternative mechanisms. Transaction cost determines the existence of enterprise. The ultimate purpose of enterprise adopting different organizational forms is to save transaction cost <sup>[1]</sup>.

Zhang Wuchang further developed Coase's idea that enterprise and market are substitutes. He believes that enterprises and markets are two different forms of contractual arrangements, and enterprises have more advantages than markets. Within the enterprise, it is the "visible hand" rather than the market mechanism that performs the function of coordination and command. The object of market transaction is products or commodities, while the object of enterprise transaction is factors of production. Enterprises are not set up to replace the market. The essence of enterprises is to replace the product market with factor market <sup>[2]</sup>.

The theory of transaction costs emphasizes why enterprises exist, abandons the hypothesis of market frictionless in the theory of enterprises in neoclassical economics, and specially discusses the influence of market frictions (transaction costs) on the organizational structure and behavior of enterprises. However, the theory also has some shortcomings, such as the extension of transaction costs is uncertain, it is difficult to get a consensus on which items should be strictly and specifically determined as transaction costs; Moreover, the theory overstates the role of transaction costs, which is a very important factor in the existence of enterprises, but not the only determinant.

## **3.1.2. Team production theory**

Alchian and Demsetz regard the enterprise as a team production, think that the production needs to be completed jointly by team members, and focus on the analysis of the supervision mechanism within the team <sup>[3]</sup>. They believe that due to team production, it is inevitable that team members will be "lazy" or "free riding," which requires supervision. However, there are supervision costs in supervision, and the best way is to set up full-time supervisors; And the supervisor will also be lazy, so we need to give the residual claim to the supervisor to make it become the owner of the enterprise to mobilize enthusiasm <sup>[3]</sup>.

Holmstrom further developed the theory of team production. He believes that in the team production of enterprises, "free riding" and competition are particularly noteworthy <sup>[3]</sup>. "Budget balance constraint" (the total output must be distributed among all members) leads to the conflict between Nash equilibrium

and Pareto optimality. Only by playing the role of principal to break the "budget balance constraint" can "group incentive" work. Also, then realize the complete internalization of "group income."

The primary difference between enterprises and markets, according to team production theory, is that enterprises have the nature of team production, and therefore specific supervisors should be put up to deal with team members' leisure behavior. In knowledge-based businesses, however, it is difficult to distinguish between supervisors and producers, and the phenomena of producers' self-supervision has emerged. The team production theory posits that all team members are homogenous, meaning that each can do a variety of tasks. Managers merely need to improve team member supervision and motivation. Since the fit between team members and roles is meaningless, explaining the heterogeneity of enterprises is challenging.

#### **3.1.3.** Asset specificity theory

Willamson extended the transaction cost theory from the perspective of vertical integration of enterprises <sup>[2]</sup>. He believes that enterprises are a form of transaction to save transaction costs, and asset specificity is an important factor in determining transaction costs. Asset specificity refers to the durability investment to support a specific transaction. Once the investment is made, it cannot be used for other purposes unless the loss of productive value is paid. When asset specificity is low, it should be suitable for market transaction; When the asset specificity is very high, the transaction cost and the interdependence of both parties are also very high, and both parties may exploit the other party's Quasi rent by using the asset specificity. In order to solve this problem, the best way is that both sides of the transaction form an enterprise, which is called vertical integration. But Willamson didn't explain when vertical integration would happen <sup>[2]</sup>.

Grossman and Hart hold that although vertical integration can save transaction costs, it can also bring merger costs. The occurrence of vertical integration depends on the comparison between the transaction cost saved by integration and the merger cost. When the former is greater than the latter, vertical integration will occur<sup>[4]</sup>.

The theory of asset specificity breaks through the concept that production factors are assumed to be homogeneous and can replace each other without cost in neoclassical economics. It takes the incompleteness of enterprise contract as the starting point of logical analysis, and advocates that the owner of specific assets should have the ownership of the enterprise to ensure the efficiency of enterprise contract. It holds that the vertical integration of enterprises mainly depends on asset specificity, The specificity of assets determines the boundary of enterprises. However, the theory does not give a clear answer to the extent to which asset specificity affects human behavior and how it affects human behavior.

#### **3.1.4.** Principal agent theory

Transaction cost theory emphasizes the relationship between contract and entrepreneur's authority, while team production theory highlights the idea of contract and team, which inspires the principal-agent theory of enterprises. Meckling and Jensen hold that the essence of enterprise is contractual relationship, and focus on the principal-agent relationship between shareholders and managers <sup>[3]</sup>. Since the inconsistency between the objectives of shareholders and managers, managers do not always take actions to maximize the interests of shareholders. Therefore, it is necessary for shareholders to supervise managers, but supervision is restricted by the cost of supervision; At the same time, the operator will also make a commitment to ensure that they act according to the goal of maximizing the interests of shareholders, so as to prevent the shareholders from reducing the salary due to their expectation of laziness. The guarantee also has the guarantee cost and is restricted by the guarantee cost. After the game of supervision and guarantee between shareholders and managers is optimal. Transaction cost theory focuses on the formation of enterprises, the boundary of enterprises and the relationship between enterprises and the market. Asset specificity theory focuses on the choice of market

and enterprise (vertical integration). Principal agent theory focuses on the internal structure of the enterprise and the agency relationship in the enterprise, and pays more attention to the internal structure of the enterprise (horizontal integration). Team production theory and principal-agent theory both emphasize the internal supervision and agency relationship, and the core is to design incentive mechanism to maximize the interests of shareholders. Both of the two theories default that the enterprise is owned by the shareholders. Only when the residual claim is owned by the shareholders can the enterprise achieve higher efficiency and performance.

## **3.2. On the theory of enterprise contract**

According to the enterprise contract theory, the formation of enterprises is to save transaction costs; The essence of an enterprise is the connection of a series of contracts. The scale of an enterprise is not the bigger the better, and the boundary of an enterprise is determined by transaction costs. Enterprise and market are two different but freely chosen forms of transaction; The efficiency of an enterprise lies in choosing an appropriate form of contract to control and motivate its participants.

# **3.2.1.** The formation of enterprises

Coase thinks that the formation of enterprises is to save transaction costs. Alchian and Demsetz believe that the enterprise is generated by the excess return brought by team production <sup>[3]</sup>. Willamson believes that enterprises appear as a governance structure with incomplete contracts <sup>[2]</sup>. From a logical point of view, the theory of enterprise contract has no problem in explaining that the enterprise is formed to save transaction costs or obtain team production excess income, but it is not the historical source of the formation of the enterprise, nor the real reason for the formation of the enterprise. Moreover, it takes the operators and employees as an established premise, which cannot explain the existence of the operators and employees in theory.

# **3.2.2.** The essence of enterprise

Coase thinks that the essence of enterprise is to replace the market. Zhang Wuchang thinks that the essence of enterprises is to replace product market with factor market to save transaction cost <sup>[4]</sup>. Alchian and Demsetz think that enterprise is essentially a team production mode <sup>[3]</sup>. Willamson believes that enterprises are actually a kind of governance structure <sup>[2]</sup>. According to Grossman and Hart, an enterprise is a collection of controlled material assets <sup>[4]</sup>. Jenson and Meckling believe that the essence of enterprise is contractual relationship <sup>[4]</sup>. As a production and management unit, the enterprise contains two attributes: transactional and productive, which are endogenous in the enterprise itself. Although the enterprise contract theory reveals the transactional nature of the enterprise, it ignores the productive nature of the enterprise. This is because the enterprise is a production and operation unit which is engaged in the production of products and gains profits from it. Even if the transaction cost is zero, the enterprise still exists. Moreover, the connection of enterprise contract is dynamic rather than static, and the economic behavior of the contracting parties of enterprise.

# **3.2.3.** The boundary of enterprises

Reviewing the enterprise contract theory, we can find that its explanation of the enterprise boundary is insufficient. The boundary of an enterprise includes the operation boundary (the boundary between the enterprise and the market) and the ownership boundary, but various enterprise contract theories only focus on one aspect. For example, the boundary of an enterprise defined by Coase, Zhang Wuchang and Williamson is actually the operation boundary of an enterprise <sup>[5]</sup>. However, Grossman and Hart only give

the boundary of ownership, but ignore the boundary of management <sup>[4]</sup>. In addition, when analyzing the boundary of enterprises, various theories are mainly based on the tangible physical capital of enterprises, but pay less attention to the intangible capital such as human capital and social capital. In the era of knowledge economy and network economy, the business boundary of an enterprise extends from tangible to intangible. Therefore, we should recognize the business boundary of an enterprise again.

### **3.2.4.** The goal of enterprise

According to the theory of enterprise contract, the goal of enterprise is to maximize the interests of shareholders. This is because the emphasis on things other than the ultimate interests of the owners of the enterprise will weaken the business focus of the enterprise, resulting in low return efficiency and waste of resources, and usually cannot meet the expectations of shareholders, so the enterprise will focus on improving income, profits and shareholders' returns. However, with the transformation of modern corporate governance structure from the traditional unilateral governance of shareholders to the joint governance of stakeholders, the goal of the enterprise can no longer be simply defined as the supremacy of shareholders' interests. Since an enterprise is a "contract" concluded between stakeholders, stakeholders invest various forms of capital in the enterprise, such as material capital, human capital and social capital, in order to obtain cooperative benefits that cannot be obtained by their own capital alone. How to deal with the relationship between different stakeholders has become the key to improve the efficiency of modern enterprises. Therefore, the goal of an enterprise should be to maximize the common interests of all stakeholders.

## 4. Enterprise theory of stakeholders' collective choice and its analysis

The enterprise theory of stakeholder collective choice is based on Stakeholder Theory and collective choice theory, which is about the formation, essence, boundary and goal of the enterprise. In China, Professor Wang Zhuquan put forward and deeply studied the enterprise view of stakeholder collective choice, believing that enterprise is the product of stakeholder collective choice and an acceptable equilibrium state achieved by the collective choice of enterprise contract selectors. He elaborated on the formation, essence, boundary and goal of the enterprise under this view <sup>[4,5]</sup>.

## 4.1. The formation of enterprises

Stakeholders with different forms of capital are an independent individual, with different value orientation and behavior preference, pursuing the maximization of their own interests. The formation of the enterprise shows that the collective action of the stakeholders represented by the enterprise replaces its independent individual action, and the enterprise becomes the main body representing the collective interests of all the stakeholders participating in the action, with the goal of meeting the collective interests of all the stakeholders participating in the action, This is based on the individual rational choice of all stakeholders participating in the collective action of the enterprise.

## **4.2.** The essence of enterprise

Enterprise is a kind of collective choice of enterprise contract selectors, or enterprise is a kind of collective choice of internal stakeholders. If both individual rationality and collective rationality are satisfied in this kind of collective choice, enterprises will be formed. To be exact, the firm is an acceptable equilibrium state that the collective choice of the firm's contract selectors achieves.

## **4.3.** The boundary of enterprises

The formation of enterprises' collective choice as stakeholders has experienced two levels of collective

choice: the first level is that the participants of collective choice are all possible stakeholders, the content of choice is whether to participate in the signing of enterprise contract, and the result of choice determines the boundary between the owner of the enterprise and the subject of enterprise ownership. The participants of the second level collective choice are the owners of the enterprise. The content of the choice is the distribution of the enterprise control right and the residual sharing right among the owners. The result of the choice determines the specific content of the enterprise contract and the behavior boundary of the enterprise ownership. The two levels of collective choice jointly determine the ownership boundary of the enterprise, determine the ownership of the enterprise, clarify the goal of the enterprise, and endow the enterprise with initial self-owned capital, which creates the premise for the enterprise to carry out business activities. In order to achieve the goal of the enterprise, the enterprise needs to carry out market transactions with the main body outside the enterprise and sign various transaction contracts with it. Therefore, the boundary of the transaction contract constitutes the boundary between the enterprise and the market, that is, the operation boundary of the enterprise.

#### 4.4. The goal of enterprise

There are many stakeholders in an enterprise, and the interests of stakeholders are also antagonistic and conflicting. Therefore, generally advocating the enterprise goal of maximizing the common interests of stakeholders may lead to the inability of enterprises to start in practice. Specifically, the stakeholders who have the right and actually participate in the collective choice and sign the enterprise contract with the enterprise become the owners of the enterprise (including the managers and employees who hold shares), which determines the boundary of the ownership of the enterprise and is the internal stakeholders of the enterprise; The stakeholders who do not participate in the collective choice of the enterprise and only sign the transaction contract with the enterprise become the general traders or external stakeholders of the enterprise. Since the collective choice of the internal stakeholders as the contracting party of the enterprise contract determines the ownership of the enterprise goal of the enterprise is also the goal of the internal stakeholders of the enterprise is also the goal of the internal stakeholders of the enterprise is also the goal of the internal stakeholders of the stakeholders of the enterprise goal of maximizing the common interests of the stakeholders of the enterprise is also the goal of the internal stakeholders of the internal stakeholders of the enterprise. That is to maximize the interests of the contract signer.

## 5. Conclusion

Different from the enterprise contract theory, which regards the formation of enterprises to save transaction costs or obtain team production excess income, the enterprise theory of stakeholder collective choice regards the emergence of enterprises as the collective action of stakeholders instead of their individual action, so as to realize the value increment of their respective capital by team production in the form of enterprise transaction, The existence of operators and employees is to help the owners of enterprises to obtain the value-added capital, which makes up for the deficiency that the traditional enterprise theory cannot explain the existence of operators and employees.

The enterprise view of stakeholders' collective choice provides a new tool for understanding and explaining enterprises. The differences between this theory and the enterprise theory and the enterprise contract theory of neoclassical economics on the formation, essence, boundary and goal of enterprises are shown in **Table 1**.

View	Neoclassical economics	Enterprise contract	Collective choice of stakeholders
Formation		Save transaction costs	Collective action of stakeholders
Essence	A production function	A chain of contracts	The collective choice of stakeholders
Boundary		Determined by transaction costs	Transaction contract signed by enterprise and stakeholders
Goal	Profit maximization	Maximizing shareholders'	Maximization of the interests of the contract
		interests	signer

Table 1. Basic viewpoints of various enterprise theories

#### Funding

The 2021 Ministry of Key subjects of Art Science in Shandong Province.

#### **Disclosure statement**

The author declares no conflict of interest.

## References

- [1] Coase, RH, 1937, The Nature of the Firm. Economica, 16: 386-405.
- [2] Steven, Cheung NS, 1983, The Contractual Nature of the Firm. Journal of Law and Economics, 1: 1-21.
- [3] Alchian A, Demsetz H, 1972, Production, Information Costs and Economic Organization. American Economic Review, 5: 777-795.
- [4] Wang ZQ, 2006, Stakeholder Accounting and Externality of Accounting Information Disclosure. Modern Accounting and Auditing, 1: 1-8.
- [5] Wang ZQ, Du Y, 2006, An Analysis of Enterprise Formation Logic and Enterprise Boundary from The Perspective of Stakeholders. China's Industrial Economy, 3: 108-120.

#### Publisher's note

Inno Science Press remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.