

On Non-Profit Privately-Run Higher Education Institutions Receiving Public Finance Subsidy: From the Perspective of Pareto Improvement Theory

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Received 12 April 2016; accepted 9 June 2016

Published online 26 June 2016

Abstract

The subsidy provided by government public finance to non-profit higher educational institutions is a process of public resources for reallocation, and the concrete application of the Pareto improvement theory in the practice of government public finance resources allocation. The Pareto improvement theory is of importance guidance significance to the scientific and rational adjustment and allocation of resources. As to the allocation of public finance in higher educational institutions, the Pareto improvement theory means that the public finance resources obtained by state-run higher educational institutions is not reduced, and non-profit privately-run higher educational institutions also obtain certain public finance subsidy, which promotes the rational allocation of public finance resources. The realization of Pareto improvement of public finance resources in higher educational institutions is favorable. That non-profit privately-run higher educational institutions obtain government public finance subsidy contributes to rational allocation of public resources, and improves the circumstances of all sides, which are a multi-win arrangement.

Key words: Non-profit privately-run higher educational institutions; Public finance; Subsidy; Pareto improvement

He, G. W. (2016). On Non-Profit Privately-Run Higher Education Institutions Receiving Public Finance Subsidy: From the Perspective of Pareto Improvement Theory. *Studies in Sociology of Science*, 7(3), 8-12. Available from: URL: <http://www.cscanada.net/index.php/sss/article/view/8634> DOI: <http://dx.doi.org/10.3968/8634>

INTRODUCTION

The theory of Pareto improvement is a generalization and summary of thoughts and theories on effective allocation and adjustment of limited resources. That government public finance provides subsidy to non-profit privately-run higher educational institutions is a process of public resources for reallocation, and reflects the fulfillment of basic function of public finance. That public finance resources are limited restricts the real fulfillment of public finance functions, so that generally the allocation of public finance resources is irrational and imbalance; in view of this, Pareto improvement can help effectively adjust and allocate resources, and plays a positive role in the practice of public finance resources allocation. Through Pareto improvement, the public financial resources obtained by state-run higher educational institutions are not reduced, and non-profit privately-run higher educational institutions also can obtain abundant public financial subsidy.

1. CONNOTATION EXPLANATION OF PARETO IMPROVEMENT THEORY

Pareto improvement is an important concept in the theory of games. It was named after an Italian economist Pareto. It works based on Pareto optimality. It is widely used in economics, engineering, and social sciences. Pareto improvement means a change that improve the condition of at least one person without deterioration of any others' (Lu, 2008); differently, Pareto optimality means a state of resources allocation where it is impossible to improve any one's condition unless someone's condition deteriorates. Pareto improvement and Pareto efficiency (Pareto optimality) were an important thought and theory on resources allocation state in economics, which was put forward by Italian economist Pareto more than a hundred years ago. In a word, Pareto efficiency refers to

a social state, resource allocation, social system, etc., comparing with which there is no other choice that improves the condition of at least one person without deterioration of any others'. Accordingly, that no one's condition becomes worse and the condition of at least one person is improved when a change is made is called Pareto improvement (Zhang, 2013, p.24). Actually, the theory of Pareto improvement is a more ideal state based on the theory of Pareto optimality. Under normal conditions, it is impossible to increase the benefits of one side unless the benefits of the other side is reduced, which is a state called Pareto optimality; besides, there is a state that the benefits of one side are increased by changing the existing resources allocation state without reducing the benefits of the other side, which is called Pareto improvement. Essentially, Pareto improvement means adjusting the allocation state of some resources by certain means or in a certain way to improve the condition of one side without deterioration of any others' conditions. Generally speaking, Pareto improvement can be achieved in the case of idle resources or market failure.

Pareto improvement is an ideal resources allocation state, which is an idea and practice of resources allocation developed under the condition of resources absence. This idea is of positive value and effect in the practice of resources allocation.

Firstly, Pareto improvement is of regulating effect, helping realize optimal allocation of resources. In light of the scarcity of resources, uneven resources occupation and allocation are evitable, which leads to low efficiency. Therefore, optimal allocation of resources of great importance. The theory of Pareto improvement essentially is to change the state of resources allocation so as to improve the conditions of one side without deteriorating the others' conditions, which will be realized in the case of idle resources or market failure. In real life, idle resources and market failure are unavoidable. Thus, the theory of Pareto improvement will exert the regulating effect to optimize the allocation of resources to improve the conditions.

Secondly, Pareto improvement acts to balance something, helping realize equality of opportunity and joint development. The purpose of Pareto improvement is to improve a non-ideal state. In a sense, Pareto improvement is reallocation of resources, making the resources on all sides tend to rational and balanced. Due to the finiteness of resources, imbalanced resources allocation is common, which results in state difference. Pareto improvement aims to improve the bad state without deteriorating the good, to realize roughly balanced and rational resource distribution. Under the action of the theory and practice of Pareto improvement, all parties stand a chance to obtain some resources, and their opportunities of enjoying some resources tend to balance, which will promote joint development.

Lastly, Pareto improvement has remedial function, help to cope with the government failure and market failure. Pareto improvement works in the case of idle resources and market failure, changing the allocation state of resources and remedying the damages of market failure. In the condition of market economy, market failure can hardly be avoided, and even the government failure will occur. In the case of market failure, or if the market cannot normally work, or cannot cope with some problems such as uneven distribution of resources, widening gap between rich and poor, resources waste or idle, etc., Pareto improvement can made to rationally adjust the existing allocation state of resources to remedy the damages of market failure; in the case of government failure, namely that related administrative plans, regulations and systems don't work, and a series of social problems and market problems occur, such as fall in social morality, cut-throat competition, soaring prices, market confusion, etc., Pareto improvement can be made to adjust and allocate the limited resources to improve the conditions of one side without deteriorating the conditions of others.

2. PARETO IMPROVEMENT ANALYSIS ON SUBSIDY TO NON-PROFIT PRIVATELY-RUN HIGHER EDUCATIONAL INSTITUTIONS FROM PUBLIC FINANCE

Pareto improvement refers to a changing trend of resources, which are realized in the case of idle resources or market failure. Specifically, Pareto improvement means that the conditions of at least one party are improved, and the conditions of others are not deteriorated. The prerequisite for realizing Pareto improvement is the finiteness or scarcity of resources. Pareto improvement is the necessary approach and way to achieve Pareto optimality. Public finance, a limited public resource, aims to be allocated to a field in need to meet certain demands as far as possible. Non-profit privately-run higher educational institutions are special organizations which are both producer and consumer, and are in bad need of related resources, in particular of public finance resources. The public finance subsidy provided by government matters greatly in the development of non-profit privately-run higher educational institutions.

2.1 Analysis of Essence of Pareto Improvement

From the essence of Pareto improvement, government public finance provides subsidy to non-profit privately-run higher educational institutions provided to improve the conditions of one party. The essence of Pareto improvement is to improve a state. Specifically, Pareto improvement is to improve the conditions of one party without deteriorating the conditions of others. That the government public finance provides subsidy to non-profit

privately-run higher educational institutions conforms to the theory of Pareto improvement. The government public finance has been providing large subsidy to state-run higher educational institutions, so the funds for state-run higher educational institutions are guaranteed, and state-run higher educational institutions can develop sustainably. By contrast, the government public finance has provided little and even no subsidy to non-profit privately-run higher educational institutions for a long time, so that non-profit privately-run higher educational institutions have been being short for funds to develop themselves, and most non-profit privately-run higher educational institutions just have a little scale, the number of non-profit privately-run higher educational institutions is small, and non-profit privately-run higher educational institutions develop unevenly at a low level in respect of extended development or connotative development. Thus, non-profit privately-run higher educational institutions find it hard to fairly compete with state-run higher educational institutions. According to the theoretical logic of Pareto improvement and the resource attribute of public finance, the subsidy from the government public finance is made to promote the scientific development of non-profit privately-run higher educational institutions but not deteriorate the sustainable development of state-run higher educational institutions, to largely expand the provision of satisfactory higher education products and higher education services. In this way, the rational allocation of public finance resources in non-profit privately-run higher educational institutions and state-run higher educational institutions doesn't deteriorate the condition of state-run higher educational institutions and improve the condition of non-profit privately-run higher educational institutions.

2.2 Function Analysis of Pareto Improvement

As to the function of Pareto improvement, that the government public finance provides subsidy to non-profit privately-run higher educational institutions at least can improve the condition of one side. Generally speaking, Pareto improvement can be realized and work in the case of limited resource, which can make up the finiteness and scarcity of resources so that the condition of any side will not be damaged. Pareto improvement is dynamic, can change the state of resource occupation with the aid of information, technology and other necessary conditions, and result in that the condition of at least one side will take a turn for the better and the condition of the other side will not become bad. Public finance resources are limited, which plays a positive role under certain conditions to make resource location tend to be rational. The practice of allocating government public finance resources in higher education can dynamically adjust resources allocation in higher educational institutions with difference fund resources. For example, the distribution of public finance resources in state-run higher educational

institutions will guarantee their scientific sustainable development, then state-run higher educational institutions don't have to worry about fund shortage and can move on as planned; while non-profit privately-run higher educational institutions seldom receive subsidy from government public finance resources, then their development has been hindered for a long time so that they cannot make necessary objectives and vision, nor develop themselves as planned. According to the function of Pareto improvement, as long as the government public finance provides necessary subsidy to non-profit privately-run higher educational institutions to rationally allocate public financial resources to non-profit privately-run higher educational institutions, satisfactory function will be achieved; the condition of state-run higher educational institutions will not become bad, and the condition of non-profit privately-run higher educational institutions will be improved. The largest bottleneck of non-profit privately-run higher educational institutions is fund shortage, which can be solved by rational subsidy of government public finance; as long as the government provides rational public finance subsidy to non-profit privately-run higher educational institutions, their problem of fund shortage will be largely relieved, they will be reinvigorated, and their condition will be improved; state-run higher educational institutions, with the aid of existing information technology, will not suffer deterioration on the account of non-profit privately-run higher educational institutions.

2.3 Analysis of Limitations of Pareto Improvement

Due to limitations of Pareto improvement, it is likely that the subsidy from government public finance to non-profit privately-run higher educational institutions doesn't work, so that the condition of one side or of all sides becomes bad. The theory of Pareto improvement is a developing theory. It has distinct advantages and inevitable limitations. Its limitation is that Pareto improvement can be realized in the case of idle resources or market failure. That's to say, Pareto improvement is of little significance and can hardly bring its advantages and function into play in the case of resource abundance or normal operating market. Besides, Pareto improvement is dynamic, meaning that though Pareto improvement plays a positive role in the case of idle resources or market failure, a result that the condition of one side becomes worse while the condition of the other side becomes better may be caused due to a series of useful information and conditions; or a result that the conditions of all sides cannot be improved but deteriorated due to some human factors. In the practice of allocating government public finance resources, due to the characteristics of functions of public finance, all organizations or departments set up to fulfill public functions will receive subsidy. Thus, non-profit privately-run higher educational institutions that shoulder

certain public functions also will receive public finance subsidy to improve their conditions, which will result in reduction in public finance subsidy to state-run higher educational institutions, so that the conditions of state-run higher educational institutions may be deteriorated. Since the limited or relatively scattered government public finance resources is to be allocated to both state-run higher educational institutions and non-profit privately-run higher educational institutions that shoulder part of public functions, the resources received by both non-profit privately-run and state-run higher educational institutions may not meet their demands, and both their conditions cannot be improved.

3. NON-PROFIT PRIVATELY-RUN HIGHER EDUCATIONAL INSTITUTIONS SHOULD DESERVE NECESSARY SUBSIDY FROM GOVERNMENT PUBLIC FINANCE

Pareto improvement plays certain positive role in the practice of resources allocation, changing the conditions of all sides, especially improving some bad conditions. It can guide resources adjustment. In the case of idle resources and market failure, the guidance of the theory can effectively promote optimal allocation of limited resources. In real life, that the government provides subsidy to non-profit privately-run higher educational institutions is a way to allocate limited finance resources.

Firstly, non-profit privately-run higher educational institutions should deserve subsidy from government public finance, which promotes rational allocation of public finance resources and realizes Pareto improvement of public finance resources. That government public finance provides subsidy to non-profit privately-run higher educational institutions plays an important role in allocation of higher education resources. How to maximize the subsidy efficiency or optimize the allocation of finance resources should be the ultimate goal. Thanks to the positive external effects of non-profit privately-run higher education produces and services, non-profit privately-run higher education produces and services are quasi-public goods of high positive externality. If the government doesn't provide subsidy, and all funds are shouldered by school, the public and social forces, the efficiency of school running will be low. Higher education is a quasi-public good of high positive externality, meaning that the consumption or production of one person will bring benefits or unavoidable losses to other social members at no cost. That a person receives education means that the educated receives benefits, and other social members also benefit from education at no cost (Li, 2007). Actually, that the government provides public finance subsidy to non-profit privately-run higher education institutions will promote the non-profit privately-run

higher education institutions to improve their quality and efficiency of school running, so that more better education products and services are bound to be provided to the society and other higher educational institutions or social members can benefit more or less at no cost, which has a positive effect on the civilization and harmony of the society.

The Pareto improvement of the government in higher education is made to scientifically and rationally allocate the limited public finance resources to achieve long-term interests of all higher educational institutions, to realize the optimal state of finance resources allocation in higher educational institutions. Pareto improvement makes the limited resources be made full use of. In real life, the optimal state is an ideal state. The principle of Pareto improvement is that at least one person benefits and others' interests are not impacted (Song et al., 2004). Hence, the direction of allocation and adjustment of government public finance resources is to integrate the limited resources in a relatively stable and orderly social environment, and give consideration to interests of all sides to realize an overall development and a multi-win state.

Secondly, non-profit privately-run higher educational institutions can obtain subsidy from the government public finance, to improve their conditions and realize joint development and multi-win. Pareto improvement of public finance resources is an important measure for solving fund shortage of non-profit privately-run higher educational institutions and the imbalance between supply and demand of higher education. The realization of Pareto improvement of allocation of public finance resources in higher education field leads to win-win of both state-run and non-profit privately-run higher educational institutions, and also brings much external benefits, such as optimizing the incentive institutional environment of higher educational institutions, enhancing campus construction of higher educational institutions, raising the school running quality and level of higher educational institutions, and improving the comprehensive quality of teachers and students of higher educational institutions. Especially, the conditions of non-profit privately-run higher educational institutions will be largely improved.

Pareto improvement refers to change the existing allocation of the given resources to increase the benefits of one side without reduction in benefits of others (Mei, 2014). According to the theory of Pareto improvement, that the government public finance provides subsidy to non-profit privately-run higher educational institutions essentially is a process of reallocation of public resources. Based on the current financial budget plan, it is feasible to change the allocation of public finance resources to distribute certain budget to non-profit privately-run higher educational institutions without reduction in financial

budget to state-run or other higher educational institutions, namely providing certain public finance subsidy to non-profit privately-run higher educational institutions. As far as non-profit privately-run higher educational institutions are concerned, they will obtain more funds, which can relieve them from fund shortage, improve their conditions, and increase their interests in different extent. Concerning other schools, their funds are not reduced, and they still receive subsidy as before, except that there is certain gap between their subsidy and that of non-profit privately-run higher educational institutions. At least, their overall interests are not reduced. On the contrary, they obtain more intangible interests due to the positive external effect of education.

REFERENCES

- Li, H. Q. (2007). Pareto improvement of investment in higher education. *Yunnan Normal University (Philosophy Edition)*, (7).
- Lu, G. Z. (2008). Pareto improvement of allocation of library resources of higher educational institutions. *Inner Mongolia Science Technology & Economy*, (8).
- Mei, Y. D. (2014). Debates on connotation of pareto optimality. *China Economic & Trade Herald*, (14).
- Song, Y. S., et al. (2004). Pareto optimality is an external pursuit. *Commercial Research*, (18).
- Zhang, W. Y. (2013). *Game and society* (p.24). Beijing: Peking University Press.