Final report Entrepreneurship and Competitiveness investigations in Hungary based on the Global Entrepreneurship Monitor surveys 2017-2019

I think that the overall achievement of the whole project has been successful. Viewing the most important outcome measure of the project that is publication, we have published 25 papers, reports and books and there are a few still in the review phase. Out of these, there were three *Regional Studies* (H index=111, Q1*),* two *Small Business Economics* (H index= 120, Q1), one *Journal of Small Business and Enterprise Development* (H index=61, Q1) one *Papers in Regional Science* (H index=59, Q1) one *Strategic Change* (H index= 12, Q2) and one *Foresight and STI Governance* (H index= 13, Q2) publications. There is one paper still in the review phase in *Research Policy* and one accepted paper in *Szigma*. Besides the journal publications, there are two books, one from Springer (Acs, Szerb, Lafuente, Lloyd: Global Entrepreneurship and Development Index 2018) four book chapters all in Sanders, M.; A. Marx; M Stenkula (eds.) (2019) The Entrepreneurial Society; Reform Strategies for Italy, Germany and the UK, a Springer volume. From the Hungarian part, we have two papers in the *Budapest Management Journal (Vezetéstudomány).* Out of these publications, one Small Business Economics publication (Acs et al 2018) has already 218, and the Regional Studies publications, the Szerb et al (2019) 50, the Varga et al (2018) 38, and the Horváth – Rabetino (2018) 35 Google Scholar citations reinforcing the importance of the project and the papers.

Following the yearly working plan, the achievement was fine up to the last year when the COVID pandemic entered. While the publications went on fine, the dissemination slowed down especially the conference participations were cancelled out. This resulted a reorganization of the budget to other directions. In addition, the achievement according to the five points of the working plan has not been uniform. The two points have been over-fulfilled while in case of the other three points we have reached acceptable but not excellent results.

In the following, we present our achievement according to the five points in the research plan.

1. *The enhancement of the GEI index building methodology to be able to provide solid economic/entrepreneurship policy recommendations*.

The Global Entrepreneurship Index (GEI) methodology has been continuously developed since its first construction in 2009. Later, this methodology was applied to capture the regional context of entrepreneurship in 125 European Union NUTS1 and NUTS2 regions. The GEI and the Regional Entrepreneurship and Development Index (REDI) has been constructed for capturing both the individual and the contextual features of entrepreneurship across countries and EU regions, respectively. The methodology builds on the National Systems of Entrepreneurship Theory and provides a way to profile the Systems of Entrepreneurship. Important aspects of the method including the Penalty for Bottleneck (PFB) analysis, which helps identifying constraining factors in the Systems of Entrepreneurship. The novelty of this method that it portrays the entrepreneurial disparities amongst countries and EU regions and provides country and regional level, tailor-made public policy suggestions to improve the level of entrepreneurship and optimize resource allocation over the different pillars of entrepreneurship.

A six level index-building methodology is followed while creating the REDI index: (1) sub-indicators (2) indicators (3) variables, (4) pillars, (5) sub-indices, and finally (6) the REDI super-index. The three sub-indices of attitudes (ATT), abilities (AB), and aspiration (ASP) constitute the entrepreneurship super-index, which is called REDI. All three sub-indices contain

four or five pillars, which can be interpreted as quasi-independent building blocks of this entrepreneurship index. Each of the 14 pillars is the result of the multiplication of an individual variable and an associated contextual institutional variable. GEI consist of Initially, the penalty for bottleneck technique made it possible to provide solid policy recommendations based on the weakest performing components. The developed Equalization of the Pillar Averages method made possible to equalize the marginal effects of the improvements.

Later researches has shown that the penalty related weighting might not be optimal, and methodology should be flexible to other configurations than equal pillar values. As an alternative, we have integrated the Benefit-of-the-doubt (BOD) methodology. The Lafuente, Acs, Szerb (2020) paper that presently under review (second run) in Research Policy, employs the 'benefit of the doubt' approach rooted in non-parametric techniques to evaluate the Global Entrepreneurship Index at the global scale. By scrutinizing the efficiency of the GEI score in 87 countries for the period 2013-2015, the proposed analysis allows the evaluation of this composite indicator as well as the computation of endogenous country-specific weights that can be used for developing more informed policy making. The results show that countries prioritize different aspects of their national system of entrepreneurship that confirms that, contrary to homogeneous prescriptions, tailor-made policies are necessary if the objective is to optimize the resources deployed to enhance countries' entrepreneurial ecosystem. The findings of the empirical application also reveal that effective entrepreneurship policy is not necessarily linked to merely improving the weakest pillar of the local entrepreneurial ecosystem. Significant improvements in the quality of the entrepreneurial ecosystem can be realized by improving the policy priorities of the local entrepreneurship system identified by the 'benefit of the doubt' weights.

Besides the already submitted methodological paper to Research Policy (Lafuente, Acs, Szerb, 2020: A composite indicator analysis for optimizing entrepreneurial ecosystems), we have another Hungarian version of the BOD methodology, an accepted paper to Sigma.

According to Horváth and Rabetino (2018) REDI is appropriate to examine territorial servitization (Horváth K.; Rabetino, R. (2018): Knowledge-intensive territorial servitization: regional driving forces and the role of the entrepreneurial ecosystem, Regional Studies, 1-11). This study analyzes how regional manufacturing characteristics, i.e., specialization and the size of new manufacturers, and the entrepreneurial ecosystem, i.e., contextual factors driving entrepreneurial actions, impact the rate of new knowledge-intensive business service (KIBS) firms. Its spatial analysis of 121 European regions reveals that the entrepreneurial ecosystem plays a decisive role in supporting KIBS formation rates in territories with a solid industrial fabric. The economic potential of more attractive neighbouring regions can be detrimental to regional KIBS formation rates. The study offers valuable implications on how the entrepreneurial ecosystem can facilitate the interaction between manufacturing and KIBS firms.

The GEI methodology can be applied to investigate transformation issues. In particular Szerb and Trumbull (2018) (Entrepreneurship development in Russia: Is Russia a normal country? An empirical analysis, Journal of Small Business and Enterprise Development) examined Russia's entrepreneurial performance. Many studies have examined Russia's institutional setup to explain its deficiencies in entrepreneurial activity. However, there is a lack of comprehensive research taking into account both the individual and institutional dimensions of the entrepreneurial ecosystem. We used the Global Entrepreneurship Index (GEI)

methodology to analyze Russia's quality-related individual as well as institutional features from a system perspective in a single model. Russia's performance has been poor relative to the post-socialist countries and to most of the former republics of the Soviet Union. Russia's entrepreneurial profile is different from other transition and similarly developed non-transition countries, as well. Russia's scores are less than the scores of other post-socialist countries in six out of the nine pillars of entrepreneurial attitudes and abilities. In sum, conditions supporting entrepreneurship in Russia lag seriously behind other post-socialist countries. Moreover, Russia's individual scores are even lower than the institutional ones. Hence, improving the hostile environment alone would not be sufficient for entrepreneurship development.

2. *The application of the GEM/GEI-REDI data to examine the connection between entrepreneurship and economic growth.*

The bulk of the publications and the most important results have been within the framework of this second point. The most important results reinforce that the GEI and its regional version, REDI is an appropriate tool to measure entrepreneurship ecosystems. Together with several co-authors, we were able to provide a nuanced picture about the effect of entrepreneurship ecosystem on economic growth. We have also contributed to the smart specialization policy debate by introducing the entrepreneurship aspect to the S3 policy arena.

It is an important validation of the new entrepreneurship measure is to show its connection to economic growth and productivity. Over years we have had many attempts to prove this relationship. The Acs, Estrin, Mickiewicz, Szerb (2018) paper titled as "The global technology frontier: productivity growth and the relevance of Kirznerian and Schumpeterian entrepreneurship" analyzes conceptually and in an empirical counterpart the relationship between economic growth, factor inputs, institutions, and entrepreneurship. In particular, we investigate whether entrepreneurship and institutions, in combination in an ecosystem, can be viewed as a "missing link" in an aggregate production function analysis of cross-country differences in economic growth. To do this, we build on the concept of National Systems of Entrepreneurship (NSE) as resource allocation systems that combine institutions and human agency into an interdependent system of complementarities. We explore the empirical relevance of these ideas using data from a representative global survey and institutional sources for 46 countries over the period 2002–2011. We find support for the role of the entrepreneurial ecosystem in economic growth.

The Kirznerian and the Schumpeterian entrepreneurship issues are in the centre of the Szerb, Lafuente, Horváth, Páger (2019): "The relevance of quantity and quality entrepreneurship for regional performance: the moderating role of the entrepreneurial ecosystemhis" study. This paper analyzes how the entrepreneurial ecosystem and different types of entrepreneurship impact regional performance. By analyzing 121 European Union regions between 2012 and 2014, it is found that quantity (Kirznerian) entrepreneurship negatively impacts regional performance, while this effect turns positive in the case of quality (Schumpeterian) entrepreneurship. Also, regions with a healthy entrepreneurial ecosystem have a greater capacity to materialize the effects of high business-formation rates, regardless of their quality (Kirznerian entrepreneurship), while regions with weak entrepreneurial ecosystem may rely on innovative (Schumpeterian) entrepreneurs to compensate for the absence of entrepreneurship support policies and increase their economic outcomes.

Regarding the regional version of the GEI (REDI), the Szerb, Acs, Ortega-Argiles, Komlósi (2018) paper about policy optimization, has been published in the Papers in Regional Studies. This paper demonstrates REDI can be used to optimize local entrepreneurial discovery processes, in a manner which can support Smart Specialization Strategies (S3). While S3 industry prioritization is based on the identification of local strengths, regional improvement can be achieved by improving the weakest features of the local entrepreneurial ecosystem. REDI based suggestions are place-based and offer rationale for tailor-made regional policy interventions. First, we provide the conceptual background at the intersection of S3 and entrepreneurial ecosystem concepts. Next we measure the strengths and weaknesses of the entrepreneurial discovery processes. Finally, we discuss how REDI could contribute to smart specialization strategies by providing a solution to four S3 policy caveats: (1) measuring the necessary basic conditions for smart specialization in 125 NUTS 1 and NUTS2 European Union regions; (2) identifying the institutional and individual weaknesses in the local entrepreneurial ecosystem; (3) providing a comprehensive view about the harmonization of the components of entrepreneurial discovery; and (4) presenting some simulations on how additional policy efforts could be optimized. We found that without optimizing the entrepreneurial ecosystem, the industry specialization alone may not be successful because of the inability of the ecosystem to be able to nurture high growth potential ventures.

REDI has also been successfully integrated into a *Geographic Macro and Regional (GMR) model*. A Regional Studies publication (Varga, Sebestyén,bSzabó &bSzerb (2018) Estimating the economic impacts of knowledge network and entrepreneurship development in smart specialization policy) is also dealing with the smart specialization issue. An undesirable result of the rapid implementation of smart specialization into the framework of European Union Cohesion Policy was that it left several practical issues unanswered. An important unanswered issue is the implementation of economic impact assessment in a smart specialization policy context. Integrating entrepreneurship and interregional network policies into an economic modelling framework is considered among the most prominent challenges. This paper introduces how these two policies are implemented in the GMR-Europe model. The simulations highlight that smart specialization policy targeting the development of entrepreneurship and knowledge networks is not equally successful in all regions.

Other practical country cases application of the GMR-Europe model and the REDI dataset were four book chapters in the same Springer volume, Sanders, M.; A. Marx; M Stenkula eds (2019) The Entrepreneurial Society; Reform Strategies for Italy, Germany and the UK. The Varga A.; Szerb L.; Sebestyén T. Szabó N. (2019) Economic Impact Assessment of Entrepreneurship Policies with the GMR-Europe Model; chapter describes and evaluated different policy scenarios for three countries, Germany, Hungary, and Italy. Three other chapters contribute to the country specific policy evaluation and recommendations for Germany (Sanders, M., M. Stenkula, M. Fritsch, A. Herrmann, G. Latifi, B. Pager, L. Szerb, E. Terragno Bogliaccini and M. Wyrwich: Reform Strategy for Germany), Italy (Sanders, M., M. Stenkula, L. Grilli, A. Herrmann, G. Latifi, B. Pager, L. Szerb and E. Terragno Bogliaccini (2019) Reform Strategy for Italy), and the United Kingdom (Sanders, M., J. Dunstan, S, Estrin, A. Herrmann, B. Pager, L. Szerb and E- Terragno Bogliaccini (2019) Reform Strategy for the UK).

3. *The examination Hungary's entrepreneurial performance based on long term time series data.*

According to plan, we have conducted the regular GEM surveys in all three years, 2017, 2018 and 2019, both the Adult population survey (APS) and the Expert surveys (NES). We have put together the time series dataset (2003-2019) for Hungary and started the investigation, however, have not finished yet. We are about halfway done with book that is expected to finish by the end of 2021. We have published the GEM reports for 2016 (Németh, Horváth, Szerb 2018), 2017 (Márkus and Szerb 2018) and 2018-2019 (Márkus and Szerb 2020) that are available in the RIERC working paper series. Both report show a moderate entrepreneurial performance of Hungary.

A publication of Komlósi, É., Páger, B., Márkus, G. (2019): The role of innovation in the entrepreneurial ecosystem: an analysis of countries at different stages of development. *Foresight and STI Governance*, contains an analysis for Hungary. This paper provides a comprehensive picture of the role of innovation within the entrepreneurial ecosystem in certain countries. Out of the 14 GEI pillars, there are three pillars associated with three different aspects of innovation: Technology Absorption, Product Innovation, and Process Innovation. Our results suggest that the quality of the entrepreneurial ecosystem reflects the level of economic development. Regarding the role of innovation, it seems that the innovation-related pillars have an important role within the entrepreneurial ecosystem. Technology Absorption is highly related to the GEI score and the level of economic development since the most developed countries have the highest values for this pillar. While the Product and Process Innovation pillars have a relatively strong relationship with GEI score as well, it seems that a couple of countries have higher pillar values in these innovation-related pillars than the position of their GEI scores would lead one to expect. This may indicate that these countries have relatively good performance in research and development, but other components of their entrepreneurial ecosystem may hamper the exploitation of the results achieved by new firms.

The regular GEI reports also provide a picture of the entrepreneurial development of the countries. Over the project time period there were two GEI reports published, one in 2018 (Acs, Szerb, Lafuente, Lloyd (2018): Global Entrepreneurship and Development Index 2018, Springer International Publishing, 2018) and one in 2020 (Ács, Szerb, Lafuente, Márkus (2020): Global Entrepreneurship Index 2019, Global Entrepreneurship and Development Institute).

Two other Hungarian language publications are dealing with Hungary's entrepreneurial performance (Szerb (2017) A vállalkozói ökoszisztéma Magyarországon a 2010-es években– helyzetértékelés és szakpolitikai javaslatok, Vezetéstudomány/Budapest Management Review, 48(6-7), 2-14) and digitalization (Szerb, Komlósi, & Páger (2020): Új technológiai cégek az Ipar 4.0 küszöbén., Vezetéstudomány/Budapest Management Review, 51(6), 81-96.).

4. *Applying the GEM established business data to examine regional competitiveness*.

We have calculated the GEM established business dataset and the associated competitiveness measure. Our initial plan was to work together with Robert Huggins about a top category paper. However, Dr. Hugging got a stroke and took him to recover for more than a year. Therefore, we are still working phase on the paper. An initial version was published in a conference proceeding (Krabatné Fehér Zs., K. Horváth; L Szerb. 2018 Regional competitiveness in the European Union: The role of the individual and the institutional factors)

However, we had another application of the GEM established business dataset that is the examination of the effect of overconfident (Szerb – Vörös (2019) Effect of entrepreneurial experience on the role of entrepreneurial skill beliefs in expected and realized growth, Small Business Economics). In this article we attempt to explain the failure of many studies to show a link between entrepreneurs' beliefs in their entrepreneurial skills and the actual or expected growth of their venture. By using Frese and Gielnik's action-characteristics model of entrepreneurship as analytical framework and analyzing Global Entrepreneurship Monitor Adult Population Survey data, we show that entrepreneurs' perceived entrepreneurial skills are consistently inflated over the different phases of the startup, albeit in different ways. Depending on the typical form of overconfidence, the link between skill beliefs and growth expectations may be mediated by expectations on competitive advantages. Moreover, the huge drop in growth expectations is not associated by a fall of perceived skills but other entrepreneurial expectations also gets more realistic with a strengthening effect.

5. *The examination of the Hungary's entrepreneurial finance possibilities in particular to examine informal investment trends.*

The informal investment questions were put into the 2017 and the 2018 surveys. Informal investment variables were used in the Horváth –Szerb (2018) Strategic Change paper. In this paper we investigated how the knowledge-intensive service firms achieve superior productivity levels with management practices oriented to improve the relationship with customers. Managerial practices linked to digital and IT-based practices and cash management techniques contribute to enhance SMEs' productivity level. The positive effect of cash management techniques and digital/IT-based practices is conditioned by the characteristics of the businesses' operations, in our case, the knowledge orientation of the organization. We found that non-knowledge-based businesses benefit more from practices linked to digitization and IT practices. At the same time knowledge-intensive businesses capitalize more on management practices that seek to improve the relationship with customers.

Journal publications

Horváth, K., & Rabetino, R. (2019). Knowledge-intensive territorial servitization: regional driving forces and the role of the entrepreneurial ecosystem. *Regional Studies, 53*(3), 330-340. https://doi.org/10.1080/00343404.2018.1469741

Horváth, K., & Szerb, L. (2018). Managerial practices and the productivity of knowledge-intensive service businesses: An analysis of digital/IT and cash management practices. *Strategic Change, 27*(2), 161-172. https://doi.org/10.1002/jsc.2191

Komlósi, É., Páger, B., Márkus, G. (2019): The role of innovation in the entrepreneurial ecosystem: an analysis of countries at different stages of development. *Foresight and STI Governance*, 13(4) pp. 23-34 DOI: 10.17323/2500-2597.2019.4.23.34

Lafuente, E., Acs, Z., Sanders, M., & Szerb, L. (2019) The global technology frontier: productivity growth and the relevance of Kirznerian and Schumpeterian entrepreneurship, *Small Business Economics* 1-26; online, https://doi.org/10.1007/s11187-019-00140-1

Páger, B (2017) Entreprenurship ecosystem in Central and Eastern European regions, *Erenet Profile, 12(4), 15-24,* 2017

Szerb L. (2017) *A vállalkozói ökoszisztéma Magyarországon a 2010-es években–helyzetértékelés és szakpolitikai javaslatok*, Vezetéstudomány/Budapest Management Review, 48(6-7), https://doi.org/10.14267/VEZTUD.2017.06.01

Szerb, L., Lafuente, E., Horváth, K., & Páger, B. (2019). The relevance of quantity and quality entrepreneurship for regional performance: the moderating role of the entrepreneurial ecosystem. *Regional Studies, 53*(9), 1308-1320. https://doi.org/10.1080/00343404.2018.1510481

Szerb, L; R. Ortega-Argilés; Acs, J. Z., and É. Komlósi (2020) Optimizing Entrepreneurial Development Processes for Smart Specialization in the European Union, *Papers in Regional Science* 99(5), pp. 1413-1457, https://doi.org/10.1111/pirs.12536

Szerb L., Komlósi É., Páger B. (2020): Új technológiai cégek az Ipar 4.0 küszöbén: a magyar digitális vállalkozási ökoszisztéma szakértői értékelése. *Vezetéstudomány, 51(6), 81-96.* https://doi.org/10.14267/VEZTUD.2020.06.08

Szerb, L., & Trumbull, W. N. (2018). Entrepreneurship development in Russia: is Russia a normal country? An empirical analysis. *Journal of Small Business and Enterprise Development*. 25(6), pp. 902-929. https://doi.org/10.1108/JSBED-01-2018-0033

Szerb, L., & Vörös, Z. (2019). The changing form of overconfidence and its effect on growth expectations at the early stages of startups. *Small Business Economics*, 1-15. online https://doi.org/10.1007/s11187-019-00297-9

Varga, A.,T, Sebestyén, N. Szabó & L. Szerb (2020) Estimating the economic impacts of knowledge network and entrepreneurship development in smart specialization policy, *Regional Studies, 54:1, 48-59,* DOI: 10.1080/00343404.2018.1527026

Books

Acs Z. J., Szerb L., E. Lafuente, A. Lloyd (2018) *Global Entrepreneurship and Development Index 2018*, Springer International Publishing, 2018

Acs J Z., Szerb L., E. Lafuente, Márkus G. (2020) *Global Entrepreneurship Index 2019*, Global Entrepreneurship and Development Institute, 2020

Book chapters

Sanders, M., M. Stenkula, M. Fritsch, A. Herrmann, G. Latifi, B. Pager, L. Szerb, E. Terragno Bogliaccini and M. Wyrwich: Reform Strategy for Germany; ; in Sanders, M.; A. Marx; M Stenkula eds (2019) The Entrepreneurial Society; Reform Strategies for Italy, Germany and the UK

Varga A.; Szerb L.; Sebestyén T. Szabó N. (2019) Economic Impact Assessment of Entrepreneurship Policies with the GMR-Europe Model; in Sanders, M.; A. Marx; M Stenkula eds (2019) The Entrepreneurial Society; Reform Strategies for Italy, Germany and the UK

Sanders, M., M. Stenkula, L. Grilli, A. Herrmann, G. Latifi, B. Pager, L. Szerb and E. Terragno Bogliaccini (2019) Reform Strategy for Italy; in Sanders, M.; A. Marx; M Stenkula eds (2019) The Entrepreneurial Society; Reform Strategies for Italy, Germany and the UK

Sanders, M., J. Dunstan, S, Estrin, A. Herrmann, B. Pager, L. Szerb and E- Terragno Bogliaccini (2019) Reform Strategy for the UK, in Sanders, M.; A. Marx; M Stenkula eds (2019) The Entrepreneurial Society; Reform Strategies for Italy, Germany and the UK

Reports

Márkus Gábor, Szerb László: *GEM 2017 Magyarország: A kezdő vállalkozások mennyiségi és minőségi jellemzői 2017-ben*, 2019 RIERC working paper series

Márkus Gábor, Szerb László: *GEM 2018-2019 Magyarország: Vállalkozások és vállalkozói ökoszisztéma helyzete 2018-2019-ben* RIERC working paper series

Conference participations

Krabatné Fehér Zs., K. Horváth; L Szerb. 2018 Regional competitiveness in the European Union: The role of the individual and the institutional factors, presentation at the FIKUSZ Conference 15th November 2018, Óbuda University, Budapest, Hungary,p 1-13,

Also in the proceedings,

Krabatné Fehér Zs., K. Horváth; L Szerb. 2018 Regional competitiveness in the European Union: The role of the individual and the institutional factors, In: Fehér-Polgár, Pál; Garai-Fodor, Mónika (szerk.) FIKUSZ 2018 - Symposium for Young Researchers Proceedings Budapest, Magyarország : Óbudai Egyetem Keleti Károly Gazdasági Kar, (2018) pp. 115-127. , 13 p.
available at: http://kgk.uni-obuda.hu/sites/default/files/FIKUSZ2018_10.pdf

Páger Balázs: The role of regional entrepreneurial ecosystems in the occurrence of productive firms; 9th Slovak Winter Seminar of Regional Science, Tále (Szlovákia), 2019.03.13-16.
Páger Balázs: The role of regional entrepreneurial ecosystems in the occurrence of productive firms; 59th Congress of European Regional Science Association, Lyon (France), 2019.08.27-30.,

Szerb L. –É. Komlósi: Vállalkozói fejlesztési folyamatok optimalizálása és az intelligens szakosodás az Európai Unió régióiban" XVI. GAZDASÁGMODELLEZÉSI SZAKÉRTŐI KONFERENCIA, Pécs, MTA PAB székház, 2020. október 2

Szerb László, Rappai Gábor, Kehl Dániel: Building Composite Indicators for Policy Optimization Purposes, ENTerprise REsearch InNOVAtion *Conference (*ENTRENOVA) *Rovinj*, Croatia, 12-14 September *2019*

Szerb László, Rappai Gábor, Kehl Dániel: Összetett indexek gazdaságpolitikai alkalmazása: a Globális Vállalkozói Index; XXXIII-ik Magyar Operációkutatási Konferencia. 2019. május 20-22 Szeged

Szerb László: Vállalkozáspolitikai és intelligens specializációs (S3) szcenáriók az Európai Unió régióban: hatékonyság versus egyenlőség, Előadás a Magyar Tudományos Akadémia Intelligens szakosodás és regionális fejlődés című workshopján, 2019. május 8.

Szerb, L. E. Lafuente, K. Horváth and B. Páger (2018) The relevance of quantity and quality entrepreneurship for regional performance: The moderating role of the system of entrepreneurship, presentation at the ICUBERD 2018: Innovation, Entrepreneurship, Regional Development and EU Smart Specialization Policy, International workshop hosted by the Simonyi Business and Economic Development Center, (BEDC) and the Regional Innovation and Entrepreneurship Research Center (RIERC) at the Faculty of Business and Economics, University of Pécs, November 29, 2018 (OTKA)

Lafuente, E., Z. J. Acs, M. Sanders & L. Szerb: The Global Technology Frontier: Productivity Growth and the Relevance Of Kirznerian And Schumpeterian Entrepreneurship; Presentation at the Workshop on Entrepreneurship, October 31st 2018. Founders Hall 602, George Mason University Arlington Campus, Arlington, Virginia, United States