

**EXCHANGE FOR POLICIES****A RETROSPECTIVE VISION TO INVESTMENT POLICIES  
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***Abstract:***

*The Party and the State investment policies for research and development (R&D) are seen in numerous aspects, namely: objectives of and solutions for higher investment rates, and focus on better efficient investments. In practice, however, these policies still have certain shortages. An analysis of these short aspects of the issued policies would provide hints for innovation of policies to be issued in the next period.*

**Keywords:** *Legal document; R&D policy; Investment policy; R&D.*

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In Vietnam, investment policies for R&D are seen in numerous Party and State documents. Some key documents can be listed, namely:

- Resolution No. 37-NQ/TW on 20<sup>th</sup> April 1981 by the Party Politbureau;
- Resolution No. 26-NQ/TW on 30<sup>th</sup> March 1991 by the Party Politbureau;
- Resolution No. 02-NQ/HNTW on 24<sup>th</sup> December 1996 by the 2<sup>nd</sup> Conference of the Party Central Committee, Session VIII;
- Resolution No. 20-NQ/TW on 1<sup>st</sup> November 2012, by the 6<sup>th</sup> Conference, the Party Central Committee, Session XI;
- Law on Science and Technology (S&T), 2000 Year;
- Law on S&T, 2013 Year;
- Decree No. 35-HDBT on 28<sup>th</sup> January 1992 by the Council of Ministers;

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- Strategies for S&T Development of Vietnam up to 2010 promulgated by Decision No. 272/2003/QĐ-TTg on 31<sup>st</sup> December 2003 by the Prime Minister;
- Decision No. 418/QĐ-TTg on 11<sup>th</sup> April 2012 by the Prime Minister approving Strategies for S&T Development, 2011-2020 period.

The paper will provide an analysis of master points of the issued policies.

### **Objectives of efforts for higher investment rates for R&D activities**

By 1981, the objectives of efforts for higher investment rates for R&D had been recorded, for the first time, in Resolution No. 37-NQ/TW as “It is necessary to raise financial investment rates for R&D activities up to 2% of the national revenues in the 5-year plan from 1981 to 1985”. After that, by 1991, Resolution No. 26-NQ/TW and Decree No. 35-HĐBT defined “Annually, the State allocates at least 2% of the State budget for scientific research and technological development”. Resolution No. 02-NQ/TW defined the target of “Raising gradually the annual expenditures from the State budget for R&D activities to achieve the rate not lower than 2% of the total budget expenditures”.

The adjustments from “the national revenue” to “the State budget” and from “R&D” to “S&T” are clear conceptual shifts. It is a trend to reduce investments for R&D<sup>2</sup>.

Another trend is more attentions paid for investments for cutting edge purpose, as indicated by Resolution No. 20-NQ/TW by the 6<sup>th</sup> Conference of the Party Central Committee, defining the S&T development and application as “important priority matter to get investments in advance in activities of State organizations of all the levels”.

### **Solutions for higher investment rates for R&D activities**

There were many solutions implemented to achieve higher investment rates for R&D activities, namely:

- More direct investment sources from the State budget combined with other sources:
  - + *From large scale works*: Issuance of rules to require adequate capital volumes to be extracted from the capital volume for large scale works for research and experiments of S&T research topics to serve the

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<sup>2</sup> In Vietnam, by 2013, R&D investments made 43% of the total S&T investments where 38.8% from State budget, 53.5% from enterprises and 17.6% from overseas sources (MOST, (2015) *Khoa hoc-Cong nghe Viet Nam, 2014 (Vietnam Science-Technology)*. Hanoi, Science and Technics Publishing House, p. 83).

- construction and operation of these work<sup>3</sup>; Issuance of rules to require the partial extraction of capital volumes of investment projects for research and evaluation of S&T research topics in relation to contents and quality of the projects<sup>4</sup>;
- + *From S&T organizations*: Issuance of rules to allow scientific organizations to establish themselves production-business units or JV units with enterprises of various economic status to conduct production-business activities (including export) for products produced by their own R&D activities. These moves would generate additional capitals for scientific activities, in addition to the allocated State budget<sup>5</sup>;
  - + *From enterprises*: Issuance of rules to require production-business enterprises of all the economic status to share a partial capital volume for R&D activities for innovation of technology and products<sup>6</sup>; to encourage enterprises to share a capital volume for innovation researches<sup>7</sup>;
  - + *From international sources*: Issuance of policies to attract overseas investment sources for S&T activities<sup>8</sup>.
- Issuance of rules of compulsory administrative nature to require enterprises and investment projects to hold certain finances for R&D activities. In addition to that, it is necessary to provide incentive economic measures (incentive taxation, credit sources and etc.) to encourage investments for R&D fields;
  - Establishment of funds and Public-Private Partnership (PPP) form for R&D activities, in addition to form of direct expenditures. The form of funds to be established is regulated by Resolution No. 26-NQ/TW by the Party Politbureau, Articles 39, 40 and 41 of Law on S&T, 2000 Year, and Articles 59, 60, 61, 62 and 63 of Law on S&T, 2013 Year, and etc. Finances for R&D activities are also to be mobilized by the PPP forms as noted in Resolution No. 20-NQ/TW, 6<sup>th</sup> Conference, Party Central Committee, Session XI.

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<sup>3</sup> Resolution No. 26-NQ/TW on 30<sup>th</sup> March 1991 by the Party Politbureau.

<sup>4</sup> Resolution No. 02-NQ/HNTW on 24<sup>th</sup> December 1996, 2<sup>nd</sup> Conference, Party Central Committee, Session VIII.

<sup>5</sup> Resolution No. 26-NQ/TW on 30<sup>th</sup> March 1991 by the Party Politbureau.

<sup>6</sup> Resolution No. 26-NQ/TW on 30<sup>th</sup> March 1991 by the Party Politbureau.

<sup>7</sup> Resolution No. 02-NQ/HNTW on 24<sup>th</sup> December 1996, 2<sup>nd</sup> Conference, Party Central Committee, Session VIII; Decision No 418/QĐ-TTg by the Prime Minister; Article 38, Law on Science-Technology, 2000 Year; Article 58, Law on Science-Technology, 2013 Year.

<sup>8</sup> Decision No. 418/QĐ-TTg by the Prime Minister.

These policy solutions show the Party and State great efforts for higher investment rates for R&D fields. Many among them are found compatible to experiences shown by many countries in the world.

Policy solutions to raise investments for R&D fields in Vietnam experienced changes during long periods. Particularly, some policies among them such as rules to require adequate volumes to be shared from total project capitals of large scale works for S&T researches to serve the construction and operation of the works were applied for certain time and then halted.

The process of review, revision and amendment of R&D investment policies was not much related to changes of actual contexts or objectives to raise R&D investment rates. Basically, it is the process of searches and tests to identify appropriate solutions and then certain solutions were tested during long periods of time.

### **Effectiveness of investment measures for R&D fields**

During stages of preparation, issuance and implementation of Party and State policies, the effectiveness of R&D investments gets early attentions and in many aspects, namely:

- Following strictly the global principle: R&D investments must be the way to give contributions to enhance fast the social productivity rate and economic efficiency of science-technique activities, and to turn these investments, in practice, to the highest productive way for national economic development<sup>9</sup>; and to make State S&T authority agencies more liable for management and effective use of State budgets for S&T investments<sup>10</sup>;
- Underlining the importance of investment control and the practice of efficiency based considerations for investments: stronger implementation of control, monitoring and inspection works for the use of S&T investments from State budgets by ministries, sectors and local governments, and more regular application of S&T investment policies based on effectiveness and outputs of activities<sup>11</sup>;

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<sup>9</sup> Resolution No. 37-NQ/TW by the Party Politbureau.

<sup>10</sup> Article 37, Law on S&T, 2000 Year.

<sup>11</sup> Decision No. 418/QĐ-TTg by the Prime Minister.

- Applying the identification of key focuses for use of State budgets for R&D investments: a particular attention is to be paid for national important S&T tasks and national products<sup>12</sup>;
- Enhancing financial self-management powers for State budget using organizations<sup>13</sup>, and assigning the property rights of scientific research and technological development results generated with use of State budgets to S&T task hosting organizations<sup>14</sup>;
- Implementing order-by-State mechanisms for S&T research tasks, and applying modes of purchase and/or lump sum contracts for research results in lines with individual specific features of S&T activities<sup>15</sup>;
- Integrating links between research and production activities in R&D investments on basis of rules to require S&T investments from large scale projects as well as to require and to encourage R&D investments by enterprises.

### **Remarks on results of policy implementation**

A retrospective vision to R&D investments made during recent years in Vietnam shows certain growths in absolute values<sup>16</sup> but reveals also that some of them fall short of basic expectations.

*First*, R&D investment rates remain very low. The total R&D investments of 2013 was VND13,390 billion (*MOST, 2015, p. 83*) which is low in comparison to some ASEAN countries. Really, the volume of R&D investments of Vietnam is equal to 30% of Indonesia, 15% of Malaysia and 6.4% of Singapore<sup>17</sup>. This low investment rate was clearly noted in assessments of global S&T investments by Resolution No. 26-NQ/TW by the Party Politbureau, Resolution No. 02-NQ/TW, 2<sup>nd</sup> Conference, Party Central committee, Session VIII, Resolution No. 20-NQ/TW, 6<sup>th</sup> Conference, Party Central committee, Session XI, and Decision No. 272/2003/QD-TTg by the Prime Minister.

*Second*, some policy solutions for promotion of R&D investment almost could not enter the practice, e.g. the rules to require large scale projects to

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<sup>12</sup>Resolution No. 02-NQ/TW, 2<sup>nd</sup> Conference, Party Central Committee, Session VIII; Article 37, Law on S&T, 2000 Year; Article 50, Law on S&T, 2013 Year.

<sup>13</sup>Decision No. 272/2003/QD-TTg by the Prime Minister.

<sup>14</sup>Resolution No. 20-NQ/TW, 6<sup>th</sup> Conference, Party Central committee, Session XI.

<sup>15</sup>Decision No. 418/QD-TTg by the Prime Minister.

<sup>16</sup> For example, the total S&T investments from State budgets was VND611 billion by 1996, VND1,885 billion by 2000, VND5,429 billion by 2006, VND9,170 billion by 2010, and VND17,085 billion by 2013 (*Source: MOST*).

<sup>17</sup>*Calculated by Battelle.* R&D Magazine, International Monetary Fund, World Bank, CIAWorld Factbook, 12/2013.

share adequate volumes of project capitals for researches of construction and operation activities of the works or for S&T researches of project related aspects and etc.

*Third*, S&T investments in general and R&D investments in particular did not bring clear effects and was not effective to promote strong driving forces for socio-economic development. The lack of effects is a refrain repeated multiple times in official documents in various times such as “State investments reserved for S&T development is low and ineffectively used”<sup>18</sup>; “The allocation and the use of State budgets for S&T sector remain inappropriate and ineffective”<sup>19</sup>; “S&T investments remain low and the effects of their use are not high”<sup>20</sup>. It is useful to note the remark in Resolution No. 37-NQ/TW on 20<sup>th</sup> April 1981 by the Party Politbureau on S&T policies: “S&T plans do not become organically integrated part of plans for socio-economic development. No plans of long term and well-focused investment were set up for S&T development, the capitals actually invested for S&T sector is not found adequate”. All these quotes show that during long periods, we did not manage to make any considerable steps forward to set the existing problems.

Gained effects from investment activities are very crucial in supports to attract new investment sources. In Vietnam, the senses of these support effects cannot be seen well until the effects from these activities remain unclear.

*Fourth*, the shortage in realization of R&D investment indexes, though influences the realization of targets of S&T development, does not cause clear impacts to the realization of defined objectives of socio-economic development.

The real weak situation of R&D investment activities is usually assigned to causes of lack of right awareness that the investments made for S&T development are the ones for social development in final accounts. Then, we do not make appropriate policies and mechanisms for mobilization of capital sources for R&D development<sup>21</sup>. The following part provides

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<sup>18</sup> Resolution No. 26-NQ/TW by the Party Politbureau.

<sup>19</sup> Resolution No. 02-NQ/TW, 2<sup>nd</sup> Conference, Party Central Committee, Session VIII.

<sup>20</sup> Resolution No. 20-NQ/TW, 6<sup>th</sup> Conference, Party Central committee, Session XI.

<sup>21</sup> Example: “The lack of right awareness that the investments made for S&T activities are for investments for social development. Resolution No. 26-NQ/TW on 30<sup>th</sup> March 1991 by the Party Politbureau (Session VI) defining the minimal rate of 2% of the total State expenditures for S&T sector was not rigorously implemented (actual practice of less than 1% during long years). The State does not make appropriate mechanisms and policies for mobilization of non-State sources of capitals for S&T development” (Source: Resolution No. 02-NQ/TW on 23<sup>rd</sup> December 1996, 2<sup>nd</sup> Conference, Party Central Committee, Session VIII on

discussions for some other reasons which may lead to the identification of targets and conditions for effective investments for R&D activities.

In Vietnam, the shift of financial expenditures from R&D activities to S&T sector made the objectives seen less clearly. In comparison to R&D activities, S&T activities are found closer to economic activities and, then, investments for S&T activities are easier to bring economic benefits and, so, more comfortable to attract investment sources. The shift to investments for S&T sector, however, implicates some difficulties.

In fact, the scope of S&T activities is very large including R&D activities, S&T services and S&T training activities. These fields of activities are very different in their natures and relations to investment activities, investment needs and capacities to attract investment sources. Once being listed in the global framework of S&T investment, the objectives of R&D investments do not get more supports but remain faded and then gets less priority focus.

Many countries in the world do not target S&T investments but R&D investments. The world's experiences show that external comparative investment rates cause pressures to raise domestic investment rates<sup>22</sup>. From this vision, the incompatibility to the world's practice in terms of targets of R&D investments appears one of our disadvantageous points.

Another limitation is the lack of clear definition of R&D activities' tasks for focused investments. They can be listed to include: roles and meanings of R&D activities for socio-economic development, and national security and defense; level of focus priorities and limits of scopes, subjects and time restrictions of R&D tasks selected for investment priority, determination and responsibility of R&D task assigning authority agencies; differences between roles and meanings of R&D activities in global terms and actual tasks assigned as priorities for focused investments. In practice, we are lacking not only highly categorized and justifiable research tasks but realizing many research tasks of low necessity and less scientific meanings.

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directives of strategies for S&T development in the period of industrialization and modernization and tasks to the year of 2000).

<sup>22</sup> Normally, R&D investment indexes are capable of causing pressures between countries. During the last half century, the US was believed to have dominating positions in global R&D investments. Many countries made efforts to raise their investment rates to compete the US positions. Actually, China attracts the world's attentions by its two-digit growth rate of annual R&D investment volumes during the last two decades. Many debates have place to interpret the challenges China puts to the other countries in the world. China passed many countries in these aspects and is forecasted to overpass the US in 10 years in terms of R&D investments. The competitive nature in R&D investments is also marked by economists. For example, in the work "*Economics*", the authors David Begg - Stanley Fischer - Rudiger Dornbusch emphasized "international comparative nature" when providing analysis of costs for R&D activities. A rating is also used to rank countries in terms of R&D investment rates. Recently the US had been warned to get down 8 ranks in terms of R&D investment rates among OECD members.

The conceptual vision of “focused priority investments in advance” noted in Resolution No. 20-NQ/TW, 6<sup>th</sup> Conference, Party Central Committee, Session XI is a new approach way. The underlined remark of “in advance” would advocate the future oriented investments. Even with that, the future objectives need to be indicated clearly. It is a real challenge because the long term objectives for future are always defined more difficultly than the immediate ones.

In addition to GDP, the growth of R&D investments gets impacted from other actors such as the requirement of compatibility to R&D human resources and R&D management capacities. We should note that our R&D resources remain limited in many aspects, namely: limited R&D human forces and not high qualification of R&D staffs (lack of high qualified scientists capable of leading high level research projects and under-qualification of research capacities of part of staffs in State-budgeted S&T organizations); inappropriate structure of distribution of human resources in scientific and economic fields (typically, a minor share of R&D staffs in high tech fields selected for development priorities).

These shortages cause impacts to R&D investment rates in corresponding aspects, namely: total investment rates for development of R&D human resources in global, investment rates for development of leading scientists and investment rates for priority fields which are investments of strategic nature. It is necessary to emphasize investments of strategic nature because they are to promote human resources ready for strategic development perspectives which play decisive roles to enhance effectiveness of investments as well as to raise investment rates for R&D activities of every nation.

Another shortage is seen in management of R&D expenditures, namely in determination and operation of mechanisms for control, establishment and implementation of actual management regulations. The reality shows a gap of actual management capacities from requirements of management practice. The conceptual vision for global and radical innovation of R&D management practice brings certain initial results and still has many further problems to settle.

The modes to determine objectives of investments and conditions to promote efficiency of investments because more impacts than the reasons frequently quoted from awareness level and policy solutions to mobilize capitals for R&D investments.

Efforts and continuous works were great to advocate the awareness for the roles of S&T sector and for the solutions to promote R&D investments. The awareness, however, cannot get separated from reality of mobilization of

R&D activities which are expressions of effectiveness of R&D investments. The awareness also needs to be well reflected in the modes to determine objectives of R&D investments. Policy solutions for mobilization of R&D investment sources have no ways to miss objectives of investments and conditions for promotion of R&D activities.

We are guided by the slogan: “Investments made for S&T activities are the ones made for development”. This slogan should be interpreted to mean that R&D investments (then for S&T development in general) are required to bring “essential development” for the country - a real development in the actual context of today. It is a new approach with higher responsibility towards social sources of investments for R&D activities. It is necessary to unify two aspects: scale of investments and efficiency of investments with more counterweights focused for efficiency. Therefore, the innovation of the modes to determine objectives and the pro-active initiatives to offer favorable conditions for realization remain tasks of central attention in the next time./.

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