

QUALITY EDUCATION SYSTEMS AS A FUNDAMENTAL PREREQUISITE FOR COMPETITIVENESS IN THE EUROPEAN CONTEXT

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ABSTRACT

In this paper, it is examined the competitiveness of the European Union in comparison of the rest of the world with the highlight on the quality of the education systems. In addition, it has been also investigated what are the main reasons for European Union has been struggling with the lower grow rates in comparison to the other region. A key determinant, among others, that influences the competitiveness of the European economy are higher education institutions and education systems, which must necessarily follow the processes of globalization, digitalization and demographic trends in this area. In this paper it has been reveal a several main challenges for higher institutions has to face in order to be leaders of competitiveness at the European Union level. Among other factors higher institution have to strategically redefine the approach to education to focus on creating skills that will be relevant in the future and reduce the current shortage of certain skills. Higher education institution should make education systems more adaptable and responsive to changes in the needs of the job markets. In addition to that they should commercial innovative cutting the edge research making them attractive for the market. International accreditations in the field of economics and business economics are one of the possibilities of harmonizing and standardizing the education process improving the quality of higher educational processes.

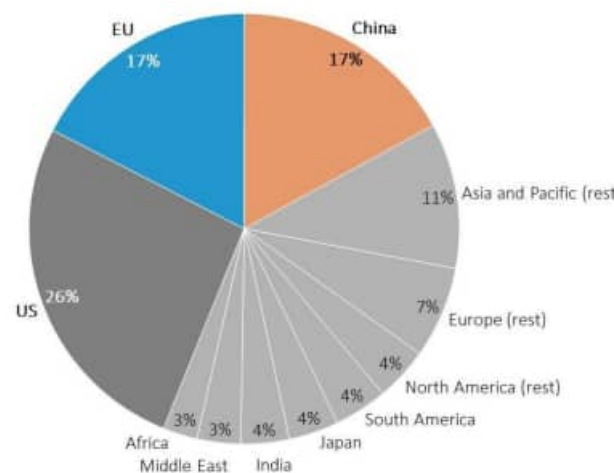
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INTRODUCTION

Since the beginning of the 20th century, Europe has been struggling with lower growth rates and that means that economic growth in Europe has been slowing down in relation to other regions. Regardless of various attempts and strategies, this trend has remained unchanged. Due to recent changes in the geopolitical scene and the rapid growth of technology, there is a risk of a deepening gap in relation to other countries/regions (USA, CHINA). The main reason why economy of the European Union is not growing as fast as others is not taking full advantage of digital technology in order to boost productivity. The dominantly increasing gap between the EU and the US in the past, but also in the future, can be explained by the technology sector, which will be the main factor in increasing productivity, and consequently economic growth at the global level. It is precisely in this sector that the EU's weakness is recognized, as according to current data that European Union have only 4 among the 50 largest global technology companies. Without increasing productivity and growth, the EU will not be able to achieve all its ambitions, i.e. to become an independent player on the world stage, and for all of the above, there is a need for radical changes and reforms at the EU

level. Europe's way of doing things means they have open markets and competition, but also laws and programs to help people and reduce inequality. Europe has built a Single Market of 440 million consumers and 23 million companies, accounting for around 17% of global GDP (**figure 1.**).

Figure 1. Share of World GDP



Source: IMF, 2024

The Draghi report (Draghi, 2024) defines three main areas of action where the European Union must use strengths, such as a strong education and health system, or a strong welfare state, to re-launch the trend of higher, but also sustainable economic growth. The first and most important one relates to reducing the gap in innovation, i.e. advanced technologies, in relation to the USA and China, where the biggest problem is reflected in the commercialization of research and patents due to inconsistent and restrictive laws and regulations. In addition, the crucial for innovation, the development of new technologies and the management of such processes, i.e. such companies, is to increase the opportunities for adult education, i.e. lifelong learning programs. The second area relates to a common plan in the field of decarbonization and competitiveness, but in order for this same decarbonization to increase the competitiveness of the EU and become one of the sources of future growth, it is necessary to create a common plan that will cover several key industries. The third area relates to increasing security and reducing (resource) dependence, i.e. it will be crucial to initiate an increase in the production of military equipment and increase investment in defense, and through trade agreements to ensure resource supplies in critical areas and create partnerships with resource-rich countries to ensure the security of the supply chain of key resources and technologies for the development of the EU as a whole. Draghi (2024) identify three main obstacles as the barrier of the higher competitiveness of the European Union: "1. Priorities are not defined and objectives are not sufficiently supported (e.g. innovation is supported, but at the same time the administrative and regulatory burden increases); 2. European market is characterized by fragmentation, i.e. non-exploitation of the potential offered by the single market. 3. Various policies are not sufficiently coordinated between the EU and national levels" (Draghi, 2024.).

Another major problem is the extremely slow adoption of decisions and new laws (an average of 19 months pass between the harmonization and adoption of a new legal act), which is especially pronounced in this complex global environment. On another hand social security, unemployment

benefits, progressive taxation to reduce inequality can be considered as the strong base and the foundation of the economic system of the European Union. That has enabled European Union to achieve excellent results in the areas of governance, health, environmental protection and education. Among other important fact European Union achieved high educational success where a third of adults have higher education. In addition, European union has been world leader in sustainability and environmental standards and progress towards a circular economy.

TRENDS IN JOB MARKETS IN THE ERA OF DISRUPTION AND DIGITALIZATION

In order to follow global trends in education, it is essential to consider **global demographics** and the **internationalization processes** that result from it. It is no less important to transfer knowledge related to artificial intelligence, digitalization, cybersecurity and numerous other technological changes. “Technological change, geo-economics fragmentation, economic uncertainty, demographic shifts and the green transition – individually and in combination – are among the major drivers expected to shape and transform the global labor market by 2030” [WEF, 2025. p. 6].

In the technological world which is constantly evolving, a lot can change in a single year. Statistics on the implementation and use of ChatGPT confirm this. For example, ChatGPT, launched in late 2022, grew incredibly fast. It uses AI to create text, images, and music, and it's still getting bigger. This AI chatbot became hugely popular very quickly, making it one of the fastest growing apps. It can create human-like content and answer many questions. Over the past few years, ChatGPT has broken several records. For example, five days after its release, the chatbot crossed the one million user mark, and within two months it jumped to 100 million active users, securing its position as the second fastest growing consumer application in history.

The deployment of ChatGPT, leveraging sophisticated deep learning architectures, demonstrates the capacity of generative artificial intelligence to synthesize outputs across modalities, encompassing textual, visual, and auditory domains, and to execute complex information retrieval tasks. Concomitantly, the accelerating velocity of digitalization, as evidenced by the proliferation of such AI systems, underscores the profound and rapid transformations occurring within the contemporary labor market.

The prestigious Harvard Business Review published a study based on several conclusions about how the labor market have changed in 2024, including: “1) Organizations are offering employees numerous creative benefits; 2) Artificial intelligence creates, not reduces, job opportunities; 3) The four-day workweek is becoming the norm, not the exception; 4) Resolving employee conflict is a necessary management skill; 5) Experiments with artificial intelligence carry hard lessons and painful costs. 6) Skills are changing formal education requirements; 7) Environmental protection is becoming the new employee benefit. 8) Artificial intelligence will not disappear, but will become integrated into all segments of business - traditional career paths are changing” [McRea et.al., 2024.]

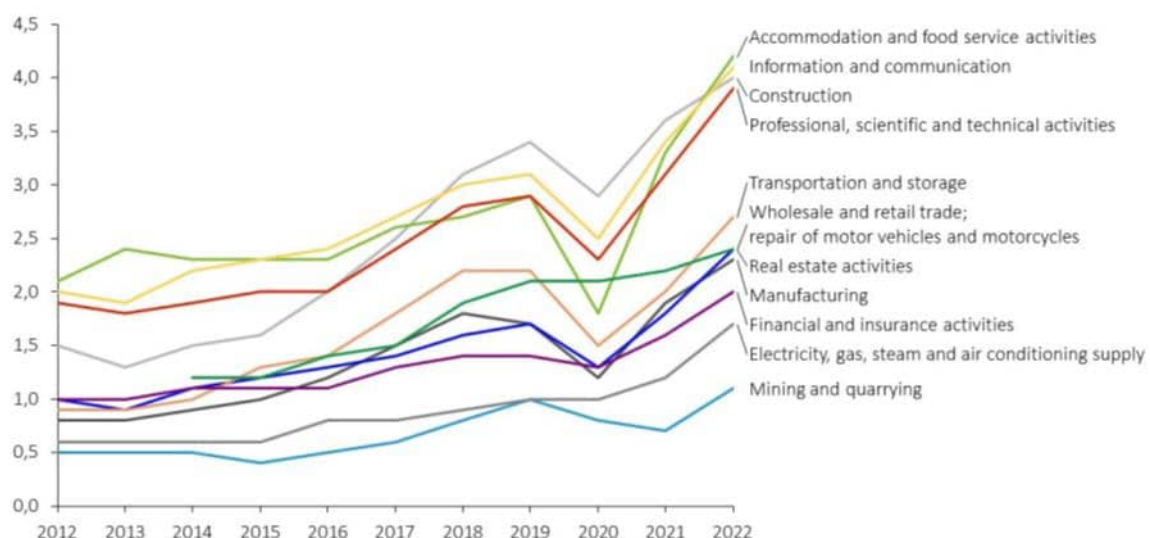
Artificial intelligence can provide significant benefits and solve some business challenges. However, organizations must be aware of being critical towards the solutions offered by artificial intelligence. This is the only way to manage expectations and risks associated with the implementation of artificial intelligence in business. It should be emphasized that artificial intelligence should be critically examined, which creates a strong need for quality control and sophisticated judgment of different stakeholders. These risks do not outweigh the potential benefits of artificial intelligence, but they require that professors support students to think critically and

develop an assessment of the validity of information about how and when to use this new technology. The use of different technology enabled the employees to work remotely or in a hybrid environment. In addition to that the employees experienced different life decreasing the costs of living, time and energy associated with going to the office every day.

Some studies have shown that there is no statistically significant impact on employee performance if they work from home or in the office. Because of this, organizations are looking for new ways to attract employees to work, which include subsidies for buying an apartment closer to work, flexible working hours that allow for childcare and elderly care, and many other benefits. Previously considered a radical departure from the traditional schedule, the four-day workweek has now been negotiated by unions and is becoming the preferred choice for many workers. Recent pilots of the four-day workweek have shown benefits for productivity and employee well-being. With talent shortages putting pressure on attracting and retaining employees, four-day workweeks can be a tool for employers to improve employee engagement, performance and well-being, and business results.

In conclusion, it should be noted that the labor market is constantly changing and is influenced by numerous external factors. In such an environment, quality education is a key determinant of attracting and retaining young talents. Likewise, the educational process must continuously change and be upgraded. European Union has been facing its two major challenges: aging and declining age populations. “Around one-quarter of European companies have faced difficulties in finding employees with the right skills, while another half report some difficulties. 77% of EU companies report that even newly recruited employees do not have the required skills. Skills are also lacking at the managerial level. Technology-related roles are the fastest growing jobs in percentage terms, including Big Data Specialists, Fintech Engineers, AI and Machine Learning Specialists and Software and Application Developers. Green and energy transition roles, including Autonomous and Electric Vehicle Specialists, Environmental engineers, and Renewable Energy Engineers, also feature within the top fastest-growing roles” [WEF, 2025.p. 6].

Figure 1: Skills shortages in the EU Job vacancy rate (% of total posts)



Source: Eurostat

European strategy to address skills gaps focused on all stages of education is crucial. “Diversity, equity and inclusion initiatives have become more prevalent, with 83% of employers reporting such an initiative in place, compared to 67% in 2023” [WEF, 2025. p. 6]. Europe’s education and training

systems deliver strong educational attainment, with a third of adults having completed higher education. Although technology is crucial to protect Europe's social model, AI could also undermine it without a strong focus on skills. "AI is already a source of anxiety for European workers: almost 70% of respondents in a recent survey favored government restrictions on AI to protect jobs" [WEF, 2025, p. 6]. "A 2023 survey found that 22% of employees expect AI to replace their jobs in the next five years. Despite this concern, GenAI will not replace many jobs in the short to medium term, but it will lead to jobs being redesigned to include new responsibilities, such as better use and integration with GenAI tools. Gartner predicts that GenAI will play a role in 70% of text- and data-intensive tasks by 2025, up from less than 10% in 2023" [McRea et.al., 2024.].

The impact of AI in Europe has so far been labor-enhancing rather than labor-replacing: there is a positive association between AI exposure and the sector-occupation employment share. However, this association may be transitory as businesses are still in the early stage of understanding how to deploy these technologies. Unlike previous waves of digitalization, the jobs of higher-skilled workers are likely to be more exposed. Providing workers with adequate skills and training to make use of AI can nevertheless help to make the benefits of AI more inclusive.

The big challenge but also the opportunity for the European union should be education and lifelong learning. The lifelong learning should emphasize the benefits of the artificial intelligence on the one size and minimize the negative impact of social inclusion.

CHALLENGES IN THE EUROPEAN EDUCATIONAL SYSTEMS CONNECTED TO THE COMPETITIVENESS OF THE EUROPEAN UNION

Draghi (2024) identified several challenges regarding the European educational systems. Among others, main challenge of the European Union is being not able to transform innovation research into the commercialization. European union has one of the most quality education systems generating cutting the edge research but less efficient in transferring the innovation into the real market world. "Europe has a strong position in fundamental research and patenting: in 2021, it accounted for 17% of global patent applications versus 21% for the US and 25% for China. However, while the EU boasts a strong university system on average, not enough universities and research institutions are at the top. Another strong challenge is the fact that using volume of publications in top academic science journals as an indicative metric, the EU has only three research institutions ranked among the top 50 globally, whereas the US has 21 and China 15" (Draghi, 2024, p. 28.). In addition to that European Union has a strong program for Research and Innovation called Horizon Europe. However, over the years the European Union created a strong bureaucratic machine making the process of using these funds extreme difficult and complex. Although the budget for this programme is close to EUR 100 billion it is insufficiently focused on disruptive innovation. In addition to that it is perceived that is mostly led by the EU officials rather the top scientists and innovation experts. All these reasons at the end are constraining research and innovation capacity. The main recommendation for European education systems should be commercializing fundamental research. In order to achieve that it is essential to establish and consolidate European academic institution at the forefront of global research. The European Research Council has been crucial to the competitiveness of European science but many promising proposals remain unfunded due to a lack of financial resources.

The report recommends doubling the support for fundamental research through the European Research Council, significantly increasing the number of grant recipients without diluting the amount they receive. In parallel, the EU should introduce an excellence-based, highly competitive "ERC for Institutions" programme to provide the required resources for academic institutions. One of the recommendations should be employment of world class researchers. That means that European Union should create a financial and labor law framework to attract and retain the best

academic scholar from all over the world. This regime should be supported by a new EU framework for private funding to enable public universities and research centers to design more competitive compensation policies for top talents and to provide additional support for research.

Beyond academic institutions, increased funding and stronger coordination is required to develop world-leading research and technological infrastructures, when scale is needed. [Draghi, 2024., p. 33.]. To achieve all this, the Draghi Report (2024) lists several concrete steps/proposals: 1. "Strategically redefine the approach to education to focus on creating skills that will be relevant in the future and reduce the current shortage of certain skills; 2. Make education systems more adaptable and responsive to changes in the needs for different skills; 3. Revise curricula and include the participation of employers and other stakeholders; 4. Place a special focus on addressing the shortage of technical and STEM skills, and enable adult education to acquire new and improve existing skills; 5. Encourage scholarships in key areas, provide greater opportunities for student internships in cooperation with research centers and EU institutions in order to encourage the development of researchers and innovation" [Draghi 2024.].

The higher educational institutions should regularly produce original scientific research with social impact. It should demonstrate impact on stakeholders who are strategically important for the successful development of the: academic colleagues, management experts, students and other stakeholders. The Higher Education Institution should demonstrate the involvement of such stakeholders in the creation, development and dissemination processes of knowledge.

Skills shortages are acting as a barrier to innovation and technology adoption as well. "Skill gaps are categorically considered the biggest barrier to business transformation by Future of Jobs Survey respondents, with 63% of employers identifying them as a major barrier over the 2025 - 2030 period. Accordingly, 85% of employers surveyed plan to prioritize upskilling their workforce, with 70% of employers expecting to hire staff with new skills, 40% planning to reduce staff as their skills become less relevant, and 50% planning to transition staff from declining to growing roles" [WEF, 2025. p. 6]. "The most prominent skills differentiating growing from declining jobs are anticipated to comprise resilience, flexibility and agility; resource management and operations; quality control; programming and technological literacy. Analytical thinking remains the most sought-after core skill among employers, with seven out of 10 companies considering it as essential in 2025. This is followed by resilience, flexibility and agility, along with leadership and social influence" [WEF, 2025. p. 6].

The creation of new study programs developed by the Higher Education Institution should be designed in the area of digitalization, innovation, artificial intelligence and disruptive economies. Teaching methods should be diverse oriented not to deliver theoretical fact knowledge but reflect current educational practice in the area of artificial intelligence oriented mostly on critical thinking and provide opportunities for practical work. "Study programs should undergo regular and systematic evaluation, incorporate feedback from students and other stakeholders, and demonstrate measurable long-term impact on students' knowledge, skills, and attitudes, their career success, and their overall satisfaction with their educational experience. Programs should be delivered by appropriate faculty, and programs should be managed and administered" [EFMD, 2024.]. In addition to that higher education institution should be more than ever focused on the lifelong learning programs. Lifelong learning should be considered central to strengthening the higher education institutions connections with businesses, bodies and organizations. Lifelong learning programs should contribute to the development of the faculty by maintaining relevance in teaching and research. In addition, they should contribute to improving business practice by making the faculty's diverse professional expertise available to practicing managers in support of their lifelong learning needs and to the organization in support of its development goals.

ENHANCING AND HARMONIZING THE EDUCATION SYSTEMS THROUGH ACCREDITATION PROCESSES

International accreditations in the field of economics and business economics are one of the possibilities of enhancing harmonizing and standardizing the education process. At the world level, AACSB and EQUIS accreditations are recognized at the level of the entire institution and EFMD's program accreditation. In the field of economics and business economics, AMBA is also recognized as an accreditation related to MBA study programs. Each of these accreditations has different requirements and criteria, which include the quality and international relevance of professors, the quality of the teaching process, and the results of that process. Accreditation processes include document analysis, interviews and several visits by an accreditation team made up of deans of various faculties and representatives of the economy. Accreditation criteria enable processes of harmonization and standardization of the education process, which actually means that diplomas are recognized everywhere in the world because the criteria are met on a global level. This enables them to be mobile, not only during their studies, but also competitive and mobile in the global labor market once they have graduated. In this sense, meeting the criteria of EQUIS, AACSB and AMBA accreditation is recognized by the so-called triple accredited schools.

For example, EQUIS is an international quality assessment framework that includes strategic review, quality improvement and represents accreditation for higher educating institutions in the field of economics and business economics. The EQUIS accreditation evaluation criteria include 10 standards that are evaluated, including environment, management and strategy, programs, students, staff, research, lifelong learning, resources and administration, internationalization and connection to practice

The key determinant of today's education is the multidisciplinary of education and research at the higher education institutions. First of all, it refers to the connection with other faculties that include natural sciences, engineering, social sciences and other disciplines. Therefore, programs in economics and business economics are often linked to legal practice and mathematical disciplines. In addition, education should be closely related to the activities of companies and society in order to ensure relevance and impact. Therefore, connection with practice is one of the main strategic goals of numerous faculties operating in the field of economics and business economics. This ensures relevant learning, responsible research and effective practice.

The education systems need to improve vocational training to better match industry needs. Some sectors and skill areas, including both technical and managerial roles, require extra support. One proposed solution should be to bring skilled workers from outside the European Union. This approach should introduce a new European Union-wide visa for students, graduates, and researchers in key fields. It would also offer more European Union scholarships and provide internships and graduate contracts with research centers and public institutions. By creating more career opportunities, the program aims to keep talented workers in Europe and strengthen its economy. It is very important to enhance the internationalization processes in a way that promotes global exchange between faculties. This ensures learning experiences, cultural understanding and research collaboration. In 2021, there were more than 6.4 million international students in the world, compared to 2 million in 2000 (UNESCO, 2023). Scholars have shown that such mobility for higher education tends to strengthen hierarchies of knowledge around the world. Students moving from the Global South to the Global North, for example, are usually taught a curriculum that is presented as a summary of global principles and perspectives. In this sense, the four key higher education markets are Australia, Canada, the United Kingdom and the United States, which account for almost 44% of all international students in 2023, an increase from 40% in 2022. Institutions in the United States received over 1 million international students in 2023, returning to pre-pandemic levels. France has overtaken Australia as the fourth most popular destination for international students for the first time since 2017. In this context, it is important to highlight the rise of China

as a powerhouse of higher education (Marginson, 2022). At the level of the European Union, ERASMUS is a program that has greatly contributed to the internationalization of students and teachers.

The growth of study programs in English in many parts of the world is the basic premise of attracting international students. The higher education institution should have a clearly defined internationalization strategy and policy. It should demonstrate its commitment to educating and preparing students and participants for management in an international environment. This should be supported by active cooperation or alliances with international partner institutions in areas such as campuses or virtual student exchanges, joint programs, research activities and connections with practice. The higher education institutions should be able to attract students and teaching staff from other countries to provide professional and study experiences from other countries. It should conduct and disseminate research of international relevance and scope. Modern education should reflect the relevant processes of geopolitical changes, globalization and regionalization. It should also reflect awareness of climate change, energy transition and a sustainable society.

CONCLUSION AND RECOMMENDATION

Investing in education brings the greatest long-term benefits, making the quality of the educational process a top global and European Union priority. In addition, the education is the key prerequisite for the competitiveness of European union on the global market. Bearing in mind that European Union has one of the best education systems in the world there is a gap between connecting high quality research and possibility to commercialize the innovation arising from the cutting the edge research in the area of artificial intelligence, globalization, digitalization and disruptive economies. To maintain high standards and competitiveness of European research the paper revealed areas of improvement. In addition to be in line with the global trends various quality control measures are implemented at both national and international levels. These efforts are crucial for improving higher education institutions, especially as the labor market becomes more flexible and dynamic. Education must adopt a global outlook, which requires strengthening internationalization at all levels. While large English-speaking countries lead in this area, all institutions must continuously enhance their strategic processes, student engagement, research, industry connections, lifelong learning programs, and commitments to ethics, sustainability, and responsibility.

Given demographic trends, attracting foreign talents and the best researchers global in European area is essential. Many institutions and countries in European are already facing to have more available enrollment spots than there are students to fill them. In order to follow global trends in the terms of competitiveness European union must ensure financial resources making innovative research more attractive at the European level.

Facing the lack of knowledge in the area of AI, digitalization and disruptive economies new study programs is necessary to meet evolving labor market demands. Although higher education institution in the European level have strong level of quality without strong internationalization efforts, their full potential cannot be realized. Although some barriers to workforce entry are being reduced, formal education will remain important. Beyond obtaining a degree, lifelong learning plays a key role in professional growth. Continuous education programs are vital for career development, ensuring individuals can adapt to changes in their fields and remain competitive in the labor market.

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