
From the Editor



Since the onset of the political crisis in Serbia at the end of last year, the role of education and science in society and the economy has emerged as a central theme in both public and expert discussions. These debates have intensified following a series of government decisions, including drastic cuts to the funding of scientific research at public universities, the potential revocation of accreditations for public faculties, the formation of new state universities, the proposal to fund tuition at domestic private universities through a voucher system, and the invitation to foreign universities to begin operating in Serbia without accreditation.

The measures introduced and announced by the Government have raised a series of fundamental questions: To what extent do economic and social progress depend on education, science, and technology? What is the role of universities in the development of science and technology? What is the quality of public and private universities in Serbia? Are public or private universities generally of higher quality at the global level? Would the arrival of unaccredited foreign universities improve the quality of higher education in Serbia? Is it justified for the state to finance studies at private universities through a voucher system? And what are the effective ways for the state to improve the quality of higher education?

Economic theory and empirical research demonstrate that technological innovation is a key driver of economic development, as it enables an increase in output per worker, i.e. a rise in productivity. In the absence of technological progress, output can be expanded by increasing the quantity of labor and capital; however, this does not lead to gains in output per worker, and thus leaves per capita consumption unchanged. It follows that without technological innovation, there can be no sustainable improvement in living standards.

A major turning point in the economic and overall development of humanity occurred around 10,000 BCE with the advent of agriculture, which was followed by a series of innovations that enabled the growth of other economic activities, art, culture, institutions, and more. However, until the mid-18th century, innovations were rare and sporadic, allowing only temporary improvements in living standards, typically followed by population growth and a return to previous levels of well-being—a pattern known as the Malthusian trap. As a result, the main outcome of innovation and economic progress from the advent of agriculture until the mid-18th century was an increase in population, while gains in living standards remained modest. A true reversal occurred with the Scientific Revolution, which, from the mid-18th century onward, enabled a more than tenfold increase in population

and a 12- to 14-fold rise in living standards.

The emergence of the Scientific Revolution and technological innovations was the result of a combination of several favourable factors, among which the development of universities in Western and Northern Europe played a significant role. The rise of universities, along with increasing levels of autonomy, contributed to the advancement of the scientific method, rationalism, and the Enlightenment. These developments, alongside other changes such as the invention of the printing press, institutional reforms, and geographical discoveries, facilitated the dissemination and enhancement of scientific knowledge and technological innovation.

The role of universities in the Scientific Revolution and in technological breakthroughs was crucial, as the majority of scientific theories and discoveries were developed by individuals who worked or studied at universities. The importance of educating the broader population for economic and social progress was one of the core ideas of the Enlightenment, which progressive countries adopted during the 18th and 19th centuries through the creation of publicly owned educational institutions. All of this indicates that the notion of universities as primarily teaching institutions, with scientific research confined to separate institutes, is fundamentally flawed.

Due to unfavourable historical circumstances, Serbia was significantly delayed in establishing universities and in developing widespread education among its population. Despite this substantial historical lag, Serbian universities are now among the leading institutions in Central and Eastern Europe. According to the Shanghai Ranking, the University of Belgrade is positioned between the 400th and 500th place, with only Charles University in Prague and Lomonosov Moscow State University ranking higher in the region. Among the top 500 universities from Central and Eastern Europe, only institutions from Serbia, the Czech Republic, Poland, Hungary, and Russia are represented, while all universities from the former Yugoslav republics rank lower. Important achievement is the inclusion of the University of Novi Sad among the top 1,000 universities on the Shanghai Ranking. Serbian universities also perform well on the Center for World University Rankings (CWUR), where the University of Belgrade ranks 387th globally, placing it in the top 1.9% of universities worldwide. Furthermore, public universities in Novi Sad, Kragujevac, and Niš are ranked among the top 8.5% globally. Meanwhile, no private university from Serbia appears among the top 2,000 universities in the world.

In Serbia, a segment of the public holds the widespread belief

that private universities abroad are superior to public ones, and that Serbia should therefore establish a system where private universities dominate. However, in Europe, the highest-ranked universities are publicly owned (Imperial College London, Ludwig Maximilian University of Munich, ETH Zurich, Sorbonne, Lomonosov Moscow State University, Charles University in Prague, etc.), with only Oxford and Cambridge being privately owned. Globally, most top universities are also publicly owned, with the exception of institutions in the United States. Another common misconception among the public is that high-quality private universities are founded primarily to generate profit for their owners. In reality, the world's best private universities (Harvard, MIT, Oxford, Cambridge, etc.) are non-profit institutions, meaning their owners do not receive dividends but reinvest any profits into improving education, research, and development. As such, the owners of high-quality universities typically include religious institutions, charitable foundations, and university staff themselves. Generally, profit maximization is incompatible with quality education, as it tends to imply a lack of admission selectivity, low academic standards, hiring of less qualified teaching staff, a low teacher-to-student ratio, minimal investment in scientific research, and similar shortcomings. Consequently, profit-driven private universities are poorly ranked on international university quality lists. A key reason for the predominance of public education is that it more easily ensures accessibility for all social groups, which is important both in terms of fairness and efficiency—enabling talented individuals from low-income families to access higher education.

The Serbian government recently proposed allowing foreign universities to operate in the country without undergoing the national accreditation process, with the state financing student tuition at these institutions through a voucher system. The rationale behind this proposal is that the arrival of foreign universities would increase competition and thereby enhance the quality of higher education in Serbia. An additional motivation cited is the potential reduction in education costs for Serbian students who currently study abroad. However, it is almost certain that implementing this proposal would not improve the quality of higher education in Serbia. The world's top universities are not interested in establishing branches in Serbia due to its relatively small population and low purchasing power. The limited revenues such institutions would generate in Serbia would be insufficient to cover the costs of hiring high-quality faculty or investing in research—both of which are essential to maintaining a strong international reputation. Over the past 35 years, there has not been a single case of a prestigious global university establishing a campus in any Central or Eastern European country, even in those with larger population and more developed markets than Serbia. It is far more likely that lower-ranked private universities—on par with or even below the quality of Serbian public universities—would express interest in entering the Serbian market. Moreover, it is likely that the quality of teaching and research at such institutions in Serbia would be inferior to what they offer in their home countries. The lack of accreditation implies that these universities would not be obligated to employ top faculty, follow the same curricula, or

uphold the same academic standards as their parent campuses. An indication that foreign universities would behave in such a manner upon entering Serbia can be found in the fact that for several decades now, some private universities in Western Europe have had special programs for foreign students with more lenient admission and exam requirements, where the best professors do not teach. Another important issue is that foreign universities would likely retain their scientific research activities—which represent an essential function of universities—in their home countries, while limiting their activities in Serbia to teaching. This has happened in wealthy Arab countries where well-known global universities have established branches that mainly provide education in commercial fields (business, finance, languages, IT), while scientific research has been reduced to a minimum. The third problem is that the state would allocate a portion of the already limited funds designated for public universities to foreign universities, which would mainly engage in teaching activities in Serbia. The result would likely be a decline in the quality of public universities, and consequently a deterioration in the overall quality of higher education in Serbia, which would negatively affect the country's economic and social development.

The previous topic is closely related to the question of whether it is justified for the state to finance studies at domestic private universities. The answer to this question is conditional, meaning it would be justified only if there are private universities that are ranked equally or better than the four public universities in Serbia (Belgrade, Novi Sad, Kragujevac, and Niš) on relevant international rankings (Shanghai, CWUR, etc.). This condition would serve as an incentive for private universities to improve the quality of education and scientific research. The second condition is that the funds for financing study vouchers should be provided from additional resources allocated to higher education, and not through the reallocation of funds from public universities. Otherwise, if private universities were to be financed by reducing allocations to public universities, the overall quality of universities would almost certainly deteriorate.

Although public universities in Serbia, considering the country's size and level of development, are relatively well ranked on international lists, achieving a high level of national development requires improving the quality of universities. Based on the experience of developed European countries of similar size, enhancing the quality of higher education necessitates increased public investment, sending the best students to doctoral studies at the world's top universities with a requirement to return to the country, organizing instruction in English, establishing joint programs between public universities and leading European and global institutions, introducing stricter employment and promotion criteria at public universities, placing greater value on scientific research, and so on. Improving the quality of higher education also requires tightening accreditation criteria for all universities, including private ones, along with strict monitoring of compliance with those standards.

