



**ARMEN TSHUGURYAN**

*Professor of Yerevan Northern University, Doctor of Economics*

## **CHALLENGES IN POST-GRADUATE EDUCATION ORGANIZATION IN ARMENIA**

*Armenia's higher education reforms in the context of the doctoral education, at present face serious challenges. Third level education within the Bologna Process principles associated with the Salzburg principles, currently aren't fully applied. Moreover, Armenia is still under pressure of the post-graduate education approaches, inherited from the past. This article considers the ways of improving management of doctorate education in the Armenian University system, highlighting the necessity of recognizing outcomes of researcher and thesis in a multipart and their complex socio-economic impact on the country's further development.*

**Key words:** *Salzburg principles of doctoral study, Bologna process, academic credits, research outcomes recognition, applied socio-economic impact of doctoral education*

### ***How is Doctorial Study in Armenian Universities Organized***

Traditionally, Armenia is considered as a country with higher level of educated population and availability of scientists in various fields. But even under this condition, the implementation of research and practice activity of researchers does not still have a serious impact on socio-economic development of the society. Functions of several substantial scientific organizations, which are mostly operating from public financing sources, should be represented with effective outcomes from research. Although the country has seen an increase in

research costs, currently, Armenian research entities report financing support difficulties and because of that, face decrease year by year (see table 1). Simultaneously, Armenian Statistic Office has also recorded a tendency of decline in the number of post-graduate students (see table 2). However, the main reasons of this situation are related to ineffective organizational issues of PhD education in Armenia.

Table 1

*Domestic Costs For Research and Development in RA (mln. Armenian drams)<sup>1</sup>*

Indicators	2009	2010	2011	2012	2013
Domestic costs, total mln. Drams	8473.4	7987.9	9276.6	9713.2	9655.7
of which at the expense of budgetary funds	5079.1	5298.0	6066.2	6750.6	6711.0
Scientific organizations, total	83	81	72	72	62
Scientific researchers	5895	5460	4748	4421	4234

Studies show, that currently in Armenia most of doctoral students:

- are educated and trained too narrowly,
- lack key professional skills,
- are ill prepared to teach,
- it takes them too long to complete their degree or not to complete it at all
- have an overly long transition period from PhD completion to stable employment.<sup>2</sup>

Table 2

*Doctorial Student Graduates per year in RA<sup>3</sup>*

Science fields	2009	2010	2011	2012	2013
Total	597	440	370	368	239
of which in the field of science					
physicists and mathematicians	47	41	52	53	34
technical sciences	47	56	64	67	41
economics'	185	130	92	97	60
law	46	21	21	25	23
political science	16	10	17	19	11

The educational environment in doctoral studies in Armenia is still not competitive. There are feeble linkages between PhD programs and labor markets. Furthermore, the research programs are not strongly related with contemporary demands of economic development and only a few of them are functioning, based on contracts between universities, research entities and business organizations. As a result, mainly the process goes on by the format-created science for needs of sciences, but not "science for social

<sup>1</sup> Armenian Statistical Office yearbook, 2014, p.146, // [www.armstat.am](http://www.armstat.am)

<sup>2</sup> Kogan Maurice and Teichler Ulrich, // Key challenges to the academic profession, Paris-Kasel: UNOSCO-INCHER, 2007, p.1

<sup>3</sup> Armenian Statistical Office yearbook, 2014, p.151, // [www.armstat.am](http://www.armstat.am)

economic development”. Besides, the absence of the science market does not give opportunities for the commercialization of research results, finding stable financial sources for developing PhD programs, and presenting competitive doctoral study programs in Armenia.

***Which are the PhD education development targets in Armenia***

Post graduate education is taking more discussion within Bologna process development not only in Armenia, but also within European Higher Education Area generally. From this aspect it is necessary to realize, which are the most important targets in doctoral study: to prepare researchers with transferable skills, or to carry out original research and present dissertation with scientific novelties. These problem solving issues are closely related with the implementation of Salzburg principles for the third cycle of professional education, with doctoral training as an advancement of knowledge through original research. At the same time, it is recognized, that doctoral training must increasingly meet the needs of the labor market, which is wider, than academia.<sup>4</sup>

According to overseas experts, in Armenian universities a doctoral thesis is often a review paper, derived from books in Armenian or Russian, rather than original work of independent research. Consistent with statistics, over 45% of qualified scientists and researchers have left Armenia in the past twenty years seeking for better quality research environment outside its borders.<sup>5</sup> While the Armenian higher educational system battles for improvements within the realm of the third cycle study to find most adequate ways to incorporate quality research in doctoral education, throughout Europe battles and transformation still occur. It has been noted, that the change in focus in doctoral education from the research output, the thesis, to the doctoral holder has been fundamental in the development of career services. The outcome is no longer the research results to be defended in front of an expert panel, and doctorate holder with specific research, transferable skills and experiences, should be represented in a wide range of careers.<sup>6</sup>

In this regard, the following questions arise: as to which areas should reforms in doctoral study process be targeted, what will promote the socio-economic development of the society (see figure 1). On the one hand, the PhD assists the development of professional carrier of researchers, giving them more opportunities for taking a high level job position in the labor market. But at the same time, not often they consistently seek for research novelties implementation process and as a result, the scientific results are not actively promoting socio-economic development of the society, and mainly “outstanding on the paper”, formatting cycle “the development of science for the benefit of science”.

<sup>4</sup> The Bologna seminar on “Doctorial Programs for the European Knowledge Society”, Salzburg, 3-5 February 2015.

<sup>5</sup> Implementation of Salzburg principles in Republic of Armenia, Tempus – Veritas project, Yervan, 2015, p. 28.

<sup>6</sup> Byrne Joanne, Jorgensen Thomas, Quality Assurance in Doctorial Education – Results of the ARDE Project, EUA publications, 2013, p. 36.

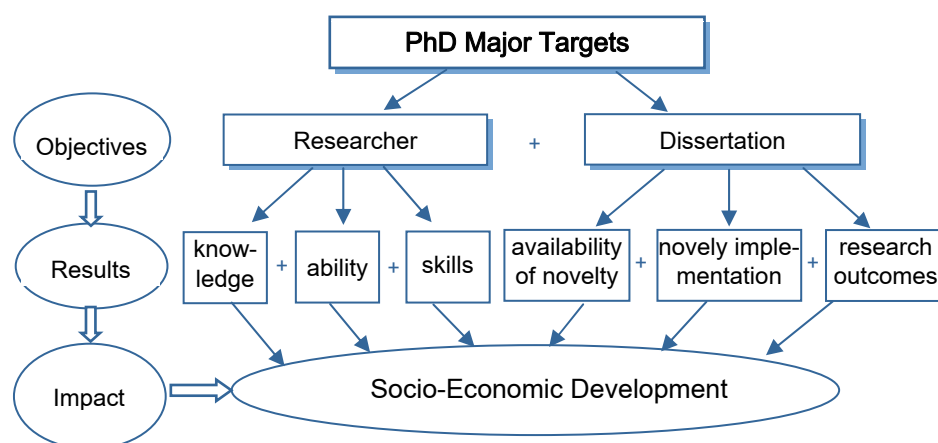


Figure 1. *PhD education development targets from the viewpoint of Salzburg Principles*<sup>7</sup>

One of the main tasks of researchers is to focus on continuous improvement of their research skills and competences. A number of studies suggest, that doctoral degree holders' personal carrier progress is significantly faster than that of other degree holders. However, many universities are quite aware, that the transition from the academic to the non-academic labor market could be made easier and doctoral candidates should be prepaid for the transition from an early point onwards.<sup>8</sup>

Another important issue is the weak ties between the educational system and research framework. During the Soviet times, the universities and institutes were considered as places having one important mission: to teach. Most of the basic research is still conducted by research institutions belonging to the National Academy of Sciences. Consequently, one of the vulnerable spheres is, currently, the labor market. To be more precise, there is lack of people having PhD education and training and, at the same time, there is a surplus of graduates with university diplomas whose level of expertise is not sufficient and does not meet the requirements of nowadays labor market and employers. There are also specialists having several diplomas from various international HEIs who face a lot of problems when finding appropriate jobs. These and other problems lead to such questions, as: why should we prepare so many doctors, lawyers and economists for a small country and not prepare specialists who would be in great demand in the local and international labor markets? Why not to reveal the needs to find out the most demanded and not the most fashionable specialties? How to implement international experience and good practices into the educational system of Armenia?<sup>9</sup>

#### *Is it nessecary to implement ECTS in Doctorial programs*

PhD program students' opinion about the system of application of academic credits intended by researcher's academic program is not certain. In some cases they even complain as they mostly want to carry out research and

<sup>7</sup> Composed by authors.

<sup>8</sup> Byrne Joanne, Jorgensen Thomas, Quality Assurance in Doctorial Education – Results of the ARDE Project, EUA publications, 2013, p. 36.

<sup>9</sup> Yeritsyan S., Jughuryan A., Bologna Process Consequence Pathway, monograph, Yerevan, p. 74.

not just accumulate credits. Initially, accumulation of credits in professional educational system pursued two important goals. Firstly, to measure and assess the results of learners' academic workload with the help of credits, and, secondly, ensure learners' "vertical" and "horizontal" mobility on the basis of qualified credits which, by the way, does not function effectively in the RA.

Taking into consideration the above-mentioned, of course accumulation of credits on the third level of professional education becomes senseless, as here the degree system of professional education comes to an end and, therefore, there is no necessity for portability of accumulated credits to another level ("vertical" mobility). Accumulation of credits is also controversial because often there is no possibility to measure researchers' workload in case of publishing articles, participating in conferences or writing thesis. By the way, this view is also supported by many European experts and is not introduced in every Western country's credit system in the system of doctoral studies.

However, we should consider this issue in Armenia on another platform, especially from the perspective of post-doctoral education management. Credit system regulates a post-graduate student's academic behavior. If we confess, not long ago dishonest post-graduate students were not involved in the work of the chair, did not effectively cooperate with supervisors, had passive position regarding personal educational processes, university conferences, and their annual attestation had just formal nature.

Curricula compiled based on credits forced post-graduate students to accumulate credits in the mentioned direction and now it is a matter of complaint especially for those who hope to become a candidate of sciences publishing just two or three articles, passing several attestation exams and defending thesis by inertial force of the past. Of course in these conditions researchers' academic load is lightened, but the quality of post-graduate fellowship has suffered, and not only educational component but also „post-graduate student-University-economy-society" interrelationship has weakened. And there was no interuniversity mobility of scientific researchers and implementation of joint academic programs by vertical portability of credits, which is, by the way, one of the requirements of current Bologna process.

### ***What's the current level of Salzburg principles implementation in Armenian Universities***

Although in the RA Universities post-graduate education structures have traditionally been operating, principles of Soviet post-graduate fellowship, are still inertially applied. Thus, research block still dominates in them, but educational block is still in the formation stage. Previously, candidates did not need to earn academic credits and they were generally overwhelmed by research work. However, now a post-graduate student has to earn academic credits not only from research sphere, but also from educational block, regularly attending courses. In the current situation ***Joint doctoral programs are not formed***, there is no framework for providing educational services, which is one of the most important Salzburg principles.

Traditionally, of post-graduate fellowship in Armenia was not in close cooperation with the labor market and branches of economy. Post-graduate students used to perform research without being involved in production, and as

a result, there were no commercial orders from the spheres of production and service. The situation is similar for post-graduate studies functioning in the RA Universities, which do not have close relationship with the applied economy. They were deprived from employers' orders and private financial inflows. It turns out that post-graduate studies in the RA are financed only by public means – from the State budget, which is not enough for stable funding, which is considered to be one of the most important Salzburg principles.

There is no culture of sufficient quality assurance in the RA Universities. Professional educational standards are not developed yet, internal quality assurance system generally operates for Bachelor's and Master's levels, skipping postgraduate studies. External quality assurance is still implemented only with regard to research thesis defense by the RA Supreme Attestation Commission, but the functions should be performed by Armenian National Quality Assurance Agency.

In case of post-graduate studies *academic freedoms* are still constrained which are especially highlighted during the process of preparation and defense of the thesis. Post-graduate educational system does not have full academic freedom to approve theses, as finally titles of themes are approved by Universities' scientific councils.

In addition, the thesis defense process bureaucracy is overly inflated, which is accompanied by numerous bureaucratic complexes. First, a doctorate defends the thesis at the University Chair, then in the leading organization, and finally at the Professional Council, but, in fact, not all the professors deal with the narrow specialization of the thesis within this council. After passing this three-step defense procedure a doctorate can fail at the RA SAC which can "destroy" the result of a successful defense and just according to an opinion of only one expert and arrange a second defense.

Based on the results of self-evaluation implemented by Tempus – Veritas Armenian work group it can be observed, that the system of post-graduate education in the RA in some aspects is close to Salzburg principles, but there is still much to be done (see figure 2).

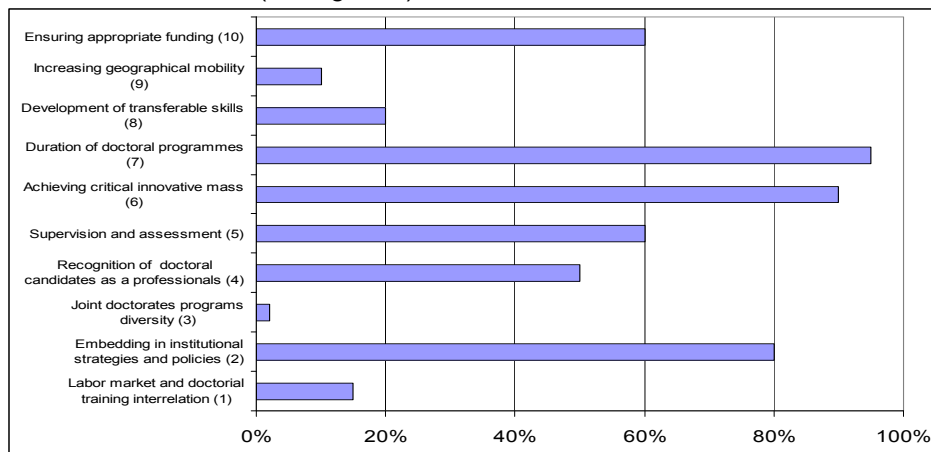


Figure 2. The current level of Salzburg principles implementation in Armenian Universities<sup>10</sup>

<sup>10</sup> Composed by authors.

## CONCLUSION

The Doctorial study process, organized in Armenian Universities, should be more related to Salzburg principles, operating within the Bologna process. However, the set of standards, for establishing and implementing efficient third cycle of professional education are as follows:

- the core component of doctoral training is the advancement of knowledge through original research,
- embedding of institutional strategies and policies to operate PhD programs in order to promote society's development,
- recognition of doctoral candidates as an early stage researchers,
- creating linkage between PhD programs and scientific markets.

The number of doctoral candidates successfully completing their studies, should have a more positive impact not only on personal carrier progress, but also on society's development. As a result, PhD candidates successfully complete their degrees. It is expected, that far more trained researchers than before will seek and will have to seek job outside academia and research institutions. Relevance of research topics and the achievement of additional transferable skills, abilities for nonacademic labor markets, have currently become key challenges in doctoral education and training in Armenia.



## ԱՐՄԵՆ ՃՈՒՂՈՒԹՅԱՆ

Երևանի Հյուսիսային համալսարանի պրոֆեսոր,  
տնտեսագիտության դոկտոր

**Հետբուհական կրթության կազմակերպման մարտահրավերները Հայաստանում.**– Հայաստանի Հանրապետությունում ընթացող բարձրագույն մասնագիտական կրթության բարեփոխումների համատեքստում դոկտորանտուրան լուրջ մարտահրավերների առջև է կանգնած: Բոլոնիայի գործընթացի շրջանակներում կրթության երրորդ մակարդակին առնչվող Զալցբուրգյան սկզբունքները ներկայումս լիովին չեն կիրառվում: Ավելին, մեր հանրապետությունում դեռևս մեքենայորեն գործում են անցյալից ժառանգած ասպիրանտական կրթության մոտեցումները, և առանցքային վերջնարդյունք է համարվում ոչ թե հետազոտողի որակական հատկանիշների ամբողջությունը, այլ հենց ատենախոսությունը: Հոդվածում ներկայացվում են ՀՀ բուհական համակարգում դոկտորանտուրայի կազմակերպման բարելավման ուղիներ՝ մասնագիտական կրթության երրորդ աստիճանում կարևորելով հետազոտողի և ատենախոսության վերջնարդյունքների ազդեցությունը երկրի սոցիալ-տնտեսական զարգացման վրա:

**Հիմնաբառեր.** դոկտորանտուրայի կազմակերպման Զալցբուրգյան սկզբունքներ, Բոլոնիայի գործընթաց, ակադեմիական կրեդիտներ, հետազոտության վերջնարդյունքների ճանաչում, ասպիրանտական կրթության սոցիալ-տնտեսական ազդեցություն:

## АРМЕН ДЖУГУРЯН

Профессор Ереванского Северного университета,  
доктор экономических наук

**Вызовы организации послевузовского образования в Армении.**– В контексте реформ высшего образования Армении докторантура сталкивается с серьезными проблемами. В рамках Болонского процесса, третий уровень профессионального образования еще не применяет в полном объеме Зальцбургские принципы. Более того, до сих пор в нашей стране, в силу инерции, принимаются подходы к аспирантуре, унаследованные от прошлого, и в качестве конечного результата оценивается больше всего качество представленной диссертации, чем качественные и профессиональные свойства исследователя. В статье рассматриваются пути совершенствования организации докторантуры в вузовской системе Армении, придавая большое значение признанию комплексного влияния результатов диссертации и навыков исследователей - на дальнейшее социально-экономическое развитие страны.

**Ключевые слова:** Зальцбургские принципы организации докторантуры, Болонский процесс, академические кредиты, признание результатов исследований, социально – экономическое влияние докторантуры.