

SOME EXPERIENCE OF CHINA ON REMUNERATION POLICY FOR SCIENTISTS

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Abstract:

In recent years, China has made every effort to improve their remuneration policy for scientists. Scientists are currently paid in accordance with their posts assigned and task performance assessment, taking into account specific characteristics of science and technology (S&T) activities and the national direction of S&T development. In effecting remuneration for scientists, China pays special attention to two priority groups of personnel, namely returned Chinese scientists living abroad and scientists implementing key and major S&T projects of the country.

This paper provides an introduction to China's experience in the reform of remuneration policy for scientists. On the basis of these lessons learnt from China, it makes some recommendations for Vietnam with respect to wage policy reform for Vietnamese scientists - an issue of great concern in Vietnam currently.

Keywords: *Remuneration policy; Wages for scientists; Experience of China.*

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1. Wage policy reform in China

In general, wage policy in many countries, including China, followed the old-socialist style model, which used to start with flat rates of remuneration and then gradually shifted to market principle by widening the gap between wage levels.

After the Revolution in 1949, China established a wage system with the characteristics of egalitarianism. All employees working in the public sector, regardless of rank, were provided with a minimum amount of basic necessities, goods and a small amount of money. For more than 20 years, since 1949, wages in China were not considered as material incentives in nature, no wage increase effective along the time, it was a stand still system.

In 1978, China began the market-oriented economic reform and this made the formerly egalitarianism wage system changed. In 1985, the wage system in

public sector was improved and it made a radical change to the previous wage system. It abolished the old-style ranking regime by introducing a new system whereby it was based on actual working posts with some special considerations such as seniority and past achievement. Performance and responsibility were the main factors to be considered when determining wages.

The wage reform in public sector in 1993 basing on the position and post of employees had three main features: (1) gradually phasing out the wage system existed in the egalitarianism planned economy; (2) creating a new system of competitive remuneration, taking into account the market volatility; (3) widening the remuneration difference between levels in the same system. For the first time, in China, the 1993 wage reform had created a mechanism for periodic wage increase, allowing wage scales to be automatically adjusted in line with the country's economic development, cost of living and price indices to ensure the real income of workers in the public sector constantly be increased.

The Labour Code in 1994 was for the first time prescribed a minimum wage system. Article 48 of the Code stipulated that minimum wage was to ensure essential daily needs of workers be provided.

In 2003, in order to strengthen the protection of the rights of workers by applying minimum wage, the Ministry of Personnel and Social Security promulgated specific provisions on minimum wage. Accordingly, the minimum monthly wage when established by provincial governments, it must consider some factors such as the level of economic development, labor demand and supply, cost for the basic needs of workers and their dependents, as well as the consumer price index in that locality. Minimum wage must be set between 40% - 60% of the average monthly wage and be considered at least once for every two years (Article 10) [6].

With such a wage policy reform, wage level and payment modality for all workers in China, including scientists had experienced significant changes.

2. Experience of China in wage policy reform for scientists

Before 1985, wage policy for scientists in China, like any other employees working in the public sector, was compliant with the principle of "egalitarianism". Since 1985, with the wage reform in public sector, scientists had been remunerated based on their job position and performance, taking into consideration of the characteristics of S&T activities and the

orientation of S&T development of the country. The aim was to promote the talent of scientists.

China pays wages for scientists on the basis of distinction between levels of education: college graduate, bachelor, PhD and professor in different job positions. Gap in wage level is doubled between the education levels. In this context, it means that scientists are not purely entitled with basic salary according to their education degree but it depends also on the correspondent position they occupy.

The income of scientists in public research institutes is composed of three parts:

- *Basic salary*: To be paid according to education level, accounting for 60-70% of the scientist's income. Salary increases once for every two years. Currently, the basic salary of a scientist with bachelor degree is around 1,600 Yuan/month (5.4 million VND), but in reality, his/her total income may be higher than 3,000 yuan/month (more than 10 million VND); for scientists with PhD degree, it is of more than 6,000 yuan/month (more than 20 million VND) and for professors it is of up to 10,000 yuan/month (about 34 million VND);
- *Responsibility allowance*: To be paid according to the position and title which the scientist is holding;
- *Remuneration thanks to the benefits brought from the work*: It includes bonuses, percentage of funding for research project or remuneration from research contracts with external institutions. With research activities having revenue (including research projects/themes), part of the revenue will be divided in proportion of 3-3-4 (30% as contribution to the host institution, 30% as for project leader and 40% for members of the research team) [5].

According to statistics from the National Agency of Statistics of China, in 2011, the average wage/month of personnel working in the field of scientific research and technical service ranked 3rd among 19 different areas of activity in China, it was nearly 5,300 yuan (17 million VND¹); Group of people working in the financial sector had a highest average wage/month with about 6,800 yuan (nearly 23 million VND); ranked second was the

¹ As announced by the State Bank, the average interbank exchange rate on 31/12/2011 between VND and Yuan was 1 yuan = 3,372 VND (Source: <http://www.brt.vn/149/46225/Ty-gia-ngoai-te-ngay-31/12.htm>)

group of people working in field relating to computer services and software development with an average wage/month of nearly 6,000 yuan (about 20 million VND) [7].

One further innovative feature in the China's wage policy for scientists was payment is made under specific labor contracts. Previously, scientists were paid from the state budget under a lifetime payroll regime, now working under labor contracts with clear job description, duties, rights, and the contract is subject to annual review. The performance of scientists was very strictly, seriously evaluated to decide whether the working contract with scientists would be extended or not. After evaluation, those scientists have not met the requirement they must be relocated to lower position compared with their academic degree and receive lower remuneration for the new post, accordingly. In China, the majority of positions, scientific posts (major researcher, senior researcher, professor) and management posts are given under termed contract through competitive selection. Lifetime working regime is only applied to elite professors. Each year, research institutes conduct assessment to select outstanding scientists to be entitled to lifetime payroll. Currently, the Chinese Academy of Sciences (CAS) has only 20% of scientists enjoying the entitlement of lifetime payroll. In research institutes, for those highly qualified staff when reaching the age of retirement, if they wish, they could stay on working as scientist but could not hold management position, accordingly they shall enjoy lower wage (no more other allowances). Through assessment and competition mechanism, 50% of scientists found inappropriate with the research project would be put under early retirement or transferred to other posts so as to ensure an annual rate of scientist transfer is 5% [5].

A highlight of the new Chinese wage policy for scientists is that China pays special attention to two groups of priority, namely invited/returned Chinese scientists living abroad and scientists implementing key and major S&T projects of the country.

As for world-renowned scientists, mainly Chinese scientists living abroad who are invited to work in the country, Chinese government is committed to pay them high remuneration at the rate not less than that they enjoy overseas. To attract overseas Chinese scientists to return home, many local governments or S&T organizations had issued specific wage and incentive policies, for instance, at the Chinese Center for Economic Research (CCER) of Beijing University, the wage paid to returned economists is

from 30,000-50,000 dollars per year, in addition to free house rental and other entitlements. A PhD degree obtained from abroad is the minimum professional requirement for getting a job at CCER. On average, there are about 10-15 candidates competing for a post at CCER [8].

In addition, returned scientists can apply to carry out State research project/theme (this policy is implemented at CAS); scientists returning home after 2-3 years may be assigned with the task as supervisor of post-graduate studies and they are entitled to remunerations/benefits according to their performance. The China's principle is: "Support stay overseas to study, encourage return home, freedom in leaving and returning", "Intellectuals shall keep the right of forever permanent resident overseas". China considers the attraction of talented Chinese living abroad is an important central task in the Plan "100 persons/year" of CAS and the Plan "Changjiang scientists" of the Ministry of Education.

Table 1. China's programs and policies to attract talented personnel to return to the country

Program	100 persons Plan	300 talents Plan	Changjiang Scientists Plan
Sponsoring Agencies	Academy of Sciences	Central Authorities	Ministry of Education
Duration	1994-1997	1998-2000	1999-
Budget	\$ 32 million	\$ 72,5 million	\$ 15 million / year
Target Group	100 plus scientists under 45 in 15 fields of study	300 scientists outside CAS	300-500 university titles under 45 years old
<i>Wages</i>	<i>\$242,000/ 3 years for each study</i>	<i>\$242,000/ 3 years for each study</i>	<i>\$12,000 per year for 5 years</i>
Entitlements	Housing, equipment and support staff	Housing, equipment and support staff, graduate students	Housing price, at a level suitable for research
How to select	Institutes and Magazine of CAS	Magazine of CAS and support of the Ministry of Finance	Group of experts
Results	177 persons were accepted (60% directly from abroad)	111 persons were accepted	73 became leaders (17 from abroad)

Source: CAS, Ministry of Education: 21st January 2000 Vol. 287 Science
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The invited world-renowned scientists of course do not automatically receive such a high remuneration; their entitlements must be associated with certain specific responsibilities and the extent of completion of their work. For example, in the “100 persons Plan”, scientists are responsible for research and development of cutting-edge sciences, with the aim to train a Chinese talent class to assume responsibility of undertaking the missions of sciences in XXI century, they have the mission to use advanced S&T knowledge to explore new areas of research, at the same time, build up their research team/group. In the “Changjiang Scientists Plan”, scientists have the mission to hold the position as professor at the University [5]. In the “1000 Young Talents Plan”, scientists have responsibility to involve in the sector plan development; participation in/support for lead scientists in research organization; making forecast on development trend of the world’s advanced S&T and the important strategic direction of the nation; conducting initial research to address the key issues in the field of study; applying these research results in scientific research projects of national importance with the aim to creating breakthrough and significant achievements [9].

Nevertheless, wage policy reform is not the most important reason that makes overseas Chinese scientists to return home. The survey report on the return to China of Chinese scholars living abroad was published by CAS indicated that returned scholars expressed great concern about first the “future and destiny of the country”, and then second the “career and personal prospects” and third the “improved livelihood”. CAS statistics below showed clearly indicative causes rooted from objective conditions in the country and abroad which promote scientists to return from abroad [4]:

Table 2. Statistics of responses to the interview question: “Why did the number of returnees increase?”

Reason for return	Rate of selection (%)
The rapid economic development of China	58
Appropriate policies of the Government	47
Good opportunities to develop new technology in China	42
Difficulty in finding good opportunities abroad	32
Highest salary level overseas for Chinese	31
Political stability in China	19

Source: Nguyen Thi Thu Phuong, 2009

Also, it should be added that Chinese people do love their fatherland. Thus, although the rapid economic development of the country and the improved remuneration policy, including wage policy by the Government and other favorable conditions are the most important reasons for overseas Chinese scientists to return home, the love of homeland expressed by these overseas scientists is a crucial reason. This is to prove that, in order to attract overseas scientists to return to work in the country, it cannot just rely on wage policy reform, but it also needs to create good working environment and promote the patriotism, national pride of each scientist.

In China, the recruitment of researchers for implementing key and major S&T projects of the country is conducted in a fairly cautious manner. The Chinese government realizes a broad/open competition policy between local and foreign scientists in the application for the implementation of key and major national S&T projects. A selection committee established by the Chinese government is responsible for selecting the most suitable candidates to assume full authority and accountability in the research project implementation. The selected scientists shall be remunerated at the basic salary level of professor or senior researcher title, together with position allowance and research allowance, and housing subsidy of about \$30,000 in 3 years. In addition, they are also entitled with preferential treatments for their position and have the right to recruit talented people to work with, and be provided with sufficient funding to implement the project. However, after 3 years, host research institutions/ universities shall conduct a detailed assessment of the research performance of scientists, thereby to decide whether to extend or terminate the contract with them [5].

In summary, the above-mentioned wage policy for scientists is an effort of the Chinese government in reform of remuneration for personnel working in scientific research and technological development. Scientists now are paid in accordance with their qualifications and posts assigned instead of the former “egalitarianism”. In addition, the double gap of wage between qualification levels has created motivation for scientists to actively enhance learning or further education in order to get better positions with higher corresponding remuneration. Income of scientists has increased, remuneration has been effected according to competency of researchers and benefits generated from research work. Wage policy applicable to overseas Chinese scientists has attracted a number of talented scientists to return to work in CAS and in many other research institutions creating a “spillover” wave of knowledge and technological know-how from abroad to China.

The new regulations on changing working position of scientists, i.e moving from fix long-term employment to labor contract with regular performance assessment, annual review for necessary post relocation, or promotion of scientists, etc. has created motivation for them to improve their capacity in doing research and obtain better results of their scientific research.

Besides the achievements obtained, China still encounters certain limitations in wage policy for scientists, such as: the level of remuneration that scientists enjoy does not commensurate with the level of economic development of the country; salaries paid are mainly based on qualifications/academic degree and employment positions rather than on the results of S&T research; too large gap between the wage level applied for scientists returned from abroad and that effective for local scientists. Therefore, in order for the wage policy to actually become one of the motivation factors, China must continue with the wage policy reform for scientists of the country to better perform research work.

3. Lessons for Vietnam

Presently, wage policy for scientists in our country is still put under the common system of wage policy for public officials and employees, not based on the results of their work and the wage level is much lower than the common ground of payment in society nowadays. Because of low wages, scientists cannot wholeheartedly be dedicated for research work, they have to ensure their economic benefit. Moreover, the difference between wage levels does not satisfactorily reflect the disparity of qualifications and the job requirement; the wage incremental depends too much on the time of employment (seniority), not paying much attention to the results of scientific research. Currently S&T personnel have no special career allowances. The State has not had an exclusive wage policy for attracting talent scientists living abroad to return home to work. Low wages, inappropriate remuneration regime does not reflect the real value of scientists' labor, it makes many scientists, especially young scientists find outside second job for them and their family to survive, this is the main reason why they tend to leave out the public sector to work for business sector, making the "brain drain" phenomenon become a matter of great concern today.

In order to renew the wage policy for scientists and overcome existing shortcomings, Vietnam needs to take a number of measures taking into

consideration of lessons learnt from China, a country with many similarities to Vietnam in terms of political and economic institutions. Vietnam as well as China all are moving from centrally planned economy mechanism to market mechanism. Furthermore, Vietnam and China both pay high attention to the significant role of S&T, considering S&T development is of a top national policy. The wage policy reform for scientists in Vietnam has been discussed for a long time, however, there are still two constraints of biggest obstacle that have not been solved, i.e, the wage system for scientists is still placed within the general wage system for public civil servants, and scientists are currently considered as government officials working in S&T sector. In addition, in the present context of limited state budget it is difficult to increase the remuneration level for a so crowded team of scientists. However, learning China's experience, it is confident that wage policy for scientists in Vietnam can surely be reformed.

In the condition that the State budget is not enough to provide preferential remuneration for all scientists, the state policy has focused on giving wage incentives to some selected target scientists, namely those who have been assigned as team leader of particular important S&T project/programme at national level, eminent scientists, young talented scientists².

For Vietnamese scientists living abroad, presently the state has not yet had specific wage policy with special remuneration to attract them to return and work in the country. Basically, the state budget may not afford it to pay wages at the level as they are enjoying overseas but it must be competitive with other sectors in the country. In addition, it is indispensable to create an enabling environment with good working conditions for overseas specialists, at the same time, arouse the patriotism, pride of national tradition of every overseas Vietnamese scientist.

For other remaining scientists, in the process of wage policy reform, the State should ensure that 60-70% of their income is from basic wage, the remaining 30-40% is from remuneration as benefits resulted from non-regular tasks (such as research projects/themes under research contracts

² On 12th May 2014, the Government issued Decree No. 40/2014/ND-CP prescribing “*provisions on the use and appreciation of personnel working in scientific and technological activities*”, The Decree took effect from the date 01st July 2014. Under the provisions of the Decree, scientists being assigned as leader of particularly important tasks of S&T at national level shall receive a salary equivalent to senior expert level 3 and enjoy monthly allowance by 100% of salary entitled before the appointment as leader of the task; leading scientists shall enjoy monthly incentive by 100% of their current salary; young talented scientists are considered to enjoy exceptional recruitment without competition to work in S&T public institutions and are entitled to have wage coefficient 5.08 (equivalent to level 3/8 of principal expert class).

with external institutions). This kind of remuneration would be based on the results produced, transparent, open, be paid at regulated market rates. Wages for scientists need to be based on the integration between the level of academic qualification and rank title. There should be a clear distinction on levels of posts and different titles. This means that scientists are not only paid by qualifications they have but also by the responsibility they assume associated with the titles they have been assigned. This mechanism of wage and remuneration payment can, on the one hand, allow scientists to maintain a stable income for their living, and on the other hand it encourages scientists to be proactive in getting more income from other sources, thus it helps assess the performance of each scientist and links their remuneration with the results of their scientific research. The selection of which wage payment mechanism to be applied for each specific type of scientists as mentioned above would need further studies, discussed and tested before putting it into large scale implementation. Finally, it should soon eliminate administrative mechanisms whereby considering scientists as pure public servants./.

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