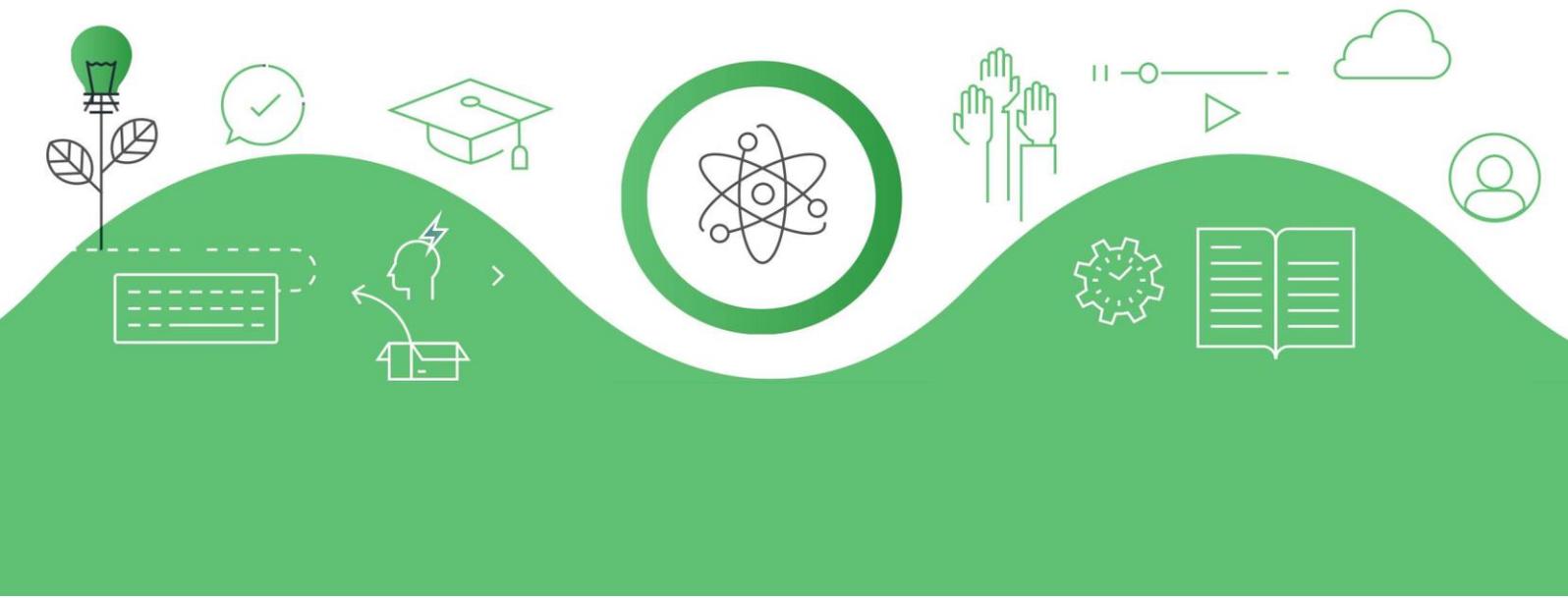


# Selected Papers of the 2<sup>nd</sup> International Conference on Sustainability

## 2019



# **Selected Papers of the 2<sup>nd</sup> International Conference on Sustainability at Budapest Business School**

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Budapest Business School, 2020

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# Aiming for Quality Education: Selected Indicators of Sustainable Development Goals

Éva Réka Keresztes, Budapest Business School, Hungary

## Abstract

In reflection to global problems, the United Nations has set up 17 Sustainable Development Goals (SDGs) to handle climate change and many other related issues. The UN's Agenda has already been adopted by more than 150 countries in the world and the European Union is also committed to reach these goals by 2030. Among the goals relating to the social, economic and environmental aspects of sustainability is quality education (SDG 4), which is in the focus of this research, with special regard to Hungary. Sustainable goals can be achieved by providing inclusive and quality education as well as lifelong learning opportunities. According to statistical figures, out of the 17 goals the European Union made its second-best progress in the field of education during the short-term period that was between 2011-2016 and 2012-2017. The seven European Union indicators of SDG 4 are the following: early leavers from education and training; tertiary educational attainment; participation in early childhood education; underachievement in reading, maths or science; employment rates of recent graduates; adult participation in learning; and young people neither in employment nor in education and training (NEET).

**Keywords:** sustainable development goals, quality education, European Union, Hungary

## Introduction

There is an expectation that the Fourth Industrial Revolution, which has brought the digitalization era powered by big data, artificial intelligence (AI), the internet of things (IoT), mobile and the cloud services, has the possibilities to reduce inequalities in the world. Thirty years after the invention of the world wide web, every second person in the world has internet connection, however, internet user growth has slowed from 17% in 2007 to 5.5% in 2018. Recent technologies can drive economic growth and inclusion and help tackling societal challenges, too. However, new opportunities could be used maliciously and turned into risks such as cyberthreats, privacy concerns, market dominance, fake news and manipulation of democratic processes. The ideal aim is to live in an inclusive, trustworthy and sustainable digital future by closing the digital and wealth divide (WEF, 2018). The complex set of world

economic relations connects all people, all businesses, technologies in flows of trade, finance, ideas, advertising and production systems. The idea of sustainable development stems from the fact that not only the world's economic, but also social, environmental, political and cultural factors need to be fitted together. Global issues need global and holistic solutions; therefore, nations should act together. To do this, sustainable development goals have been set to handle the problems of this globalised world of already 7.2 billion people (Sachs, 2019). In 2015 all the members of the United Nations adopted a new global sustainable development framework: the 2030 Agenda for Sustainable Development. In the framework of this global action, 17 sustainable development goals (SDGs) were formulated together with 169 associated targets measured by 232 indicators (EC, 2016; UN, 2019b).

## **Global Initiatives**

The United Nations have set up global sustainability goals and monitored them but instead of directing everyone involved as to what to do, they are expecting initiatives from individuals or groups to make an impact besides governments, the private sector and the civil society. They would like to bring global problems closer to the people because they know that together they are more capable of dealing with any kind of issue. The UN, for example, has set up an Action Network called "Higher Education Sustainability Initiative" for voluntary commitments and partnerships to facilitate global common work. For SDG4, an incredible number of 715 actions have already been published on the homepage of the Action Network. Higher education institutions may simply join the network online and by registering they obligate to:

1. Teach sustainable development across all disciplines of study,
2. Encourage research and dissemination of sustainable development knowledge,
3. Green campuses and support local sustainability efforts, and
4. Engage and share information with international networks (Unesco, 2019, p.1)

The European Social Fund (ESF) of the European Union "is financing initiatives to improve education and training and ensure young people complete their education and get the skills that make them more competitive on the jobs market. Reducing school drop-out rates is a major priority here, along with improving vocational and tertiary education opportunities." Its main agenda is the following: "strengthening employment and mobility by opening pathways to work, creating chances for youth, boosting business, and caring for careers. It aims for better education by opening doors to learning, helping people aim higher and training that works. It wants to give a chance to all by fighting marginalisation, promoting social enterprise,

supporting local partnerships, and inclusive approaches. It helps institutions offer better public services and build partnerships between public authorities and stakeholders such as NGOs”. For example, a seminar is to be held in Budapest, Hungary, 28th May 2019 entitled “Moving towards independent living and community-based care – EU funding instruments to support the development of community-based services for children under protection” (ESF, 2019, p.1).

## **The Synergies of SDGs**

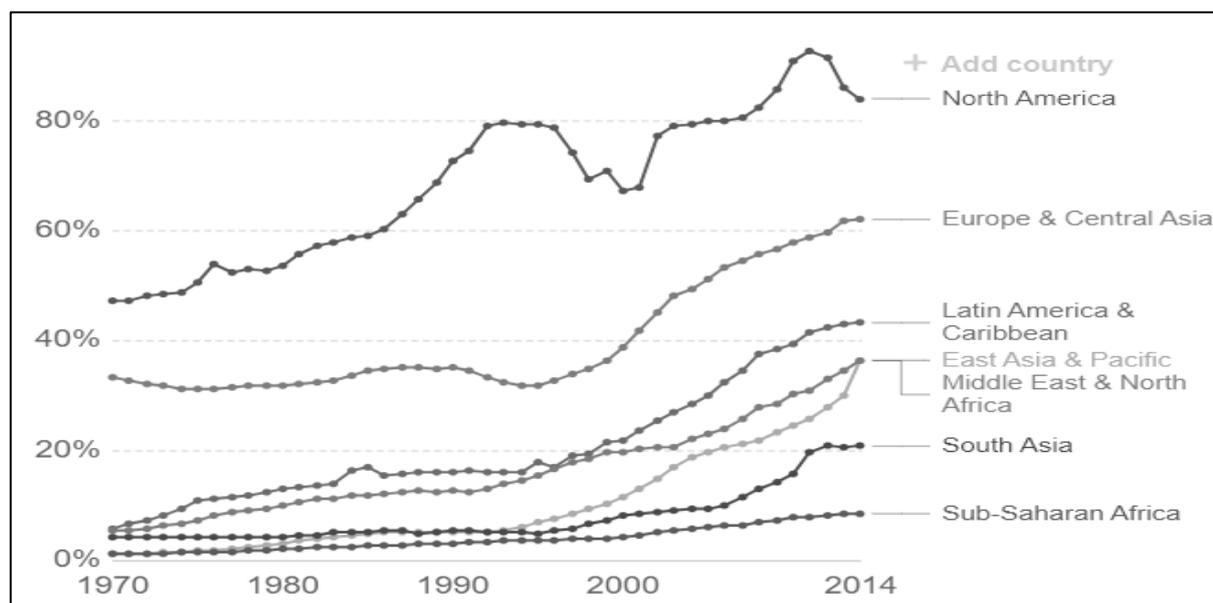
Aiming for quality education cannot be done without eradicating poverty and hunger. Although global poverty rates have been reduced by more than half since 2000, 783 million people or 11% of the world population was estimated to live in extreme poverty in 2013, that is below the international poverty line of US\$ 1.90 a day. Globally children, and women aged 25 to 34 are more affected than men of the same age group by extreme poverty, which is most prevalent in the Southern Asian and sub-Saharan African regions. The proportion of undernourished people worldwide was 15% according to statistics for 2000 to 2002. This number was successfully decreased to 10.6%, which meant 777 million people in 2015, but on the rise again with 11.0% and 815 million people suffering from hunger in 2016. With the growing number of world population, an additional 2 billion people is at risk of undernourishment by 2050. However, malnutrition affects all countries since it includes obesity, basic caloric needs, childhood wasting, stunting, and micronutrient deficiencies alike. (UN, 2019a). For example, the focus of first two goals, ending poverty and hunger have a lot in common, in terms of their causes and viable solutions. In their systematic study of sustainable development goal (SDG) interactions, Pradhan et al. (2017) found that positive correlations between indicators of SDGs dominate well over the number of negative correlations. Therefore, SDGs are in synergy with each other and the fulfilment of one goal does not hinder the completion of another on a global scale.

## **Enrolment Rates Worldwide**

Enrolment rate in early childhood and primary education was 70% worldwide in 2016, with the lowest rates of sub-Saharan Africa (41%) and Northern Africa and Western Asia (52%). However, participation rate in primary education in most developing countries increased to 95%. Over 265 million children were out of school and there were 617 million youth worldwide without basic mathematics and literacy skills. In the least developed countries education infrastructure needs to be improved, as 66% of primary schools lacked electricity and 60% of them basic handwashing facilities in 2016, along with the higher levels of gender and

urban/rural disparities in education (UN, 2019b). On the other side of the scale, the total enrolment in tertiary education – regardless of age, expressed as a percentage of the total population of the five-year age group following on from secondary school leaving – was the highest in North America, followed by Europe and Central Asia (Figure 1) (UN, 2019b). For the fourth sustainable development goal, which is to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all, the United Nations has defined 10 targets together with 11 indicators. The progress of indicators can be openly monitored via interactive data visualizations by the University of Oxford (Ritchie et al, 2018).

Figure 2. Gross enrolment ratio in tertiary education

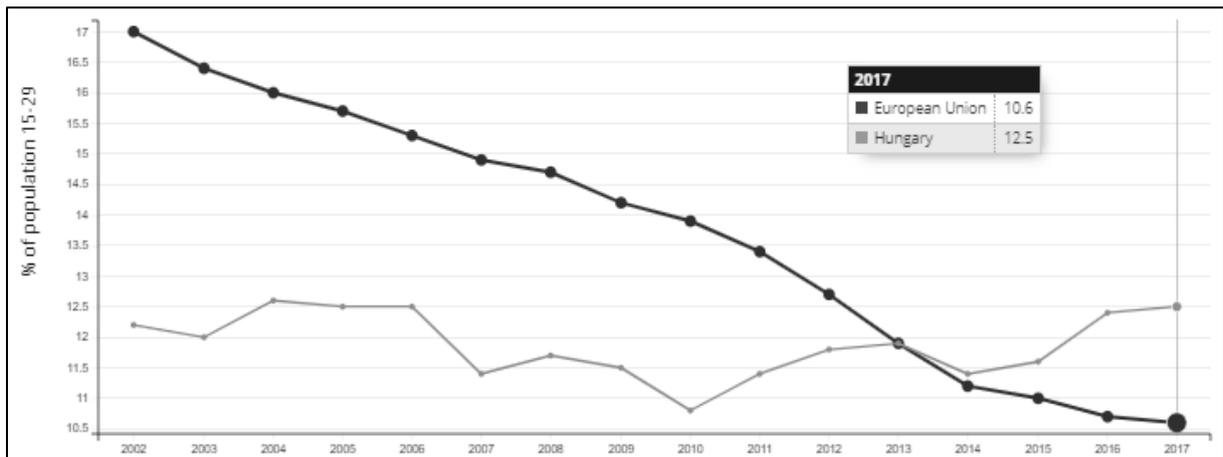


Source: Ritchie et al, 2018, p1. based on World Bank data

## SDG4 Indicators of the European Union and Hungary

According to figures, the European Union made its second-best progress towards SDG 4 that is ‘Quality education’ after SDG 3 that is ‘Good health and well-being’. Europe 2020 indicators are in line with the SDG indicators and the EU has made significant achievements in most of the fields of education. More children were participating in early childhood education and care, and fewer students were leaving school early. In 2017 the EU average decreased to 10.6%, while in Hungary its value was 12.5%, therefore dropout rates should be monitored further (Figure 2).

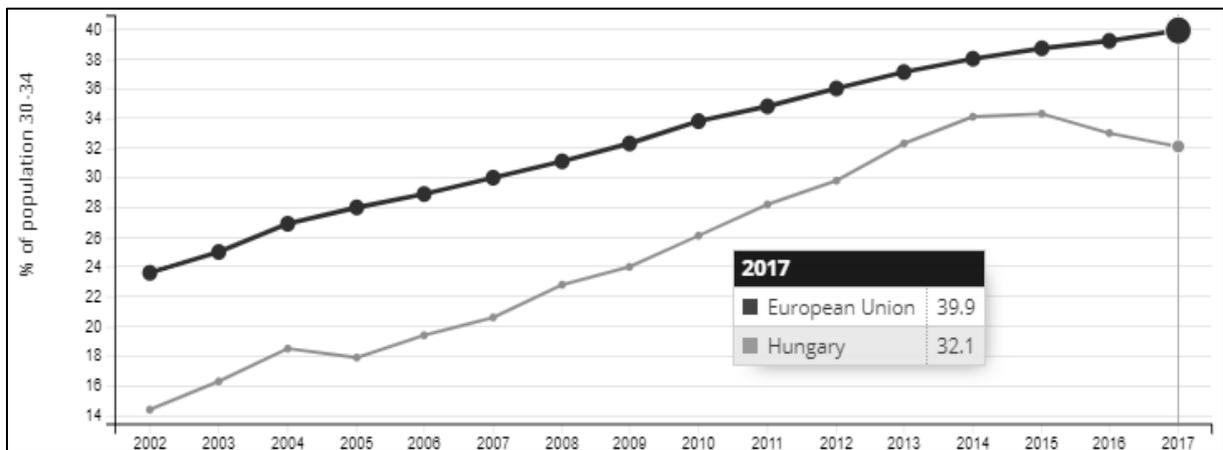
Figure 3. Early leavers from education and training (as % of the population aged 18 to 24)



Source: Eurostat, 2018, p1.

The desired minimum educational attainment level for a EU citizen is upper secondary education, which can prepare students with the suitable skills and competencies required by the labour market. More people were attaining a tertiary education in the EU, which almost reached its target value with 39.9%, while Hungary’s tertiary attainment slightly declined after 2015 and was 32.1% in 2017, therefore a more appealing conditions for learning should be provided for students and prospective students in Hungary (Figure 3).

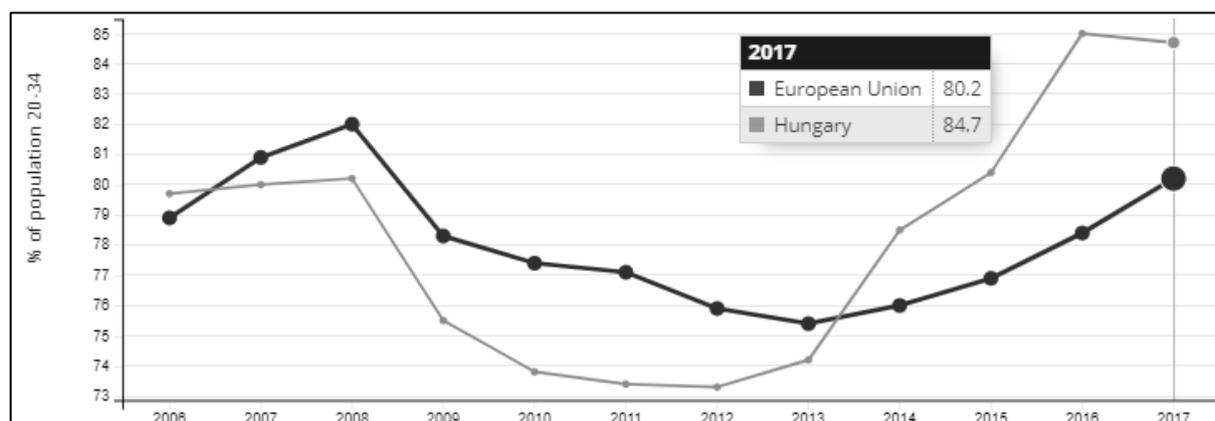
Figure 4. People with tertiary educational attainment (as % of the population aged 30 to 34)



Source: Eurostat, 2018, p1.

The employment rate of recent graduates rose between 2013 and 2017 in the EU and the greater demand for them in the labour market can be perceived after the recovery from the crisis. Hungary was more affected by the crisis with lower levels of graduate employment data between 2007 and 2013 than the EU average. However, after 2013 the Hungarian data is 4.5% higher than the EU average, which could be explained by the more favourable market environment (Figure 4).

Figure 5. Employment rate of recent graduates (as % of population aged 20 to 34)



Source: Eurostat, 2018, p1.

With regards to secondary education, there is a movement away from the EU target in students' scores of PISA study for reading, maths and science. The basic skills such as reading a text or performing calculations are needed to participate in society and to learn more specialized skills. Underachievement does not only hinder personal development but will have negative consequences for both the individual and the society in financial terms. Unfavourable school climate, violence in schools, insufficient learning support or poor teacher-student relationships could result in low performance of basic skills and unfortunately school dropout. Gender differences are observable in early school leaving and reading skills, both in favour of the girls. However, later, women are more prone to lower employability. In addition, relatively more females graduate from higher education institutions, however, male graduates are more likely to find a job. People with disabilities or from a migrant background also have less chance to be employed in highly paid jobs, partly due to their lower level of educational attainment. Early leavers and low educated young people face low employment rates. Young people who are not engaged in employment nor in education and training (NEET) are more prone to social exclusion and depend more on social benefits. On the other hand, higher educational attainment raises employability, which means a comparative advantage on the labour market. There is also an insufficient progress towards the EU target of adult participation in learning in the short-term period (Eurostat, 2018).

## Conclusion

Education at all levels is inevitable for sustainable development. Investment in people and caring for especially children is the most important for human development. The cumulative investments in human capital in the health, the nutrition, and the skills of an individual through

education, training, and experience are crucial in the entire lifecycle. Social gains to a preschool program are higher expected earnings and reduced cost of both direct crime costs and the costs of a criminal system, not to mention avoiding the negative externalities of committing a crime. Early childhood development is particularly important as the rate of return to investing in human capital is the highest in the preschool age and it results in higher productivity, a more inclusive society and lower education inequality. (Sachs, 2019).

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