## Highlight 2. Reform in higher education in Serbia: on doctoral studies

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This is the first in a series of short reviews of issues relating to the reform in higher education in Serbia. We will begin with the issue of doctoral studies for three reasons. The first one is the importance of quality doctoral studies to social development. Doctoral studies are the crown of educational process and a foundation stone for development of scientists and university lecturers in any field of science. The second reason is that the quality of doctoral studies in Serbia in some fields of science is much below the highest international standards. One of the main consequences of such state is, on one hand, overproduction of personnel with doctor's degree who are not properly trained for scientific work. On the other hand, the most talented young people are leaving the country increasingly to take up quality doctoral studies abroad. They often do not come back, either because they do not want to, or because they cannot find employment at universities or research institutions in Serbia. This affects universities and research institutes adversely, and could have a catastrophic long-term consequence for society. The third important reason why the reform is necessary and why we are writing this paper is the need to use the scarce government funds (getting even scarcer) for higher education and scientific work as efficiently as possible.

Although much of the following can be more or less applied in any field of science, for the purpose of concreteness and regarding the obvious importance of economics for the society, we will focus on development and funding of high quality doctoral studies in economics.

## 1. What the doctoral studies in economics in Serbia are and what they should be

Not a small number of institutions in Serbia offer doctoral programmes and award doctor's diplomas in economics and related branches (business management, for instance). The key reason for this is existence of a number of public and private faculties which provide education in these fields and which are obliged by the valid law to formally round up its educational process and obtain appropriate accreditation. Another important reason why doctoral programmes are offered, the way they are today, is that they allow faculties increase their profits. Both of these reasons are far from the primary purpose of doctoral studies - to be the crown of

educational process and to create quality researchers.

Since all faculties in Serbia, even the public ones, charge fees for doctoral studies in economics, and since no adequate fellowships that would enable the prospective PhDs focus on studies and scientific research over the period of 4 to 5 years (this is necessary to write a quality PhD thesis) are awarded, most of the students have to work simultaneously. Lecturers are often people with little or no experience in writing scientific papers that can be published in high quality international journals in the SSCI list, which is the international research quality standard in economics. To attract students who do not have too much time to study, to facilitate the work of lecturers, and to attract a mass of students necessary for profitability of these programmes, teaching materials used in undergraduate studies and, to a certain extent, in master studies are employed.

All this make doctoral studies in economics in Serbia inadequate for its main purpose. It is therefore important to mention some of the essential characteristics of quality doctoral studies in economics and their social function.

Firstly, being the crown of educational process, domestic doctoral studies, both by its form and its essence, must keep pace with the high quality and structure of the best international doctoral programmes as much as possible. The goal is to enable talented young people become top-class economists-researchers without having to go abroad. It is important to mention that in economics and business management, probably more than in any other social science, clear international quality standards of doctoral studies have been established. Leading American universities and business schools set these standards and the rest of the world adopted them. Lecturers at doctoral studies are typically people who have proved their ability and willingness to do internationally-valuated research work. Classes are typically in English. Doctoral programmes thus can compete for students and lecturers from all around the world, and students are enabled to study in language which is de facto the official language of economics. Applicants have to satisfy objective and stringent initial selection criteria. Students are usually awarded fellowships with which they can pay the fee and live modestly. This allows them focus on studies and research. In return, prospective PhDs are to a certain extent involved in the teaching process and/or research. The objective of teaching process at quality doctoral studies is to achieve a high level of competence to understand and independently develop models used in scientific works in top-class international journals on economics and business management, and to provide high-quality

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training in empirical research. These programmes therefore, without exception, reached a high quantitative level. Textbooks on main subjects, primarily on microeconomics, macroeconomics and econometrics, and the mathematical apparatus students are expected to handle, have been standardized. Doctoral students also have access to standardized databases and can attend quality research seminars where they become acquainted with works of the leading international researchers and make personal contacts with them.

Thanks to the knowledge and skills they acquire, students completing doctoral degree at prestigious universities are in great demand both in university circles and outside of them. For example, besides the leading multinational companies and international institutions (IMF, World Bank, EBRD etc.), ministries of finance, central banks and fiscal councils in many countries increasingly employ top-class PhDs. Similar goes for private sector—banks, insurance companies, large enterprises. Quality doctoral studies in economics are therefore a very important factor which contributes to increase in institutional capacities and modernization of the society.

Another very important thing that people in Serbia know very little about is that there is a superbly organized formal world labour market for the people who successfully complete quality doctoral studies in economics or some other social sciences. Several thousands of fledgling PhDs from all around the world go to the first round of interviews with potential employers at several large world conferences, primarily the Allied Social Sciences Association (ASSA) conferences held every year early in January in North America. At this well organized labour market for economists-researchers wherein leading American, European, Asian, Russian, Australian and Latin-American universities, institutes, companies and international organizations participate, doctor's degrees, and consequently, universities awarding them are valorized. This encourages institutions and countries willing to participate in this market to open up and hire doctoral students at the top-class programmes as lecturers and researchers, and to establish an upwards trend in the quality of their own doctoral studies. Serbia can either try to follow these trends, or continue falling behind not only the leading countries, but also the contries that have until recently been far behind us, at least in these fields.

## 2. One, but valuable

The foregoing clearly shows that quality doctoral studies in economics are very important and useful but also a quite complex undertaking. The question is what Serbia, given the current state of affairs, can do. We could learn from some European countries' experience. Some of the problems European countries, especially the continental ones, are faced with are quite scarce funds for research work, very heterogeneous quality of the existing researchers in the field of economics, and that quality researchers are hired in a number of institutions. To establish a competitive high-quality doctoral programme, joint doctoral programmes in English have been developed in a growing number of countries, by a group of institutions or at the national level. These are some examples:

The Humboldt University and Freie University and two more universities from Berlin (one of them is a top-quality private business school) in cooperation with more than 20 institutes established a joint PhD programme in economics in English. Only top-class researchers hired with these institutions hold the classes which satisfy the highest world standards. Besides the professors from Germany, lecturers come from other countries, too. Maximum annual number of students is 20 (for all fields of economics and related branches). All students are awarded fellowships and come from Germany, Europe and other parts of the world.

There is another example in Spain. Two leading universities from Barcelona, the Pompeu Fabra University and Autonomous University of Barcelona (previously bitter rivals) established the Barcelona Graduate School in Economics. All of their master's and PhD programmes, which are among the best in the world, with top-class world lecturers, and classes held in English, are jointly organized at this school. Although they pay quite modest salaries (which are comparable with salaries received at Serbian faculties of economics), these two schools are able to hire top-class young talented academic economists from all around the world, primarily thanks to the quality research work and students.

The third example is especially interesting. Even Switzerland and Austria, rich countries, implement austerity measures and concentrate their resource (primarily human resources). Swiss Finance Institute is an umbrella organization which organizes joint doctoral studies in finance in English for the whole of Switzerland. In Vienna, consortium of two leading public universities and the private university Vienna Institute for Advanced Studies offer joint doctoral studies in economics and finance. These are all quality programmes.

The fourth example is closer to us, geographically and by mentality. There is only one PhD programme in physics in Croatia. All Croatian universities and institutes engaged in physics participate in it. The number of similar examples is large and growing.

## 3. How to develop quality doctoral studies in economics in Serbia?

Clearly, quality, and especially top-class, doctoral studies in Serbia cannot be developed overnight. We however think that it is necessary, for the foregoing reasons, to work on it. These are the steps that, in our opinion, should be taken if we want to achieve it in the foreseeable future.

The current structure of teaching personnel and funds the government allocates for higher education and science dictate extremely rational use of scarce human and material resources. Quality researchers are employed with different institutions in Serbia, such as universities, institutes, but also the National Bank of Serbia. The success of the International Masters in Quantitative Finance (IMQF) programme established at the Faculty of Economics in Belgrade shows that, through cooperation between the leading domestic and foreign lecturers and with top-class standardized programmes, it is possible to develop both cheap and quality educational programmes in Serbia.

On the other hand, none of the institutions has adequate human resources to carry out a quality doctoral programme on its own. We therefore suggest that the country take an active part in development of a **single** PhD programme in economics and business management that would gather the leading economists-researchers in Serbia and from Serbia, regardless of where they are currently employed, as lecturers, and also attract high-quality lecturers from abroad.

Entire programme should be in English, though a combination of English and Serbian would be possible during a transitional period. The structure and quality of the programme should be monitored by an **international council for the programme** made up of some of the leading world academic economists with a wealth of experience in establishment of similar programmes.

The idea is to establish a programme that would be up to world standards regarding its goals, content and the quality of lecturers, and the quality of PhD thesis and working conditions. Only the number of students for which it is possible to provide quality mentoring and fellowships that would allow them commit to studying and research over a period of 4 to 5 years should be enrolled on the programme. It cannot be a large number on national level (about twenty students annually for the entire field of economics).

It is important to point out that all quality human resources should be included in the process and that all regulatory, organisational, interest-related and psychological barriers must therefore be removed to make it possible. Additionally, top-class seminars organized by the National Bank of Serbia should be a backbone of research seminars at which doctoral students and, of course, lecturers would be active participants.

Experience teaches us that spontaneous association and socially responsible behaviour of domestic academic institutions cannot be expected as long as majority wants to maintain the status quo.

The state therefore plays the key role, at least at the beginning. It is in charge of two important issues: it allocates funds to most productive activities and grants accreditations only to those programmes, especially doctoral programmes, which reach certain quality standards. We therefore suggest that, regarding economic research funding, the government give top priority to funding for these elite doctoral programmes and everything that helps establish and develop such programmes. Some funds should be spent on researchers hired as teachers at these courses. Additionally, fellowships and access to appropriate databases should be given to all students, and study visits at partner institutions and programmes abroad should be arranged. However, probably the most important role the government should serve could be to find the mechanisms to remove all barriers to return and employment of our young people who completed top-class PhD studies abroad and wish to come back, and to open up to international labour market for economists-researchers. With possible considerable savings, these measures would produce more profound effects than buying peace by preserving the (unsustainable) status quo.