

JOURNAL OF CORPORATE RESPONSIBILITY
AND LEADERSHIP

INNOVATIONS IN CORPORATE SOCIAL RESPONSIBILITY
AND PUBLIC MANAGEMENT

Public Investment Management of Higher Education in Vietnam: Current Issues and Policy Recommendations

DOI: <http://dx.doi.org/10.12775/JCRL.2018.022>

LE NGOC LAN

Foreign Trade University, Hanoi, Vietnam
e-mail: lanltn@ftu.edu.vn

VU MINH TRANG

Foreign Trade University, Hanoi, Vietnam
e-mail: mtrangvu97@gmail.com

Abstract

Purpose: The aim of the paper is to provide a comprehensive insight on public investment management practices in higher education and experiences of developed countries, to analyse the current approaches to public investment management in Vietnam and to propose applicable policy recommendations.

Design/methodology/approach: Case study based on literature of public investment in higher education and analysis of legal documents, reports and data regarding Vietnam's current practices in the field.

Findings: Public investment management practices of Vietnam still follow the traditional approach, which has shown various weaknesses and drawbacks in terms of efficiency, lack of unification, and incapability of higher education institutions to seek for autonomy and alternative operational resources.

Research and practical limitations/implications: Lack of quantitative data and survey tools to enhance the practical implementation of the study.

Originality/value: This paper can become a reference resource for policy makers in terms of promoting reforms in the public investment system for higher education in the future.

Paper type: Case study.

Keywords: higher education, public investment, public investment management, higher education funding.

1. Introduction

Training and research and development (R&D) are the areas that need government support. The government is directly responsible for the majority of investments in basic education in most countries. In addition, public investment in higher education also creates learning opportunities for individuals who are not financially capable as well as it facilitates the access to this service. Improving quality of higher education in Vietnam is an urgent need in the process of comprehensive renovation of domestic education and at the same time enhancing competitiveness when integrating into the region and the world. One of the solutions to improve the quality of higher education is to focus public investment resources on this education sector.

Research on public investments in the field of higher education, which focuses on analysing the experience of countries in regard to the state budget revenue and expenditure policy, learning about public investment scale, public investment structure and allocating public investments in higher education is an essential job to draw lessons for the education sector in Vietnam. Therefore, the aim of the paper is to provide a comprehensive insight on public investment management practices in higher education and experiences of developed countries, to analyse the current approaches to public investment management in Vietnam and to propose applicable policy recommendations. The study employs the case study methodology based on literature of public investment in higher education and analysis of legal documents, reports and data regarding Vietnam's current practices in the field.

First of all, the theory of public investment management in higher education is discussed, including its mechanisms, and the input-based and output based types of public investment management. Secondly, the study explores the insights and lessons regarding public investment mechanisms in higher education in European and developed Asian

countries. Thirdly, the process and current situation of public investment management in higher education of Vietnam are analysed. Finally, policy recommendations on the public investment management system reforms for the higher education sector in Vietnam are proposed.

2 Literature review on public investment management in higher education

2.1. Public investment in higher education

Public investment is understood as the state sector's share of physical capital to create public goods and social services, such as roads, jetties, schools, and hospitals. Public investment capital is usually taken from the state budget, government bonds, or foreign development aid. Depending on the concept of each country, public investment may include projects for business purposes, through the state-owned enterprise sector (SOE), or projects that are purely public (United Nations, 2009). In Vietnam, public investment is defined uniformly and specifically in Law No. 49/2014/QH13 Public Investment Law issued on June 18, 2014: "Public investment is the investment activities of the State in programs and projects to build socio-economic infrastructure and invest in programs and projects for the development of the economy and society".

Public investment in the field of higher education is commonly understood as the investment activity of the State in education programs, projects to build infrastructure for education and projects for educational development. Education spending in general and higher education spending in particular have become one of the common policies of all countries, not only developed countries, but also developing and underdeveloped ones. However, the level of expenditure is completely different between countries and periods (Ministry of Planning and Investment, 2016).

Studying public investments for higher education is also the issue of the economic politics of higher education finances. According to Tilak (2004, 2006), there are four models of access to higher education finances, including: (1) traditional subsidies – meaning that the state pays with the state budget, (2) loan, (3) borrow and pay according to income, (4) and pay according to income tax due to university

graduation (high income). One of the issues that concerns countries is the ‘non-exclusive’ characteristic, which allows citizens to participate in the education process. It means creating the best conditions for all citizens to have equal access to education services in general and higher education services in particular through investment from the state budget (public investment).

2.2. Public investment management mechanisms

The management of public investments in higher education of countries is defined through public investment management mechanisms. Salerno’s (2004) study identifies four main forms of public investment mechanisms for higher education institutions, taking into account the scale of centralization of the system and the foundation of budget calculation.

The first mechanism is the traditional type of public investment, in which the system provides investment capital based on annual requirements (work plans and budget expenditure proposals) submitted to the regulatory agencies. Although the central level plan sets out the rules for allocation, in fact the various detailed budgets are often based on the previous year’s budget allocations. Separate budget items are then negotiated between the representatives of educational institutions and relevant funding agencies (such as the ministry of education or the national funding board). Annual changes (usually in an ascending trend) for any particular item are processed on an institutional basis and are often based on cost estimates. Typical areas of investment include: staff salaries, facility requirements, maintenance and investment costs, as determined by indicators such as unit cost or capacity (e.g., the number of sponsored students) (Salerno, 2004).

The second mechanism is still a centralized system but now the criteria for allocating funds are based on the results achieved, not the required inputs. The criteria used vary, but the outcomes may include the graduation rate or the number of credits earned by students of different disciplines in an institution. The examples of this form are the Danish tax calculator model or the Swedish funding plan, both of which invest funds allocating them to organisations based on a combination of enrolment and number of credits passed. This is also the case in the Netherlands, where funding is based on the number of first-year students and the number of master’s degrees awarded (Jongbloed and Vossensteyn, 2002).

The third mechanism describes key market-driven systems, in which higher education institutions compete primarily through the supply of graduates or research activities by submitting applications for bids to national budget agencies. Competition is encouraged and applied not only to educational activities but also to scientific research (usually through national research councils). Contracts are established between funding agencies and higher education institutions, with the goal of providing graduates for labour market needs, or research results to enhance the creative capacity of the nation. It is important that organisations receive core financial resources only while meeting agreed criteria, which may include the types and qualifications of students admitted to higher education institutions. The maximum tuition fees are calculated by the institution and due to the higher education institution's commitment to ensure quality of training for its students (Salerno, 2004).

The fourth mechanism is considered to be the most progressive and is considered by many studies. Basically, the organisation's core financial resources are closely linked to the needs of educational service users. Students receive documents to participate in optional educational institutions with flexible parameters. Higher education institutions must monitor quality of their teaching and training programs, because unattractive programs will receive no funding. Tuition fees may be set by the government, but price flexibility will draw students attention to quality of the service they receive from higher education institutions (Salerno, 2004).

2.3. Input-based vs. output based public investment management

There are various types of public investment management in higher education, which can be classified into two categories: input-based and output-based. Input-based public investment in higher education includes:

Allocation and management of investment budgets based on goals and results: This form guides the allocation and management based on given results and targets along with specific financial limits to be allocated. Higher education institutions wishing to receive this investment from the state budget require a commitment to meet the quantitative and qualitative goals of the allocated capital. In general, the conditions for this budget allocation are feasible investment projects, scientific research projects submitted and approved according to

the objectives and outputs. This approach helps investment finance managers as well as higher education institutions take the initiative in approving, allocating and managing budgets for educational activities. The investment projects emphasize quality of output products to determine the level of investment from the state budget for educational institutions. High-quality programs are invested more than mainstream programs. Key programs will be prioritized in investment projects funded by the state budget (Jongbloed, 2004).

Allocation and management of investment budgets based on expenditure categories: With this approach, items invested by public budget must comply with regulations. It is not allowed to spend from one item to another. The approach to public budget investment for higher education institutions in particular and for state agencies in general under this model has eliminated the self-determination factors of those receiving investment and is only determined in the specific gauge format (Jongbloed, 2004).

Formula funding: Most countries in Europe use sponsorship formulas to calculate the size of public subsidies for teaching and / or ongoing activity and, in some cases, research. The investment areas in the formula include input criteria (e.g. enrolment, staff) and / or performance indicators (e.g. credits, diplomas). The sponsorship formula is popular for a number of reasons. Justice and transparency are two of the important attributes of the formula. Reducing the administrative burden is another compelling feature of a recipe, because once established, the application of this formula is quite simple. A set of rules apply to all universities and there is no need to negotiate with each institution separately (Jongbloed, 2004).

The current trend of public investment management in higher education sectors in developed nations has been shifting focus to the output-based budget provision, in which higher education institutions are provided with funding calculated by their respective performance-based indicators, including criteria related to quantity and quality of education and training, and academic research activities. The practices applied in output-based public investment in higher education include:

Performance-based funding: It is clear that the relevant inputs are still important in all countries, although there is a gradual trend of attention to performance-based subsidies. Although a number of countries have reduced their investment inputs to focus more on

performance-related factors, none has a 100% performance-based system. One of the reasons for the moderate attention to efficiency factors is the difficulty in unifying indicators that can fully and comprehensively assess both quantity and quality. The typical investment regime includes extreme politicized investment decisions, but today the financing formula has been used instead of negotiating-based methods. The budget for education is based on the number of students, updated annually for changes in student numbers. Research and teaching funding is combined, and the allocation mechanism for grants is growing. In most countries, funding includes teaching and component research, which is calculated based on different criteria (although universities are autonomous about how they spend this money). Research funding allocation also experiences changes from a basic funding formula to one with output factor (quality of research activities) (Jongbloed, 2004).

Project funding: Many countries have a research committee that awards project grants for scientific research projects at universities – the ‘dual mode’ model. This means that, in addition to the main funding of academic research (institutional or direct funds that are a part of a one-time income), there is a second source of competitive funding originating from a research council or an intermediary organisation. Competitive research funds are awarded based on research proposals prepared by research groups. In some countries, an important part of the current funding is channelled into competitive research contracts and other contract studies. Regarding research funding, the tendency to attach new (additional) research funds to specific priorities is chosen by funding agencies. In other words, while competitive research funds may still be initial projects, many governments are forcing specific conditions and goals into new competition funds. An example of this is the emergence of new research programs and programs to carry out strategic studies such as elite centres. The proportion of funds distributed through competing funding programs (e.g., research councils) is increasing in proportion to the funding allocated with direct donor formulas and programs. Although the donor funding system still appears to dominate national systems, in all countries the percentage of project funds for research has increased (Jongbloed, 2004).

Contract funding: Switching to the third type of funding (besides formula-based grants and project funds), another popular

form of funding is through contracts. Funding contracts, signed between donor agencies and individual universities, are the example of the third type (decentralized, output oriented) of public investment mechanisms identified by Salerno (2004). This funding approach can be seen as a way for the government to ‘buy’ a product made of higher education operations (Jongbloed, 2004).

3. International experiences on public investment management in higher education

Most countries apply a range of public investment practices into management policies, with a further focus on an output-based, decentralised approach. The role of the government now is to supervise. As an investor, the government may also choose to be more flexible. For example, when basic expenditure items can be met relatively adequately with the budgets of provinces, cities or the school itself, the government can focus its investment on training projects and strategic or ground-breaking research (Le, Nguyen, Nguyen, Hoang and Vu, 2017). It is important to study the common characteristics and experiences of the public investment mechanisms in various nations in order to define the current issues lasting in Vietnam’s current public investment management in higher education process.

3.1. Practices of performance-based funding mechanism in Europe

Compared to the 1990s, when only a few countries with performance-related criteria played an important role (Denmark, the Netherlands, Poland, Sweden and the United Kingdom), nowadays there are nearly 20 countries with performance factors being used to balance the budget investment in higher education institutions, including: Austria, Belgium (Flanders), Denmark, Germany, Estonia, Finland, France, Greece, Iceland, Italy, Netherlands, Norway, Poland, Romania, Slovakia, Slovenia, Spain, Sweden and the UK. Even the funding mechanism for higher education systems in many countries in Central and Eastern Europe, previously guided by central planning, has been reshaped. The typical investment regime includes extreme politicized investment decisions, but today the

financing formula has been used instead of negotiating-based methods (Jongbloed, 2004).

More specifically, in each of the countries' education systems, there are different approaches. In the Danish system, the allocation of teaching funding (on average one-third of university revenues) is directly linked to the number of students who pass their exams. In the Dutch funding system, the distribution of university teaching funding is in 50% based on the number of degrees and in universities of applied sciences the graduation rate affects funding. While funding for teaching activities in the Czech Republic is mainly based on inputs (number of students), output criteria such as the number of recent graduates have been introduced. Today's Italian funding is also based in part on the outcome of research-related activities (through the introduction of a practical research review). The Norwegian funding system allocates funds according to the formula based on a combination of a fixed component (60%) and components resulting from education (25% based on student credits and graduate students) and research (15% based on a combination of the following performance indicators: doctoral degree, EU funding, research council funding and number of publications). In Sweden, funding criteria for teaching are a combination of the inputs (full-time student equivalent) and outputs (student achievement on credit). Universities in the United Kingdom receive research budgets based on periodic quality assessments that include research evaluation (RAE) tasks. The budget for education is based on the number of students, updated annually (Jongbloed, 2004).

3.2. Experiences in current public investment in higher education practices in Asian developed countries

According to the report by Le et al. (2017), the practices in Korea, Singapore and China show that investment in research is always one of the top priorities. Governments in all countries have increased investment in research at universities, building research centres to enhance research capacity and competitiveness of universities.

In the context of globalization and rapid change of technology, the mastery of knowledge and skills and the ability to create new technologies is an important step for countries to maintain their competitive advantages. However, it should be emphasized that

selectivity is one of the basic conditions to ensure optimisation of investment resources. Countries have carefully selected and focused resources on a number of key research areas with potential for future development. So, which industry should be considered as a spearhead? In fact, there is no common answer for all countries. Keeping up with the general trend is essential. Still, a sector that has the potential to grow in the world can be an effective investment for one country, but less effective for another. The creation of foundations for key industries depends heavily on the available advantages as well as the adaptability and transformation of each economy. On the other hand, the agility and long-term vision of the government are also important factors to ensure the investment budget will be effective. This can be clearly seen in the case of Singapore and South Korea (Le et al., 2017).

On the other hand, the process of analysing large investment projects in Korea and China shows that investment packages to promote government research always accompany or include investment items for infrastructure. The quality of education and research infrastructure, especially laboratories, and the accompanying equipment, are essential for quality of the high-tech research that these countries seek. On the other hand, modern facilities and high remuneration are the foundation for Korea, China and Singapore to attract high quality human resources from abroad (Le et al., 2017).

However, governments of all countries now tend to encourage the diversification of investment capital for education, especially in higher education. Increasing sources of off-budget investment not only reduces financial pressure on governments but also brings other positive effects. For example, in the case of China, when financial responsibility is decentralised to the local level, the governments of the provinces and cities will have to be more active in seeking revenues to ensure education expenditures. Similarly, when universities in Singapore are financially autonomous, on the basis of cost-benefit considerations, schools will proactively set appropriate tuition rates. A higher level of responsibility makes schools more flexible if they want to maintain financial stability and improve their competitiveness (Le et al., 2017).

Regarding the form of budget allocation for higher education, it depends largely on the institutional system of each country. Nevertheless, it is possible to identify the most common principles that

governments apply to improve public investment. Firstly, every form of budget allocation must ensure the selectivity of investment items. As mentioned above, governments of all countries have directed investment budgets for a number of key universities, a number of key research fields and potential to compete in the world. However, the investment efficiency can only be achieved on the basis of carefully selecting subjects to receive investment through transparent mechanisms. The true capacity of new schools is a factor that helps the government quickly achieve initial investment goals, including closing the gap with advanced education around the world. On the other hand, the more transparent the recruitment mechanism is, the more competitive it is (Le et al., 2017).

Secondly, the budget allocation to universities should be determined based on performance. Different from the target system applied decades ago, formula funding and performance based funding are not only flexible, bringing investment efficiency but they also contribute to strengthening transparency in the budget allocation process. This can be clearly seen in the case of Korea and Singapore. On the other hand, in the trend of university autonomy, this will be appropriate because the government no longer manages through administrative orders anymore but acts as a buyer of services (Le et al., 2017).

Thirdly, for research and development, it is advisable to maintain the competitive allocation mechanism. Unlike teaching expenditures, research expenditures are less constrained by social equity goals (such as equality of access to education at the university level). Therefore, the efficiency factor is much higher. The governments of South Korea and Singapore maintain funding for research projects for all universities. In the context of reasonable competition criteria and the transparent selection process, this allocation mechanism will help the government select the recipients of capital that have the best capacity, ensuring investment efficiency. In addition, these funds are usually directly controlled by the Ministry of Education to ensure fair competition for all universities (Le et al., 2017).

Fourthly, all forms of budget allocation must ensure accountability of the parties. If accountability is not enforced, budget allocations will become less transparent and create enormous social losses. Schools or projects, who receive investment, need to be seriously and publicly assessed to ensure the efficiency and transparency of

the use of investment capital. External or third-party assessments are the form used by South Korea and Singapore. As a result, the government can take appropriate measures to adjust behaviours of recipients to avoid losses and encourage competition. Meanwhile, the lack of mechanisms to assess and monitor investment funds in the case of China has raised concerns about equity in budget allocations between universities (Le et al., 2017).

The government, as an investor, also needs to exercise certain accountability. Public investment in higher education is essentially a resource that residents contribute (mainly through taxes) that the government is the representative for management and use. Therefore, the government also needs a public account of the items of the budget spent and the effectiveness of these expenditures. Auditing is therefore not only mandatory for universities but also for government agencies that are directly responsible for the relevant budget items (Le et al., 2017).

4. Current situation of public investment management in higher education of Vietnam

4.1. The process of public investment management for higher education in Vietnam

According to current regulations, the process of public investment in higher education is carried out according to the following three steps: (1) investment strategic planning, appraisal and approval, (2) public investment projects planning, appraisal and distribution, and (3) funding distribution and public investment project implementation.

Step 1: Investment strategic planning, appraisal and approval: The formulation of a proposal report for investment projects of higher education institutions should be based on the orientation of development within the institution, in accordance with the targets set out on the development planning of the institution, industry, region or nation in medium term and long term and applicable for the available capability of the institution. Based on the proposed investment policy report, as well as the ability to balance the budget revenue and compliance with the legal provisions on investment and

financial management, competent authorities according to decentralisation (usually in charge of the decision making progress) shall make evaluation and appraisals (based on the opinions of planning and investment agencies and finance agencies of the same level or higher depending on the programs or projects) and submit to competent authorities for decision on the investment policy. The decision on public investment policy serves as the basis for the process of summing up the list of projects, approving the total investment and the allocation in the medium-term public investment plan. Under the Public Investment Law of 2014, before the 20th of October of the fifth year of the previous plan, the Government submits to the National Assembly the plan for the next period. Before 10th of November the National Assembly shall decide the plan for the next period. Before 20th of December, the Prime Minister assigns the medium-term investment plan for ministries, sectors and regional agencies. Before 31st of December, the Ministry of Finance and Planning shall give out detailed plans for public investment to ministries and local governments (Ministry of Planning and Investment, 2016).

Step 2: Public investment projects planning, appraisal and distribution: Based on the investment strategies already approved by competent authorities, higher education institutions shall make evaluation reports and finalise the public investment projects and programs for submission to competent authorities for appraisal. On the basis of the evaluation results, competent authorities shall issue decisions on investment in public investment programs or projects. Accordingly, activities and cost estimates for the implementation of the programs and projects will be clarified annually and throughout the duration of the program or project based on the total investment and the previously planned distribution in the medium term public investment strategic plan. Estimated project funding will be aggregated and allocated based on the annual public investment plan submitted to competent authorities for approval (Ministry of Planning and Investment, 2016).

Step 3: Funding distribution and public investment project implementation: The allocation of investment capital to higher education institutions is in accordance with the allocation procedures stated in the national public investment strategies for ministries, as well as additional funding plans for local agencies. Accordingly,

based on the annual public investment plan approved, the competent authority will allocate investment capital to the corresponding unit, which can be a ministry, sector or region. Based on that, the corresponding unit will allocate the funding, either directly to higher education institutions or indirectly by decentralisation. In addition, the State Budget Law, the Public Investment Law, Decree 77 regulates the allocation and use of state budget reserves, whereby the Government stipulates reserve funds in the medium-term public investment plan to deal with emerging issues. The contingency reserve is 10% of the central budget for medium-term plans of the central ministries, agencies and regions for unexpected projects to meet urgent demands (Ministry of Planning and Investment, 2016).

4.2. Current issues on public investment management process in higher education of Vietnam

In Vietnam, in the past years, the Party and State have always paid attention to the development of education. The 2005 Education Law (revised 2009), the Law on Higher Education of 2012 and the Professional Education Act of 2014 recognize public investment in education as development investment. The state prioritizes education and the state budget must remain a major player in the total investment in education. According to statistics, in the end of the 2016–2017 academic year, the higher education system of Vietnam included 235 universities and institutions (170 public, 60 private ones, 5 foreign owned), 37 scientific research institutes assigned to train doctoral students, 33 colleges of pedagogy and 2 intermediate schools of pedagogy. The state budget is still limited, but the State has always reserved a considerable proportion of the budget to be invested in higher education (Ministry of Planning and Investment, 2016).

While there has been a remarkable change in the strategic focus of public investment in higher education, as well as the quantity and policies dedicated to improve the system, the public investment management mechanism in Vietnam still follows the traditional practices (budget provision, and input-based reliance). This has led to various issues regarding investment inefficiency, the lack of investment strategies, especially in terms of promoting educational quality and research activities, and incapability of higher education institutions

in implementing autonomy or private partnership. According to the Central Institute for Economic Management (CIEM) (2016), although the Law on Procurement and Decree No. 15/2015/ ND-CP on investment in the form of PPP has created a legal framework to apply market principles in allocating public investment, but so far many regulations have not come to practice due to the lack of provisional guidance. Ministries, sectors and localities have not yet developed an uniform system of criteria for allocating, monitoring and evaluating public investment. Research results of the CIEM also pointed out that disciplines of public investment management have too many loopholes, leading to ineffective and unmanageable implementation practices. Public investment management processes have not yet been established.

In particular, the current process of managing public investment in higher education poses the issues as below. Firstly, the process of managing public investment is not uniform for the whole higher education system. The university system is currently managed by three different agencies, two national universities are directly managed by the Government, the Ministry of Education and Training, the remaining universities are managed by provinces. Thus, it can be said that the process of managing public investment in higher education in Vietnam is diversified and this difference has an impact on the efficiency of public investment for universities (Ministry of Planning and Investment, 2016).

Secondly, the appraisal process of the investment project has shown inconsistency, the lack of appropriateness of the proposed strategies, and failure to follow the development targets of the nation, sector and the institutions themselves. According to the report by the Ministry of Planning and Investment, a survey of 68 universities revealed that 81% of schools confirmed that they had a school development strategy and 73% had a school development plan. However, as many as one-fourth of the schools said that the plan did not include the list of projects expected to invest. One of the reasons given for the appropriateness of investment is the urgency of the proposed projects. The report also shows that up to 35 projects (or 61.4%) are funded based on the temporary demands for the institution's operation (Ministry of Planning and Investment, 2016).

Thirdly, the process of evaluating the effectiveness of the project has not been implemented appropriately. According to Lavado

and Domingo (2015), the calculation of the efficiency of a public investment project is focused on the source of investment capital. Efficiency is reflected through a comparison between the expected benefits of the investment and the cost spent. A common tool used to perform this comparison is the cost-benefit analysis. However, the regulations on investment monitoring and supervision do not require projects to demonstrate the effectiveness of investment. For example, Decree 113/2009 / ND-CP on monitoring and evaluation of investment stipulates five forms of project evaluation: initial evaluation, mid-term evaluation, end-of-term evaluation, impact assessment and unexpected evaluation, but no form of assessment has specific requirements to evaluate the effectiveness of investment, not to mention the method of cost-benefit analysis. The Public Investment Law (2014) also contains provisions on the forms of evaluation of programs and projects, but not specific enough to be applied and reflected in the report proposing investment policy. As such, investment efficiency has not been paid attention as one of the most important conditions for approval of the project.

Fourthly, the post-investment evaluation system has not yet been established to assess and evaluate the project's performance. For public investment projects, it is necessary to assess the extent to which they have achieved or been able to achieve the desired objectives and outcomes as described in the detailed project documentation. A report by the Ministry of Planning and Investment shows that at present, the lack of a system for monitoring output results in higher education institutions means that the efficiency of investment has not been used as a necessary criterion for evaluation and selection of projects (Ministry of Planning and Investment, 2016).

Finally, there is a lack of mechanisms to ensure sustainability of the project. According to the Ministry of Planning and Investment (2016), 45.6% of the projects do not include maintenance costs and there are about 12% of other projects are unclear about whether this is included.

Attracting investment capital and allocating state budget for higher education also pose various practical issues, indicating the failure of meeting international standards. As the allocation of the state budget still follows the traditional approach – with conditional adjustments according to proportion, the new funding mechanism has brought about misunderstanding in terms of 'autonomy', which is

being understood as ‘financially independent’. Higher education institutions have not proven that they are oriented towards a sustainable vision, currently requesting and receiving funding for ‘urgent’ needs rather than strategic long-term development proposals. In terms of suitability, there is a lack of financial mechanisms to link universities with domestic industries and activities. There is also insufficient encouragement for higher education institutions to practice administrative autonomy and parting from the reliance on state budget to actively seek for private sources of funding. The quality of the public investment proposals has also been overlooked, since there is no apparent link between the aims of investment with the institution’s performance, as well as the development of crucial long-term aspects in education and training, scientific research and reforms on management and administration.

5. Policy recommendations on the public investment management system reforms for the higher education sector in Vietnam

From the theory of public investment mechanisms and practices applied by developed countries, it is advised that the public investment management system in higher education of Vietnam shall experience comprehensive renovation from the capital allocation process and a clear investment evaluation procedure, consisting of both input-based and output-based factors that higher education institutions can follow to enhance their strategic visions, training and research performance as well as autonomy and openness for non-state resources. In order to fully reform the public investment management system, the authors agree with the policy recommendations from the report of Ministry of Finance and Planning (2016) with modifications with the recommendations as below:

5.1. Renovating the overall mechanism of capital allocation for higher education institution: merging separate authorities into a uniform system

In the long term, the mechanism for allocating capital to higher education institutions is to simultaneously implement both recurrent expenditures and budget investment expenditures, which are managed by a central agency to improve efficiency and the performance of investment capital. International experience shows that it is important

that each unit, when planning, has to consolidate its recurrent expenditure plan and invest in a single joint development plan. In the case of Vietnam, the report provides an example model of the National Council for Higher Education, the unit under the management of the Prime Minister to become responsible for the allocation of funding budgets for the higher education sector.

According to the above model, the National Council for Higher Education will manage both recurrent and capital expenditures allocated by the government to the sector. This budget will be divided into packages (or different budget funds) to meet different objectives of higher education institutions, specifically as follows. The allocation funding is funded to establishments to ensure normal operation at the standard level for public facilities. With this budget, the allocation will apply priority criteria to encourage establishments to be able to stabilise their operations and commit themselves to a gradual increase in autonomy.

The competitive projects funding will carry out the capital allocation based on the quality assessment of the projects for the proposed facilities based on a detailed scale, and the funding is made for projects with a high to low score based on the total actual capital of the package allocated annually. Thus, establishments will have to compete with each other based on the design and project management capabilities.

The performance funding will force higher education institutions to commit to improving the quality of activities after being funded. An objective performance monitoring and evaluation system will be set up to assess the implementation of those commitments by institutions. Funding will be carried out based on the commitment to improve the quality and operational proposal of facilities.

5.2. The roadmap for renovation of public investment mechanism for higher education: encouraging autonomy, strategic planning, competitiveness and social responsibility capabilities of higher education institutions

From the current model to the ideal model in the future is a long road, there should be gradual and careful shifting steps. The ministries, local branches and the Ministry of Planning and Investment consider to apply a part of the priority criteria to review these projects. The four criteria groups that can be considered for current priority include: (1) encouraging autonomy, (2) prioritizing training industries, (3) improving

institution performance, and (4) the quality of project proposals, which can be applied immediately to ‘encourage autonomy’ criteria and gradually with criteria based on the institution’s performance results.

During the near future, it is possible to apply the funding mechanism according to priority criteria for new arising projects when using the reserve capital in the total capital allocated or considered to apply when conducting the adjusting medium-term public investment plans. On the other hand, due to insufficient time for other reforms to be conducted synchronously to create a relatively adequate legal framework for all other priority criteria, it is possible to select some of the most simple and easy-to-measure criteria to pilot. At the same time, a series of other innovation activities need to be implemented in parallel to prepare for a more radical renovation phase after 2020.

In phase 2, possibly happening around 2021–2025, it is possible to expand the capital allocation according to priority criteria to all ministries, branches and localities and apply the full set of priority criteria, while retaining a larger proportion of the state budget invested in higher education institutions to pilot the review and funding of projects on a competitive basis. For the capital allocated through ministries, branches and localities (for operational budget package), the ministries, branches and localities will implement the consideration and approval to export projects of higher education institutions within micro-management of ministries, branches and localities in a manner similar to the method of implementation with reserve capital in the previous period, but the set of priority scoring criteria will be complete according to the above three groups of criteria.

Finally, in phase 3 – the phase of comprehensive innovation, the system will shift to the ideal model. All investment and regular funds for higher education are consolidated into a single budget, which is divided into three component budgets. The basic budget is to ensure the maintenance of the operation of higher education institutions in the basic network of higher education institutions. The budget for reviewing projects under the competition mechanism is to encourage higher education institutions to develop quality projects that really contribute to improving the capacity of higher education. Finally, it is possible to study the formation and step-by-step replication of the budget according to the performance results in order to link accountability and commitment of higher education institutions to deliver contributions to society.

5.3. Reforms on the funding mobilisation mechanism: encouraging pro-activity and alternative funding for higher education institutions

To ensure that higher education institutions in general and public higher education institutions in particular develop sustainably, promote the participation of society, there is a strong demand for the renewal of capital mobilisation mechanism. However, to aim at the above model, it is necessary for the institutions to meet all conditions on institutions, policies and socio-economic development levels, based on the overall evaluation of the financial mechanism for education. In the near future, the foundation should be developed by strengthening autonomy policies, as well as overcoming legal difficulties and obstacles in implementing joint ventures, partnerships and cooperation of public higher education institutions. In the upcoming stage, piloting the application of financial models based on the form of unified common ownership for public higher education institutions with the participation of individuals and non-state organisations (private capital) can be implemented by amending and supplementing relevant legal regulations, including Education Law, Higher Education Law, Law on Education and Training and relevant legal documents to regulate and apply governance model in the direction of management business treatment in public higher education institutions.

In the final stage, the financial and capital raising mechanism for higher education institutions will be comprehensively renewed. State capital transfer for individuals and organisations outside the public sector or community of other higher education institutions can be implemented with a full legal basis for the process implementation, including the valuation of state assets, control of the process of divestment, transfer and recovery of state capital in higher education institutions on the state budget, formulating and implementing a scheme for job placement and support to find new jobs for public lecturers and employees of public higher education establishments that divest and transfer capital.

Conclusions

Improving quality of higher education, further enhancing competitiveness when integrating into the region and the world through the concentration of public investment sources is an urgent requirement for the higher education system in Vietnam. The paper has studied the definition of public investment in Vietnam, as well as the forms and process of public investment management in higher education applied in countries with developed higher education systems. Through the study of the recent report on public investment management context for the higher education system in Vietnam, the paper has analysed the key issues regarding the lack of an uniform mechanism in investment allocation, lack of integration and evaluation throughout the project implementation, the issue of sustainability of investment projects and policy limitations on giving higher education institutions the ability to practice administrative autonomy, non-reliance on state budget and enhancing competitiveness. From which, the research has proposed solutions accordingly to these issues, namely the development of a uniform funding system for the higher education system, further emphasis on investment criteria to enhance long-term development goals of higher education institutions, and encouraging university autonomy and private funding contribution to diversify the capital budget.

There are various limitations remaining in the paper, including the collection of quantitative data through developing and distribution of surveys due to lack of time and resources, as well as a practical questionnaire to evaluate the public investment management efficiency in the higher education sector. This will be conducted in the further studies of the authors with the desire to bring valuable scientific contributions to improve the public investment policy for higher education in Vietnam.

References

- CIEM (2016), *The Role of the State in National Investment*, Background Paper on the Role of the State in Viet Nam's Economic Development.
- Jongbloed, B. (2010), *Funding Higher Education: A View Across Europe*, European Centre for Strategic Management of Universities, Brussels.
- Jongbloed, B.W.A, Vossensteyn, J.J. (2002), *Financiering Masters: Argumenten en Arrangementen*, Center for Higher Education Policy Studies, Enschede, The Netherlands.

- Lavado, R., Domingo, G. (2015), *Public Service Spending: Efficiency and Distributional Impact – Lessons from Asia*, ADB Economics Working Paper Series, Asian Development Bank, Mandaluyong City.
- Le, T., Nguyen, T., Nguyen, V., Hoang, B., Vu, M. (2017), *Public Investment in Higher Education – International Experiences and Lessons for Vietnam*, Foreign Trade University.
- Ministry of Planning and Investment (2016), *Investigation and Assessment of Current Situation and Study and Proposed Reform of Investment Mechanism for Vocational Education and Training*, Project Report, Department of Science, Education, Natural Resources and Environment, Ministry of Planning and Investment, Hanoi, Vietnam.
- Salerno, C.S. (2004), “Public Money and Private Providers: Funding Channels and National Patterns in Four Countries”, *Higher Education*, Vol. 48, Issue 1, pp. 101–130.
- Tilak, J.B.G. (2004), “Higher Education Between the State and the Market”, UNSESCO, Forum Colloquium on Research and Higher Education Policy, 1–3 December.
- Tilak, J.B.G. (2006), “Higher Education Between the State and the Market”, in: Neave, G. (Ed.), *Knowledge, Power and Dissent: Critical Perspectives on Higher Education and Research in Knowledge Society*, UNSESCO, Paris, pp. 235–254.
- United Nations (2009), *The Role of Public Investment in Social and Economic Development: Public Investment: Vital for Growth and Renewal, but Should it be a Countercyclical Weapon?*, New York and Geneva.