Journal of Social Sciences *Vol. VIII, no. 4 (2025), pp. 114 - 136*
Fascicle *Social Science* *ISSN 2587-3490*
Topic *Pedagogy and Psychology* *eISSN 2587-3504*

https://doi.org/10.52326/jss.utm.2025.8(4).07
CZU 378:001.89:330.34(520+478)

STRENGTHENING HIGHER EDUCATION THROUGH COHERENT AND SUSTAINABLE PUBLIC POLICIES: JAPANESE EXPERIENCE AND IMPLICATIONS FOR THE REPUBLIC OF MOLDOVA

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Received: 10. 08. 2025
Accepted: 11. 24. 2025

Abstract. Higher education is the main pillar for innovative economic, technological, and social development. Japanese universities have become not only centers of education but also hubs of research and innovation. Although the Republic of Moldova and Japan are in different economic and cultural contexts, the Japanese experience offers a valuable model for the strategic integration of higher education into socio-economic development processes. The purpose of the research is to analyze the performance, policies, and evolution of the higher education system in Japan in order to identify good practices that can be transferred to the Republic of Moldova to improve the quality and efficiency of university education. Methods used: documentary and statistical analysis, comparative-descriptive analysis, policy analysis, benchmarking and policy transfer framework. The research reveals that the success of higher education in Japan is due to consistent performance-oriented policies and universities' commitment to excellence. Transferring Japanese experience to the Republic of Moldova can support the modernization of the university system and contribute to increasing the performance and relevance of higher education in relation to societal challenges.

Keywords: *higher education, policies, research and innovation, internationalization, challenges, performances.*

Rezumat. Învățământul superior reprezintă pilonul principal al dezvoltării economice, tehnologice și sociale inovative. Universitățile japoneze au evoluat nu doar ca centre de educație, ci și ca poli de cercetare și inovare. Deși Republica Moldova și Japonia se află în contexte economice și culturale diferite, experiența japoneză oferă un model valoros pentru integrarea strategică a învățământului superior în procesele de dezvoltare socio-economică. Scopul cercetării este de a analiza performanțele, politicile și evoluția sistemului de învățământ superior din Japonia, în vederea identificării bunelor practici care pot fi adaptate și transferate în Republica Moldova pentru a îmbunătăți calitatea și eficiența învățământului universitar. Metode utilizate: analiza documentară și statistică, analiza comparativ-descriptivă, analiza politicilor, benchmarking și cadrul de transfer de politici. Cercetarea evidențiază faptul că succesul sistemului de învățământ superior din Japonia se bazează pe

politici coerente, orientate spre performanță și pe angajamentul ferm al universităților pentru excelență. Transferul experienței japoneze în Republica Moldova poate sprijini modernizarea sistemului universitar și poate contribui la creșterea performanței și relevanței învățământului superior în raport cu provocările societale.

Cuvinte cheie: *învățământ superior, politici, cercetare și inovare, internaționalizare, provocări, performanțe*.

1. Introduction

The economic performance of any country depends directly on the quality of education and research, which are key factors for innovation and progress. Countries that have excelled in these domains have achieved a strong position in global competitiveness. Among them is Japan, which has developed a high-performing education system capable of responding to current and future internal and external challenges. Although numerous actions have been taken in the Republic of Moldova to strengthen the potential of higher education, it has not yet succeeded in establishing itself as a determining factor for sustainable economic progress.

Although both countries face similar challenges caused by demographic decline and population aging, the enrollment rate of young people in Japanese higher education is steadily increasing (on 14.8% in 2011-2024), while in the Republic of Moldova it is declining (on 47.6%) [1, p.65; 2, p.78].

The expanded access to higher education facilitates the growth of innovation, economic performance, and national competitiveness. Thus, Japan ranked 13th in the world according to the Global Innovation Index 2024 (among 133 countries), while the Republic of Moldova ranked 68th (down 8 positions compared to 2023) [3]. Similarly, GDP per capita (in current prices) shows major disparities, standing at USD 33.96 thousand in Japan compared to USD 8.26 thousand in the Republic of Moldova (April 2025) [4]. By continuously investing in education and research, Japan has become the fourth largest economy in the world in terms of GDP in current prices, reaching USD 4.19 trillion, and the fourth largest economy by purchasing power parity. These performances are due in significant part to a highly effective education system that produces highly skilled personnel and encourages innovation-related research. Such an education system contributes to the development of cutting-edge knowledge and its application in economic and social processes, thereby promoting sustainable growth and strengthening competitiveness at the national and international levels. Thus, education and innovation are key factors determining Japan's productivity and competitiveness.

Although numerous reforms in higher education have been promoted and implemented in the Republic of Moldova in recent decades, its effectiveness remains modest and its impact on innovation processes and economic and social development is relatively small. In this context, it should be noted that the development of an economy based on human capital (expertise, skills, and innovation) stimulates productivity, GDP growth, and the well-being of the population. According to International Monetary Funds (IMF) reports, reforms in higher education that increase the competitiveness of graduates and reduce academic migration can lead to additional economic growth of 0.6–0.9% per year in the mid-term perspective [5].

Moldovan higher education often faces multiple structural, financial, and demographic challenges, amplified by migration, declining student numbers, and increasingly dynamic

labor market demands. All of this requires concerted efforts from all stakeholders - authorities (relevant support policies), universities (performance in research and training for the future), industry, and the business community (contributions to the development of research, education, and technology transfer/innovation). In this regard, studying and transferring Japan's experience in the organization, operation, and support policies of higher education to the Republic of Moldova is extremely valuable.

The purpose of this research is to evaluate the dimension and challenges faced by the Japanese university system, analyze public support policies in this domain, and identify good practices that could be adapted and transposed into Moldovan higher education. This approach is part of the project *"Elevating Higher Education Public Policies: an Empowering SPRIngboard (HESPRI)"* and was reinforced by a study visit to Doshisha University in Kyoto, Japan, which provided an opportunity for a direct analysis of institutional models and educational practices relevant to the process of reforming higher education in the Republic of Moldova.

Within the framework of this research, we start from the following hypotheses: the higher education system in Japan has evolved significantly under the impact of government policies focused on quality, performance, internationalization, and innovation; the major challenges facing the Japanese university system are comparable, to a certain extent, to those existing in the Republic of Moldova, particularly in terms of demographic changes, youth migration, the need for technological adaptation, and internationalization; public support policies and good practices in the field of higher education in Japan can be adapted and implemented in the Republic of Moldova.

2. Materials and Methods

The research methodology combined a mixed, qualitative, and comparative approach. The study was based on: strategic documents and official reports prepared by the Ministry of Education, Culture, Sports, Science and Technology of Japan (MEXT) and the Ministry of Education and Research of Moldova; statistical data from international sources (World Bank, IMF, OECD, etc.); specialized literature and recent scientific studies on educational policies and innovation in Japanese higher education; information and observations obtained during a study visit to Doshisha University in Kyoto, which allowed for direct analysis of institutional models and university practices.

The following methods were used to achieve the research objectives: *documentary and statistical analysis* (used to examine key indicators on higher education and economic and social development in Japan and the Republic of Moldova); *comparative-descriptive analysis* (to highlight the similarities and differences between the two education systems); *policy analysis* (to assess the regulatory and institutional framework, as well as the support measures implemented by the Japanese authorities); *benchmarking and policy transfer framework* (to identify Japanese good practices with potential for adaptation in the Republic of Moldova).

The results were validated using triangulation method, correlating statistical sources, documentary sources (publications, documents, reports), and direct observations collected during the study visit in order to obtain a comprehensive and balanced perspective on the Japanese university system. The argumentation of the proposals regarding the transfer of Japanese good practices and educational policies to higher education in the Republic of Moldova was based on deductive and inductive reasoning methods, completed by the application of the analytical framework for the transfer of educational policies.

3. Results and Discusions

3.1. Higher Education in Japan: Between Excellence and Challenges

The higher education system, as a core component of tertiary education, constitutes a fundamental pillar of Japan's national education framework, as well as of its research and innovation ecosystem, playing a decisive role in societal development and in strengthening the country's innovative potential. Japan's higher education system is extensive, well-designed, structured, well-regarded, and has an impact on the development of society. It includes a mix of types of institutions with diverse programs focused on developing different skills, from research-oriented to practical vocational training. As a result, vocational training through tertiary education is in high demand among young people seeking to develop skills for their future careers. Thus, according to the School Basic Survey AY2024, conducted by MEXT, in 2024, 87.3% of 18-year-olds entered tertiary education (an increase of 3.3 percentage points compared to the previous year) [6], this indicator rising to a record level. Depending on their level and role within the education system, Japanese tertiary education is structured into the following institutional types:

- *Universities* - offer bachelor's degrees (typically four years), as well as master's degrees (two years), and doctoral degrees (typically tree-five years). Some professional degrees, particularly in medicine and dentistry, may require six years of study. They are the core of the Japanese tertiary system and are actively involved in research and innovation;
- *Junior Colleges* - offer associate's degrees (two or three years), mainly in the humanities, social sciences, education, health, etc., with a greater focus on practical and vocational training;
- *Colleges of Technology* - offer five-year integrated programs for junior high school graduates, leading to an associate's degree, often in engineering;
- *Professional Training Colleges* - focus on practical and vocational skills, leading to diplomas or specialist's degrees after one to two years of study.

An innovation in Japanese higher education is the introduction, starting in 2019, of *professional universities* - higher education institutions focused on applied training. These were created to reform tertiary education in a declining demographic context, combat the gap between university knowledge and labor market requirements, support regional development through universities focused on local industries, and train specialists who can immediately integrate and contribute to solving problems in the economic environment (e.g., Professional University of Information and Management for Innovation, International Professional University of Technology in Tokyo, International Professional University of Technology in Osaka, etc.). Study programs are developed in partnership with employers and experts in key fields. At least 40% of professors must have professional experience in industry or business. These institutions offer professional bachelor's degrees and, in some cases, professional master's degrees in technical or service fields.

This typology highlights the diversity and adaptability of the Japanese tertiary education system, which integrates academic, professional, and technical pathways in order to respond effectively to the nation's evolving economic and societal demands.

The study highlights that Japanese tertiary education can be classified into two main types, depending on the orientation of educational programs and vocational training objectives: *Tertiary-type A education* - university system, focusing on theory-based programs and advanced research; *Tertiary-type B education* - focused on practical, technical, and professional training, offered by junior colleges and professional training colleges,

emphasizing practical, technical, or occupational skills. This typology provides a clear picture of the differentiation between theory- and research-oriented education and practice- and technical skills-oriented education, highlighting the complementarity of the two types within the Japanese tertiary system.

Depending on their constitution and form of ownership, universities in Japan are of three types (Table 1).

Table 1

Classification of Japanese universities according to their legal status

Types of universities	Established mode	Mission, specifics
National Universities	Established by the natial government.	Focus on high-level academic education and advanced research; training specialists and researchers for academic, governmental, and industrial careers; scientific innovation and development at the national and international levels.
Public Universities	Established by local public entities (prefectures or municipalities).	Focus on developing applied skills relevant to local communities; collaborations with local authorities and regional industries.
Private Universities	Funded by educational corporations, private organizations or foundations.	Focused on educational programs that are continuously adapted to the needs of the labor market; on competitiveness to attract students; on flexibility in curricula and educational programs.

Source: Elaborated by the author

Thus, national universities are research-oriented, public universities are regionally oriented and integrated into local communities, supporting their development, while private institutions focus on aligning with labor market requirements and flexibility.

Such a diversified higher education system, in terms of institutional types and skills development, offers young people vast opportunities for professional development in multiple dimensions - from acquiring fundamental knowledge to developing practical skills in a wide variety of fields, as well as integration into the research-innovation process.

The institutional infrastructure of higher education in Japan is continuously expanding (Table 2).

Table 2

Number of institutions and students in the Japanese university system

Types of universities	Number of institutions				Number of students, thousands			
	2011	2020	2022	2024	2011	2020	2022	2024
National	86	86	86	86	451	599	600	604
Public	95	94	101	103	125	159	160	168
Private	599	615	620	624	1994	2158	2171	2178
Total	780	795	807	813	2570	2916	2931	2950

Source: Elaborated by the author based on [7, p.6; 8; 9, p.2; 10, p.2]

According to MEXT data analysis, in 2024 Japan had a total of 813 registered universities, comprising 86 national, 103 public, and 624 private institutions, with their overall number exhibiting an upward trend. Thus, between 2011 and 2024, the total number

of universities in Japan grew by 4.2% (33 institutions). While the number of national universities remained unchanged, public universities increased by 8.4% (8 institutions), and private universities expanded by 4.2% (25 institutions). Private universities account for the largest share - 76.7%, remaining at a stable level (76.8% in 2011).

The number of students enrolled in universities is also on the rise, despite the demographic decline. In 2024, it stood at 2,950 thousands compared to 2,570 thousands in 2011, an increase of 14.8%. The number of international undergraduate students in Japanese universities has been rising, reaching 87,400 in 2024, representing 3.0% of the total student population [11, p.6]. Most students (73.8%) study in private institutions. The educational process is provided by 192,500 full-time teaching staff [10, p.2].

Promoted studies show that private universities play a central role in the Japanese higher education system, both quantitatively and qualitatively. They represent the majority of institutions, hosting a significant share of the national student population. Through their substantial contributions to the training of skilled human resources, the promotion of educational innovation, and the expansion of access to higher education, private universities have profoundly influenced the evolution of modern Japanese education. Given their strategic importance, the Japanese government has treated the promotion and support of private universities as an educational policy priority, developing a series of measures and programs aimed at strengthening their institutional capacity, academic quality, and financial sustainability. These initiatives reflect the recognition that the balanced development of the entire education system cannot be achieved without the active involvement and consistent support of the private sector in higher education.

The enrollment rate of young people in Japanese universities has increased significantly: from 25% in 1990 to 56.6% in 2022 and 59.1% in 2024. It should be noted that the enrollment rate of young people in all types of tertiary education institutions (universities, colleges) was 87.3% in 2024, reaching its highest level [6].

One of the main indicators of higher education performance in Japan is considered to be the employment rate of graduates. This is important for the allocation of funds and the ranking of universities. Thus, according to MEXT surveys, in 2024 the share of graduates of bachelor's programs who entered the labor market was 76.5%, and that of master's programs was 78.5%. At the same time, 12.6% of graduates of bachelor's programs enrolled in master's programs [6]. These data indicate an impressive level of consistency between education and the labor market for Japanese graduates.

Research shows that despite the international reputation of the Japanese education system, higher education in this country faces multiple challenges generated by demographic changes, internal socio-economic dynamics, and pressures from the global academic environment. Several reforms have been promoted to respond to the challenges of the times. Thus, since 2004, Japan's national universities have been reorganized into National University Corporations [7, p.8], in accordance with national legislation. This represented a major turning point in Japanese education policy, designed as a response to the need to modernize and adapt higher education institutions to the new demands of society. This reform marked a significant transition from a centralized administrative model, in which universities were managed directly by public authorities (the government/ministry), to an institutional model characterized by extensive autonomy and managerial responsibility. The main objectives of this transformation were to strengthen institutional autonomy, revitalize educational and research activities, and increase the attractiveness and competitiveness of universities in

relation to ever-changing societal and economic demands. As a result of this reorganization, each national university now operates independently of central administrative structures, autonomously managing key areas such as human resources, budget, and academic strategy under the leadership of the university president (rector), who holds ultimate responsibility for governance and managerial decision-making. For example, the University of Tokyo is officially called the "University of Tokyo, National University Corporation," reflecting this corporate status.

Although reforms implemented over the past two decades have contributed significantly to modernizing university governance, making curricula more flexible, stimulating international cooperation, and strengthening performance in research and innovation, Japanese universities are currently facing a new set of challenges. Within the scope of the present research, the main challenges were identified, among which the following can be highlighted.

Demographic decline and pressure on enrollment - Japan is facing a dramatic decline in the number of young people eligible for university studies, in the context of a declining birth rate and an aging population. The Central Council for Education of Japan estimates that by 2040, the number of 18-year-olds will fall to around 820,000 (compared to 1.09 million on January 1, 2025 [12]), and the number of effective university applicants to only 510,000 compared to 630,000 in 2023 [13].

Tension between traditional teaching approaches and emerging technologies*:* although the Japanese education system is widely renowned for its rigor and consistency, it remains deeply rooted in traditional, teacher-centered methods that emphasize frontal knowledge transmission and memorization (passivized learning), thereby constraining the development of students' critical thinking and practical skills. The adoption of ICT, as noted by experts in the field, often remains superficial, without authentic pedagogical integration [14]. In the context of rapid developments in digital technologies and pressure to innovate for the global economy, universities need to better integrate and utilize new technologies, including AI technologies and advanced online learning tools, to modernize teaching and research.

The need for curriculum and research reform - the university curriculum is often perceived by the business community as rigid and insufficiently adapted to the requirements of the modern economy, especially in emerging fields such as artificial intelligence, digital transformation, interdisciplinarity, or transversal skills. Research policies and activities also need to be reconsidered in order to encourage interdisciplinarity, cooperation with industry, and real contributions to the development of society.

Financial constraints - Japanese national universities are facing a gradual reduction in government subsidies, which is affecting their financial stability and institutional capacity to invest in infrastructure, research, and innovation [15]. Although the corporate reforms of 2004 aimed at university autonomy and diversification of revenue sources, this goal remains difficult to achieve for smaller and less prestigious universities. This situation limits the ability of universities to invest in infrastructure, research, and innovation.

Limited internationalization - Japanese universities continue to face challenges in attracting and integrating international students and faculty. Among the main barriers are the limited number of English-language programs and strict language requirements, restricted access to post-graduation jobs, insufficient support services, which affects Japan's attractiveness as a long-term educational destination. These difficulties, according to experts,

constrain Japan's participation in global academic networks and hinder international mobility. Despite efforts to internationalize and reform the education system, Japan has not achieved its goals for global rankings - to have 10 Japanese universities in the world's top 100 by 2023. According to the Academic Ranking of World Universities (ARWU), by 2022 only two Japanese universities were in the top 100, compared to five in 2003 and three in 2013 [16].

However, these and other challenges call for *new approaches, proactive and adaptive educational policies, and strategic development frameworks* capable of addressing the complexity of emerging realities and supporting not only academic excellence and innovation, but also the diversity of university missions. To this end, Japan has adopted a series of ambitious educational policies to transform its higher education system into an engine of innovation and competitiveness. The policies mainly target the structural reform of universities, increasing international competitiveness, modernizing research, and adapting to demographic and technological changes. Among the most relevant policies, reforms, and strategic actions for the development of Japanese higher education, identified through the analysis and research conducted within our research, the following initiatives stand out as having a significant impact on the modernization and internationalization of the Japanese university system.

Continuing governance reform and expanding institutional autonomy: one of the major reforms, as mentioned above, was the transformation of national universities into National University Corporations, which gave universities administrative and financial autonomy, allowing them to manage their resources flexibly and adopt their own institutional development policies. Nevertheless, according to experts, this reform has had mixed effects, generating both progress and new challenges, and was not sufficient to respond promptly to current challenges. Therefore, the Japanese authorities have initiated complementary reforms to strengthen and streamline the governance of the university system. These policies aim to reform some national universities by granting them the status of "Designated National University Corporation"[17]. This initiative (launched in 2017) aims to designate National University Corporations that are expected to develop their education and research activities at the highest global level and to facilitate innovation. Such universities must be at the top level in Japan in three aspects, namely, research quality, collaboration with society, and international cooperation. After selection, these top institutions (10 selected to date) receive increased financial autonomy and additional resources to support their educational and research capabilities.

Another strategy, launched by MEXT in 2018, and titled the "Grand Design for Higher Education toward 2040," articulates a comprehensive vision for reforming higher education in response to the challenges of Society 5.0, demographic shifts, the ongoing industrial revolution, and future societal needs, with particular emphasis on emerging technologies and flexible, adaptive education [18]. The evaluation of this initiative notes its focus on strengthening regional cooperation (developing "Regional Cooperation Platforms" to connect higher education institutions with local governments and industry, supporting regional development and education tailored to the local context); diversifying the types of institutions; reforming postgraduate education as a pivot for innovation and increasing its relevance; expanding educational mobility (facilitating credit transfer between institutions to offer students more flexible and diverse educational pathways); supporting the inclusion of foreign students and multiculturalism; and the digital transformation of education in the context of a smart and connected society.

At the same time, in the context of demographic changes and socio-economic transformations, the Japanese government is promoting policies to reorganize universities in order to increase their efficiency and impact on the development of society. Thus, the authorities are encouraging mergers or reforms of private universities that are not meeting their enrollment targets, offering additional subsidies to those that merge and imposing reviews of some institutions in order to maintain funding. These subsidies can amount to 10% of the budgets of the respective institutions.

In this context, in May 2022, the Council for the Creation of Future Education, chaired by the Prime Minister, compiled "The Ideal State of Universities and Society that Drive Japan's Future (First Proposal)"[19] and recommended specific measures concerning universities, as key institutions shaping Japan's future: accelerating the reorganization of universities and other institutions that train the human resources who will support the future; improving learning support in response to the new era; creating an environment that promotes re-learning (recurrent education). MEXT is to provide funding for restructuring focused on growth areas (digitalization, eco-innovation) and for promoting continuing education.

Policies to strengthen research and innovation - aim at both scientific excellence and the applicability of results in the economy and society. Initiatives such as the World Premier International Research Center Initiative (WPI) and the KAKENHI program encourage advanced research projects, international and interdisciplinary collaborations, and the involvement of young researchers in the scientific ecosystem. The focus is on research efficiency, impact-based evaluation, and integration into international networks of excellence.

The WPI government program was launched in Japan in 2007 by MEXT with the aim of creating world-class research centers of excellence that would attract top researchers around the world, promote interdisciplinarity, and develop high-level scientific results. Our research shows that this program focused on the following pillars: internationalization, scientific excellence, interdisciplinarity, and innovative governance. Relevant examples include the International Research Center for Neurointelligence (IRCN), the University of Tokyo; the Institute for Integrated Cell-Material Sciences (iCeMS), Kyoto University, and others. This initiative (WPI) continues to operate in Japan to this day and is evolving through the adoption of new centers and the development of an advanced network of research excellence. Thus, in 2023, the Advanced Tohoku University's Institute for Marine Ecosystem Change (WPI–AIMEC), in collaboration with the Japan Agency for Marine-Earth Science and Technology (JAMSTEC) was established as the 18th center, strengthening Japan's global network of advanced research hubs focused on marine and environmental sciences [20]. In 2017, MEXT created the WPI Academy, a special network that brings together WPI centers that have achieved "world-premier" status. This is a way to consolidate the impact of thise initiative and support the international mobility of researchers [20]. In 2025, the Japanese government launched the J-RISE (Japan Research & Innovation for Scientific Excellence) policy package, a 100 billion yen policy package aimed at strengthening the research environment and attracting international talent. The WPI initiatives are an integral part of this strategic and operational plan. In addition, the Japanese government intends to promote other programs, such as Adopting Sustainable Partnerships for Innovative Research Ecosystem (ASPIRE), to advance large-scale international collaborative research in cutting-edge fields of science and technology, and to strengthen exchanges and networks among excellent researchers, thereby facilitating international brain circulation [21].

An evaluation of Japanese research and innovation policies has shown that the KAKENHI Program (Grants-in-Aid for Scientific Research) has had a major impact on maintaining Japan's scientific competitiveness, stimulating the production of ISI articles, innovative discoveries, and the academic career development of researchers [22]. It focuses on supporting fundamental research in all fields and is a bottom-up program, meaning that the projects funded are proposed directly by researchers, rather than being imposed by the government through fixed priorities. This program is considered the "backbone" of fundamental research funding in Japan (similar to the Horizon Europe programs in the European Union) and is one of the largest national grant schemes in the world.

Another major pillar of science and technology policy, which is distinct from WPI and KAKENHI, is Japan's Center of Innovation (COI) Program, a strategic initiative launched by the Japanese government (2013-2021) [23] through Japan Science and Technology Agency (JST). Analysis of the experience of implementing this program has highlighted its particularities and benefits. It focuses less on fundamental research and more on technology transfer, applied innovation, and university-industry-society collaboration. Its objective is to create an ecosystem in which universities, research institutes, and companies collaborate to generate disruptive innovations with a direct impact on society and the economy. Each COI is based on a long-term vision (10–20 years), such as: a healthy and long-lived society, technologies for sustainability, smart mobility, digitization; on substantial budgets and private co-financing; on the mechanism of "vision-driven, backcasting R&D"**;** stimulating the formation of international centers of excellence in education and research, global competitiveness through grants and collaborations [24]**.** COIs are focused on solving Japan's major challenges (aging population, sustainability, health, AI, energy, digitization, etc.). COI promotes collaboration between universities (basic research), companies (practical implementation), government (funding and regulation), and civil society (end users). The host university is the coordinator (scientific leader), but companies are co-creators, not just users. This builds a sustainable ecosystem of co-creation between industry, universities, and local authorities.

After finishing the original COI cycle, JST launched in 2020 a new framework: Center of Open Innovation - NEXT Stage (COI-NEXT), which is designed to keep up the philosophy of the previous COI program. It adheres to the COI principles (vision, backcasting) and aims to implement them through self-sustaining centers of collaboration between universities, industry, local administrations, and the community. COI-NEXT focuses on supporting self-sustaining innovation ecosystems (not just research projects); expands the involvement of small and medium-sized universities, not just top ones; encourages cross-sector partnerships (local authorities, NGOs, industry, etc.).

An analysis of the functioning of these innovation centers shows that many of the COIs in the initial program have continued their activities, while others have reorganized into university centers, commercial spin-offs, and local consortia. For example, the University of Tokyo initiated a COI dubbed the Self-Managing Healthy Society in the first stage and is currently continuing projects in medical AI, in collaboration with the Tokyo Medical Cluster; Tohoku University created a COI focused on disaster resilience and, in the post-COI phase, is developing the Tohoku Forum for Creativity, an international interdisciplinary hub.

Thus, if the COI Program focused on promoting disruptive innovation through university-industry consortia, then COI-NEXT focuses on developing sustainable regional ecosystems for the future. Among the most notable examples are: the "CHANGE" project (Kawasaki) addresses population aging and the care system by combining healthcare,

engineering, and nursing to create a sustainable and healthy society in the current demographic context [25]; „Quantum Software Research Hub" of Osaka University is an international hub for the development of quantum technologies in collaboration with major companies [26]; University of Tokyo - Co JUNKAN develops a "beyond zero-carbon" platform for sustainable resource circulation in communities through public-private-academic integration [27]; Hiroshima University - Bio DX Center focuses on Bio-digital transformation for an inclusive, SDG-oriented bioeconomy [28], etc.

It can be concluded that COI-NEXT plays a key role in the context of the "Grand Design for Higher Education toward 2040" vision: it transforms universities from simple centers of education into platforms for regional innovation; it promotes learning through applied research (including for undergraduate students); it gives universities an essential role in regenerating the regional economy, especially in the context of demographic decline. Each hub is an applicable model, deeply integrated into local communities, and articulates the role of the university in futuristic development.

However, as the research findings show, the Japanese government continues to identify and leverage new opportunities to respond to current societal challenges by adopting long-term strategies aimed at strengthening two major ecosystems designed to change the future. The first, *the knowledge ecosystem*, is supported by the allocation of approximately USD 70 billion (over 25 years) to a select group of high-performing universities, with the aim of generating new knowledge through science, technology, and innovation, developing their own financial resources, and playing a leading role in national research. The second, *the human resource development ecosystem*, aims to stimulate two-way academic mobility and inclusion, to train a highly skilled workforce in the field of knowledge, capable of integrating into global talent pools and actively contributing to the revitalization of the national economy [16].

Digital transformation (DX) and educational innovation are central priorities in Japanese education policy. International policies [29] encourage universities to adopt advanced teaching technologies (AI, virtual reality, online learning platforms), but also to digitize administrative processes and personalize educational pathways. The assessment of Japanese policies in this area has identified the main directions for the digitization of higher education in Japan, among which the following stand out: investment in digital infrastructure projects; the development of digital skills as a curricular objective; the consolidation of universities as centers of digital innovation; expanding international collaboration initiatives (partnerships between Japanese academic institutions and prestigious universities worldwide, promoting the exchange of digital knowledge, advancing research in cutting-edge fields such as artificial intelligence and robotics). Since 2020, the Japanese government has allocated substantial funds to improve the IT infrastructure of universities in order to support the complete digitization of higher education and the adoption of advanced educational IT systems, including personalized learning tools, digital assessments, and online collaboration platforms for students and teachers. The impact of these actions is significant. For example, the University of Tokyo has implemented distance learning platforms and promoted the use of artificial intelligence technologies in education to improve the learning experience of students, while Wako University has adopted advanced digital learning systems and collaborations with IT companies to develop innovative online education platforms.

The research finds that education digitization policies are cross-cutting in nature, being integrated into large-scale government initiatives such as the "Super Smart Society"

(Society 5.0) Project [30]. This strategic initiative aims to transform Japan into an advanced digital society, in which education is a central pillar of development. In particular, special attention is given to the digitization of higher education and the promotion of livelong learnig, which are considered essential tools for developing the skills needed in an economy based on technological innovation and adaptability. The integration of education into such projects reflects a systemic approach aimed at ensuring consistency between educational policies and digital development strategies at the national level.

Japan is persistently pursuing the goal of *increasing the international visibility and attractiveness* of its universities through a series of dedicated policies. An analysis of these policies reveals several initiatives with a major impact on the internationalization of higher education. For example, the Global 30 Program (2009–2014) aimed to admit 300,000 international students into tertiary education by 2020. This goal was achieved and exceeded in 2019 (312,000 students [11, p.2]). Under this initiative, 13 selected universities (national and private, including Doshisha University) received government grants totaling 15 billion yen [31, p.81] for developing programs in English and becoming "centers of internationalization." The next program, Top Global University Project (2014–2023) [32] continued the strategy to increase global visibility and extended financial support to 37 universities in the internationalization process, with clear objectives to increase the number of international faculty and students, develop English-language programs, and strengthen international partnerships.

Depending on the level and scope of internationalization, Japanese universities involved in these programs were classified into two categories: Type A (Top Type) – universities with the potential to rank among the top 100 universities globally (13 institutions were selected, including the national universities of Tokyo, Kyoto, Tohoku, Nagoya, private universities Keio University, Waseda University, etc.) with annual subsidies of 420 million yen and Type B (Global Traction Type) - innovative universities that can lead internationalization at the societal level (24 institutions selected, including Kumamoto University, Nagaoka University of Technology, Shibaura Institute of Technology, private institutions Hosei University, Sophia University, Meiji University) with annual subsidies of 170 million yen [33].

These policies have had an impressive impact: in 2024 (as of May 1), the number of international students (in all types of tertiary education institutions) reached 336,700, marking a 20.6% increase over the previous year and confirming the effectiveness of these policies [11, p.2].

Many universities have improved their infrastructure and support for international students. For example, Meiji University has opened Global Village, an international dormitory complex for international and Japanese students. An increasing number of universities offer degree programs for undergraduates and postgraduates delivered entirely in English, while others offer their own institutional scholarships to foreign students and support foreign students in finding part-time jobs to finance their studies. Through its policies, the Japanese government promotes the employability of foreign graduates, setting an employment target of 50% for international graduates [34]. For this purpose, it expands employment opportunities for foreign graduate students with the aim of retaining talented foreigners in the country.

However, in 2023, at the Council for the Creation of Future Education, the Prime Minister of Japan launched an ambitious plan to boost student mobility. The initiative aims to send 500,000 Japanese students abroad and accept 400,000 international students by 2033

[35]. This is part of Japan's broader strategy to internationalize its higher education sector, which is essential for strengthening national competitiveness and maintaining the effectiveness and relevance of universities. In this regard, universities are expected to equip graduates with the skills necessary to thrive in a globalized economy, including innovation, critical thinking, and collaborative abilities.

Demographic decline, rural depopulation, and the need for regional revitalization require *policies that adapt educational offerings to local contexts and support universities in disadvantaged areas*. Through the Universities for Regional Revitalization Initiative, institutions are encouraged to become actively involved in the development of local communities, to train human resources for the regional economy, and to become centers of applied innovation and regional regeneration. This promotes a model of a university integrated into the local ecosystem for the creation of the region's future. Analysis of the actions of the Japanese authorities within this initiative consisted of the launch of several programs (COC [36], COC+ [37], SPARC [38]) tailored to local needs. For example, in the framework of the Center of Community (COC) Program, Akita University has implemented the project "Regional Development aimed at promoting an Independent Society in which all Individuals have Value," which directly addresses urgent issues such as depopulation and aging in Akita Prefecture [39]. The “Human Resource Development for Regional Revitalization: Super-Excellent Program for Activating Regional Collaboration (SPARC)” was designed to restructure existing educational programs through collaboration between universities and local communities. Its main objective was to transform universities into institutions capable of cultivating the human resources genuinely required by the region. In November 2023, Gifu University, in partnership with representatives from industry, government, and the financial sector, launched the “SPARC-GIFU Regional Partnership Platform” to put these objectives into practice [40]. Other universities are also actively engaged in local revitalization through research centers, partnership platforms, and customized educational initiatives: Teikyo University operates a Research Center for Regional Revitalization, collaborating with local governments and industries to support regional economic growth and education [41], Fukushima University runs the Revitalization Knowledge Project, designed to rebuild and innovate in areas affected by the 2011 Great East Japan Earthquake, through agreements with municipalities and practical learning programs [42]. Such programs promote encouraging local businesses to invest in the education and training of young talent in their respective areas. They have contributed to the creation of new local industries based on scientific research, such as in the field of green technologies and smart agriculture, to reducing the migration of young people from less developed areas to cities, and to creating new educational and professional opportunities for young people in these areas.

In the context of the globalization of education and economic and social interdependence between countries, *regional cooperation and the promotion of mutual mobility* have become an essential pillar in the sustainable development of Japanese higher education. The Japanese authorities support this through dedicated policies and invest substantially in this area. In our opinion, the CAMPUS Asia and Collaborative Online International Learning (COIL) programs play a distinct role in this regard. Launched in 2012 at the Japan-China-South Korea Trilateral Summit, CAMPUS Asia's main objective is to facilitate university mobility and cooperation between three countries in order to increase academic competitiveness in Asia and promote mutual understanding [43]. The COIL program supports virtual interactions

between Japanese students and international peers for educational collaborations. Although it faces certain barriers, the implementation of COIL, as the researchers mention, offers a viable means of contributing to an internationalized, inclusive, and collaborative curriculum in Japanese universities, provided that there is adequate institutional support and teacher involvement [44]. The above-mentioned programs are coordinated by the ministries of education of Japan, China, and South Korea, supporting the expansion of international cooperation by promoting alternative learning models. Thus, regional cooperation and mutual academic mobility are emerging as strategic mechanisms for strengthening a common educational space oriented towards excellence, inclusion, and innovation.

Both CAMPUS Asia and COIL have had a transformative impact on how universities collaborate, exchange students, and innovate pedagogically. While CAMPUS Asia strengthens regional integration and physical academic mobility in Asia (double and joint degree programs, regional academic networks), COIL paves the way for more flexible and inclusive internationalization, adapted to new technological and social realities (digital and intercultural skills, stimulation of pedagogical innovation, reduced costs of internationalization). Both programs contribute to the formation of a generation of students with global thinking, transversal skills, and the ability to work in multicultural environments.

However, the Japanese authorities are exploring new visions and opportunities for advancing higher education. Under Japan's Fourth Basic Plan for the Promotion of Education (2023–2027) [45], higher education is addressed through a series of strategic measures designed to respond to current challenges and contribute to the development of a sustainable and innovative society (enhancing academic and research excellence, improving educational program quality and institutional management, promoting internationalization, stimulating collaboration with local communities, training human resources in strategic areas such as information technology, artificial intelligence, and sustainability. At the same time, education policy continues to focus on maximizing possibilities and chances for individuals, toward the 100-year life era and Super Smart Society (Society 5.0) and the transition to Well-Being Society 6.0 [47], requiring universities to refocus on educating socially and environmentally responsible citizens.

3.2. Adapting Japanese Higher Education Best Practices to the Moldovan Context

In a context which is marked by economic transition, profound demographic changes, and aspirations for European integration, higher education represents an essential pillar of innovative and sustainable development in the Republic of Moldova. Its role is not limited to training skilled human capital, but extends to strengthening social cohesion, supporting innovation, and stimulating regional development.

Although a series of reforms in higher education have been initiated in the Republic of Moldova over the last decade, aimed at strengthening the quality of education, ensuring its alignment with labor market requirements, and facilitating integration into the European community, the real potential of this sector has not yet been fully exploited.

According to data from the National Bureau of Statistics [1, p.65], in the 2024-2025 academic year, the Moldovan higher education system included 16 universities (three regional), of which four were private, with a total of 58,900 students (bachelor's and master's degrees), compared to 89,600 in 2014-2015. The overwhelming majority of students currently study in public institutions – 84.3% (79.5% in 2014-2015). Public policies in the field of education are primarily oriented towards supporting public universities, while private

institutions do not benefit from public funding for the development of infrastructure, digitalization, internationalization, and related areas. The enrollment rate in higher education institutions of people who graduated from general secondary education in 2024-2025 was 52.2% (compared to 62.4% in 2014-2015), decreasing by 10.2 percentage points over the last ten years. This downward trend indicates not only a decline in the attractiveness of higher education, but also a possible shift among young people toward other forms of vocational training, educational migration, or emigration. The enrollment rate of the young in higher education in the 19–23 age group was 56.5% in the 2024–2025 academic year, a relatively stable level, but insufficient to have a significant impact on the labor market and sustainable economic development. It should also be noted that in the first quarter of 2025, the share of NEET (Not in Employment, Education or Training) young people (aged 15-29) was 22.5% [48] (double rate compared to the EU average of 11% in 2023-2024, which the EU wants to reduce to less than 9% by 2030) [49]. This highlights an increased vulnerability among the younger population regarding access to education, vocational training, and integration into the labor market. It is not possible to evaluate the level of youth participation in the labor market due to a lack of statistical data and official information. In order to fully realize its potential, the education system must respond effectively to current structural, financial, and demographic challenges, as well as to the future prospects for the development of society.

Although the quantitative indicators of higher education, such as student enrollment and institutional density, are relatively comparable between the Republic of Moldova and Japan, with 247 students per 10,000 inhabitants in Moldova versus 239 in Japan, and one university per 148,800 inhabitants in Moldova compared to one per 152,000 inhabitants in Japan, the qualitative differences in system performance, educational outcomes, and socio-economic impact are pronounced. While Japan stands out with a university system that is well integrated into the country's economic and technological development, the Republic of Moldova continues to face difficulties related to the relevance of education to the labor market, limited internationalization, insufficient funding, and the exodus of skilled labor.

This discrepancy between seemingly comparable size and differing actual impact highlights the importance of *institutional quality, policy coherence, and the connectivity of the education system with the socio-economic environment*. Japanese public policies in recent decades have focused on structural reform of universities, increasing international competitiveness, modernizing research, and adapting to demographic and technological changes. The results of these policies are significant, with a visible impact on the economic and social potential of Japanese society. For the Republic of Moldova to fully harness the potential of its university network, it is essential not only to preserve a critical mass of students and institutions but, above all, to transform them into active actors of national and regional development.

The National Development Strategy "Education 2030" [50] highlights the main challenges facing the education system in the Republic of Moldova and sets out strategic directions for intervention aimed at ensuring the quality, relevance, and equity of the educational process. A comparative analysis finds that both the Republic of Moldova and Japan face similar societal challenges (demographic decline, aging population, emigration of young people, etc.) and priorities in higher education, such as the need to modernize the curriculum, integrate digital technologies, develop transversal skills, and strengthen the links between education, research, and the labor market. However, differences become apparent at the level of policies and implementation programs.

While Moldova is focusing on getting in line with European standards and fixing internal structural issues (such as insufficient funding, teachers leaving, and gaps between urban and rural areas), Japan approaches educational reform through long-term national strategies such as Society 5.0 and Society 6.0, along with the Basic Plans for the Promotion of Education and the Science, Technology and Innovation Basic Plans. These initiatives aim not only to address domestic challenges but also to strengthen global competitiveness. Moreover, Japanese policies emphasize integrating universities into innovation ecosystems, stimulating international academic mobility, and supporting applied research, while the Republic of Moldova is still undergoing a gradual process of adjustment to these models.

This difference in approach reveals that, although the overall objectives remain aligned in both countries, the implementation and long-term effectiveness of educational policies are profoundly influenced by institutional capacity, financial resources, and governance mechanisms.

Higher education, in our opinion, is more than just a sector of education - it is a strategic investment in the future of the Republic of Moldova. In the context of current challenges (chronic underfunding, institutional rigidity, declining attractiveness to young people, and poor alignment with labor market demands), strengthening this area must be treated as a national priority, from an economic, social, political, and cultural perspective. Through coherent policies, adequate funding, and openness to international best practices, higher education can become a key tool for the development of a prosperous, equitable, and competitive Moldova.

From this perspective, a comparative analysis of international models that have demonstrated the ability to adapt effectively to contemporary challenges is required. In this regard, the Japanese model, as mentioned above, stands out through a series of *relevant policies and practices* focused on digitization, regional revitalization, the promotion of continuing education, and the development of functional partnerships between higher education institutions, public authorities, and the private sector. These elements can serve as valuable benchmarks for the Republic of Moldova in its efforts to strengthen the role of higher education as a vector of sustainable economic and social development.

The evaluation of Japan's experience in higher education within the framework of this research has enabled the development of policy recommendations and strategic actions aimed at supporting the reform, performance improvement, and competitiveness of the higher education system in the Republic of Moldova. These recommendations address the following issues.

Increasing institutional and financial autonomy: developing a legal framework that strengthens real university autonomy, establishing responsibilities and limits; adopting a model similar to the Japanese concept of National University Corporations, whereby Moldovan universities would enjoy greater autonomy to manage their academic freedom (establishing their own study programs, implementing rapid curricular reforms, adapting educational offerings to labor market requirements and global trends), administrative, and financial autonomy while promoting an organizational culture based on accountability, transparency, and performance; diversifying funding sources and encouraging alternative financing (European projects, private sponsorships, competitive grants); promoting close links between universities, industry, and authorities to encourage technology transfer and innovation; including in the list of performance indicators for the allocation of funding the indicator concerning the integration of graduates into the labor market, which is a relevant

measure of the efficiency of the university's activity (In Japan, state budget allocations are linked to research results; graduate integration into the labor market; international projects attracted; and the relevance of educational programs). Increased institutional and financial autonomy will lead to more efficient and flexible management of university resources, stimulate innovation, competitiveness, and managerial responsibility.

Promoting a policy framework that guarantees equitable support for all higher education institutions, regardless of their form of ownership: integrating private universities into national policies on innovation, digitization, and internationalization; providing funding to these institutions through competitive mechanisms dedicated to research and innovation, digital transformation and technological adaptation, and internationalization programs; supporting the development of academic and social infrastructure; facilitating public-private partnerships. In this way, private universities could contribute more effectively to improving the quality of education, developing skilled human capital, strengthening competitiveness, and enhancing their role in the national knowledge and development ecosystem. In Japan, private universities receive substantial government support through programs such as the Top Global University Project, COC/COC+, and others, which provide them with dedicated funds for research, innovation, and internationalization, as well as opportunities to create partnerships with the private sector and international institutions. As a result, Japanese private universities contribute significantly to diversifying educational offerings, stimulating innovation, and increasing international competitiveness.

Positioning internationalization as a national priority: developing a national internationalization strategy or program (currently lacking) that includes: developing programs in foreign languages, supporting student and academic staff mobility, bilateral partnerships with European and Asian universities; actively promoting study programs in foreign languages to attract students and teachers from abroad; strengthening relations with the Moldovan academic diaspora; adopting programs dedicated to the internationalization of universities (similar to those in Japan - Global 30, Top Global University Project), which support the expansion of international academic collaborations and the internationalization of the curriculum. This would contribute to increasing the visibility of Moldovan universities internationally, attracting external resources, and improving the quality of the educational process, as well as better preparing young people for work in a global economy.

Promoting university-industry partnerships and stimulating technology transfer: creating institutional mechanisms (collaborative platforms with industry, technology transfer centers) to facilitate cooperation between academia and the private sector in the field of applied research, innovation, and professional training; supporting the development of innovation and technology transfer centers within Moldovan universities based on the Technology Licensing Offices (TLOs) model [51], which operate as intermediaries between researchers and companies; stimulating applied research through joint university-industry grants, by launching national funding lines for joint university-company projects and offering tax deductions for companies that invest in academic research; establishing, based on the Japanese experience, joint university-industry/business councils and integrating them into university governance (for curriculum co-create, identifying relevant research projects, increasing graduate employability); encouraging the creation of incubators and industrial science parks.

Digital transformation of the university system: adoption and implementation of a national program for the digitization of higher education (as part of the Republic of Moldova's

Digital Transformation Strategy for 2023-2030) with dedicated funding, similar to the Japanese Digital Transformation (DX) model, which would encompass: infrastructure development, digital training for teachers, digitization of services and online learning (national digital platforms for universities, hybrid courses, distance learning, digital libraries, virtual laboratories, cloud infrastructure); nationwide implementation of an integrated educational management platform (Learning Management System - LMS) that would be interoperable between universities; creation of a government educational cloud for storing and exchanging academic data; development of partnerships with tech companies to offer internships in digital fields; encouraging universities to offer micro-certifications and open online courses (MOOCs), including for the diaspora. The integration of digital technologies into educational, research, and university governance processes will contribute to increasing the accessibility, efficiency, and quality of academic services, while facilitating the adaptation of higher education institutions to international standards and the requirements of the knowledge-based economy.

Smart regionalization of universities: leveraging the role of universities in regional development through differentiated budgetary support and encouraging their involvement in local innovation, entrepreneurship, and vocational training projects; developing triple helix partnerships (university-local authorities-business); transforming regional universities and branches of other universities into hubs of innovation, culture, and entrepreneurship based on the experience of the Japanese "Universities for Regional Revitalization" program; financing them through separate programs to contribute to community development (economic development, social projects, retaining and attracting young people to regions); offering scholarships and logistical support to graduates who choose to remain in rural areas or regions with high migration (the Japanese COC, COC+, and SPARC programs offer scholarships, internships, and jobs to young people who choose to settle in regions experiencing demographic decline).

Reconsidering the concept of financing the higher education system: adopting and implementing a funding model aligned with strategic national priorities (such as research and innovation, digitization, internationalization, human capital training in strategic areas) and based on institutional differentiation, inspired by the Japanese experience (public investment is strategically concentrated in a limited number of national universities with clearly defined missions to promote academic excellence and advanced research at the international level); establishing funding mechanisms based on specific programs and projects, through competitive grants (similar to the Japanese Top Global University Project and COC+ initiatives); reviewing and improving the methodology for institutional funding of universities based on performance (based on a set of clearly defined, transparent, and measurable indicators that objectively reflect the real contribution of higher education institutions to national development, as well as their position in the international education and research system); developing mechanisms for co-financing public-private partnerships, which would supplement public funds and encourage investment in infrastructure, laboratories, and innovative projects; providing equitable access to public funds for all universities, including private ones, based on transparent and objective criteria, which would contribute to the creation of a sustainable, equitable, and competitive national research and innovation ecosystem.

Strengthening research and innovation potential: creating and developing university centers of excellence and innovation, inspired by the World Premier International Research

Center Initiative, COC+ and Top Global University Project, COI-NEXT programs, focused on: promoting high-level interdisciplinary research, attracting international researchers and global cooperation, integrating research with regional development and societal needs; allocating long-term strategic funds for research and innovation, including priority projects, similar to the Japanese experience; offering competitive grants and support programs for innovative projects; stimulating public-private and international partnerships that generate added value through applied research and innovation; adopting a system for evaluating and rewarding performance in research and innovation, based on the Japanese model, which would stimulate patent registration, publication in top journals, and technology transfer, thus strengthening the national innovation ecosystem; encouraging co-financing of research projects and university programs by the private sector.

Stimulating research through competitive funding: creating a framework for research funding based on competition and international evaluation (similar to the KAKENHI grant model or WPI initiatives in Japan); promoting joint research projects between universities, research centers, and industry, including the scientific diaspora; attracting international evaluators to assess research projects; supporting interdisciplinary and collaborative research, including large-scale projects focused on global challenges (such as climate change, AI, health, energy, etc.) that integrate both theoretical and applied research; offering research grants for interdisciplinary teams focused on national priority topics (e.g., sustainability, public health, digital education); continuously evaluating the impact of research, introducing a clear methodology for evaluating research results, including criteria for economic, social, and international impact (quantifiable and internationally comparable indicators); providing dedicated funding (grants) for early-career researchers.

Aligning education with the labor market and the digital economy: promoting an ecosystem for human resources development, based on a systemic approach, functional partnerships with the business environment and a curricular reform, focused on current competencies, digital skills; undertaking a comprehensive analysis of the labor market and its evolving needs, alongside an evaluation of the higher education system's capacity and the prospects for economic and social development, in order to substantiate a strategic plan for human resource development and professional training that is closely aligned with the demands of the national economy; creating university career and innovation centers that connect students with the real requirements of the market; introducing flexible, modular programs, including retraining, adapted to the needs of the labor market (information technology, renewable energies, digital business, etc.) and supported by partnerships with the private sector; collaborating with professional associations and creating advisory councils in which the business environment actively participates in defining study programs and educational content; directing investments (public, private) in research projects oriented towards strategic areas with high potential for the future, such as artificial intelligence, green energy, environmental protection, relevant for building a sustainable and innovative economy; providing financial incentives, support in accessing resources for entrepreneurial initiatives and facilitating the professional integration of young people in rural or disadvantaged regions.

The integration and adaptation of Japanese good practices in the higher education system of the Republic of Moldova can contribute to increasing the competitiveness of national universities, stimulating the development of human capital and strengthening the national research and innovation ecosystem, oriented towards excellence.

4. Conclusions

Analyzing Japanese higher education system and related public support policies reveals that this model is based on long-term strategic visions, close interconnection between education, research, and innovation, as well as differentiated and performance-oriented financial support. The Japanese experience shows that success in strengthening the competitiveness of universities depends on the existence of coherent policies, significant investment in human capital and scientific infrastructure, and the promotion of internationalisation and collaboration between academia, industry and the authorities.

The Republic of Moldova has the opportunity to adapt these best practices to its own context by increasing university autonomy, revising the performance-based funding paradigm, ensuring equitable access to public funding, advance digital transformation, support internationalization and academic mobility, and strengthening the research-innovation ecosystem through cross-sector partnerships and the integration of advanced digital technologies into education. Adapting and integrating these elements into national education and research policy can significantly contribute to creating a competitive, transparent, and high-performing ecosystem, strengthen universities' competitiveness, increase their efficiency and excellence, develop human capital, and enhance the role of higher education in the sustainable and innovative development of the Republic of Moldova. The implementation of such policies requires sustained political and institutional commitment, oriented towards innovation, inclusion, adaptability, and internationalization. This would support the transition from a centralized and passive model to one oriented toward efficiency, innovation, and societal relevance, evolving from a reactive approach to a strategic one capable of addressing not only current needs but also the future demands of a society undergoing profound transformation.

The research findings substantiate the validity of the initial hypotheses. The evolution of the higher education system in Japan demonstrates the positive impact of government policies focused on quality, performance, internationalisation and innovation. The comparative analysis reveals that Japan and the Republic of Moldova face analogous challenges, notably demographic decline, the international mobility of young people, and the need to align the education system with emerging technological and economic demands. At the same time, the research emphasizes that adapting and implementing the policies and practices from the Japanese model could provide a robust foundation for improving the efficiency, relevance, and quality of university education in the Republic of Moldova.

Acknowledgments. This study has received support from HESPRI project (HORIZON-MSCA-SE, G.A. no. 101086224). Views and opinions expressed are those of the author only and do not necessarily reflect those of the European Union or the granting authority.

Conflicts of Interests. The author declares no conflict of interest.

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Citation: Savga, L. Strengthening higher education through coherent and sustainable public policies: Japanese experience and implications for the Republic of Moldova. Journal of Social Sciences, 8 (4), pp. 114-136. https://doi.org/10.52326/jss.utm.2025.8(4).07.

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