MacGREGOR PELIKÁNOVÁ. Fostering Innovation – a Myth or Reality of the EU in 2018 In: Staníčková, M., Melecký, L., Kovářová, E., Dvoroková, K. (Eds.). *Proceedings of the 4th International Conference on European Integration 2018*, May 17-18, 2018, Ostrava, 965-973 of 1121. ISBN 978-80-248-4169-4.

Fostering Innovation – a Myth or Reality of the EU in 2018

Radka MacGregor Pelikánová

Metropolitan University Prague Dubečská 900/10, 100 31 Praha 10 - Strašnice Czech Republic e-mail: radkamacgregor@yahoo.com

Abstract

During a historic UN Summit in 2015, the 17 Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development (SDG) was adopted and, along with the one decade Europe 2020 strategy, became a target setting for the current EU. Interestingly, SDG 9 deals with Industry, innovation and infrastructure and calls for the fostering of innovation. The EU translates it into a demand for an increase in R&D while observing the R&D to GDP ratio – Gross domestic expenditure on research and development (GERD) index, the DESI index and European patent application for inventions. But are these goals real, legitimate, effective and efficient? Is fostering innovation a myth or reality in the EU in 2018?A law, economic and IT overview suggests that modern European integration and the single internal market with the expected vigorous and fair competition, employing modern IP, can hardly be imposed from above. The fostering of innovation demands a bottom-up and multi-stakeholder approach and a humble admission that both criteria and targets set by the EU are at least partly futile vis-à-vis the much needed fostering of innovation.

Keywords: Europe 2020, innovation, sustainable development.

JEL Classification: F-63, K-20, O-31, O-32.

1. Introduction

During a historic UN Summit in September 2015, the Resolution Transforming our world: the 2030 Agenda for Sustainable development (Agenda 2030) with its 17 Sustainable Development Goals (SDGs) and 169 associated targets was adopted by world leaders (UN, 2015). In January 2016, these SDGs became universally applicable in order to mobilize efforts and stimulate action towards them for the next 15 years. Since they are not legally binding per se, the states and other subjects of International law are expected to establish and employ appropriate national legal and order measures assisting in their achievement, i.e. it is well recognized that each country has the primary responsibility for its own development. SDG 9 means to build resilient infrastructures, promote inclusive and sustainable industrialization and foster innovation (SDG 9). Agenda 2030 explicitly include,s within the SDG 9, the building of infrastructure to support economic development, promotion of inclusive and sustainable industrialization, increase of access of SMEs to resources and enhancement of scientific research with upgrades of technological capabilities in all countries, including the increase of the information systems and information technologies ("IS/IT") and affordable access to the Internet(Turečková, 2016). Indeed, our post-modern global society depends upon the use of IS/IT and is marked by digitalization, aggressive competition and economic and other crises (MacGregor Pelikánová, 2013). Innovation has

become an integral part of policies to promote growth, but the public financial support for (private) R&D is constrained by limited public budgets and other public factors (Blind et al., 2017). Empirical studies find that innovation activity leading to practical results came often from the private sector and tend to increase with the size of firm (Damijan et al., 2017), a similar trend applies to the standards in Corporate Social Responsibility ("CSR") (Adámek, 2016). The concept of economic and political integration with the dominance of technocratic over political institutions (Lianos, 2010) with the intensification of the supranational approach over the intergovernmental approach have formed both the current EU, EU law and EU decade strategies. The internal single market with the famous four freedoms is at the heart of the EU (MacGregor Pelikánová, 2017) and The EU strategy for 2000-2010 aka the "Lisbon Strategy" or "Lisbon Agenda 2000" set the highly ambitious strategic goal "to become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth by 2010". Under the auspices of the Lisbon Strategy, the EU planned on catching up and even passing the high rate of economic growth in the US (Balcerzak, 2015). Soon, it became clear that this was an unrealistic ' mission impossible' and the shift of the blame for that to the new accessing EU members (Wanilin, 2006) is neither fully correct nor in compliance with the EU fundamental principles. The destiny of the Lisbon Strategy was sealed by the set of crises of 2007 and 2008. The European Commission got the message and took over from the European Council the preparation of the strategy for a new decade, 2010-2020, which should have more realistic and rather IS/IT suitable goals, while paying special attention to the boost and use of innovations. On March 3, 2010, the European Commission issued the COM(2010) 2020 final Communication Europe 2020 – A strategy for smart, sustainable and inclusive growth AKA "Europe 2020" with three mutually reinforcing priorities - smart, sustainable and inclusive growth, translated into five headline targets and seven flagship initiatives. Europe 2020 is a product of a time when the European economy faced crises and post-crises issues and the economic indicators were back to 1990s levels (Colak & Ege, 2013). Europe 2020 attempts to address two methods of economic growth through innovation - technological competitiveness and growth accumulated by cost competitiveness (Terzić, 2017). The technological progress and innovation implemented into new technologies should be outputs of effective synergy about how Europe 2020 can act as symbiotic parallel along with the EU Competition policy (Kordoš, 2016). Hence, the first priority of Europe 2020, smart growth, requires the development of knowledge and innovation and their business use and is quantified by the target demanding that 3% of the EU's GDP be invested in R&D. In 2010, the R&D spending in the EU reached only 2% of GDP, while the rate in the US was 2.6% and in Japan 3.4% so the European Commission implied that without an increase in this respect, the EU would sink to the second, or even lower, rank of the global order (Walburn, 2010). Agenda 2030 with the SDG 9 reacts to this pragmatic economic fear regarding the decrease of the global competitiveness of the EU as well as the sustainability and social dimension (Pakšiová, 2016). Innovation and the use of IS/IT are key areas for the European Cohesion Policy (Billon, 2017) and the SDG 9 became fully embraced by the EU, which recently issued Sustainable development in the EU – Monitoring report on progress towards the SDGs in an EU context ("Monitoring report 2017") covering all 17 SDGs (Eurostat, 2017). This leads to the questioning of the innovation setting, namely whether the EU truly fosters innovation in 2018. What can be implied from the set legal, political and economic framework and the dynamic results of the amount of spending, as compared to the GDP, for the R&D - the GERD index? What do other indicators suggest, such as the DESI index or the data of the European Patent Office ("EPO")? Do we have a futile, ineffective and inefficient or a real, effective, efficient, fostering of innovation? Is the fostering of innovation a myth or reality in the EU in 2018? A law, economic and IT overview suggests that modern European integration and the single internal market with the expected vigorous and fair competition

employing modern IP can hardly be imposed from above. The fostering of innovation demands a bottom-up and multi-stakeholder approach and a humble admission that both criteria and targets set by the EU are at least partly futile vis-à-vis the fostering of innovation.

2. Problem Formulation and Methodology

Both Agenda 2030 and Europe 2020, are declared as fostering innovation. The EU, via Europe 2020, translates it into a demand for an increase in R&D, while observing the R&D v GDP ratio (GERD) index (Nevima & Kiszová, 2013). However, is the wording and spirit of Europe 2020 materialized in real life? Is it real, legitimate, effective and efficient for the EU top institutions to set such a priority, targets and flagship initiatives? Can, and does, the EU select and employ conceptually right, i.e. effective, and appropriately operating towards set goals, in short, efficient, methods in this respect? What are the results? Is fostering innovation a myth or reality in the EU in 2018? A scientific and academic assessment of SDG 9, in particular the fostering of innovation by the EU in 2018, requires an open minded selection and search of multidisciplinary primary and secondary sources from jurisdictions. The cross-disciplinary nature suggests that the data yielded by the indicated search is to be processed by Meta-Analysis (Silverman, 2013), while confronting the hard mathematical data offered by Eurostat and summarized by GERD index, DESI index and the indicative numbers of IP assets represented by European patent applications with the proclamations of the Agenda 2030 and goals of Europe 2020. GERD reflects the investment's commitment to the R&D in co-relation to the GDP, while the DESI index is a composite Digital Economy and Society Index (DESI) that summarizes some 30 relevant indicators on Europe's digital performance and tracks the evolution of EU Member States, across five main dimensions: Connectivity (25%), Human Capital (25%), Use of Internet (15%), Integration of Digital Technology (20%), and Digital Public Services (15%). The GERD index investment commitment and the DESI index digitalization use have to be appreciated in the context of innovations reaching the perhaps highest protection status - patents. The holistic perception and critical Meta-Analysis (Silverman, 2013) of the quantitative and qualitative data and methods, including confronting achieved results, with deductive and inductive aspects of legal thinking (Matejka, 2013) and interpretation of legal and political texts, offers a unique, both argumentative and axiomatic, context leading to Socratic questioning (Areeda, 1996) A law, economic and IT overview boosted by the data demonstrates the limits of the 'from the above' imposed fostering innovation in the not so harmonized EU, since cultural differences and diverse private investment in R&D readiness points to the EU of many faces, speeds and Intellectual property ("IP") commitment.

3. Problem Solution

Addressing the presented burning questions about the reality or fiction of the fostering innovation in the EU demands, based on the above presented contextual summary, calls for three key analyses of the SDG 9 - the evolution of the GDP v. R&D ratio – GERD index (3.1), the DESI index (3.2) and IP assets - EPO patent applications (3.3).

3.1 Fostering innovation by the R&D spending (GERD index) – myth or reality?

It is suggested that R&D is the key variable explaining innovation (Billon, 2017) and Europe 2020 determined that the R&D spending in the EU in 2010 in the amount of only 2% of the GDP is way behind the ratio of the EU's competitors on the global market and that the EU target to be reached in 2020 is 3%, otherwise the competitiveness of the EU and EU businesses will be severely, if not irreversibly, jeopardized. The overview of the dynamics of

the evolution of the GERD during the first 6 years of the Europe 2020 is instructive. Since data for 2010 does not yet reflect Europe 2020 and data for 2016 is not fully available, the dynamic observation targets the years 2011, 2013 and 2015, see Table 1.

Table 1: R&D v. GDP (%), GERD index, in the EU and selected EU member states in2011-2015

	2011	2013	2015	Comment	
EU	1.97	2.02	2.04	Minimal growth	
Belgium	2.16	2.33	2.47	Growth progress	
Bulgaria	0.53	0.63	0.96	Growth progress	
Czech Republic	1.56	1.90	1.93	Growth progress	
Denmark	2.94	2.97	2.96	Stagnation	
Germany	2.80	2.82	2.92	Slow growth	
Greece	0.67	0.81	0.97	Progressive growth	
Spain	1.33	1.27	1.22	Slow decrease	
France	2.19	2.24	2.27	Slow growth	
Italy	1.21	1.31	1.34	Slow growth	
Finland	3.64	3.29	2.90	Decline, but mtg target	
Sweden	3.25	3.31	3.27	Stagnant, but mtg target	
United Kingdom	1.67	1.65	1.67	Stagnation	

Source: prepared by the author based on Eurostat data (Eurostat, 2018)

Since in 2015, the GERD of the USA was 2.79%, of Japan 3.4% and of South Korea 4.29% (Eurostat, 2018), then Europe 2020 seems to have selected an effective target of the GERD of 3%. At the same time, it is highly questionable how realistic and efficient is it. According to one of the 7 flagship initiatives of the Europe 2020, the aim is to re-focus R&D and innovation policy on the challenges facing our society, the Commission has to launch and complete various programs while EU member states should reform national R&D and innovation systems and prioritise knowledge expenditure, namely promote greater private R&D investments. In the light of sustainability and inclusion, it is of a high concern that basically each EU member state slowly oscillates around its amount of GERD and there is neither a generally increasing trend nor a unification trend. Unless the EU rejects the indicative value of GERD for the innovation fostering, the semi-conclusion emerges that innovation fostering in the EU, while considering the investment aspect, is a myth. Even, it can be argued, that this myth is caused by a misunderstanding of the EU competencies and capacities, i.e. Europe 2020 endeavours towards SDG 9 are not succeeding due to the lack of the de iure and de facto power of the EU and EU institutions powers (Pasimeni & Pasimeni, 2016) and generally legality in this respect. Based on the GERD dynamics, Europe 2020 aims vainly to increase the EU's innovation drive and global competitiveness (Erixon, 2010). However, the expenditure on R&D cannot be treated mechanically as a guaranty of building and fostering innovation (Balcerzak, 2015). Also, the public and private R&D investments are complementary rather than substituting (Hammadou, 2014) and the role of involvement of the educational system and academia is not be underestimated, instead the awareness needs to be increased (Staníčková, 2016). There is a competence deficit and the GERD 3% issues are merely arbitrary and incidental indicators and that instead the fostering innovation reality of the EU should be measured based on true outcomes, and not on the money invested and spent pursuant to the EU command, namely on digitalization and IP protected assets.

3.2 Fostering innovation by the digitalization (DESI index) – myth or reality?

The DESI index testifies about advanced digital economies, which is perceived as highly needed for an IS/IT success and competitive advantage in the global marketplace. Since Europe 2020 explicitly deals with the single internal Digital market, and one of its seven flagship initiatives is the digital agenda for Union, it can be well argued that fostering innovation in the EU pursuant to Agenda 2030 and Europe 2020, especially vis-à-vis the SDG, has to be reflected by the DESI index and the EU member state's ranking.

DESI index	Over 0,6	0,5-06	0,4-0,5	0,3-0,4
States	DK, FI, SE,	BE, UK, IE, EE,	CZ, SK,	EL, BG, RO
	NL, LU	AT, DE, ES, PT	HU, PL, IT	

Table 2: DESI rating of the EU and selected EU member states in 2017

Source: prepared by the author based on DESI index charts and information (EC, 2017)

The DESI scores presented in Table 2 represent a wide diversity between EU member states, but does not provide a great deal of information about fostering innovation. However, this can be achieved by an analysis of each of the 5 main dimensions. Firstly, in re connectivity, the best is NL, LU and BE, and the weakest BG and PL, while in general the number of high-speed connections reaches 75%. Secondly, for Human capital – digital skills, DK, LU, FI, SW, NL excel, while BG, EL, IT fail. Although 79% of Europeans go online at least once per week, 44% of Europeans still do not have basic digital skills. Thirdly, regarding the use of the Internet by citizens, the highest activities go to DK, SW, LU and LU and, again, lagging way behind is RO, BG and IT. Interestingly, 70% of Internet users read news online, 66% shop online, 59% do e-banking. Fourthly, regarding the integration of Digital Technology by businesses, the best results are achieved in DK and FI, while bringing up the rear are RO, PL and BG. Although European businesses are increasingly adopting digital technologies, such as the use of a business software for electronic information sharing (from 26% in 2013 to 36% of enterprises in 2015), sending electronic invoices (from 11% in 2014 to 18% of enterprises in 2016) or using social media to engage with customers and partners (from 14% in 2013 to 20% of enterprises in 2016), these results are not impressive. Even worse is the extremely low level and slow growth of the e-commerce by SMEs going from 15% in 2014 to 17% of SMEs in 2016. Fifth, regarding digital public services, the best in egovernment and related services are EE, FI and NL, the worst RO, HU and HR. In general, the availability of online e-public services went from 75% in 2014 to 82% in 2016, but their real use reached only slightly over 30% (EC, 2017). Well, the EU member states and their subjects follow different legal, cultural, and other traditions (MacGregor Pelikánová et al., 2017) and share a diverse attitude to the IS/IT. The message about the Digitalization and DESI adds to the already identified insufficient investment in innovation (see GERD index) the grim results about the transposition and implementation of innovation in the IS/IT environment in the current society. This lends credence in re a deep problem of the EU and Europe 2020, and especially the fact that SMEs, instead of becoming more competitive thanks to innovations, are actually weakly involved in digitalization. Nevertheless, it can still be argued that the Agenda 2030 and Europe 2020 are leading to an effective and efficient fostering in the EU, due to the fact that many vibrant and competitive advantage generating IP assets are produced and benefit by the law protection. Is this truth or wishful thinking?

3.3 EPO IP assets as the evidence about fostering innovation-myth or reality?

Monitoring the report 2017, reflecting the meeting of goals set by Europe 2020 and Agenda 2030, addresses the SDG 9 while using the above discussed GERD index, the employment in the IS/IT sector and the number of R&D personnel with, as yet, inconclusive data, and the number of patent applications to the EPO (Eurostat, 2017). Well, fostering innovation should lead to positive IP outcomes, i.e. IP protected assets and innovation are often matched by an actual invention, and the best evidence and protection for an invention is a granted patent. Hence, it seems appropriate to measure the EU's fostering of innovation by the number of inventions for which a patent was granted. Therefore, it is definitely relevant to consider the data on patent applications to the European patent office, namely the number of patent applications filed with the EPO in general and by EU member states.

Year	2011	2012	2013	2014	Comment
Patent applications	57.5	56.8	56.7	56.7	

Source: prepared by the author based on Monitoring report 2017 (Eurostat, 2017)

The number of patent applications by EU subjects to the EPO has been stagnating, while the GERD index and DESI index have been going up. It must be emphasized that subjects from the EU member states with the highest GERD had the highest number of patent applications per capita (Eurostat, 2017). To reach a deeper understanding of this, the number of patent applications filed in 2011-2014 needs to be broken down by the EU member states of these applicants, and confronted with the number of granted patents in 2016. This time gap was selected based on the experience that the EPO patent proceedings often last 2-5 years, i.e. the EPO granted patents in 2016 based on applications filed generally in 2011-2014.

Patent applications per state and year	2011	2012	2013	2014	Comment – 2016 granted patents
Belgium	2014	1886	1882	1927	1114
Bulgaria	16	13	23	34	11
Czech Republic	162	140	151	167	95
Denmark	1782	1605	1942	1983	1033
Germany	26202	27249	26510	25633	18728
Greece	78	79	68	95	39
Spain	1404	1544	1504	1471	752
France	9617	9897	9835	10614	7032
Italy	3970	3744	3706	3649	3207
Finland	1548	1851	1894	2482	1081
Sweden	3638	3518	3674	3873	2661
United Kingdom	4746	4716	4587	4764	2931

 Table 4: Number of patent applications and granted patents by EPO by selected EU member states

Source: prepared by the author based on EPO data (EPO, 2018)

This leads to a logical conclusion that EU member states which spend more on R&D, as witnessed by the GERD index, generally benefit by a more developed and wider spread

digitalization, as witnessed by the DESI index, and have subjects which generate more EPO applications and even granted patents. However, some limitations need to presented. First, the eagerness to file an application with the EPO does not always mirror the well supported and fostered innovation drive. It is more reliable to consider only the successful applications, i.e. patents granted by the EPO. Second, a patent is not always the preferred method and instrument for IP protection and SMEs often use business secrets, contracts, unfair competition and other regimes. Third, patented innovations which do not manage to pass the Rubicon and became employed in praxis could hardly be considered as a demonstration of effective and efficient innovation fostering. Fourth, there are as well other patents to be obtained, i.e. there is a choice between national, regional and international patents and so the EPO is not the only institution granting valuable patents with a possible scope of use in the EU. Last, and perhaps most importantly, the IS/IT sphere is very different and distant from traditional industrialization. Computer programs, software and other instruments and platforms to be used by post-modern society in the global environment are excluded from patent protection and instead are a subject matter of copyright and other law mechanisms.

4. Conclusion

Pursuant to Europe 2020, Agenda 2030 and other strong strategic and/or legal documents, the EU takes seriously SDG 9 and hence has taken since 2010 a very strong commitment to support effective and efficient fostering innovation. However the official data provided by the EU, such as the GERD index, DESI index and EPO application and patent numbers show a very different picture. The post-Lisbon EU and its internal signal market desperately need a vigorous and fair competition employing modern IP assets, which are outcomes of effective and efficient fostering innovations. However, all plans and goals set by the EU and its top institutions in this respect do not lead to such a result. The differences between EU member states remain and EU member states appearing as champions of fostering innovation have reached such results rather thanks to the long ongoing bottom-up, multi-stakeholder and national approach. Germany and the Northern states do better in all accounts vis-à-vis innovation fostering than other EU member states. The differences between EU member states show no signs of diminishing and the indexes and data about the fostering innovation trends are not unanimously going up. It appears that proclamations and declarations of the EU are mere wishes for the setting and imposing, but they lack both the competence and capacity. Fostering innovation was and remains in hands of the EU member states or more specifically in the hands of Europeans. All stakeholders, including the EU, EU key institutions and EU leaders, have to humbly accept that even the best meant requirements and targets set by the EU are at least partly futile vis-à-vis the much needed fostering of innovation, that the endorsed indexes are merely indicative and that fostering innovation is a complex process needed to be done while taking an open-minded and bottom-up approach. The EU should implement policies on organizational and institutional improvements and incentives for stimulating inter-organizational collaborations, i.e. promote open-minded institutional efficiency, reduction of institutional barriers (De Noni et al., 2018), industry 4.0 trend and the involvement of businesses, including SMEs. Regarding fostering innovation (and not only about that), the EU should be the facilitator, not the directive organizer. So far, fostering innovation in the EU and the related discussions are oscillating between chimerical myths of the all knowing and ordering EU and pragmatic reality and this is hardly reconcilable with the Europe 2020 proclaimed smart, sustainable and inclusive growth.

Acknowledgements

This contribution was supported by GA ČR No. 17-11867S "Comparison of the interaction between the law against unfair competition and intellectual property law, and its consequences in the central European context."

References

- Adámek, P. (2016). Consequences of Corporate Social Responsibility Approach in Voluntary European and Global "Responsible" Initiatives. In *International Conference on European Integration*. Ostrava: VŠB-TU Ostrava, Faculty of Economics, pp. 19-27.
- [2] Areeda, Ph.E. (1996). The Socratic Method. *Harvard Law Review*, vol. 109, iss. 5, pp. 911-922.
- [3] Balcerzak, A.P. (2015). Europe 2020 Strategy and Structural Diversity Between Old and New member States, Application of Zero Unitarization Method four Dynamic Analysis in the Years 2004-2013. *Economics and Sociology*, vol. 8, iss. 2, pp. 190-210.
- [4] Billon, M., Marco, R., Lera-Lopez, F. (2017). Innovation and ICT use in the EU: an analysis of regional drivers. *Empirical Economics*, vol. 53, iss. 3, pp. 1083-1108.
- [5] Blind, K., Petersen, S., Riillo, C.A.F. (2017). The impact of standards and regulation on innovation in uncertain markets. *Research Policy*, vol. 46, pp. 249-264.
- [6] Çolak, M.S. & Ege, A. (2013). An Assessment of EU 2020 Strategy: Too Far to Reach? Social Indicators Research, vol. 110, iss. 2, pp. 659-680.
- [7] Damijan, J., Kostevc, Č., Rojec, M. (2017). Exporting status and success in innovation: evidence from CIS micro data for EU countries. *The Journal of International Trade & Economic Development*, vol. 26, iss. 5, pp. 585-611.
- [8] De Noni, I., Orsi, K., Belussi, F. (2018). The role of collaborative networks in supporting the innovation performances of lagging-behind European regions. *Research Policy*, vol. 47, pp. 1-13.
- [9] EPO (2018). European patent applications 2007-2016 per country of residence of the applicant [online]. [cit.2018-02-28]. Available at: http://www.epo.org/aboutus/annual-reports-statistics/statistics.html#applications
- [10] Erixon, F. (2010). The Europe 2020 strategy: time for Europe to think again. European view, 9:29.
- [11]European Commission (2017). *DESI 2017* [online]. [cit.2018-02-28]. Available at: https://ec.europa.eu/digital-single-market/en/desi
- [12]Eurostat (2018). *GERD* [online]. [cit.2018-02-28]. Available at: http://ec.europa.eu/eurostat/tgm/table.do?tab=table&plugin=1&language=en&pcode =t2020_20
- [13]Eurostat (2017). Sustainable development in the EU Monitoring report on progress towards the SDGs in an EU context, 2017 ed. [online]. [cit.2018-02-28]. Available at: http://ec.europa.eu/eurostat/web/products-statistical-books/-/KS-04-17-780

- [14] Hammadou, H., Paty, S., Savona, M. (2014). Strategic interactions in public R&D across European countries: A spatial econometric analysis. *Research Policy*, vol. 43, pp. 1217-1226.
- [15]Kordoš, M. (2016). Effects of the EU Competition Policy and Strategy Symbiosis. In *International Conference on European Integration*. Ostrava: VŠB-TU Ostrava, Faculty of Economics, pp. 472-479.
- [16] Lianos, I. (2010). Shifting Narratives in the European Internal Market: Efficient Restrictions of Trade and the Nature of "Economic" Integration'. *European Business Law Review*, vol. 21, iss. 5, pp. 705-760.
- [17] MacGregor Pelikánová, R. (2017). European Myriad of Approaches to Parasitic Commercial Practices. *Oeconomia Copernicana*, vol. 8, iss. 2, pp. 167-180.
- [18] MacGregor Pelikánová, R. (2013). Internet My Dearest, What Type of European Integration Is The Clearest? Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis, vol. 61, iss. 7, pp. 2475-2481.
- [19] MacGregor Pelikánová, R., Císařová, J., Beneš, M. (2017). The misleading perception of the purpose of the protection against misleading advertising by the EU law and its impact on the Czech Republic. *Lawyer Quarterly*, vol. 7, iss. 3, pp. 145-161.
- [20] Matejka, J. (2013). Internet jako objekt práva Hledání rovnováhy autonomie a soukromí. Praha: CZ.NIC.
- [21]Nevima, J., Kiszová, Z. (2013). Multiplicative and Additive Approach in Analytic Hierarchy Process – Case Study of Competitiveness Evaluation of Czech and Slovak Regions. *International Journal of Mathematical Models and Methods in Applied Sciences*, vol. 7, iss. 5, pp. 490-499.
- [22] Pakšiová, R. (2016). Understanding of corporate social responsibility in large companies in Slovakia within the context of a sustainable development. In *Economic policy in the European union member countries. International scientific conference.* Karviná : School of Business Administration in Karvina, SU in Opava, pp. 516-525.
- [23] Pasimeni, F. & Pasimeni, P. (2016). An Institutional Analysis of the Europe 2020 Strategy. Social Indicators Research, vol. 127, pp. 1021-1038.
- [24] Staníčková, M. (2016). Practical Aspects of EU Project and Grant Management in Programming Period 2014-2020. In International Conference on European Integration. Ostrava: VŠB-TU Ostrava, Faculty of Economics, pp. 898-907.
- [25] Silverman, D. (2013). *Doing Qualitative Research A Practical Handbook.* 4th Edition, London, UK : SAGE.
- [26] Terzić, L. (2017). The Role of Innovation in Fostering Competitiveness and Economic Growth: Evidence from Developing Economies. *Comparative Economic Research*, vol. 20, iss. 4, pp. 65-81.
- [27] Turečková, K. (2016). Sectoral specialization as a source of competitiveness: case study on ICT sector in V4+ countries. In: *Proceedings of the 3rd International Conference on European Integration 2016.* Ostrava: VŠB-TU Ostrava, pp. 1023-1029.

- [28] United Nations (2017). *Transforming our world: the 2030 Agenda for Sustainable Development* [online]. [cit.2018-02-28]. Available at: https://sustainabledevelopment.un.org/post2015/transformingourworld
- [29] Wanilin, A. (2006). *The Lisbon Scorecard IV: Will Europe's Economy Rise Again?* London: Center for European Reform.
- [30] Walburn, D. (2010). Europe 2020. Local Economy, vol. 25, iss. 8, pp. 699-702.