

REMOVING CUMBERSOME IN FINANCING SCIENTIFIC RESEARCH IN UNIVERSITIES IN VIETNAM THE CASE OF ACADEMY OF FINANCE

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Abstract:

In recent years, the Government has implemented a number of policies with specific measures for promoting science and technology (S&T) development. However, reality shows that financial investment for S&T activities is still far from expected to meet the requirements of industrialization and modernization of the country. S&T needs large financial investment while the resource allocated for S&T from the State budget is limited. In this difficult context, we have not had, on the other hand, appropriate policies and mechanisms strong enough to mobilize other non-state funding sources, encourage all economic sectors to invest in science and technology, especially in technology application. Particularly, the issue of finding solutions to overcome difficulties in universities caused by financing mechanism for scientific research is essential to ensure successful contribution of S&T to the country's industrialization and modernization. In this paper, the author pointed out achievements, constraints and the need of provision of appropriate intervention measures to overcome cumbersome in the current financial regime for scientific research in universities. Especially, the author proposed groups of solution with a view to improving the financing mechanism for S&T in universities, in general and in the Academy of Finance(AOF), in particular.

Keywords: Finance for S&T activities; Financial mechanism; University.

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1. Introduction

Science and scientific research is a means of fostering economic development, social progress and has been playing an important role in socio-economic development of each nation, particularly for Vietnam. In past years, the Government has implemented a number of policies with specific measures for promoting science and technology (S&T) development. However, it was not as expected as the assessment stated in the Resolution of 2nd Conference of the Party Central Committee, term VII, on strategic orientation for S&T development in the period of industrialization - modernization and specific S&T tasks up to 2015, says: “we have not had appropriate policies and mechanisms to mobilize other non-state funding sources for S&T development...”. Reality shows that

financial investment for S&T activities is still far from expected to meet the requirements of industrialization and modernization of the country. S&T needs large financial investment while the financial resource allocated for science and technology from the State budget is limited. In this difficult context, we have not had, on the other hand, appropriate policies and mechanisms strong enough to diversify the way of mobilizing other non-state funding sources, encourage all different economic sectors to invest in science and technology application.

For a higher education institution, teaching and scientific research are two basic interrelated and interactive tasks, they are complementary, it may promote or hinder the development of each other. To improve the quality of education and training, each teacher must constantly improve the quality of curriculum by doing research, applying scientific research results in teaching and learning. One of the factors affecting scientific research activities of the faculty members is financial mechanism. In practice, there have been many research works on financial mechanism for scientific activities in universities and the way to use effectively the resource allocated to them. The case study of AOF gives us some lessons learnt from the current financial regime for scientific research in general and for research activities in universities, in particular. It also suggests that this issue should be continued to study deeper.

Some key concepts used in this article.

S&T activities is: a system of interrelated activities closely related to the production, improvement, dissemination and application of science and technology knowledge in all fields of science and technology, i.e., natural sciences, engineering and technology, medical sciences and agriculture, as well as social sciences and humanity (defined by UNESCO).

Scientific research is an activity to detect, understand phenomena, objects, natural laws, social and thinking; innovative solutions for application in reality. Scientific research includes basic research and applied research.

2. Present situation of the financial mechanism of Vietnam for scientific research in universities

There are many approaches to analyze the financial resources for scientific research in universities. In this article, the author uses the approach of comparison between direct funding from the State budget and by other financial resources for analysis. The reasons for using this approach are as follows:

- Currently, funding for S&T from non-state sources in our country is still not common. Private companies have almost had not much investment in scientific research. Funding of State-own enterprises for S&T is not considerable and mostly comes from State budget, by nature.
- In reality, finance for S&T in universities is mainly from State budget, if some research projects the university signed contract with provincial/city authorities or businesses, most of the funding also has the origin of the State budget.
- Financial support by foreign organizations for S&T looks significant in recent years but due to lack of statistics, it is difficult to track records.

In pursuant to the State policy of socialization, diversification of capital sources for S&T development, financial resources invested in this sector are increasingly expanding and it attracts the involvement of all economic sectors, both domestic and foreign:

- *Financial resources from the State budget directly allocated to scientific research in universities* include: State Development Fund managed by the Ministry of Planning and Investment; State scientific research programs or tasks; Funding allocated for S&T development at ministries, provinces, cities, and from there channeled to universities.
- In addition, *other financial resources for scientific research in the universities* can include: Sale of experimental products such as seed of crop varieties, livestock, prototype machine and equipment to be used in production; extra income from research contracts, training services, rent of technical facilities; part of tuition fee collected, support of international organizations through collaborative research projects.

3. Assessment of the effectiveness of the financial mechanism for scientific research activities in universities

3.1. Achievements

- Thanks to the increased investment of the State in building basic infrastructure of universities and funding for scientific research activities, the conditions for training/education and scientific research in universities have been much improved, better meeting the requirement of learning, teaching and scientific research.
- Teaching staff at universities is increasingly getting empowered with qualifications improved and more experienced. Every year, hundreds of teachers in universities receive PhD and Master degree, or granted with

associate professor and professor title. This means, an additional force of highly qualified teachers has been added to undertake training and research activities.

- Universities have made a number of significant contributions to the country's industrialization and modernization through carrying out scientific research programs at State or Ministry level, and through transfer of knowledge and technology and utility solutions for the country's socio-economic development.
- Contribution of university can be made for planning, policy making and guidelines of the Party and State: research programs and projects has provided scientific arguments and foundation for the preparation, elaboration of plans, guidances and policies for national socio-economic development and management, science and technology development, improved product quality, enhanced competitiveness of businesses and the economy, increased development level of productive forces.

3.2. Restrictions

Besides the achievements mentioned above, the financial regime for scientific research in universities exposes some limitations as follows:

- Investment in scientific research in universities is not highly effective because research activities have not much impact on empowerment and development of teaching staff.
- Level of funding from the State budget per teacher is still lower than required by research and staff empowerment tasks.
- Fund allocation mechanism in the financial regime for research activities is still unreasonable, still on average basis.

Causes of the restrictions:

First, in the condition that the State budget is still limited, the spread and irrational budget allocation for scientific research makes it insufficient investment in science and technology projects in universities.

Second, lack of mechanisms and policies and diversified forms of mobilizing financial resources outside the State budget for scientific research and technology transfer.

Third, lack of coordination between financial sources for scientific research and funding for education/training in universities.

Fourth, lack of mechanisms for effective use of funds from the State budget for scientific research in universities.

Fifth, loose relationship between universities (researchers), research result users and State in the mobilization and use of financial sources for S&T activities.

4. Actual situation of the financial regime for scientific research in the Academy of Finance

Annual budget of the Academy is allocated from the State budget: VND 3 billion for 2012, VND 3.5 billion for 2013 against VND 3.9 approved for the year. However, it was still far from the requirement for scientific research activities in order to complete the scientific research process from conducting research, testing and practical application.

Regarding research and teaching equipment, annually the Academy makes investment in necessary procurement of equipment to best meet the requirement of teaching and scientific research of faculty members. Currently, the Academy has 285 desktops; 281 air conditioners, 291 printers, 92 projectors of all kinds, 3 scanners, surveillance camera systems, and peripheral equipment, namely super speed printers, fax machines, audio system, lighting systems in auditorium for lecturing, seminar, exclusive web pages on the Internet and various software applications for managing research projects and the Academy's library. In coming years, AOF continues to strengthen, expand and upgrade its technical facilities to meet the needs of teaching and scientific research of faculty members.

Over the past 45 years, the Academy completed total 586 research projects, including 3 national-level projects, 141 projects of Ministry level, 442 research themes of Academy level.

In addition to research projects funded by the Academy, individual units, scientists have also signed contract with outsiders or got involved in research projects funded by other financial sources.

Content of research projects mainly focused on improving the quality of training, fostering the innovation of curriculum, education programs to be appropriate to various kinds of trainees; elaboration of theoretical basis for administrative science development in line with the requirement of administrative reform.

The number of faculty members involved in research was 184 times. On average, each faculty members took part in 2.4 projects in 5-year. Especially, in past years, attention was paid to the involvement of students in research activities with the funding support from the Academy in the range of VND 30 to 40 million/topic/year (about 12 topics/year). Scientific research activity of the Academy has achieved certain results, made a significant contribution to solving scientific theoretical concern in finance area,

theoretical and practical issues in the field of state administrative management, improving the quality of teaching in the Academy and the improving the quality of the Academy staff, particularly proposing a number of solutions to remove barriers in financial policies reform.

However, the AOF had faced many obstacles caused by the financial regime for scientific research, e.g.:

The financial management is slow reform, still heavily subsidized, most of expenditures of S&T activities still requires full budget from government, though other sources are of high potential but have not been utilized to reduce subsidies. Many specialized research projects have no specific cost norms making it difficult in budgeting, allocation, disbursement and control of project funds. Set of criteria for budget allocation of S&T is unstable, lack of autonomy and flexibility and fairness between clusters of topics.

The reform of financial management is slow, not consistent with actual changes. Many expenses need to be incurred but done without guidelines, it made the spending ineligible. The allocation of State budget for S&T was often late, not open/transparent, lack of discipline, violations of the state budget law still happened.

5. Solutions for solving problems in the financial regime for scientific research in universities in Vietnam

Facing the difficulties in following financial regulations for research in universities in Vietnam, we need to have solutions for the problem:

First, to increase the level of funding for scientific research: Although funding for scientific research in our country is not too low compared to some other countries, it should be allocated in a more reasonable and focusing manner to ensure effective use of the resource. For universities, we need to scarify or cut down some of unnecessary funds to give it to scientific research.

It can secure some more funds from domestic and international research financing organizations such as: National Foundation for Science and Technology Development (NAFOSTED) established since 2008; Technological Innovation Fund established in 2011; The Teaching and Research Innovation Grant project funded by World Bank (TRIG). This project has allocated USD 60 million for 22 universities in 2008.

In addition, there are a number of funds available we need to look for the opportunity to receive their support...

Second, there should be a reasonable allocation policy: According to the guidelines of Ministry of Science and Technology, distribution of funds for

the country's S&T development should focus on oriented basic research, technology applications, research for policy, strategy formulation, research for public services and science and technology of priority to encourage researchers.

Third, increased autonomy in scientific research: Financial autonomy in scientific research is very important. It encourages researchers be more proactive in their own jobs. Financial autonomy must be linked to accountability and transparency of information. Financial autonomy itself does not create quality and efficiency, it is only a condition to create enabling environment for the research, here the role of successful teams, their dedication and quality scientists is more essential.

However, financial autonomy creates space for expansion and increase of resources. It is good but we need, on the other hand, to prevent the right is abused, arbitrarily used and then bring about serious consequences. Financial autonomy is always tied with accountability of responsible persons.

Fourth, promoting socialization policy in scientific research: Socialization in scientific research is a very successful solution, right tendency if we know how to handle it. We need to quit thinking of relying on the State support and subsidy with a view to establishing closer link with the private sector in scientific research.

Fifth, generating more funds for scientific research: This is very important but should be done in a dynamic and creative manner. Scientific products can be commercialized to get the return to research activity. Enhanced linkage through contract with other institutions forwards making research products become quality commodities for society.

6. Solving problems in financial regime in the Academy of Finance

The financial regime for scientific research in AOF should touch upon the issue of autonomy; here autonomy means three aspects: academic autonomy, financial autonomy and autonomy in organization of research and personnel involved.

6.1. Academic autonomy

Academic autonomy is understood as autonomy in curriculum development, training content, training inputs and mode of enrollment. In this respect, the AOF as well as many other universities, in addition to comply with the program framework, general content of some subjects stipulated by the Ministry of Education and Training, the Academy has demonstrated its pro-

activeness in localize other specific content. For example, some specialized "spearhead" subjects have been designed by the Academy itself for the professional courses in accordance with the training objectives of the Academy [8].

However, the compliance with the framework of the Ministry of Education and Training has exposed many limitations to the academic autonomy of the Academy. Moreover, the enrollment norms as well as the right to open new areas of study are still in status of "ask-give" mechanism. Accordingly, the Academy is automatically placed under the management of two ministries: Ministry of Finance and the Ministry of Education and Training.

6.2. Financial autonomy

Financial autonomy means self-securing and use of property of the university. This is the leading factor to ensure the university can implement its mission. Financial mobilization can be realized from many sources: tuition fees, research funds from the State, from business sector, from consulting services, from international cooperation, etc.

Currently, AOF is among a few universities having high budget coming from the State. This source is guaranteed partly for regular expenses of the Academy. However, only with this, the Academy cannot, even in the long run, be fully self-financed or at least partly self-financed for its regular budget.

The following issues need attention to be paid:

First, due to being bound by the tuition fee frame set forth by the Government, the revenue of universities is limited.

Second, revenues from technology transfer activities and services of the Academy is almost insignificant. Research and consulting programs under contract with businesses and other organizations have not been systematically promoted in the Academy.

Third, revenues from international co-operation also accounted for very small portion in recent times. The Academy has been too slow to exploit this potential source. The reason for this is lack of a mechanism to promote the cooperation and competent staff for this activity.

Fourth, revenues from training and consultancy services are not much due to low efficiency in implementation. According to the recent report, the average net income from these operations was approximately VND 500 million.

Fifth, income generated from the internal services organized is not significant. AOF has not organized a company to exploit "internal market

for student” namely cantina, library, sale of textbook, foreign languages training, information technology,.... .

Sixth, the financial management system needs further improvement to assist the Academy to identify which activities are effective and which are not.

6.3. Autonomy in organization of research and personnel involved

Indicative figure for enrollment was approved by the Ministry of Finance based on the proposal of the Academy. Planning of human resources development, staff recruitment, training, personnel utilization, management is under decision of the Academy, except the appointment of leaders by the Ministry of Finance.

Thus, it can say that this kind of autonomy has worked well by the Academy and it has assumed clear "self-responsibility" though it looks on appearance that the Academy is dependent on the Ministry of Finance. To be more successful, the remaining problem in this autonomy of personnel management, organization that needs to be solved is building the Academy management machinery in a maximum decentralized manner by giving more authority to the units in the Academy [11].

6.4. Solution for the autonomy and self-responsibility issue of the Academy of Finance

To elaborate a development strategy with clear objectives is important and indispensable for achieving autonomy of a university. In this respect, AOF should define its own strategic objectives to be a leading university, in which achieving autonomy goal is a means to reach strategic objectives.

From that mindset, we believe that the goal of autonomy is long-term goal, it should be carried out through several stages:

- Stage 1: Increased self-financing to the highest level towards full autonomy in regular expenditure; step by step achieving autonomy in academic;
- Stage 2: Full autonomy in academic and administration model, internal organization. This objective will not be completely achieved if state institutional reform for universities unchanged.

First, the AOF should build up, at soonest, a business model for this matter. In this model, we need to determine clearly the stable number of students, stable number of teachers and management staff, the standards for a stable infrastructure. On that basis, it can determine fixed and variable costs for one trainee.

Second, AOF need to seek investments for training services through various forms. Different institutions can be established within the Academy or the Academy can joint venture with other outside organizations of high reputation by giving counterpart in-kind contribution (the Academy brand) to increase competitiveness.

Third, the AOF should ask the State to allow the Academy be flexible in the use of revenues from tuition fees credited in the bank account instead of having to debit all to the State Treasury.

Fourth, it needs to use effectively the Academy's brand and infrastructure, good location to increase the revenue from the Academy services.

Finally, the Academy needs to promote scientific research, publication and associated training services, international recruitment to raise income, ensure the quality up to standards.

7. Conclusions and recommendations

7.1. Conclusions

The paper presents the need, the current situation and possible solutions to *overcome the cumbersome in the financial mechanism for funding scientific research in universities in Vietnam in general* and in the AOF, in particular. The article pointed out achievements, constraints, the need of having measures to overcome the bottlenecks in the financial regime for scientific research in universities. On the basis of recommendations for a improved mechanism with a view to better and effective mobilization and use of financial resources, the author suggested a cluster of solutions to complete financial mechanism for S&T in universities of Vietnam in coming years. For a more in-depth paper, the author will continue to conduct further studies to produce other article to express a reflection that not only in higher education sector but also in other sectors, financial regime always exposes "bottlenecks" that should be overcome and removed.

7.2. Recommendations

1. *First*, it should create an institutional environment to enable scientific research products become commercialized, traded between scientists and entrepreneurs.
2. *Second*, the support to the scientific and technological market and relevant regulations of the State should be strengthened.
3. *Third*, funding sources to support research organizations and tax incentive policy for them should be revised and updated.

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