

# Strengthening Higher Education in Bulgaria<sup>1</sup>

## Executive Summary

### Overview of major developments in higher education in Bulgaria

1.1. **In 2007, Bulgaria joined the European Union (EU). In that context, the government's objective to accelerate the social and economic convergence to EU norms requires increased productivity and a labor force equipped with the high-order skills demanded by a rapidly developing knowledge-based economy.** Such knowledge-based workers are expected to have tertiary education. There is extensive evidence that effective tertiary education investment increases a country's ability to make leading-edge innovations. Highly skilled people are also more adaptable in the face of changing labor market needs. Further, tertiary education and research are among the key foundations of European integration: through provision of skills and knowledge that promote labor mobility, and through participation in the European Higher Education Area (the Bologna process) and the European Research Area.

1.2. **Since 1989, Bulgaria's higher education sector has undergone significant transformation, marked by a rapid transition from overregulation to academic and institutional autonomy of higher education institutions (HEIs) (1990 and 1995), redesign of HEI governance models (1999), and introduction of per capita financing linked to student enrollment (1999).** Bulgaria's participation in the Bologna process since 1999 has led to the introduction of the three-stage structure of higher education degrees (bachelor, master and doctor), the institutional reorganization and strengthening of the National Evaluation and Accreditation Agency (NEAA), and its membership in the European Association for Quality Assurance in Higher Education (ENQA) and the European Quality Assurance Register (EQAR).

1.3. **The rapid expansion of private HEIs, in parallel to the upward trend of enrollment in public universities, has changed the sector's size and structure and enhanced competition among providers.** The number of higher education students increased by 16% in the last ten years while the number of secondary education graduates dropped by 13% over the same period. The net enrollment rate for tertiary education has reached 41% of the population aged 19-23 (2010). Three main consequences have emerged from the expanded coverage of tertiary education: increased student-teacher ratios, decreased unit costs for higher education, and greater heterogeneity of students with regard to their skills and learning capacity.

1.4. **Public funding has been the main source of income for the public HEIs (65% share in total funding), growing steadily in nominal terms until 2010, but falling as a share of the total funds to reflect the higher revenues of HEIs from tuition fees, research projects and other sources.** Universal tuition fees have been in place since 2000, with fee levels following an upward trend, but still affordably low for the most popular university programs. The tuition fees for state quota students have been pegged as a percentage of the per student expenditure norms defining the state subsidies for HEIs (initially at 30%, and subsequently revised to 50% and to two thirds at present). Until recently, a limited number of enrollments in masters programs were

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allowed beyond the state quota, with fees set on a full cost recovery basis. The austerity measures implemented by the Government in the wake of the global financial and economic crisis have restricted state funding to universities, and in 2010 the Government amended the Higher Education Act to allow state-funded HEIs to enroll students in all stages (bachelor to doctor) against a full cost recovery fee with the restriction that the number of students enrolled on this basis does not exceed 10% of the capacity of the institution.

**1.5. To ensure equal access against the backdrop of rising tuition fees, in addition to a means-tested merit-based scholarships program, the Government launched a student loan scheme covering the tuition costs of full-time students, and a loan scheme for covering the living cost of young parents studying full-time in tertiary institutions.** In 2011, around 1.7% (4,800 students) of the students enrolled in Bulgarian HEIs drew student loans, and roughly 6% (16,000 students) benefited from state subsidized student scholarships. Since 2009, as part of a four-year EU-funded project implemented by MEYS, the government has made available additional resources for scholarships, whereby around 5% of the students (15,000) receive monthly scholarships and around 4% receive financial awards.

**1.6. Despite the quantitative achievements during the past two decades, higher education in Bulgaria continues to face challenges with regard to quality, efficiency, and accountability for results.** Recent reform initiatives have started addressing some of the weaknesses. The funding of HEIs was complemented by a small performance awards envelope in 2011. This followed a major undertaking to collect information on educational outcomes and graduate employment in 2010 and 2011 as part of the Bulgarian Universities Ranking System (BURS) initiative. In the second half of 2011 legislative amendments laid the foundations for competition on the quality assurance market by allowing ENQA and EQAR members to conduct program evaluations of Bulgarian HEIs. The accreditation grading scales was revised to allow greater differentiation among accredited HEIs. The NEAA revised its institutional and program evaluation criteria in a bid to provide a common ground for future consolidation of bachelor, masters and PhD degrees' program evaluations. Bulgaria should follow up on these reforms and implement integrated measures to increase the quality and efficiency of its tertiary education by revisiting the models of governance, quality assurance and financing of higher education. These elements need to be addressed in a long-term strategy for higher education, currently missing in Bulgaria.

## **Outstanding challenges in higher education and options for reforms**

### **1.7. Accreditation and quality assurance**

#### **1.7.1. Challenges:**

Despite the existence of an evaluation and accreditation framework that is fully compliant with the European standards and guidelines for internal and external quality assurance of higher education (ESG), policy makers at the central level and external stakeholders do not have adequate instruments to measure and influence the quality of learning in the autonomous HEIs (both state-funded and private).

- **Weak evaluation and accreditation criteria.** As in many other EU member states, the NEAA accreditation framework evaluates a set of general prerequisites for quality delivery, though in Bulgaria greater attention is paid to inputs rather than results. Where results are measured, the focus is on quantity rather than quality. These weaknesses are further extended into the systems for self-evaluation of the HEIs and the post-accreditation monitoring and control (PAMC). While the heavy reliance on self-evaluation and quality improvements driven by the HEIs has proven effective in other

contexts (USA, Canada, for instance), Bulgarian quality assurance (QA) efforts have often been obstructed by the weak criteria used by NEAA in the evaluation and accreditation process, creating incentives for pro-forma self-evaluation.

- **Burdensome design of the evaluation and accreditation procedures.** The legal requirement to accredit and evaluate each professional field and every specialty for regulated professions and doctoral studies puts significant pressure on: 1) NEAA's human resources; and 2) the larger universities offering a wider selection of professional fields, which undergo seemingly constant cycles of accreditation.
- **Inadequate involvement of external stakeholders and foreign experts.** The evaluation and accreditation process is not yet sufficiently open for participation by prominent foreign experts, the business community or other stakeholders relevant to a professional field. The results from evaluations are not published in full and the information disclosed lacks justification of the ratings granted.
- **Concerns about the autonomy of NEAA.** By law, NEAA is designed as an independent agency under the Council of Ministers to reduce influence from both the policy makers at central level (the Ministry of Education Youth and Science, MEYS) and the HEIs subject to evaluation. In practice, however, NEAA is a second level budget spending unit under the MEYS, and its independence from some HEIs may appear ambiguous, considering the composition of the evaluation committees tasked to implement the accreditation procedures.

#### 1.7.2. *Options for reforms:*

- **Greater focus on qualitative dimensions in the evaluation criteria and simpler evaluation procedures:** The NEAA may want to consider merging institutional and program accreditation activities while sharpening the focus of the evaluation criteria by paying more attention to the qualitative dimensions of the evaluated institutions and programs.
- **Improve credibility and rigor of NEAA evaluations by greater involvement of employers and prominent international experts.** Program evaluation would greatly benefit from the expanded involvement of prominent international experts and representatives of professional organizations, who can add value in assessing the comparative quality of programs and in ensuring that the employers or employers' associations are better represented in the assessment process. An assessment by an external body would provide an additional layer of assurance that program accreditation is rigorous and without conflict of interest.
- **Institutionalize the collection and use of quality- and performance-related data in the Bulgarian University Ranking System (BURS) as part of the QA framework.** The government has to ensure the sustainability of the BURS and identify a prominent role for it in the tertiary education QA framework. It is recommended that the range of data collected for BURS be expanded and complemented by a full-fledged graduates and employers' tracer study, thus bringing in more comprehensive information on the educational and labor market outcomes of graduates.

### 1.8. **Governance**

#### 1.8.1. *Challenges:*

- **Limited declared strategic priorities in higher education.** Bulgaria has adopted strategic documents for all stages of formal education but higher education. Key European policies related to higher education, research and innovation have been reflected in various government decisions, programs or other sectoral strategies

(including a separate strategy for research), leaving the sector without a comprehensive strategic document that outlines the vision and the future of higher education in Bulgaria.

- **HEIs are governed for the benefit of the academic staff.** Under the existing legal framework, all strategic decisions of the HEIs concerning academic life, management of resources, control and compliance are in the hands of the HEIs' academic staff, which are excessively represented in all governing and controlling bodies of these institutions. The rector is selected, appointed by and reports to the General Assembly, in which at least 70 per cent of the votes come from the academic staff (at least 15% from students and administrative staff), the ranks of which the rector is likely to rejoin after having served his/her term of office.
- **Weak connection to external stakeholders.** The link between HEIs and the education stakeholders who are external to the institution is very weak and the establishment of the Councils of Trustees (2007) to represent the broader public interest has not affected HEIs' performance because of the very limited powers entrusted to the councils.
- **Unmet need for professional management of HEIs.** The current governance model has led to inefficiencies in the management of financial and human resources of HEIs. In addition, the surveys and hard data collected on graduates' employment as part of the Bulgarian Universities Ranking System (BURS) provide evidence of obvious disconnects between the policies and programs of some HEIs and labor market needs, reflecting weak relevance of the knowledge and skills produced.

#### 1.8.2. *Options for reforms:*

- ***Change the model of public HEIs' governance by establishing Governing Boards:*** The governance reform should start with the transformation of the Councils of Trustees into authentic governing boards, to serve as the main organs governing public HEIs. Two thirds of the governing board members may be appointed by the government and/or the president to represent key external stakeholders, including the government, employers, civil society, and labor unions. The elected members (one third) may represent the key internal stakeholders of the institution: faculty, students, academic managers, staff, and alumni. The chair of the board may be appointed by the government or the president from the roster of appointed members or selected independently by the board members. The board should govern the affairs of the university/tertiary institution by: (a) developing broad administrative and management policies for the institution; (b) providing broad direction and coordination to the development of academic programs in relation to the HEI's strategic plan; (c) approving the budget and overseeing the efficient management of funds, property, facilities, and investments; (d) appointing the rector, as chief executive of the institution. The establishment of strong governing boards should keep intact the mandate of the academic council to debate and decide on academic matters.
- ***Develop a strategy for the higher education sector.*** MEYS should initiate and participate together with all relevant higher education stakeholders in a strategic planning process to develop a vision and strategy for the future of higher education in Bulgaria and an actionable program for its implementation.
- ***Incentivize strategic planning at institutional level.*** The government should provide appropriate incentives for HEIs to conduct their own strategic planning and develop integrated strategies covering all issues of governance and management of the institution (e.g., by employing a tested methodology such as the Balanced Score Card)

### 1.9. **Financing higher education**

#### 1.9.1. *Challenges:*

- **Underfunding of higher education.** Bulgaria has gone through a decade of underfunded expansion of its higher education sector. The objectives to improve quality and equity in addition to meeting the access and participation targets set out in the Lisbon and Europe 2020 strategies requires the mobilization of additional resources, both public and private, should the Government be set on meeting these objectives within the envisioned timeframe.
- **Limited role of HEI's performance in the allocation of funds.** The per-capita financing of HEIs in Bulgaria is, in principle, conducive to competition among institutions. However, the conceptual weakness of this model is that funding (despite recent initiatives to reform) has been based almost exclusively on the number of students enrolled, without adequate relation to performance objectives or educational outcomes (such as the number of graduates achieving a pre-defined performance standard). The recently introduced performance funding indicators allocate too little to have any significant impact on HEI policies and are unlikely to spur a system-wide drive for better performance if kept at their present low levels.
- **Lack of strategic focus in financing HEIs.** Public resources for higher education institutions have not been used to steer longer term, strategic policy reforms. The planning and allocation of state subsidies to HEIs is not yet fully aligned with the outcomes or labor market demands despite the recent innovation marked by the launch of the BURS and the comprehensive performance data contained in that rankings system.
- **Inflexible tuition fees-setting mechanism.** Tying the level of fees to the per student expenditure norms in the permanent legislation proves to be an inflexible arrangement, requiring frequent changes to the main law instead of giving greater flexibility to HEIs to define their tuition fees to adapt to declining state support at times of austerity measures.
- **Underutilized potential of the student loans scheme.** The low fees for the cheap tertiary education programs into which most students in Bulgaria enroll and the strict eligibility criteria for loans covering living expenses undermine the student loans' popularity. Thus, the potential for mobilizing additional private resources into the higher education sector (in volume, which the state budget cannot afford) is limited.

#### 1.9.2. *Options for reforms:*

- **Increase public funding for higher education to 1% of GDP in the medium run.** Such an increase of public resources for the sector should take place with an agreed ceiling on public contribution of 60-65% of the total funds, within a broader finance reform package, including the options suggested below.
- **Consider a shift from funding enrollments to funding graduates of HEIs.** As a first step, the government may explore the option to base the core funding formula on the number of graduates meeting predefined criteria (as in the Netherlands) instead of the number of enrollments. In this process, due attention should be paid to develop buffers against possible unintended consequences (e.g. loosening the rigor of student assessment to ensure graduation of students).
- **Increase the share of the performance-based component in the core funding of HEIs.** The government needs to review the indicators currently used for performance awards and check their validity. As a next step, the share of the performance-based component in the core funding of HEIs may be increased to 10% of the total state funding, and to 20-30% over a five-year period.
- **Introduce performance contracts with HEIs.** In addition to the core funding, the government may encourage long-term policy reforms / reaching strategic objectives through performance contracts with HEIs. The performance contracts, spanning a period of 3-4 years, should combine top-down and bottom-up approaches to define performance

- targets, based on the government's priorities and HEIs' responses to them in their individual target setting.
- **Consider the option of introducing matching grants.** Government may provide matching grants to encourage HEI efforts to raise funds with industry and philanthropists.
  - **Increase tuition fees and make fee-setting arrangements more flexible.** In line with the increased public funds for higher education, own source revenues of HEIs need to grow, should their 35-40% share be kept. This implies, but does not mandate, future increases in tuition fees. Fees-setting could become more flexible by (i) introducing ranges, e.g. from 30 to 80% of the per student expenditure norms, or (ii) untying fees from the expenditure norms and imposing differentiated minimum and maximum levels, or (iii) deregulating fee setting altogether, while ensuring information on tuition fees of all universities (public and private) is made public.
  - **Make the student loan scheme more palatable for the public.** The first step should be to make the loans for living costs accessible for all full-time students. To make loan repayment conditions more attractive, the loan scheme needs to be redesigned by including the tax administration/social security system to track and handle repayments from higher education graduates; this is a prerequisite for converting the scheme into an income-contingent loan scheme whereby loan repayment is set as a percentage of the graduates' future income and collected through the income tax system.
  - **Refocus the existing scholarship programs:** The above reforms may be rolled out together with a revised policy of existing scholarship programs funded by the state budget to target only the most academically qualified low income students in selected priority fields and programs.

#### 1.10. Efficiency

##### 1.10.1. *Challenge:*

- **Large number of small, specialized public “universities”.** The higher education landscape in Bulgaria is characterized by the large number of small, specialized public HEIs. This is a concern from a fiscal, research and development, and governance point of view. The low student to academic staff ratio of these small public HEIs fosters spending inefficiencies in the sector. Moreover, small HEIs are unlikely to gain the critical mass of researchers, usually across disciplines, needed to achieve the declared objective of the government to make universities key players in the research and innovation scene.

##### 1.10.2. *Options for reforms:*

- **Consolidate universities and tertiary institutions:** The government may consider merging some universities into larger institutions or creating a smaller number of comprehensive universities with larger average enrolment than at present. An example of this kind of consolidation would be the establishment of a comprehensive multi-campus technical university in Sofia by clustering the Technical University of Sofia with the specialized smaller institutions of chemical technology and metallurgy; forestry; and mining and geology. The challenge anticipated in considering the consolidation or merger of universities is a classic example of change management negatively affecting strong vested interests. Hence, it would require fully defined and committed policy foundations and capable change managers using fair and transparent criteria. The benefits of such consolidations or mergers would need to be articulated to all affected parties, especially the concerned university faculty and rectors. China and Hungary provide examples of successful mergers of such institutes through bold government action, despite considerable opposition from the universities. The Hungarian reforms of 1996

managed to consolidate (by 2007) around 100 specialized institutions into 30 larger comprehensive universities.