



Executive Summary

1. Strategy for Tertiary Education

At present, there is no strategic plan document for the higher education sector in Armenia. The government's objectives for the sector were briefly highlighted in the government program approved in February 2019. An action plan of the government program was developed and approved in May 2019. The new government is planning to draft a strategic plan for the sector in the near future.

2. Governance of Systems and Institutions

The regulatory framework does not generate a level-playing field. Private universities and cross-border institutions have considerably more autonomy as compared to public universities, particularly with regard to governance and financial matters. The regulatory framework includes some provisions to improve meritocratic human resource practices and horizontal governance practices, but they primarily apply to public universities. The Government of Armenia has developed an anti-corruption strategy, but it is not perceived to be effective.

3. Financing

There is a stable funding mechanism for public universities. It is transparent but is considered outdated. Performance-based funding is currently not used, although the government is considering its introduction in the near future. Universities can receive some competitive funding for education, research and innovation.

4. Quality Assurance

There is a quality assurance and accreditation agency (the National Center for Professional Education Quality Assurance or ANQA), but at present it mainly covers the public-sector universities. ANQA has developed quality assurance standards, which are currently being implemented by the institutions. There are consequences for noncompliance with accreditation criteria for public universities, while some cross-border institutions operate without accreditation. There is currently no mandatory accreditation for degree programs.

5. Tertiary Education Management Information System (TEMIS)

There is a management information system for universities in the country, although it is not operational at present. Nevertheless, some universities are using their own management information system to collect data about their operations.

6. Access and Equity

The government has several measures to improve access and equity, but inefficiencies at various levels hinder these efforts. To make universities more accessible to the poor, financial aid needs to become more targeted, and universities will need to reach out to high schools while encouraging children to sit for admissions tests. Attention also needs to be given to students with special needs within the context of inclusive education.

7. Relevance of Tertiary Education for Social and Economic Needs

The government has some incentives in place to improve the relevance of its tertiary education system. The insufficient relevance of the curriculum to the labor market is a problem, and most internships are formal positions that do not offer learning opportunities.

Status



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List of Acronyms

ANQA	National Centre for Professional Education Quality Assurance
ARMENIC	National Information Center on Academic Recognition and Mobility
CIF	Competitive Innovation Fund
ECTS	European Credit Transfer and Accumulation System
ENQA	European Association for Quality Assurance in Higher Education
EQAR	European Quality Assurance Register for Higher Education
INQAAHE	International Network of Quality Assurance Agencies in International Education
LSNCO	Law on State Non-Commercial Organizations
LTD	Company Limited by Guarantee
MoESCS	Ministry of Education, Science, Culture and Sport
NACET	National Center on Educational Technologies
RDI	Research Development and Innovation
SNCO	State Non-Commercial Organization
TEMIS	Tertiary Education Management Information System

Introduction

This report aims to help the Government of Armenia and its stakeholders develop a strategy for the tertiary education sector. It uses the methodology of SABER – Tertiary Education (SABER-TE), which is a diagnostic tool to assess how education systems perform and to identify priorities for reforms at the national level. The methodology and this report are part of the World Bank’s Systems Approach for Better Education Results (SABER), which benchmarks education systems at the country level.

SABER-TE focuses on seven dimensions of tertiary education policy (see box). The general idea is that a strong policy environment is a prerequisite to better performing tertiary education institutions, including universities, colleges, and technical and vocational institutes. The diagnostic tool aims to help countries assess best practices and to diagnose which policies need urgent attention. For some policy areas, countries are scored on specific “policy levers” to help make concrete recommendations for improvement.

Each of the seven policy dimensions can contribute to the outcomes of tertiary education systems, although they work together in a holistic way. By way of illustration, a strategic plan without an effective governance structure is just a collection of ideas that will not be implemented; a well-designed governance structure without a strategic plan is a meaningless bureaucracy.

The World Bank has identified best practices in each of these dimensions in a review of the world’s most effective tertiary education systems.¹ The best-practice indicators used for scoring are made available in the appendix to this report. Countries are scored and then benchmarked on these policy dimensions with one of four possible scores:

- **Latent**, indicating that this topic has received too little attention;
- **Emerging**, indicating that there are some instances of good practice;
- **Established**, indicating that there is systemic good practice; and
- **Advanced**, indicating that the country follows international best practice and is an example for others.

SABER uses an extensive questionnaire to collect data on the policy environment for tertiary education. The questionnaire is populated through an analysis of the most recent versions of relevant legislation, policy documents, and reports on the sector. The SABER team also carried out fieldwork in Armenia between July 2018 and March 2019 with visits to several universities, government agencies, and other stakeholders. After data collection for Armenia was complete, the policy dimensions were scored on a rubric (see the appendix for a full overview of the rubric). Both the answers to the questionnaire and the rubric scores are available from the SABER website (<http://saber.worldbank.org>).

Seven policy dimensions of successful tertiary education systems

1. A clear and evidence-based strategy for tertiary education
2. Modern governance of systems and institutions
3. Financing that promotes performance and innovation
4. Independent quality assurance
5. A robust Tertiary Education Management Information System (TEMIS)
6. Access and equity to ensure social mobility
7. Relevance to country’s social and economic needs

¹ World Bank, 2016. What Matters Most for Tertiary Education Systems: A Framework Paper. Washington DC: World Bank.

This report proceeds as follows. First, we describe the context of the tertiary education system in Armenia. In the seven sections that follow we proceed with scoring each of the seven policy dimensions in turn, and in the conclusion we offer a few general observations and recommendations about tertiary education in Armenia.

Context

Armenia is one of the countries that was an early adopter of the World Bank’s Human Capital Agenda and aims to rapidly improve its position on the Human Capital Index (HCI). The index showed Armenian workers are only 57 percent as productive as they could be, due to a lack of attention for human development outcomes. In 2012, productivity was actually higher at 58 percent, meaning that Armenia’s human capital stock may be declining. For this reason, Armenia currently ranks much lower than the average for its region, in place 78 out of 157 countries.

Education is at the heart of Armenia’s human capital deficit. Children in Armenia are expected to stay in school for 11.1 years, which means that the average young person will not reach higher education (which typically starts after 12 years of education). Importantly, when we adjust years of schooling for learning outcomes, children on average only learn the equivalent of 7.9 years. This is due to the low scores that students obtain in internationally comparable student assessments.

Armenia is an upper-middle-income country with a nominal GDP of \$3,872 per capita (2017) and has sustained strong economic growth in recent years. Pulled along by a recovery in external and domestic demand for goods and services—primarily tourism—in response to increases in disposable income, remittances, and investment, the economy grew by 7.5 percent in 2017 and by 8.5 percent in the first six months of 2018. Growth slowed to around 3 percent in the second half of 2018; however, the annual growth rate still remained at a healthy 5.2 percent.

Despite recent economic growth, the country is struggling with population decline, high poverty, and unemployment, while gender gaps also remain high. Armenia has a population of 2.93 million (as of 2018). This means that over a longer period of time, the population has *declined*, dropping from around 3.5 million in 1990. Armenia made significant progress in reducing poverty, which fell from 54 percent in 2004 to 25.7 percent in 2017. More recently, poverty reduction has slowed considerably, showing meaningful reductions only in 2012 and 2017. Despite this progress, Armenia still has one of the highest poverty rates in Europe and Central Asia (ECA),² with over one-fourth of its population living in poverty. Unemployment has been high since the financial crisis, and the latest estimate sets it at 17.8 percent (2017, which is slightly down from 18.5 percent in 2015). Finally, gender gaps and imbalances also constrain Armenia’s achievement of its full economic potential. Armenia ranked 98th among 149 countries on the World Economic Forum’s Global Gender Gap Index 2018,³ up from 105th in 2015.

² In 2017, 12.3 percent of the population in Armenia lived below the World Bank international poverty line for lower-middle-income countries of US\$ 3.20 per person per day on purchasing power parity terms in 2011 dollars, which is the fourth highest poverty rate among ECA countries with available data.

³ World Economic Forum, *The Global Gender Gap Report 2018* (Geneva: 2018); available at http://www3.weforum.org/docs/WEF_GGGR_2018.pdf.

The new government is renewing its focus on governance and human development. In the spring of 2018, large nationwide peaceful street protests—referred to as the “velvet revolution”—forced Armenia’s longstanding leader from power. While the scale of street protests and the rapid toppling of the government took everyone by surprise, Armenians’ discontent with their government had been building for several years.⁴ Although the country has undertaken some reforms in recent years, it performs poorly with respect to regional comparators on corruption-specific indicators.

Armenia ranks 105 among 180 countries in Transparency International’s Corruption Perceptions Index 2018,⁵ and it ranks in the bottom third of countries in the 2017 Worldwide Governance Indicators on control of corruption, voice and accountability, and political stability.⁶ The World Economic Forum’s 2018 Global Competitiveness Index highlighted issues in Armenia related to the government’s ineffective internal control frameworks, a lack of judicial independence, and the absence of merit considerations in promoting civil servants.⁷ Governance concerns have been raised in other areas of public and economic life as well. In education, the politicization of schools and universities has diverted focus from the primary aim of improving learning outcomes. Weak management of the health care system has led to poor health outcomes and exorbitantly high out-of-pocket spending by households. Poor implementation of environmental laws and regulations has generated significant environmental liabilities or “legacy pollution” in industries such as mining.

The new government has brought a new commitment to anticorruption efforts, good governance, transparency, and accountability in Armenia, which already reflect on the tertiary education sector. These efforts have so far resulted in measures to reclaim unpaid taxes among politically linked businesses and a call for businesses to operate transparently. Both analysts and citizens report reduced corruption, and *The Economist* named Armenia its “Country of the Year” in 2018, citing the prospects for democracy and renewal following the velvet revolution.⁸

Sector context

Higher education in Armenia is currently provided in a variety of institutions, including universities, academies, and conservatories. The higher education system offers three types of degrees: bachelor’s, master’s, and *aspirantura* (equivalent to a PhD). These degrees were introduced on an experimental basis

⁴ In the 2017 Caucasus Barometer—a biannual public opinion survey by Armenia’s Caucasus Research Resource Center—45 percent of respondents felt that Armenia’s politics were going in the wrong direction, and 59 percent responded that they had no trust in the executive government (much in line with the results of the previous survey in 2015).

⁵ Transparency International, *Corruption Perceptions Index 2018* (2018). Available at <https://www.transparency.org/cpi2018>.

⁶ D. Kaufmann, A. Kraay, and M. Mastruzzi, *The Worldwide Governance Indicators: Methodology and Analytical Issues*, World Bank Policy Research Working Paper No. 5430 (Washington, DC: World Bank). Interactive dataset available at: www.govindicators.org.

⁷ K. Schwab, ed., *Global Competitiveness Report 2018* (Geneva: World Economic Forum). Available at <http://reports.weforum.org/global-competitiveness-report-2018/>.

⁸ “What Happens Next in Armenia?” *The Economist*, December 12, 2018.

in several universities in 1995 but were first widely offered in 2005 when Armenia joined the Bologna process. There are three types of universities: public, private, and cross-border, with state participation. The Law on Education, which was adopted in 1999, has a separate section on Higher Education. In 2004, The Law on Higher Education and Post-Graduate Education was adopted by the Armenian Parliament.

Higher Education institutions in Armenia have undergone substantial changes since 1991, when Armenia became an independent state. During Soviet times, these institutions were under the ideological and administrative control of the state. After the collapse of the Soviet system, the demand for higher education increased but the places in universities were limited and even applicants with high marks were unable to secure seats. Following public distrust in university entrance procedures and protests by those who felt excluded from the system, the government introduced centralized admission exams in 1990s.

With the transformation of the Armenian economy to the market system, private universities were allowed to operate, leading to a substantial growth in the number of institutions as well as students. In 1991, only 14 higher education institutions were operating in Armenia. In 1995, private universities started operating and the total number of universities increased to 55. By 1997, the number of universities reached its highest level at 102, operating with 56,154 students. Afterward, the number of universities decreased gradually, and it currently stands at 61. Of this total, 16 universities are public, 12 are foundations, and another 4 are state noncommercial organizations. Cross-border universities are also foundations. Private universities have a different legal status; most of them are limited companies (LTDs).

In 2005, Armenia joined the Bologna Process, which led the country to focus on an extensive reform agenda to place it in the European Higher Education Area. The country adopted the three-cycle system of higher education and reoriented its programs on learning outcomes and the European Credit Transfer and Accumulation System (ECTS). While the extent of these reforms are seen as shallow⁹, the government has remained committed to the process. In 2015, Armenia hosted the Ministerial Summit of the European Higher Education Area as a testament to that commitment. The communiqué from the summit reoriented the process toward improving the teaching and learning process:

*We will encourage and support higher education institutions and staff in promoting pedagogical innovation in student-centered learning environments and in fully exploiting the potential benefits of digital technologies for learning and teaching.*¹⁰

Due to the high rates of return and impact on poverty reduction that higher education promises, it features strongly in Armenia's reform agenda. According to the government's *Social Snapshot and Poverty in Armenia 2018* report, the poverty rate in Armenia is lowest among persons with tertiary education – around 1.8 times lower than the national average for the population over age 16 and 2.4 and

⁹ OSF Armenia, *Higher Education in Armenia Today: A Focused Review* (CEU Higher Education Observatory, 2014); http://www.osf.am/wp-content/uploads/2013/11/OSF_HE_report.pdf

¹⁰ Bologna Process. 2015. Ministerial Communiqué.

2.5 times lower for those with elementary and incomplete secondary educations, respectively. When one compares graduates of all levels of education, the rate of extreme poverty is the lowest among those with tertiary education in both 2008 and 2017. The figure for 2017 was 0.4 percent, which is close to the 0.5 percent extreme poverty rate of tertiary level graduates in 2008. 53 percent of the poor population in Armenia has a general secondary education qualification. This group of secondary graduates is the one that faces the greatest difficulties in finding jobs among all adults (ages 17 and above).¹¹

Even though higher education has grown and demand for it remains strong among families and youth, the sector is currently contracting and undergoing consolidation. This is primarily due to demographic shifts, including population decline, high levels of outmigration, and new regulations of private higher education institutions. Between 2009 and 2018, the sector’s student population decreased by 31 percent, and 16 universities (out of 77) had to close their doors. Additionally, in 2010 the government introduced a regulation whereby private university applicants (like their public university counterparts) had to sit for admission examinations. This step reduced the number of applicants gaining admission to private higher education institutions. The introduction of an accreditation process and the failure of some universities to fulfill licensing procedures caused further closures. Despite this decline, universities are not systematically reaching out to new groups, and inequality remains substantially high in the sector. Between 2004 and 2013, inequality by family background in access to higher education remained unchanged, despite expansion throughout that period.¹² Table 1 illustrates the changes in the student, faculty, and institutional population between 1991 and 2018.

Table 1: Trends in the number of higher education institutions, students, and faculty in Armenia, 1991–2018

	1991	1997	2009	2018
Number of higher education institutions	14	102	77	61
Number of Students	66,079	56,154	114,629	78,747
Number of Professors	N/A	8,303	12,196	10,937

Source: Armstat. Statistical Yearbooks 1991-2018.

The rapid expansion of the system was associated with declining quality, particularly in the private sector. Many private universities were created as business enterprises to meet the demand for higher education from families and youth without having the adequate staffing and facilities to offer competitive degree programs. The number of private universities started decreasing after state universities massively restarted part-time education services, which had been stopped during the first few years of independence. It is unclear whether the recent consolidation of the system and the decreasing student

¹¹ Armstat. 2018. *Social Snapshot and Poverty in Armenia 2018*. https://www.armstat.am/file/article/poverty_2018_english_4.pdf

¹² K. Geven, *Inequality in Armenian Higher Education, 2004-2013*, Working Paper (2014).

numbers are leading to higher quality, as there are two opposing forces at work: institutions can more selectively recruit faculty, but must expand places to maintain a steady stream of income.

On macro-level indicators, there are strong reasons to remain concerned about the quality of Armenian higher education. According to the 2019 edition of the *Global Talent Competitiveness* report, which is published every year, the overall ranking of Armenia's universities place the country 78th out of 125 countries.¹³ For its university ranking, the report used data from QS World University ranking¹⁴. Armenia ranks 101st in tertiary education expenditures and 50th in tertiary education enrolment among 125 countries (the enrolment and expenditure data are derived from the UNESCO Institute for Statistics). State funding for universities is very low. The yearly state budget allocation for higher education institutions is around 12 billion Armenian drams, which is less than USD 25 million.

While there were several attempts at regulation, the first official attempt at a university accreditation process failed. In 2008, the National Center for Professional Education Quality Assurance (ANQA) was established, which started the development of accreditation principles and standards and the process of accreditation. During the first years of operation, the Board of Trustees of ANQA was headed by the Prime Minister of Armenia, which raised concerns about the autonomy of ANQA. Later the board of ANQA was headed by a representative of the Central Bank of Armenia.

The government has been introducing various reforms to improve the higher education system. One of the significant steps was the introduction of the 2005 Law on Higher and Postgraduate Professional Education, which brought a new governance system to Armenia's public higher education institutions. Before this law was passed, rectors of universities were appointed by the prime minister or minister of Education and Science. The law introduced university boards as the main governance bodies of public universities. However, within a few years the boards were politicized, as they were given the opportunity to appoint 25 percent of their members from state officials. Political figures such as the president of Armenia, prime ministers, speakers of Parliament, and other high-level political leaders became heads and members of university boards.¹⁵ Several reports prepared by international and local experts raised the issue of the politicization of these boards as an obstacle to university autonomy.^{16 17} After the velvet revolution in 2018, the boards of public universities were slightly changed in that high-level political leaders could still serve on them but no longer head them.

¹³ INSEAD, The Addeco Group, TATA Communications. *The Global Talent Competitiveness Index 2019: Entrepreneurial Talent and Global Competitiveness* (2019); <https://gtcistudy.com/wp-content/uploads/2019/01/GTCI-2019-Report.pdf>

¹⁴ QS is a reputation based university ranking. For details, see <https://www.topuniversities.com/university-rankings>

¹⁵ World Bank, *Addressing Governance at the Center of Higher Education Reforms in Armenia* (Washington, DC, 2013).

¹⁶ World Bank, *Addressing Governance at the Center of Higher Education Reforms in Armenia*, p. 23.

¹⁷ OSF-Armenia, *Strengthening Integrity and Fighting Corruption in Education: Armenia* (Yerevan: Open Society Foundations – Armenia, 2016).

Armenia is in the process of amending its Law on Higher and Postgraduate Professional Education. This process started in 2016, and since then several drafts of the law have been discussed. The latest version was approved by the government in December 2017 and sent to the Parliament. After the velvet revolution in 2018, a new draft of the law was being prepared, and it is anticipated that the new draft law will be merged with the Law on Science and will undergo public discussions in 2019.

1. Policy Dimension 1: Strategy for Tertiary Education

Overall score: Latent ●○○○

Summary: At present, there is no exclusive strategic plan document for the higher education sector in Armenia. However, the government's main strategy and objectives for the sector are highlighted in the general State Program for Education Development 2011–2015, which is outdated. The government is in the process of developing a new strategy on higher education, but it remains unclear when it will be completed.

Under this policy dimension we review the efficiency of the strategy for tertiary education by asking three questions. First, does the country have a fully developed strategic plan for the sector? Second, was the strategic plan developed with the involvement of relevant stakeholders? And third, is it grounded in relevant and publicly available evidence?

Existence of Strategic Plan

There is no dedicated strategic plan document for tertiary education in Armenia. The government has stated its strategy and key objectives for tertiary education in the document called the State Program for Education Development 2011-2015. The goals set for tertiary education are described in the document as follows:

- To introduce a national qualifications framework in line with the European Qualifications Framework;
- To set up and strengthen a national quality assurance system;
- To introduce an effective and stable system of higher education funding;
- To provide recognition for and comparability of higher education certificates;
- To promote student mobility and the attractiveness of the Armenian education system; and
- To foster interaction between higher education institutions and employers (labor market) and promote learners' professional guidance and the solution of their employment issues.¹⁸

The Ministry of Education, Science, Culture and Sport (MoESCS) had plans to develop a Higher Education Strategy for 2016-2025, but that has not been completed yet. A feasibility study for developing the new strategy has been conducted and is publicly available on the MoESCS website. Simultaneously, a document entitled "State Program for Education Development until 2030" is being drafted as well. Neither document had been completed before the new government came to power. At present, it is unclear when the Higher Education Strategy will be drafted, but the Law on Higher Education and Post Graduate Professional Education (hereafter, the Law on Higher Education), which will be merged with the Law on Science, will be presented to National Assembly in 2019.

¹⁸ The Law of the Republic Armenia on Approving the Education Development State Programme of the Republic of Armenia: 2011-2015, p. 23. http://www.gdf.am/images/Education_Development_National_Programme_2011-2015_eng.pdf

Stakeholder involvement

In its efforts to revise the existing Law on Higher Education in 2017–2018, the ministry held extensive stakeholder consultations and secured the involvement of various stakeholders in presenting the provisions of the proposed law. The ministry organized discussions with different groups of external stakeholders, such as development partners, NGOs dealing with higher education issues, and universities.

Use of evidence

There has not been systematic use of evidence, since a strategy has not yet been finalized. As will become clear in Chapter 5, there is still no finalized Tertiary Education Management Information System (TEMIS). Nevertheless, the government has undertaken diagnostic work to inform discussions about the law. A feasibility study¹⁹, which looked at the capabilities and performance of higher education. Another comprehensive study was published by the Amberd Research Center, affiliated with the State Economics University of Armenia. In 2018, a report on anti-corruption reforms in Armenia was published by the Organisation for Economic Co-operation and Development (OECD)²⁰. Chapter 4 of that report covers the prevention and prosecution of corruption in higher education. Additionally, MoESCS has been engaging with several partners, including the World Bank, in building an evidence base for its strategy.

¹⁹ Klemencic, M. 2016. Feasibility Study for Higher Education in Armenia. UNESCO.

²⁰ OECD. 2018. Anti-corruption reforms in Armenia 4th round of monitoring of the Istanbul Anti-Corruption Action Plan. Paris: OECD <https://www.oecd.org/corruption/acn/OECD-ACN-Armenia-4th-Round-Monitoring-Report-July-2018-ENG.pdf>

2. Policy Dimension 2: Governance of System and Institutions

Overall score: Established ●●●○

Lever	Policy Lever 1: Steering the system	Policy Lever 2: Institutional autonomy	Policy Lever 3: Promoting good institutional governance
Lever score	Established ●●●○	Established ●●●○	Emerging ●●○○
Public universities	-	Emerging ●●○○	Emerging ●●○○
Private universities	-	Established ●●●○	Latent ●○○○
Cross-border institutions	-	Advanced ●●●●	Latent ●○○○

Summary: There are several laws and regulations governing the three subsectors of the higher education sector in Armenia. Private universities and cross-border institutions have considerably more autonomy than public universities. Cross-border institutions enjoy the most autonomy among all three subsectors. These differences in autonomy between the different subsectors are explained in detail in the institutional autonomy section. The regulatory framework includes some provisions to improve horizontal and meritocratic human resource practices and horizontal governance practices, but they mostly apply to public universities. The government of Armenia has developed an anti-corruption strategy that includes the higher education sector and accompanies the Programme on Anti-Corruption in education, but it is not very effective. There are some measures to promote transparent human resource practices at the governance level and horizontal governance practices, but they are not very effective and mostly apply to public-sector institutions.

Under this dimension we analyze the effectiveness of the governance system by asking three questions: (1) Is there a comprehensive regulatory framework for steering the system? (2) How much institutional autonomy is afforded to tertiary education institutions? (3) Are there policies in place to promote good institutional governance practices?

3.1 Policy Lever 1: Steering the System

Established ●●●○

There are three main questions about the regulatory framework. First, is there an effective regulatory framework? Secondly, does the regulatory framework have adequate provisions to regulate the market entry and operation of public and private tertiary education institutions? Thirdly, are there mechanisms in place to combat academic malpractice and corruption?

Presence of an effective regulatory framework

Higher education institutions in Armenia are subject to several education-focused and non-education-focused laws. The two main pieces of legislation governing the tertiary education system are the Law on

Education of 1999 and the Law on Higher Education and Post Graduate Professional Education of 2004 (hereafter, the Law on Higher Education). Both these laws outline the roles of the government, higher education institutions, students, faculty and management, especially the Law on Higher Education, which defines higher education policy and quality assurance and defines institutional autonomy, management structures, and governance models.

In addition to these two laws, public universities are also subject to the Law on State Non-Commercial Organizations (hereafter the SNCO Law). This law became applicable to public educational institutions in 2002-2003 when the legal status of those institutions changed from state bodies to state non-commercial organizations. The change in status has created confusion in the sector, since the SNCO Law was not specifically created for education institutions and in fact contradicts education laws, jeopardizing the governance and academic autonomy provided to universities by the Law on Higher Education. One of the main contradictions is that according to education laws, tertiary education institutions are separate legal entities, whereas under the SNCO Law the founder of a state non-commercial organization is entitled to make decisions on the governance and other related activities of that organization.

In recent years, several universities have changed their legal status from that of an SNCO to that of a foundation. The Law on Foundations (2002) offers more flexibility to universities in terms of financial autonomy. Thus, while universities governed by the SNCO Law must channel any revenue generated to the state budget, foundations are able to carry out entrepreneurial activities and retain their revenues. At the same time, since the Law on Foundations was not explicitly developed for educational institutions it imposes some important limitations on universities, such as the board of trustees' power to dismiss the rector.

The incompatibility of laws governing the tertiary education institutions in Armenia has favored government control over the sector. Recently there was a case that showed that the absence of special legal status for universities is creating challenges. The Ministry of Finance highlighted that according to the Law on Foundations, scientific institutes and university laboratories cannot receive direct grants from the state budget but can only receive funds on a competitive basis. Another example of confusion between the laws is related to the resignation of university rectors. The Law on Foundations allows the board of trustees to fire the executive director (in this case, the rector) from the institution at any time based on the number of votes, but under the Law on Higher Education this matter is not regulated. In sum, there is a need to synchronize the Law on Foundations and tertiary education legislation or adopt a special legal statute for universities.

Regulation regarding the market entry and operation of tertiary education institutions

There are frameworks to regulate the entry and operation of institutions in all subsectors of tertiary education in Armenia except for cross-border institutes that are subject to interstate agreements.

All subsectors of tertiary education institutions are subject to monitoring through licensing, formal accreditation, and quality assurance procedures. There is a licensing agency in Armenia that regulates

licensing procedures for universities based on the Regulation on Licensing of Education Programs adopted by the Armenian government in 2009. There are several requirements for licensing, which include the requirements that 50 percent of academic staff be full-time workers and that 50 percent of academic staff hold scientific degrees. Additionally, there are requirements on auditoriums, labs, and libraries. Licensing is not time-bound, and universities need to get licensing for each specialty. Licensing also defines the language(s) of instruction to be used, types of programs (full-time and/or part-time) universities can offer, and the maximum number of students they can enroll.

While all public institutions are accredited and regularly monitored, the situation with private institutions and cross-borders is unclear. According to the Statute on State Accreditation of Tertiary Level Institutions and Academic Programs in the Republic of Armenia (2011, hereafter, Statute on Tertiary Accreditation), all institutions were required to apply for institutional accreditation by December 31, 2018, but some institutions have not yet complied with this requirement. Data from the National Centre for Professional Education Quality Assurance (ANQA), as of December 31, suggest that 13 private universities and one cross-border university fall in the latter category. Two private universities have informed ANQA that they will seek accreditation from foreign organizations registered with the European Quality Assurance Register for Higher Education (EQAR). At the time of this writing, the consequences for these unaccredited universities were unclear.

Combating academic malpractice and corruption

In 2015, the Government of Armenia developed an anti-corruption strategy for 2015–2018 with an action plan, listing higher education as one of the priorities. The strategy accompanies the Program on Anti-Corruption in Education and recognizes higher education as one of the sectors at risk of corruption. The project entitled “Strengthening Integrity and Combatting Corruption in Higher Education in Armenia” began in January 2015 with the objective of increasing the general level of integrity and decreasing the incidence of corruption in higher education institutions across the country. The initial step toward that goal was a needs assessment that included interviews with a wide range of stakeholders and culminated in a publication “Risk Analysis of Issues Affecting the Integrity of the Armenian Higher Education System in Armenia.”²¹

Armenia established an Anti-Corruption Council and a permanent task force of independent experts to support its work. The task force included an education expert, who was charged with assessing corruption risks in education and creating and implementing a plan for action. After extensive consultations with civil society and research organizations active in this field and considering the risks, in 2017 the Task Force presented the Anti-Corruption Council with its proposed Program on Anti-Corruption Measures in Education²². This program only exists on paper and is not perceived to reduce corruption and malpractice

²¹ Council of Europe. 2018. Strengthening Integrity and Combatting Corruption in Higher Education in Armenia.

²² Government of Armenia. 2018. Programme on Anti-Corruption Measures in Education

in the universities. One of the reasons why malpractice is still rampant is the lack of a comprehensive and updated university curriculum and effective teaching approaches. This allows a space in which students are not eager to learn and prefer to find “shortcuts” to doing academic work. Another reason is that faculty often moonlight (work in more than one institution), which leads their attention span to be spread across several groups of students at the same time.²³

The above-mentioned Program on Anti-Corruption Measures in Education recognizes cheating and plagiarism as a widespread problem among students and faculty, but it is not very effective. In a survey of five main universities in Armenia, two-thirds of the students confessed to plagiarizing during their academic careers. Most tertiary education institutions do not have policies and procedures in place to deal effectively with this issue, although the anti-corruption strategy of 2015–2018 put in some measures to address the problem of plagiarism. These include establishing databases for PhD dissertations and graduate-level work and introducing measures for proper management of these databases. According to the strategy, universities will be required to have clearly defined procedures to safeguard thesis and graduate-level work by students.²⁴

There is still a need for universities to develop and enforce consistent and equitable official policies, procedures, and responses to raise awareness on the unacceptability of plagiarism and set up programs to promote academic integrity. More recently, the Standing Committee on Science, Education, Culture, Diaspora, Youth and Sport in the National Assembly of Armenia has raised the issue of regulating private initiatives, such as www.referat.am, www.kursayin.am, www.diplomayin.am, www.bankreferat.am and many others that offer as paid services the writing of dissertations and theses based on customized orders. The Standing Committee suggests adding a provision to the Law on Advertisements to prohibit advertisements of services for developing research work on behalf of students. Student plagiarism has a widespread nature, and increasing opportunities for plagiarism need to be regulated on a national level.

²³ Ohanyan, A. The Academic Career in a Transition Economy: Case Study of the Republic of Armenia in P. Altbach, L. Reisberg, and M. Yudkevich, G. Androushchak and I. Pacheco (Eds.), *Paying the Professoriate: A Global Comparison of Compensation and Contracts* (London: Routledge, 2012).

²⁴ OECD, *Fighting Corruption in Eastern Europe and Central Asia -- Anti-Corruption Reforms in Armenia -- 4th Round of Monitoring of the Istanbul Anti-Corruption Monitoring Action Plan* (2018), pp. 155–165; <http://www.oecd.org/corruption/acn/OECD-ACN-Armenia-4th-Round-Monitoring-Report-July-2018-ENG.pdf>

3.2 Policy Lever 2: Institutional Autonomy

Established ●●●○

As mentioned in the Introduction to this report, there are major differences in the legal environment for public universities, private universities, and cross-border institutions in Armenia. This report separately discusses the autonomy of these different types of institutions. We also make use of previous research on autonomy in Armenia, which has shown low autonomy for Armenian universities.²⁵

Autonomy in various aspects of management and academics is essential for tertiary education institutions to fulfill their missions. Here we review the institutional autonomy of tertiary education institutions on four different aspects: (1) academic autonomy, (2) staffing autonomy, (3) governance autonomy and (4) financial autonomy.

Public universities

Emerging ●●○○

Academic autonomy. Both the Law on Education and the Law on Higher Education afford public universities substantial academic autonomy, but in reality most institutions follow state standards for teaching and curriculum. There are some contradictions within the laws of education. For example, the Law on Education requires universities to teach Armenian language and history as mandatory subjects. Another law, the Law on Ecological Up-bringing, mandates that universities teach ecology. Additionally, since January 2001, Government Decree No. 24, on State Standards for Higher and Vocational Education, has required tertiary education institutions to adopt educational standards, curriculum, and teaching practices established by the government.²⁶

Public universities do not have the autonomy to introduce new academic programs but can cancel existing programs with the government's approval. Universities can only offer programs that are on the list of Professions and Qualifications approved by the Armenian government in 2014. If a new degree program is not on that list, the institution needs government approval to offer it.

Public universities have the autonomy to conduct research on their topic of interest, but there have been cases in the past when a few social science research projects were not approved for political reasons. For example, a Ph.D. student was requested to omit a section from her economics dissertation that criticized the government's economic policy.

²⁵ For instance, EUA's review of University Autonomy in Armenia through the ATHENA project has been a great help. See https://www.athena-tempus.eu/images/Armenia%20ATHENA%20analysis%20and%20roadmap_Final.pdf

²⁶ World Bank, *Addressing Governance at the Center of Higher Education Reforms in Armenia* (Washington, DC: 2013), p. 23.

Public universities have the autonomy to embed internships in their curricula and decide on admission procedures for part-time students. However, the government has established strict policies and procedures for admission to full-time programs. All students applying for full-time programs at public and private universities sit for the unified university entrance exams, which are conducted by the Assessment and Testing Center. The Ministry of Education, Science, Culture and Sport (MoESCS) then decides students' eligibility in a particular public tertiary education institution and program.²⁷

Additionally, universities are not fully autonomous in deciding the number of students admitted each year. All public and private universities report on the number of spaces they have available for government-funded and private-fee-paying students for each degree program for MoESCS approval. The state provides funding for a limited number of slots to public, private, and inter-state universities. The number of students admitted is determined by the licensing agreements between the government and the universities. The government funds a small portion of the students, but even the number of fee-paying students is decided based on the number of government-supported students and on infrastructure and other resource requirements. The state funding does not include capital/infrastructure expenditures.

Further, universities are free to grant certificates but do not have autonomy to grant degrees. According to the Law on Higher Education, the government sets the standards for graduation requirements. A new commission that assesses candidates' readiness for a degree specifies that 50 percent of commission members should be specialists from outside of the university.

Staffing autonomy. The Law on Higher Education awards substantial staffing autonomy to tertiary education institutions. They have the authority to hire, promote, and fire academic staff, but most tertiary education institutions are unable to exercise this autonomy due to ineffective human resource practices. These inefficiencies include nontransparent recruitment processes, lack of performance evaluation systems for staff, and mismatch between staff and the use of their time. For example, most universities have more managerial staff than they require.

According to stakeholder interviews, despite having the autonomy to set salaries and offer performance pay, most universities do not do this in practice due to their lack of resources. Universities often hire faculty on a contractual basis to deal with tight budgets.

Governance autonomy. Governance autonomy has been limited for public universities because there has been heavy political influence from government authorities. High-level government officials sat on the university governance bodies that undermined the autonomy of public universities. For example, the boards of public universities were chaired by the highest political leaders of the country, and ministers, governors, and mayors were represented on the boards. According to the Regulation on Formation of Public University Boards, 25 percent of board members should be appointed by state officials, 25 percent

²⁷ World Bank, *Addressing Governance at the Center of Higher Education Reforms in Armenia*, p. 30.

should be well-known people from the fields of education, science, culture, and business, 25 percent should be representatives of students, and 25 percent should be representatives of university staff. The board of trustees should be approved by the prime minister. This situation changed after the revolution. The president, prime minister, speaker of the Parliament, and ministers are not represented on the boards any longer, but the boards still have representation from governors, members of Parliament, and deputy ministers. Some newly appointed boards of trustees have already convened meetings, and voting procedures are now democratic. There are some cases where board members voted for competing candidates.²⁸

Public universities do not have the autonomy to change the process of appointment for leadership. The rector of a public higher education institution is elected following a procedure of open competition, as prescribed by the Law on Higher Education and the statute of the higher education institution. Elections takes place at each institution's board of trustees by secret ballot, and the appointment is made for a period of five years. The same person cannot be elected to the office of the rector in the same higher education institution for more than two terms. The final result of the rector election has to be approved during a session of the Government of Armenia at which the prime minister, deputy prime ministers, and ministers are represented. A candidate has to secure two-thirds of the vote from the board of trustees to be approved; if the rector is not approved by the government, new elections take place and the process is repeated.

There are several legal inconsistencies in leadership appointment documents. Four different documents regulate the process, and they are not aligned. These documents are the Law on Higher Education, the Law on Foundations, the Regulation on Formation of Boards, and the Charter of the Board of Trustees. The existing discrepancies between the various laws and procedures have caused confusion and need alignment.

The involvement of internal and external stakeholders as part of universities' leadership structures is defined in the Law on Higher Education and the Regulation on Formation of Public University Boards.

Financial autonomy. Public universities have substantial financial autonomy on paper, but in practice, there are some limitations from conflicting regulations. The Law on Higher Education gives universities the autonomy to set tuition fees, but the Ministry of Education, Science, Culture and Sport has effectively set a ceiling on tuition fees. This latter regulation, which was adopted by the Armenian government in 2015, established a formula stipulating the highest limit for tuition fees. There are also limitations on universities being able to invest money and own and sell property. Universities that are legally set-up as Foundations have such investment autonomy, but universities that are State Non-Commercial Organizations face important limitations under the Law on SNCOs. Also, if the state owns the assets, such

²⁸ This happened in Shirak State University, Yerevan State University, and Yerevan State Medical University.

as university buildings, then the revenue generated from those assets is directed to the state. The Law on SNCOs also limits public universities from using its assets as collateral and mandates that universities seek permission from MoESCS when acquiring a property worth more than the amount stipulated in the law.²⁹

Private universities

Established ●●●○

Private universities exercise the same level of autonomy in academic and staffing matters as their public counterparts, but they are more autonomous than public universities when it comes to governance and financial matters. These similarities and differences are explained below.

Academic autonomy. Public and private universities are similar in the level of academic autonomy that they can exercise. Both must follow the educational standards, curriculum, and teaching practices mandated by Government Decree No. 24 and the Law on Education, but they can freely embed internships and practical trainings in their curriculum, determine academic structures, cancel degree programs, and conduct research on topics of interest. However, in reality much research does not take place due to the lack of resources. As is the case with public universities, private universities cannot freely introduce new degree programs, design admission procedures for full-time students, or grant degrees.

Staffing autonomy. Private universities are similar to public universities in their staffing autonomy, except for some minor differences. Most vacancies in private universities are not publicly announced. There are no mandatory requirements for hiring procedures. Like public universities, they can hire, promote, and fire academic and non-academic staff. Even though the autonomy to hire is awarded to private universities, this is jeopardized by non-meritocratic hiring practices. For example, there have been cases where government officials and other high-influence individuals have interfered in the hiring process by asking universities to hire their preferred candidates. As with public universities, private universities also have the autonomy to set salaries and offer performance pay to their staff but are not able to do so in practice due to a lack of resources. The main difference between public and private universities is that private universities have the autonomy to offer tenure positions to academic staff, although nepotism sometimes interferes with meritocratic hiring practices.

Governance autonomy. Private universities differ the most from public universities in their governance autonomy. Private universities have the autonomy to elect their leadership, but most of the time the owner of the university holds the highest leadership position, so the termination of leadership becomes an issue. The heads of universities are usually appointed without a term limit by Councils of Founders and these heads hold considerable power over management decisions of the respective universities. The head of the institution or its rector usually runs the university with his or her chosen limited circle of personnel.

²⁹ World Bank, *Addressing Governance at the Center of Higher Education Reforms in Armenia*, p. 33.

Unlike public universities, private institutions have the autonomy to determine the process for electing their leadership and involve internal and external stakeholders in their governing bodies, but in practice there is usually no competitive process for the election of university management, and the representation of faculty and students in university governing bodies is limited.³⁰ The process for electing rectors of private universities varies. In some cases, rectors are elected by governance bodies, and in other cases, the founders of universities act as rectors. The process used for the election of rectors is not made public by the universities.

Financing autonomy. Mostly, private universities do not receive funding for non-research operations. Two exceptions are Gladzor University and Northern (Hyusisayin) University, which get funding from the state budget for two students each. The number of state-funded students can change every year. There are no clear criteria on how these numbers are decided. Every year the Ministry of Education, Science, Culture and Sport decides the number of state-funded students. Besides that, private universities are eligible to participate in and get funding from the Innovations Competitive Fund. Private universities have more financial autonomy than public universities. Unlike public higher education institutions, they are able to borrow money, own and sell land and buildings they occupy, and deliver contractual services to generate income. Private universities are similar to public universities in that they can accumulate reserves and have the financial autonomy to invest money in financial or physical assets.

Cross-border institutions

Advanced ●●●●

Cross-border institutions such as the American University of Armenia, French-Armenian University, and the Armenian-Russian (Slavonic) University enjoy similar types of autonomy as private institutions, except in academic decision making, where they have slightly more freedom than their private or public counterparts. The similarities and differences in various types of autonomies afforded to cross-border institutions and public and private institutions are described below.

Academic autonomy. Cross-border institutions exercise more academic autonomy as compared to public and private tertiary education institutions. Unlike the public and private universities, they can design their own curriculum, but they are also required to teach courses in Armenian language and the history of Armenia for a minimum of two semesters.

Like other tertiary education institutions in the country, cross-border institutions do not have the autonomy to introduce new degree programs, but they can cancel programs at will. New programs can

³⁰ World Bank, *Addressing Governance at the Center of Higher Education Reforms in Armenia*, p. 29.

only be introduced if they are on the Professions and Qualifications List, which must be approved by the government. Tertiary education institutions have to seek government approval if a program they wish to offer is not on that list. Cross-border institutions have the autonomy to offer practical trainings and internships to their students, determine academic structures, design admission procedures, and conduct research on topics of interest.

Staffing autonomy. Cross-border institutions can hire and promote academic staff and have the autonomy to fire academic staff as well as set their salaries. They can hire, promote, and fire non-academic staff. They can also create new academic and non-academic positions, set salaries, and offer performance pay, but lack of resources can be a hindrance in exercising this form of autonomy.

Governance autonomy. Similar to private tertiary education institutions, cross-border institutions have substantial governance autonomy. They are able to appoint and terminate their leadership and establish their leadership's appointment and termination procedures. Like public universities, cross-border institutions have governing bodies, and their rectors are elected. But they differ from public universities in that they have the freedom to decide the composition of their governance bodies. For example, at the American University of Armenia and the French-Armenian University students are not represented on the governance board. The boards consists of different well-known academicians, businessmen, and public figures. Cross-border institutions are also free to change their mission and involve internal and external stakeholders in their governing bodies.

As an example: The American University of Armenia (AUA) may have not less than seven or more than 25 trustees. The president of this university must be a trustee of the corporation in his/her ex-officio capacity, with the full power of a trustee. Appointments to the board are for a term of four years, arranged such that at least one seat on the board becomes vacant each year, but not more than one-third-plus-one of the authorized number of seats on the board become vacant in any one year. The president of the university is elected by the trustees and there are no term limitations.

Financial autonomy. As is the case with private universities, cross-border institutions are also afforded extensive financial autonomy. They are able to set their tuition fees, accumulate reserves, borrow money, invest in assets, own property, and offer contractual services. Cross-border institutions get a small amount of funding from the state budget for state-funded students, an amount that includes tuition fee waivers for a few individual students (between 2 and 12 students) for each university. They are also eligible to apply for funding from the Competitive Innovation Fund (CIF), provided that these institutions have international accreditation recognized and registered by the local quality assurance agency, ANQA. Two out of the 15 universities receiving CIF grant funding in recent years have been private universities. One cross-border university with a locally recognized international accreditation—Russian-Armenian (Slavonic) University— received CIF funding.

3.3 Policy Lever 3: Promoting Good Institutional Governance

Emerging ●●○○

The promotion of good institutional governance is reviewed through three questions: (1) Does the regulatory framework incentivize the promotion of transparent governance practices at the institutional level? (2) Does the regulatory framework support transparent and meritocratic human resource services? and (3) Is there horizontal governance?

Promotion of Transparent Institutional Practices at the Governance Level

The regulatory framework includes some provisions to improve transparent governance practices of tertiary education institutions. Public tertiary education institutions are mandated to have external audits, according to the Law on Foundations and university charters, and the board of trustees is responsible for selecting audit companies. Internal audits are not required. According to the Law on Foundations, the report of the audit should be published, and this rule is followed by the universities. Public universities have to make their budgets and all assets public, but not all comply with this requirement and there is no monitoring of the presentations of financial data on the university websites. Public universities publish their financial reports and minutes of board meetings. These stipulations do not apply to private universities and cross-border institutions, which generally do not publish their financial documents. Some private and cross-border institutions publish some financial data, but this is limited.

Promotion of Meritocratic Human Resource Practices

The regulatory framework includes some provisions for the promotion of transparent human resource practices at the institutional level. These provisions include mandated public calls for new hires, but the calls are often not disseminated widely. Public institutions are also required to make their hiring and promotion criteria public. Although job postings are published on websites or newspapers, these positions are rarely competitive in practice. The person who is already occupying the post is typically selected for the interview and finally for the job. Many deans and heads of departments are reelected several times, and some have held their positions for more than 20 years. There is no age limit for these positions. Private universities and cross-border institutions do not have to follow the public regulations on hiring, and are free to decide their hiring processes. The main concern about these institutions is the lack of transparency and fairness of their processes. There is a need to develop a job description for universities' academic staff members.

The regulatory framework also includes some provisions to promote meritocratic human resource practices. These practices include academic staff being hired based on meritocratic criteria and being evaluated regularly on their teaching and, in the case of research institutions, on their research, but these practices are not widely applied. Human resource practices are also mandated by university charters and ANQA accreditation principles and standards. Some tertiary education institutions also promote their faculty based on their teaching performance. While these policies are in place, there is no accountability

for public, private, or cross-border institutions for not following them.

In the Statute on Tertiary Accreditation, Principle 5 concerns institutional quality assurance. Within that principle is guidance on faculty and staff and according to this, the institution must provide for a high-quality faculty and staff to achieve its mission and the goals set for its academic programs. There are seven standards under Principle 5, which are as follows:

1. The institution has policies and procedures promoting recruitment of a highly-qualified teaching and supporting staff capable of ensuring program provision;
2. The teaching staff qualifications for each program are comprehensively stated;
3. The institution has well established policies and procedures for the periodic evaluation of the teaching staff;
4. The institution promotes teachers' professional development in accordance with the needs outlined during regular evaluations (both internal and external);
5. There is necessary permanent staff to provide for the adequate coverage of qualifications;
6. There are set policies and procedures for staff promotion in general and for young staff in particular; and
7. There are the necessary technical and administrative staff to achieve the strategic goals.

There are concerns among civil society experts that the Armenian higher education system lacks transparency in its human resource practices and is susceptible to abuse at the point of entry to the academic profession and in matters concerning staff promotion and dismissal. According to stakeholder interviews, the procedures for hiring, dismissal, and promotion of staff are vulnerable, and staffing decisions are influenced by various forms of favoritism. An assessment of integrity in higher education carried out in 2016 in Armenia notes that appointments are commonly based on personal and political connections, the extension of short-term contracts is known to reward loyalty over professionalism, and the termination of employment can be arbitrary. Political influence is commonplace in all these processes, especially with the appointments of senior staff, such as rectors, vice-rectors, and deans of faculties.³¹

Promotion of Transparent Horizontal Governance Practices

The regulatory framework includes some provisions to encourage tertiary education institutions to adopt horizontal governance practices. The Law on Higher Education, the Regulation on Formation of Public University Boards, and university charters all regulate horizontal governance practices. These include mandated inclusion of tertiary education stakeholders in governing bodies, inclusion of student unions in policy processes, mandated term limits for university leaders, and mandated processes for the democratic election of tertiary education leaders. Public universities have limitations on their formation of boards of trustees, but in other cases all universities are free to adopt horizontal governance practices.

There are accountability measures in place for institutions that do not follow these practices. These

³¹ Open Society Foundations–Armenia, *Strengthening Integrity and Fighting Corruption in Education: Armenia* (Yerevan: 2016).

accountability measures include tertiary education institutions being evaluated on practicing these policies and their leaders being held accountable for lack of transparency in their governance practices. According to Principle 2 of the Statute on State Accreditation of Tertiary Level Institutions, an institution must adopt the following governance practices:

- The institution's governance and administrative structures and practices promote effective and ethical leadership and decision making congruent with the mission and purpose of the institution.
- The institution's system of governance provides for student and teachers input in decision making in matters directly affecting them.

3. Policy Dimension 3: Financing

Overall score: Emerging ●●○○

Summary: There is a stable funding mechanism for public universities. It is transparent but is considered to be outdated. Performance-based funding is currently not used but the government is considering introducing this form of funding. Universities can receive some competitive funding for research and innovation.

Financing mechanism are reviewed by asking three questions: (1) Does the country have a stable and transparent process of budget allocation? (2) Is there a publicly available funding formula that includes performance-based funding, and can public and private higher education institutions negotiate some performance targets with stakeholders? and (3) Is there at least one competitive line of funding available to higher education institutions to promote innovation or other national priorities?

Stable and Transparent Budget Allocation Process

Public universities receive limited funding from the government. The Ministry of Finance is responsible for approving and channeling financing to the Ministry of Education, Science, Culture and Sport, which transfers the funds to universities. Funds are provided in the form of an annual block grant.³² The funding process is stable, and universities can anticipate the amount of funds with a fair degree of confidence. But public funding is very low and even public universities receive only 15–20 percent of their funding from the state budget (which itself amounts to about USD 25 million annually). With limited government funding, universities generate most of their income from tuition fees, leading to concerns about affordability. Consequently, the average budget of an Armenian university is quite small. For example, the latest budget of the Yerevan State University, the flagship university of the country, is AMD 8.7 billion (approx. USD 18 million).

Publicly Available Funding Formula

The government uses a funding formula to allocate funds to universities, but its details are unclear. The funding formula is not available to the public. According to stakeholder interviews, the formula is said to consider the number of students, the faculty, and the university area. Performance-based funding and key performance indicators are not used as part of the funding allocation mechanism, although they are currently being considered as elements of the apparatus of financing in the future. It remains to be seen, however, what kind of incentive structure can be created with such a small public budget for the sector. The existing funding formula is subject to revision in the near future.

³² European Commission, *Overview of the Higher Education System: Armenia* (2017); https://eacea.ec.europa.eu/sites/eacea-site/files/countryfiches_armenia_2017.pdf

Competitive funding

The Government of Armenia provides funding for research and innovative education practices on a competitive basis. For example, the government established the Competitive Innovation Fund (CIF), financed by the World Bank, to encourage innovation in tertiary education. This funding program awards grants to public and private universities on a competitive basis for innovative development projects.³³ The funding windows of CIF are:

1. *Consortia projects*, uniting the public and private universities, private companies, and other companies as well as research institutions. The maximum grant amount is up to USD 600,000.
2. *Public and private university projects* targeting specific development and innovation issues at individual institutions and their satellites, taking into consideration strategic development priorities and innovative solutions in the educational sphere. The maximum grant amount is USD 300,000 per project.

Funded projects under CIF to date include: the establishment of an Excellency Center for Dentistry; improvement of scientific research and production of oenological education; an Innovative Center for Bacteriological Biotechnologies and Biofuel; improvement of educational programs for the architectural and construction specializations via establishment of an Educational Research Experimental Laboratory; an Innovation Acoustic Laboratory; and modernization of preschool and primary education. Universities also can access public funds through competition for their scientific institutions and labs. These funds are distributed by the State Committee on Science. The latter also provides funding to group projects proposed by young scientists ages 35 years or younger. Areas of funding include STEM, Architecture, Agriculture, Medicine, Social Sciences, and Armenian Studies.

³³ European Commission, Overview of the Higher Education System: Armenia (2017); https://eacea.ec.europa.eu/sites/eacea-site/files/countryfiches_armenia_2017.pdf

4. Policy Dimension 4: Quality Assurance

Overall score: Established ●●●○

Summary: The National Center for Professional Education Quality Assurance (ANQA) is the quality assurance agency for higher education in Armenia. At present ANQA covers the public sector, but most private and cross-border institutions in the country are not yet accredited by the agency. Higher education institutions in Armenia can opt to get accreditation from any agency that is a member of the European Quality Assurance Register for Higher Education (EQAR) and the European Association for Quality Assurance in Higher Education (ENQA). ANQA has developed quality assurance standards but they are not fully implemented yet. There are consequences for non-compliance with accreditation criteria, but the criteria primarily apply to public universities and there are quite a few cross-border institutions in the country operating without accreditation.

Quality assurance systems in both subsectors were analyzed using four questions: (1) Is there an independent quality assurance agency in the country, and is it effective in enforcing its standards? (2) Has it developed institutional and program quality standards? (3) Are there incentives for higher education institutions to establish management information systems? and (4) Are there any consequences for institutions that do not comply with the evaluation or accreditation criteria?

Presence of an Independent Quality Assurance Agency

The National Center for Professional Education Quality Assurance (ANQA) was established in 2009 as part of higher education reforms in Armenia. The main purpose of this agency is to “undertake studies, research, and to publish recommendations and evaluations in the tertiary education sector.”³⁴ All public and private universities operating in the country are required to be licensed by the Ministry of Education, Science, Culture and Sport. Universities are also required to obtain accreditation, either by ANQA or by other accreditation agencies that are either members of *EQAR and ENQA*.

ANQA is a full member of the International Network of Quality Assurance Agencies in International Education (INQAAHE) and ENQA. ANQA has also been admitted to EQAR since 2017 (for five years). According to its charter, ANQA is governed by a board of trustees, and 2 of the 12 members of the board are government representatives. While the president of the board is elected by the trustees, all the board’s members must be approved by the prime minister, so although ANQA is established as an independent agency, this required approval of its board membership by the prime minister somewhat undermines its autonomy.³⁵

³⁴ See the Charter of the National Center for Professional Education Quality Assurance Foundation (2008) at <http://www.anqa.am/en/about-us/mission/anqa-charter/>

³⁵ See the Charter of the National Center for Professional Education Quality Assurance Foundation (2008) at <http://www.anqa.am/en/about-us/mission/anqa-charter/>

Institutional accreditation is mandatory, but program accreditation is voluntary and is only received after institutional accreditation has been obtained. Both institutional and academic program accreditations are carried out in three consecutive phases:

- *First phase:* self-evaluation (a written report of the institution's internal review) conducted by the educational institution;
- *Second phase:* site visit carried out by an independent external expert panel; and
- *Third phase:* decision made by ANQA's Accreditation Commission regarding the granting or denial of accreditation status.

When the decision is made on granting accreditation status, that status is expressed as one of the following:

- *Accepted* – the institution meets and exceeds the minimum requirements for the criteria;
- *Conditionally accepted* – the institution meets the minimum requirements; however, it needs further development, which has been judged feasible to be achieved within a two-year timespan;
- *Rejected* – the institution fails to meet the minimum requirements, and further development to meet those requirements cannot be achieved within a two-year timespan.

Most private and cross-border universities are not yet accredited. The American University of Armenia is not accredited by ANQA, but it is accredited by another organization that is an EQAR and ENQA member. This is legal, because the 2011 Statute on State Accreditation of Tertiary Level Institutions and Academic Programs in the Republic of Armenia (hereafter Statute on Tertiary Accreditation)³⁶ allows Armenian universities to choose ANQA or any accrediting organization that is an EQAR or ENQA member. The French University in Armenia is in the process of applying for accreditation from ANQA. Even if ANQA denies accreditation to an institution or issues it only conditional accreditation, that institution can still operate in Armenia, but its degrees will not be recognized by the government or by other tertiary education institutions.

Institutional and Academic Program Quality Standards

ANQA has developed institutional quality standards containing a combination of inputs, processes, and outcomes, but the standards and their implementation status remain somewhat contested. According to stakeholders, if the principles and standards were strictly and fully implemented some universities would not be eligible for accreditation. But the Statute on Tertiary Accreditation allows ANQA to provide accreditation to a university for four years if the risks are not high and the university will be able to change the situation within four years. There is also a conditional accreditation for two years. During the first phase, universities conduct a self-assessment based on the following 10 principles³⁷:

³⁶ Approved by Government Decree No. 978-N on June 30, 2011.

³⁷ ANQA Accreditation Manual, file:///C:/WB/HIGHER/GovDec959_eng_ANQA_accreditation_manual.pdf

1. Mission and purpose
2. Governance and administration
3. Academic programmes
4. Students
5. Faculty and staff
6. Research and development
7. Infrastructure and resources
8. Societal responsibility
9. External relations and internationalization
10. Internal quality assurance.

Incentives to Establish a Management Information System

Armenia does not have a fully operational tertiary education management information system (TEMIS), and higher education institutions are not incentivized by ANQA to use the system. But during the self-evaluation phase universities are requested to collect data on the above-mentioned 10 principles.

Consequences for Noncompliance with the Evaluation/Accreditation Criteria

There are consequences for tertiary education institutions that do not follow the evaluation criteria set by ANQAA. While this is the case for public universities, working without accreditation is a big problem where cross-border foreign institutions are concerned. Quite a few of the universities are still in the process of obtaining an accreditation but are nevertheless still operating in the country. There is a lot of uncertainty concerning the operation of cross-border institutions.

Institutions that do not comply with the accreditation standards are not eligible for public funding, and the results of their evaluation results are made public. Such institutions are also ineligible to grant degrees and can even be closed down by ANQA. However, these institutions are subject to re-evaluation and re-accreditation. Tertiary education institutions are required to renew their accreditation every four or six years.

5. Policy Dimension 5: Tertiary Education Management Information System (TEMIS)

Overall score: Latent ●○○○

Summary: There is no national or regional management information system for universities in the country, but government officials note that a TEMIS tool has been developed which will become operational in the near future. Nevertheless, some universities are using their own management information systems to collect data at this time.

Under this dimension we ask two questions regarding TEMIS: (1) Is there a management information system either at a national or regional scale to collect tertiary-level data on students, faculty, and research development and innovation? And (2) Is this data used for system evaluation and reform?

Presence of a Management Information System

The National Center on Educational Technologies (NACET) has developed a model of TEMIS that is partly used by some universities on an experimental basis. Although this TEMIS is not operational across the country at the moment, according to MoESCS officials, it is ready and will become operational in 2019. Some universities are using their own education management information systems. At the same time, another development partner—the Asian Development Bank—is proposing an improvement of the broader Education Management and Information System to include all levels of education and to provide analytical tools for evidence-based decision making.

Use of TEMIS Data for System Evaluation and Reform

Because there is no national or regional-level TEMIS for higher education institutions in Armenia, data cannot be used systematically for policy-making purposes.

In 2009–2014, one of the components of the Second Education Quality and Relevance Project of the World Bank was to support the creation of an integrated TEMIS to support policy planning, management, monitoring, and evaluation of the performance of the sector at both the national and university levels. TEMIS was to be used by MoESCS to develop annual reports on higher education and to prepare the Medium-Term Expenditure Framework (MTEF) and annual budgets for higher education. TEMIS includes data on students, staff and organizational structure, and if used consistently would allow institutions to gather statistics on their management, accounting, governing boards, scientific councils, departments and chairs, student councils, career centers, memberships, and partnerships with other institutions, among other things.

Although it was developed and functionally available to use at project closing, no mandate or official requirement had yet been introduced to ensure that TEMIS would, in fact, be used. For example, there was no mandate for universities to enter data into the system or to create reports using the entered data,

and there were no deadlines or requirements for entering the data into TEMIS or for using the data. Universities were not willing to use TEMIS because it did not synchronize with their existing data or MIS and had poor levels of security.

Therefore, neither the universities nor the MoESCS have accurate or comprehensive data available to produce reports or plans. Based on the feedback generated from universities, the TEMIS was revised, and representatives of all universities took part in an additional cycle of training for its use. Nevertheless, as of early 2019, only some institutions have started data entry, and in many cases the data entered is incomplete.

While it is not yet mandatory for universities to use TEMIS, the government is currently reviewing options to mandate its use. Discussions are underway to identify the best approach to ensuring its use, particularly in light of universities' existing data management responsibilities.

6. Policy Dimension 6: Access and Equity

Overall score: Emerging ●●○○

Summary: There are some financial aid programs geared toward students from disadvantaged backgrounds and high-performing students. Details on specific student groups are provided in the section on financial aid programs and financial cost-sharing mechanisms. There are somewhat accessible and transparent procedures for gaining entry into the higher education system, but they are mired in corruption. The government has set up a mechanism for student transfer, but the significant differences among programs offered by different universities make this difficult.

In this section, access and equity are analyzed using five questions: (1) Are there any public financial aid programs or financial cost-sharing mechanisms for students from disadvantaged background for access, equity, and retention goals? (2) Are admission procedures transparent and accessible? (3) Are there any incentives for tertiary education institutions to offer outreach programs? (4) Are there any anti-discrimination and anti-harassment policies tailored to the tertiary education system? And (5) Are there any mechanisms for students to transfer between the same or different types of tertiary education institutions (TEIs) to promote social mobility?

Financial Aid Programs and Financial Cost-Sharing Mechanisms

There are some financial aid programs in place to help disadvantaged students access higher education, particularly through the offer of “free tuition places.” Overall, it remains difficult for the government to budget for these initiatives. The overall budget for higher education is extremely low, at about USD 25 million annually, with most funding (80–85 percent of it) for higher education coming from tuition fees. The existing programs are directed toward students with special needs, including from lower socioeconomic backgrounds, students with disabilities, students from border and remote villages, students whose fathers died in war, and students who have two or more children.

Student loans are a relatively recent instrument for supporting students’ access to tertiary education. According to government statistics (January 2019), a total of 14,231 student loans were outstanding with a combined amount of more than AMD 4 billion (approx. USD 8.3 million). These loans are provided by 10 commercial banks, while the Home for Youth Foundation, which was established by the Central Bank of Armenia, takes overall charge of the loan program. In March 2019, the Armenian government changed the regulations on student loans: the maximum available amount of a student loan increased from AMD 450,000 (approx.USD 940) per year to AMD 700,000 (approx.USD 1,460) per year. In total students can receive up to AMD 2.8 million (approx. USD 5,840) loans for four years. Students should pay back loans within a period of 10 years. The interest rates on student loans were decreased from 12 percent to 9 percent, and out of this 9 percent rate, 6 percent is to be paid by the student while 3 percent is to be paid by the government. All regular bachelor’s and master’s degree students are eligible for student loans. Since March 2019, clinical residency students are also eligible to receive student loans.

In accordance with the Law on Higher Education and Post Graduate Professional Education (hereafter, the Law on Higher Education),³⁸ the Government of Armenia adopted a regulation on providing student allowances and state scholarships at higher education institutions in the Republic of Armenia

The government is now providing full compensation for the tuition fee to the following categories of students:

- a) Competitively to students who have ensured higher grades at examinations and tests during one academic year;*
- b) To the following social groups as stipulated by the Law:*
 - *Students left without parental care and other individuals belonging to that category according to the Law of RA on Social Protection of Children without Parental Care;*
 - *1st or 2nd disability category individuals and persons granted “a child with disability” status as stipulated by the Law on Social Protection of People with Disabilities;*
 - *Children (students) of deceased members of the military, students who became disabled during compulsory military service as stipulated by the Law of RA on Social Security of Military Servants and Their Families; and*
- c) Students admitted to purposeful study in such fields of specialization that are of state priority and importance.*

Students without parental care and persons belonging to that group, as well as children/students of deceased military members get allowances from the 1st year of study up to the end of the program. Persons with a 1st or 2nd category disability and persons granted “child with disability” status, as well as students who became disabled during compulsory military service, get allowances at the beginning of the 1st year of study if they provide the required documents; the continuation of such provision is reviewed at the end of each academic year.

The government provides partial compensation in the form of student allowance to those who achieve the minimum threshold of the “student average qualitative score,” as defined by MoESCS, and those who belong to groups registered in the family vulnerability assessment system and those who exceed specified vulnerability threshold points, as defined by the Government of Armenia yearly. This covers the following groups:

- a) 50 percent of the tuition fee will be compensated to students from families exceeding the vulnerability threshold by up to 5 points;*
- b) 60 percent of the tuition fee will be compensated to students from families exceeding the vulnerability threshold by 5-10 points;*
- c) 70 percent of the tuition fee will be compensated to students from families exceeding the vulnerability threshold by 10-15 points;*
- d) 80 percent of the tuition fee will be compensated to students from families exceeding the vulnerability threshold by 15-20 points; and*

³⁸ Article 6 (4) and Article 21 (1(12)).

e) 100 percent of the tuition fee will be compensated to students from families exceeding the vulnerability threshold by more than 20 points.

According to the Law on Higher Education, institutions of higher education have to partially compensate the tuition fee in the form of student allowances, at their own cost, for at least 10 percent of the fee-based student population, taking into consideration the students' financial status and high academic performance. In reality, universities compensate more than 10 percent of their student body. Nevertheless, universities do not receive any tax exemptions for such compensation provided to their students.

There are no exact counts of the number of students who get financial aid, because different types of organizations support students in higher education, including charity funds, businesses, and companies. At some universities, as much as 25 to 30 percent of the student population receives some amount of financial aid.

Transparent and Accessible Admission Procedures

Armenia has mostly transparent standards for gaining entry into the tertiary education system. Tertiary education institutions organize their own admissions criteria for part-time programs but use results from competitive national exams for admissions into full-time programs. While these processes are supposed to be transparent, they are mired in corruption, although corruption risks were higher several years ago, when there was a larger pool of applicants.

Cheating on entrance exams was also more widespread when the exams were administered by universities themselves. Since the Assessment and Testing Center has taken charge of the entrance exams, the number of cheating and corruption cases has fallen substantially. In most cases students had been using technological means to cheat during the exams. In addition to this kind of corruption, there are other practices, such as merit awards and legacy admissions, that take precedence over standard admission procedures.

The dates, locations, and curriculum for the national entrance exams are made public in advance of the exams, and while private tutoring is not compulsory it is widespread. Cross-border universities have different systems of exams. The entrance exams program for these universities is different from subject programs taught at schools. Only a few schools in Armenia have preparation courses for cross-border university exams. Students who apply to public universities also take private tutoring courses. While public university exams are mostly in alignment with school programs, there are some “tricks”—subtle skills useful in test-taking—that students need to learn from private tutors. Another reason for private tutoring is the lack of autodidactic skills among students.

The system makes provisions for special needs students to gain access to the tertiary education system. According to Government Decision No. 597-N, special needs students are admitted to the tertiary

education system free of charge upon obtaining at least a passing grade on the national entrance exam. Additionally, based on Government Decision No. 1183, a regulation providing student allowances and state scholarships at higher education institutions, individuals in the 1st or 2nd disability category and persons granted a “child with disability” status (as stipulated by the Law on Social Protection of People with Disabilities) are also eligible for free education.

Incentives for Offering Outreach Programs

There are no incentives in place for tertiary education institutions to offer outreach programs. Universities work closely with schools to promote their departments and professions. University lecturers visit schools to make presentations and participate in Q&A sessions to promote various programs at their universities, but there are no specific programs for disadvantaged students.

Anti-discrimination and Anti-Harassment Policies

In Armenia, there is no specific regulation or law on anti-discrimination and anti-harassment. Policies concerning these issues are regulated by the Constitution of Armenia. Article 29 of the Constitution, which concerns the prohibition against discrimination, mentions that

Discrimination based on sex, race, skin color, ethnic or social origin, genetic features, language, religion, world view, political or other views, belonging to a national minority, property status, birth, disability, age, or other personal or social circumstances shall be prohibited.

The government is in the process of passing an anti-discrimination law, but the draft of this law has not yet been adopted by the National Assembly. Universities do not have special policies on anti-discrimination or anti-harassment, and there are no any incentives or rewards to develop such policies.

Mechanisms for Student Transfer

The academic mobility of students in higher education is regulated by the Law on Higher Education under the section entitled, Procedures on Academic Mobility of Higher Educational Institution Students, which was adopted in 2011. The Republic of Armenia offers its students and academic staff opportunities for academic mobility through European Union programs such as the ERASMUS MUNDUS, ERASMUS + (formerly TEMPUS) programs.

Additionally, through initiatives such as the European Credit Transfer and Accumulation System (ECTS), the Diploma Supplement, and the National Information Center on Academic Recognition and Mobility (ARMENIC), Armenia supports student mobility and the mutual recognition of higher education credits at both the national and international levels. In reality, however, according to stakeholder interviews, student mobility is a difficult process, and some students are required to take double exams after returning from abroad. There are big differences between the programs of different universities, which makes credit transfer arduous. One of the main problems in the mobility process is students’ mobility between universities within the Republic of Armenia. There are no possibilities offered for students to

take some of their courses at other universities. Overall, there is a common perception that the existing system is very rigid and needs more flexibility.

7. Policy Dimension 7: Relevance of Tertiary Education for Social and Economic Needs

Overall score: Emerging ●●○○

Policy Lever 1: Labor market relevance	Policy Lever 2: Promoting research development and innovation	Policy Lever 3: Social and environmental relevance
Emerging ●●○○	Established ●●●○	Latent ●○○○

Summary: *There are some initiatives at the institutional level to measure labor market outcomes of tertiary education graduates, but they are not mandatory and are conducted by only a few institutions. Practical training is mandated by law and offered by all universities in the country. There is a policy mandate aimed at strengthening research, development, and innovation (RDI) in tertiary education, but it is criticized as lacking effectiveness. Universities, especially private universities, do not have much RDI capacity due to insufficient finances. There is a policy mandate to discuss the role of tertiary education in strengthening the social and cultural development of Armenia, but it is not accompanied by any financial incentives.*

Relevance of tertiary education for social and economic needs is examined using three questions: (1) Does the system promote education that is relevant for the labor market? (2) Does it support research and development activities? and (3) Does the system actively contribute to the social and cultural development?

8.1 Policy Lever 1: Labor Market Relevance

Emerging ●●○○

Labor market relevance of the tertiary education system is reviewed by asking three questions: (1) Are initiatives in place to measure labor market outcomes? (2) Do programs support internships and practical trainings? and (3) Are there initiatives to increase the labor market relevance of the curriculum?

Initiatives to measure labor market outcomes

There are a few initiatives in place to measure the labor market outcomes of tertiary education graduates. Individual higher education institutions conduct alumni surveys, but these are not used for policy making decisions; moreover, they are not mandatory and are undertaken by only a few universities. Some surveys are conducted with the support of international organizations; for example, UNDP is currently launching such an initiative on a sizable scale.

Programs to support internships and practical trainings

There is a policy mandate to support practical trainings, which includes programs for private enterprises

to offer such trainings. Practical training is mentioned in the Law on Higher Education as a required learning activity. According to Article 21 of the law, standards for professions should be developed and all programs must have a practical training component. Many universities are increasing practical training hours, and some private enterprises are involved in this activity. Students can earn credits for practical trainings, since they are a required component of the curriculum.

Practical training programs are offered by all universities in Armenia. American University of Armenia, French University, and Slavonic University are more active than others in offering their students internship programs. For example, the American University of Armenia's Certificate in Translation Program and the Armenian Communities Department of the Calouste Gulbenkian Foundation have announced the launch of the Calouste Gulbenkian Translation Series Internship at the American University. The aim of this internship is to assist in implementing the Gulbenkian Foundation's Translation Series project, which makes seminal texts in the humanities and the social sciences available in the Armenian language. This internship is offered to a current student of the Certificate in Translation Program for the duration of one year, including the summer. It is an exceptional opportunity for students to apply themselves in the field of translation and publishing in Armenia, with an emphasis on academic rigor and practical experience.

Initiatives to increase labor market relevance of the curriculum

Making the curriculum market-relevant is one of the critical issues in Armenian higher education, but to date there have been no essential improvements in this field. There is an interesting pilot program to bridge the university curriculum with the market in the field of translation, as mentioned in the section above on programs to support internships and practical trainings. There are also some efforts underway to align curriculum to industry needs, in which education experts bring employers and university staff together to improve the market relevance of the curriculum.

8.2 Policy Lever 2: Promoting Research, Development, and Innovation

Established ●●●○

The status of promoting research, development and innovation (RDI) is determined by asking two questions: (1) Are there systemwide or sectorwide policies in place to promote RDI? and (2) Are there any financial incentives or specific programs to encourage RDI activities?

Systemwide or sectorwide policies to promote RDI

There is a policy mandate aimed at strengthening development focused RDI activity in tertiary education, but it is not effective. Universities, especially private ones, do not have much RDI capacity due to lack of finances. There are initiatives such as government-industry-academia collaboration, funding for centers of excellence, and funding for policy-relevant and government-conducted research. Recently, a wine-making education and scientific-production base was opened at Armenian National Agrarian University (ANAU) in the education-experimental branch of the university located at the Voskehat Community in Armavir. As a result, a full program of winemaking was created and an exemplary experimental area was established with modern scientific and engineering equipment. This educational and scientific-production

base was founded with the World Bank's cofinancing through the Competitive Innovation Fund (CIF), beginning with the launch of the grant project entitled, Development of Scientific Industrial Component of Winemaking Education (DSICWE), in December 2015.

Incentives and programs to encourage RDI

Expenditures on RDI form a small part of annual public expenditures in higher education. The government provides basic funding and thematic funding to public universities, research institutes, and academies to carry out research. Both types of funding are provided on a competitive basis. Basic funding is for research institutes and labs, and thematic funding is for groups within university academic and research staff and young researchers (age 35 and younger). Areas of funding include STEM, architecture, agriculture, medicine, social sciences, and Armenian studies. The CIF also aims to promote innovations and the development of research capacity. Grants are awarded on a competitive basis to promote the effectiveness of higher education institutions, embed research into the teaching and learning process, and strengthen academia's links with the labor market.

8.3 Policy Lever 3: Social and Environmental Relevance

Latent ●○○○

In order to assess the social and environmental relevance of the tertiary education system in the country, we ask two questions: (1) Are there policies and programs to support social and cultural development? and (2) Are there policies and programs to support environmental protection?

Policies and programs to support social and cultural development

There is a policy mandate to discuss the role of tertiary education in strengthening the social and cultural development of Armenia, but it is not accompanied by any financial incentives. Article 11 of the Law on Higher Education mentions the important role of universities in increasing cultural literacy across society and in developing civic skills. Public universities and cross-border institutions are more active in supporting the country's social and cultural development than are private universities, because they have more financial, material, and human resources.

Programs and policies to support environmental protection

Higher Education Institutions in Armenia lack the support to play a significant role in environmental protection and sustainability. Currently, universities are teaching courses in ecology, but they do not receive any financial incentives from the government for this initiative.

8. Conclusion and Recommendations

Armenia's tertiary education system today is presented with an enormous opportunity to reform. Armenia is a participant in the Bologna Process, which is a beneficial resource in reform implementation. After hosting the Bologna Summit in 2015, Armenia can count on a generous support network while also playing a leadership role in the process itself. Additionally, the Velvet Revolution has opened new avenues to change the higher education system and make it more effective. New boards of trustees in public universities have been formed, and there is hope that they will act as independent and competent authorities. There is a clear need to develop a strategic approach to tertiary education, adopt a new law on higher education, and improve the governance of the system.

At the same time, universities are continuing to face serious financial strain as a result of the decrease in student population during the last two years, and some private universities may not survive in this situation. Public universities are also facing financial problems. There is a public distrust in the quality of higher education outcomes, which means internal and external quality assurance systems need to be improved. The government is considering the possibility of consolidating universities, establishing program accreditation of universities, and revising the funding mechanisms aimed at competitive funding.

Within this context, we offer the following recommendations to be considered by universities, stakeholders, and the government.

Strategy for Tertiary Education

There is an urgent need to have a strategy for higher education and a new law on higher education in order to set the course toward a joint vision for the sector and the country. The current law is outdated, since it was adopted in 2004, even before Armenia joined the Bologna Process. The Ministry of Education, Science, Culture and Sport has made several attempts to develop these, but for various reasons has not been successful so far.

Governance

The governance system needs to provide a level playing field between public, private, and cross-border institutions in terms of basic regulation. The tertiary education system in Armenia consists of three types of institutions: public universities, private universities, and cross-border universities. Public universities have been under the control of the state, while private universities have not. Private universities have not had equal opportunities to compete with public universities, and the quality of education in many private universities is very low; most private universities have not applied for accreditation. Cross-border universities are in a more privileged situation. They have more financial support, a better educated and more motivated student population, and are less scrutinized by the authorities.

While autonomy is restricted for public universities, private and cross-border universities have considerable levels of academic, staffing, governance, and financial autonomy, although it is not

accompanied by accountability. This sort of situation can lead to deterioration in the quality of education. The only restriction is the requirement for the teaching of Armenian language and Armenian history. On paper, public universities also have autonomy, but there have been several cases in which the government actively intervened in governance matters. One of the most important issues is to increase competitiveness and the merit-based selection of leadership in the universities, particularly for rectors, deans, heads of departments, and chairs. In several cases, deans and heads of chairs have not been replaced in more than 20 years. Universities do not have an atmosphere where academic staff feel free to run for positions such as dean, head, or chairs. Similarly, the recruitment process for faculty needs to be made more transparent and competitive.

Financing

The inadequate amount of funding for higher education institutions is one of the main constraints to improving higher education. Tuition remains virtually the only source of university income, which limits the total income universities can receive while also creating problems of affordability and equity for students. Government funds mainly support tuition waivers and scholarships for merit-based students with limited spaces for those with financial need. There is a need to effectively allocate the available funds to improve equity and access to higher education. Public universities have a stable funding mechanism, but the mechanism is outdated. Most of the public universities publish financial reports on their websites, but this is not a requirement; to improve financial transparency, government should require all public universities to publicly report their financial data. Currently, universities do not receive performance-based funding. The introduction of performance-based funding (with an overall increase of the public funding envelope for universities) could improve the overall quality of universities if performance were connected to relevant indicators, such as student graduation rates, student retention, postgraduate employment rates, and other criteria related to the college's mission. Universities should also optimize the public universities network.

Quality Assurance

The Quality Assurance system has made essential progress in establishing and strengthening the quality assurance mechanism for universities. The next step is to implement this system and for higher education institutions to take the lead in their self-evaluations and program evaluations. The National Center for Professional Education Quality Assurance (ANQA) has been admitted to the European Quality Assurance Register for Higher Education (EQAR) since 2017 (for five years). All public universities in Armenia went through an institutional accreditation process through ANQA. Few private universities applied for accreditation, however, and only one cross-border university (French University in Armenia) is applying for accreditation to ANQA. Other cross-border institutions get their accreditation through international quality assurance organizations.

Program accreditation is not considered obligatory, but few universities are applying for optional program accreditation. At the same time, institutional accreditation is an important eligibility criterion for both public and private universities to be able to apply for CIF funding. As for inter-state universities, they are eligible to apply provided that they have an international accreditation that is recognized and registered

by the domestic quality assurance agency, ANQA. Additionally, all universities, participating organizations, and companies need to have a strategic plan (and/or business plan) at least for the period of implementation of the project presented for the CIF grant, which ensures that the targets proposed in grant proposal are in correspondence with the priorities underlined in the strategy.

It may be important to make program accreditation mandatory, as the accreditation process creates an opportunity to look more closely at the quality of an institution's curriculum and teaching/learning practices, which are critical pillars of a quality tertiary education system. Also, the principles and standards of institutional and program accreditation should be revised regularly.

Tertiary Education Management Information System (TEMIS)

In order to have an operational TEMIS, the Ministry of Education Science, Culture and Sport, the universities, and the representatives of the National Center on Educational Technologies (NACET) will need to negotiate effectively and jointly design a final version of TEMIS, which will help to collect comprehensive and helpful data on tertiary education. Having real-time data about what is happening in higher education is increasingly critical for policy makers. The irony is that a data system has already been developed by NACET, but it is not operational at present. There are disagreements with some universities concerning the data and how it should be collected.

Access and Equity

While some financial aid programs are currently available for students, there is a need to make these policies more targeted and to expand need-based financial aid to cover living expenses. It is also essential to increase outreach to high schools, where disadvantaged students are still systematically filtered out. One of the biggest problems in Armenian tertiary education is that it is not accessible to students from poor families. Affordability remains an issue, as universities rely on tuition fees for nearly all their income. State-funded places in the universities are very limited and are mostly merit-based. As a result, few students from poor families are able to access universities. Poor students who are admitted are eligible for various partial to full subsidies of their tuition fees, determined based on the level of income of the household the student comes from. However, even if they are accepted to state-funded places, many of these students cannot afford to live in the university cities, since the government scholarships do not cover living expenses. There is therefore a need to change financial aid schemes and not only give students from poor families the opportunity to get a free education but also cover their accommodation expenses.

A second issue that needs to be addressed is supporting students with special needs to realize their right to receive higher education. Inclusive education in tertiary education was not considered a priority by previous governments.

There is also a need to develop a student internal mobility system and to make learning paths more flexible. Currently, paths between various streams of tertiary education are not clear, which restricts student mobility within the system.

Finally, the government and institutions should reflect on creation of an effective anti-discrimination and anti-harassment policy. The SABER exercise did not find any evidence of an anti-discrimination and anti-harassment policy that applies to tertiary education institutions.

The Relevance of Tertiary Education for Social and Economic Needs

There is still a huge gap between tertiary education and the needs of the labor market. Universities have started to include internships in their curricula, but they form a very small part of the curriculum. They take place only in a short period of time, and they have no guiding entrance and exit requirements. These short-term internship programs do not help improve the capacity of interns to enhance their learning, increase awareness and knowledge of particular areas, or foster future employability. The lack of adequate facilities for training, the short duration of internships, the absence of well-formulated internship training programs, and the lack of interest on the part of both interns themselves and industry representatives are some of the underlying factors for the disconnect between tertiary education and labor market.

Tertiary education institutions should be incentivized to strengthen practical trainings, soft skills development, and internships in all degree programs. This will not only give students a chance to use their skills in the work environment but will also improve the labor market relevance of the curriculum.

One of the key ways to improve this, is by involving more employers (industry, SMEs, government, etc.) in the design and operation of academic programs, as well as in the institutional boards of trustees. It is equally important to strengthen academic staff's knowledge in labor market developments. Faculty should be made aware of the present and future trends in the Armenian labor market. There is a need to include employer representatives on curriculum review committees, as this is useful in bridging the gap between the industry and the classroom.

Universities are still not incentivized to encourage tertiary education to play a role in social and cultural development or in addressing the challenge of climate change. Universities are undertaking some social and cultural initiatives, but these do not have a strategic focus, except perhaps the focus on Armenian culture and language. Universities are mostly considered as physical sites for classes, exams, and research. University administrators, faculty, and students will have an important role to play in changing this perception by signaling the importance of playing a role in societal and cultural change.

Appendix: Best Practice Indicators used in SABER-Tertiary Education

1. Strategy for Tertiary Education			
1.1	1.2	1.3	
The country/state has a fully developed strategy plan for tertiary education that serves as a guide for steering the system.	The creation of the tertiary education strategic plan is relevant and representative, and includes input from key stakeholders and considers key policy levers.	The tertiary education strategic plan is grounded in clear and systemic references to relevant and publicly available evidence.	
2. Governance of Systems and Institutions			
2.1	2.2	2.3	2.4
The country has a comprehensive tertiary education law used for steering the system towards optimal performance that covers all types of TEI.	The regulatory framework includes provisions to adequately regulate the market entry and operation of public and private tertiary education providers.	The country has a comprehensive set of policies and practices that combat academic malpractice and corruption.	The regulatory framework for TEIs supports their academic autonomy.
2.5	2.6	2.7	2.8
The regulatory framework for TEIs supports their staffing autonomy.	The regulatory framework for public TEIs supports their governance autonomy.	The regulatory framework for TEIs supports their financial autonomy.	The regulatory framework incentivizes the promotion of transparent governance practices at the level of TEIs.
2.9	2.10		
The regulatory framework incentivizes the promotion of transparent and meritocratic human resource practices at the level of TEIs.	The regulatory framework incentivizes the promotion of horizontal governance practices at the level of TEIs.		
3. Financing			
3.1	3.2	3.3	3.4

Public funds are allocated to public TEIs through a stable and transparent process and using a block grant budget system.	There is a publicly known or accessible formula used to allocate public funds to public TEIs, which specifies the amounts disbursed as fixed and variable funding.	Performance-based funding is used as part of the funding allocation mechanism for public TEIs.	Public TEIs are able to negotiate at least some performance targets with stakeholders, such as the government or tertiary education agencies (TEAs).
3.5	3.6		
Private TEIs are able to negotiate at least some performance targets with stakeholders, such as the government or TEAs.	There is at least one competitive line of funding accessible to TEIs aimed at promoting innovation or to address national priorities.		
4. Quality Assurance			
4.1	4.2	4.3	4.4
There is at least one functional and effective institutional accreditation agency (IAA) or quality assurance agency (QAA) that oversees the quality of all TEIs in the country.	The IAA(s) or QAA(s) functions as an independent body.	The IAA(s) or QAA(s) has/have developed Institutional Quality Standards (IQSs) or Program Quality Standards (PQS) to apply in its/their evaluations.	The IAA(s) or QAA(s) provides incentives for TEIs to create Management Information Systems (MIS) through IQSs or PQSs.
4.5			
There are practical consequences for programs/TEIs that do not meet the evaluation/accreditation standards.			

5. Tertiary Education Management Information System (TEMIS)			
4.1	4.2	4.3	4.4
There is at least one national or regional TEMIS in operation.	The TEMIS collects student level data.	The TEMIS collects data on institutional RDI indicators.	The TEMIS collects data on faculty related indicators.
4.5			
The TEMIS is used extensively for system evaluation and reform.			
6. Access and Equity			
6.1	6.2	6.3	6.4
There are public programs in place to provide financial aid to students from disadvantaged backgrounds with the goal of advancing equity goals in access and retention.	The financial cost-sharing mechanisms available effectively serve the needs of targeted beneficiaries.	The country ensures that minimum and transparent standards are met in order to gain access to TEIs and that all eligible students are granted access to selection procedures.	The regulatory framework encourages the creation and offering of outreach programs at TEIs.
6.5	6.6		
Anti-discrimination and anti-harassment legislation applicable to tertiary education is available and enforced in the country.	The tertiary education system has an enabling governance structure that facilitates social mobility through student transfer across institutions.		
7. Relevance for Social and Economic Needs			
7.1	7.2	7.3	7.4
There are surveys to measure labor market outcomes for TEI graduates.	There are programs in place to support internships and practical training.	There are programs in place to increase the labor market relevance of TEI curriculum.	There is a policy mandate accompanied by financial incentives to strengthen development focused RDI activity in tertiary education.
7.5	7.6		
There is a policy mandate accompanied	There is a policy mandate		

by financial incentives to strengthen the role of tertiary education in fostering social and cultural development.	accompanied by financial incentives to strengthen the role of tertiary education in fostering environmental protection and sustainability.		
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The **Systems Approach for Better Education Results (SABER)** initiative collects data on the policies and institutions of education systems around the world and benchmarks them against practices associated with student learning. SABER aims to give all parties with a stake in educational results—from students, administrators, teachers, and parents to policymakers and business people—an accessible, detailed, objective snapshot of how well the policies of their country's education system are oriented toward ensuring that all children and youth learn.

This report focuses on policies in the **Tertiary Education** sector. It analyzes tertiary education on seven policy dimensions: (1) strategy for tertiary education, (2) governance of the sector, (3) the use of innovative financing, (4) quality assurance, (5) presence of a tertiary education management information system (TEMIS), (6) access and equity to promote social mobility, and (7) relevance of tertiary education to social and economic needs.

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