ECONOMIC SCIENCE IN RUSSIA: THE COSTS OF GLOBALIZATION AND REFORM OF THE RAS

Polterovich V.M.
CEMI RAS and MSE MSU, Moscow
E-mail: poltemvm@bk.ru

1. Costs of globalization

The thesis that science is one is just as common as the claim that the perfect market is efficient. However, economists are well aware that even in a perfect competitive market left to its own devices, market power is inevitably formed, which generates inefficiency. This is why antitrust regulation exists in all modern economies.

Markets for education and research services are imperfect: language and cultural barriers, travel costs and other frictional factors contribute to their fragmentation. But if one of the countries is able to offer researchers significantly better conditions, then there is no chance of the formation of modern Austrian or Lausanne schools. By utilizing the results of talent attracted from around the world, a monopoly country has been able to maintain power in the research and education markets for decades.

The unity of science, achieved through its concentration in the United States, has mixed consequences for the rest of the world. On the one hand, the knowledge and technological solutions generated in America are in demand on all continents, on the other hand, the needs of the United States have a significant impact on the formation of programs, even in the field of fundamental research. This is especially true for applied development. And it is especially acute in the social sciences.

Today the whole world learns from basic economic textbooks, focused mainly on the problems of the most developed.

Talents who come from Asia, Eastern Europe and Africa face a dilemma: whether to join the mainstream or give up the hope of getting into a high-level university. Even Europeans feel the need for their own version of basic economic disciplines. It is not for nothing that the textbook on macroeconomics by M. Burda and Ch. Viplos, published in 1998, contained a subtitle: “European text”.

Insufficient attention to the problems of developing countries is reflected in the quality of international expertise and the effectiveness of international assistance, and the brain drain and the absence of national schools make underdevel-

oped countries defenseless against the authority of Harvard graduates, even if the theoretical basis of their recommendations does not extend beyond the first theorem of general welfare. It should also be borne in mind that due to insufficient development, "scientific expertise" often becomes a hostage of political interests.

Three important conclusions follow from the above.

First, the development of Western economic science is necessary, but not sufficient for the formation of a qualified expert community in Russia. Straightforward borrowing will only exacerbate the emerging tendency to split between theorists who believe that publication in a top journal gives them reason to consider themselves experts in economic policy, and analysts who despise theory for its inability to automatically generate correct and practical solutions. Inviting Western specialists is extremely useful, but it does not solve the problem. For the cultivation of qualified experts, it is necessary to create a national economic school2. This is the most difficult long-term task, but it is necessary to start solving it now.

Second, attempts to copy the structure of the US research and education sector are doomed to failure3. American universities act as powerful pumps for talent from every continent, and a network of talent pipelines is built into the global architecture of the global science sector with its rankings, awards, and single markets for young doctors to maintain American leadership. The success of American policy in science and education is based entirely on the economic superiority of the United States.

Third, the formation of an expert community based on the combination of theoretical knowledge and experience is possible only with serious support from the state, which mitigates the consequences of the brain drain.

2. Reform of the R&D Sector: What's Happening?

In a short note, there is no room for a detailed description of the changes that are taking place, and besides, the scale of losses suffered by the Russian sector of science and education, and the recent steps of the Russian government aimed at increasing its funding, are described in many works (see, in particular, articles A.E. Varshavsky and I. Abankina in this issue). Three main strategic characteristics of the measures taken can be identified:

a) the strategy of financial support is “focal” in nature;

b) the government seeks to create competition with the Russian Academy of Sciences by supporting the formation of independent research centers and stimulating research at universities4;

c) the government continues to strive to create incentives for modernization for educational and scientific organizations, selecting projects proposed "from below", without even trying to act as a coordinator of a single project for modernizing the sector.

As a result, the diagnosis of the unsatisfactory state of education and science has not been made, the global goals and objectives of the set of measures taken have not been determined, the justification for the measures taken and the forecast of the expected results are absent. A reform organized in this way can only be effective as a result of a miraculous coincidence.

The risks associated with the implementation of the measures taken are obvious. Here are some examples.

Focal modernization can be effective only if the mechanism of spreading the achievements obtained in the “hotbeds” throughout the country is involved. Otherwise, “hotbeds” deplete the environment, attracting the best human resources with more comfortable conditions. The integral results of the network of regional monopolies built in this way may well turn out to be negative.

With the current workload of teachers, the vast majority of them will not be able to do serious research, no matter how much they pay. Is the government ready to create such comfortable conditions in universities to prevent the best brains from being drained into business and abroad? We are talking not only about material support, but also about the research infrastructure, the possibilities of inviting colleagues, participation in conferences and seminars, etc. And if the answer is no, then what are the goals pursued by the Ministry of Education and Science, opposing universities and the Russian Academy of Sciences?

It should be emphasized that at present the Russian Academy of Sciences and educational institutions complement each other. Researchers have, perhaps, the only possible privilege for a backward country in comparison with their American colleagues: the right to assign themselves the amount of teaching load. At the same time, the majority of doctors of sciences and many candidates teach in educational institutions, supervise undergraduates and graduate students, and participate in joint research. They receive far fewer full-time teachers of similar qualifications. Thus, the education sector is partially financed through the RAS. Can it be argued that a violation of the existing balance will have a positive effect?

I would like to understand what goals are being pursued by the reorganization of science and education. Are we striving to improve the international rankings of our universities or to their effective participation in solving the problems of modernizing the economy? Contrary to the tacitly accepted assumption, they

are not the same thing at all. It is hoped that solving the second problem will bring us closer to solving the first. But as a result of the focus on high scientific positions in the world, we may well produce a couple more Nobel laureates, which is almost as honorable for the country as the first place of its football team in the world championship. But ... does not affect the well-being of its citizens too much.

In conclusion of this section - my answer to a naturally arising question: if we do not rely on innovation, why do we need fundamental science? The fact is that the task of effective borrowing and a gradual transition to an innovative path of development is a fundamental complex problem that requires broad participation of representatives of both social and exact sciences, a gradual increase in the role of fundamental research. Russia is in a unique situation: for historical reasons, the level of our science is significantly higher than the scientific level of countries with similar indicators of well-being. This gives us additional chances of success if we have a rational long-term strategy that timely corrects "short-sighted" market signals.

3. Towards the modernization project of the Russian Academy of Sciences

It is customary to speak of the RAS as a ministry of science. This is true, but just as true is another thesis, seemingly contradicting the first: RAS is an element of civil society not controlled by the government. To be convinced of this, it is enough to recall Academician Sakharov and the consolidated protest of Academicians against shock therapy in 1992. Of course, the authorities may not like such duality.

The second reason to attack RAS is the desire to blame it on the lack of innovation. This accusation has no real basis: the Russian economy is not yet ready for innovative development5. But you want to find someone to blame, otherwise you will have to admit that the task was set incorrectly from the very beginning.

But the third reason for attacks on RAS should be considered in more detail. The organizational structure of the RAS leaves much to be desired. In my opinion, the leadership of the Academy made a big mistake by not yet proposing a program for its improvement. Below I list some of the measures that could become part of a future project that responds to the fundamental challenges facing RAS.

The problem of the age structure of the RAS

The following proposal, up to terminology and small details, belongs to Academician R.I. Nigmatulin 6.

A. Along with the status of a full member and a corresponding member of the RAS, it is proposed to introduce the status of an associated member of the RAS.

The Associate Member is elected by the corresponding branch of the Russian Academy of Sciences for a period of 10 years; at the time of nomination, a candidate for associate membership must be no more than 45 years old. Each branch of the Russian Academy of Sciences determines the criteria, the fulfillment of which is necessary for the nomination to associate members7. An associate member is awarded a scholarship. Associate members have an advisory vote at all meetings of the relevant sections, divisions and at general meetings of the Russian Academy of Sciences. It may be advisable to allow associate members to participate in the election of corresponding members; their vote could be counted with a reduced weight (e.g. 1/3).

B. It is advisable to develop a system of incentives (increased salaries, positions of honorary director, chief consultant, etc.) encouraging resignation from the management positions of the RAS and RAS institutes upon reaching the age of 65. (Proposal (B) was put forward in different versions more than once.)

Strengthening the requirements for candidates for membership in the Russian Academy of Sciences

Here is another proposal of Academician R.I. Nigmatulin (with a slight clarification), which I would like to support 8.

The main place of work of a candidate for membership in the RAS (of any of the three statuses) during the five years preceding the nomination must be research institutes and / or higher educational institutions.

Countering the brain drain

Recommend the directors of RAS institutes to keep the salaries of employees traveling abroad to work at universities or high-level research institutions, if the employee continues to participate in work on the planned topics of the institute and works in Russia for at least 4 months a year.

If the formulated conditions are fulfilled, members of the RAS should retain the right to receive appropriate scholarships.

Integration of academic science and education

The process of integrating science and education should become two-sided: along with the development of research at universities, the educational component of the activities of RAS institutes should be strengthened9. This thesis by no means contradicts what has been said above about the right of leading scientists to choose the level of teaching load themselves. However, one cannot but reckon with the fact that in our conditions the majority of doctors of sciences are

forced to teach, and this work of theirs does not in any way count towards the RAS. It is necessary to seek at least partial budgetary funding for postgraduate studies and other forms and levels of education in the RAS. The Ministry of Education could contribute to the development of competition in this area as well.

Improving training programs: inviting Western specialists

We have a serious shortage of teachers who are able to give courses in economics (and, I don't exclude, in other areas of knowledge) for masters and graduate students. It is not easy to find a lecturer on international economics, new political economy, industry market theory, modern labor market theory, etc. In the West, course programs are updated quickly, while in our country they are very slow. Inviting Western lecturers is an effective way of overcoming the lag, if each of the invitees is "attached" to our assistant who masters the corresponding course in order to read it in the future independently.

The available experience shows that the costs for one course should not exceed 10 thousand dollars. For 150 million rubles. (the size of one grant of the Government of the Russian Federation for state support of scientific research in universities) it would be possible to "introduce" about 500 new courses by training half a thousand teachers!

I have listed just some of the proposals that could become the subject of discussion when developing a project for the modernization of the Russian Academy of Sciences. There are many issues that I have not touched upon: the organization of the examination of dissertations, scientific journals and institutes of the Russian Academy of Sciences; formation of research plans; competitive financing; formation of funds for inviting Western scientists and internships abroad, etc. The development of such a project is the primary task of the RAS leadership.