Quarterly Corvinus Research Highlights

November 2021 – January 2022
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Cross-regional mergers and acquisitions (M&A) transfer control and diffuse knowledge across space, which facilitates the integration of business systems. We analyse about 40,000 cross-regional acquisitions in Europe completed between 2003 and 2017 and distinguish innovative and non-innovative M&A. Both types of deals cluster into communities constituted by countries or groups of neighbouring countries. However, an increasing proportion of deals connect different communities, especially for innovative M&A. More populous and richer regions host more acquiring and target companies and thus broker communities. Research and development expenditure and skilled human capital are additional factors favouring brokerage of regions by attracting acquirers.


This infecological study mainly aimed to know the thematic and conceptual relationship in published papers in deep learning (DL) and smart manufacturing (SM). Design/methodology/approach The research methodology has specific research objectives based on the type and method of research, data analysis tools. In general, description methods are applied by Web of Science (WoS) analysis tools and Voyant tools as a web-based reading and analysis environment for digital texts. The Yewno tool is applied to draw a knowledge map to show the concept’s interaction between DL and SM. Findings The knowledge map of DL and SM concepts shows that there are currently few concepts interacting with each other, while the rapid growth of technology and the needs of today’s society have revealed the need to use more and more DL in SM. The results of this study can provide a coherent and well-mapped road map to the main policymakers of the field of research in DL and SM, through the study of coexistence and interactions of the thematic categories with other thematic areas. In this way, they can design more effective guidelines and strategies to solve the problems of researchers in conducting their studies and direct. The analysis results demonstrated that the information ecosystem of DL and SM studies dynamically developed over time. The continuous conduction flow of scientific studies in this field brought continuous changes into the infoecology of subjects and concepts in this area. Originality/value The paper investigated the thematic interaction of the scientific productions in DL and SM and discussed possible implications. We used of the variety tools and techniques to draw our own perspective. Also, we drew arguments from other research work to back up our findings.
To identify whether EU certified food - here organic and geographical indications - is more sustainable than a conventional reference, we developed 25 indicators covering the three sustainability pillars. Original data was collected on 52 products at farm, processing and retail levels, allowing the estimation of circa 2000 indicator values. Most strikingly, we show that, in our sample, certified food outperforms its non-certified reference on most economic and social indicators. On major environmental indicators - carbon and water footprint - their performance is similar. Although certified food is 61% more expensive, the extra-performance per euro is similar to classical policy interventions to improve diet sustainability such as subsidies or taxes. Cumulatively, our findings legitimize the recent initiatives by standards to cover broader sustainability aspects.


The monostatic property of convex polyhedra (i.e., the property of having just one stable or unstable static equilibrium point) has been in the focus of research ever since Conway and Guy (1969) published the proof of the existence of the first such object, followed by the constructions of Bezdek (2011) and Reshetov (2014). These examples establish F < 14, V 18 as the respective upper bounds for the minimal number of faces and vertices for a homogeneous mono-stable polyhedron. By proving that no mono-stable homogeneous tetrahedron existed, Conway and Guy (1969) established for the same problem the lower bounds for the number of faces and vertices as F, V 5 and the same lower bounds were also established for the mono-unstable case (Domokos et al., 2020b). It is also clear that the F, V > 5 bounds also apply for convex, homogeneous point sets with unit masses at each point (also called polyhedral o-skeletons) and they are also valid for mono-monostatic polyhedra with exactly one stable and one unstable equilibrium point (both homogeneous and o-skeletons). In this paper we draw on an unexpected source to extend the knowledge on mono-monostatic solids: we present an algorithm by which we improve the lower bound to V > 8 vertices on mono-unstable o-skeletons. The problem is transformed into the (un)solvability of systems of polynomial inequalities, which is shown by convex optimization. Our algorithm appears to be less well suited to compute the lower bounds for mono stability. We point out these difficulties in connection with the work of Dawson, Finbow and Mak (Dawson, 1985, Dawson et al., 1998, Dawson and Finbow, 2001) who explored the monostatic property of simplices in higher dimensions.

Competitiveness of firms is studied mostly from a strategic management perspective. It is only rarely a subject of analysis from the viewpoint of operations. In this paper, we aim to connect these two approaches using the resource-based view of the firm, popularly called RBV theories. First, we provide a comprehensive definition of firm competitiveness and propose a conceptual index (Firm Competitiveness Index or FCI) to measure it, based on the theory of dynamic capabilities. Further, we demonstrate the use of the FCI concept, with an application to the Hungarian manufacturing sector, utilizing survey responses from a sample of 113 firms collected as part of an ongoing research project focusing on competitiveness of the Hungarian industry. We employ exploratory- and confirmatory factor analysis to construct a context-specific FCI indicator on this sample. Finally, we explore the relationship between the constructed FCI, and thus a concept of competitiveness, and capabilities of the production area. Hierarchical regression analysis is employed to investigate this relationship. We posit this as a means to empirically test the perceived contribution of functional areas to the overall firm-level competitiveness. We find a positive impact of the dynamic production capabilities on the firm’s perceived competitiveness but find no significant relationship between ordinary production capabilities and firm-level competitiveness.


One of the main goals of the EU Biodiversity Strategy for 2030 is to avoid further loss of biodiversity and to restore ecosystems. These efforts can be facilitated by compiling the main research topics related to conservation biology to provide new evidence for the most urgent knowledge gaps, and publicise it to researchers, research funders and policy makers. We used the possible future statements from the Hungarian Environmental Foresight Report for 2050 which identified region-specific problems. To highlight likely future environmental and conservation questions, in this study we asked researchers from the fields of ecology and conservation to define research questions addressing these future statements in line with international research trends and challenges. The study resulted in fourteen priority research topics, split into seven clusters relevant to biological conservation that should be targeted by stakeholders, primarily policy makers and funders to focus research capacity to these topics. The main overarching themes identified here include a wide range of approaches and solutions such as innovative technologies, involvement of local stakeholders and citizen scientists, legislation, and issues related to human health. These indicate that solutions to conservation challenges require a multidisciplinary approach in design and a multi-actor approach in implementation. Although the identified research priorities were listed for Hungary, they are in line with European and global biodiversity strategies, and can be tailored to suit other Central and Eastern European countries as well. We believe that our prioritisation can help science-policy discussion, and will eventually contribute to healthy and well-functioning ecosystems.
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With the advancement of technology and the need for the continuous development of service quality, the introduction of new systems in local or nationwide public transportation is a practice that passengers must accept from time to time. When these new systems are introduced along with the elimination of the old system, passengers may feel frustrated and unsatisfied. This study develops and tests a conceptual model that places the forced use of technology-based self-service at its center. Although the effects of mandatory usage of one option of a delivery mode have already been investigated, the antecedents of the acceptance of forced use are yet to be fully researched. This study provides a solid framework for the underlying factors behind the acceptance of forcing users to channel migration in public transportation. Through a real-life case of a public transportation company forcing its passengers to use exclusively self-service ticket vending machines while closing face-to-face ticket counters, we conducted a survey on the acceptance of the new mode of ticket purchase. Our results predominantly demonstrated that the perceived performance, ease of use of the new kiosks, and the need for interaction by consumers have a positive impact on the acceptance of forced use, while this acceptance plays a significant positive role in the formulation of satisfaction with the company.


Objectives: The ICEpop CAPability measure for Adults (ICECAP-A) was developed to assess the capability well-being of adults for use in economic evaluations. Currently, ICECAP-A tariffs are available only for the UK population. The objectives of this study were to develop a Hungarian tariff set for the ICECAP-A instrument and to explore intercountry differences between the Hungarian and the UK value sets. Methods: A survey was conducted by computer-assisted personal interviews on a sample representative of the Hungarian adult population (N = 1000) to elicit their preferences regarding ICECAP-A attributes with the use of a best-worst scaling choice task. A latent class multinomial logit model with continuous variance scale was used to estimate the weights for each of the 4 capability levels of all 5 ICECAP-A attributes, namely, attachment, stability, achievement, enjoyment, and autonomy. Results: The model identified 2 preference classes with approximately equal share. The first class had a stronger relative preference for autonomy and achievement, whereas the second class had a strong preference for attachment. Multivariate analysis of the classes revealed that women, pensioners, people who are married or living in a partnership, and people with poorer health status are characteristics associated with the latter class membership (preference for attachment). Population tariffs were estimated from the model. Overall, attachment was found to be the most important attribute, followed by stability, enjoyment, achievement, and autonomy. Conclusions: Hungarian tariffs are largely consistent with those found for the United Kingdom; nevertheless, autonomy seems to be less important in Hungary compared with the United Kingdom.

https://doi.org/10.1057/s41295-021-00264-3

The paper evaluates the convergence paths of Central and Eastern European member states of the EU during the 2010s, when the main task for these countries was avoiding the middle-income trap—when wages are not so low anymore to compete with less developed countries, while innovation is not developed enough yet to compete with developed countries. Using various statistical indicators, the paper shows that while most countries in the region have been on a convergence path during the decade under analysis, not all succeeded in avoiding the trap. While some countries successfully implemented policies to step on the path of productivity- and innovation-led growth (Czechia, Slovenia, Estonia, and Lithuania), in several other states, growth was supported mainly by low costs and loose monetary conditions including significant transfers from the EU. The comparative analysis of Estonia and Hungary illustrates the different growth models and shows how the institutional system plays a key role in exiting the trap.


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Social workers may play an important role in the implementation of welfare policies targeted at the poor. Their norms, beliefs, and attitudes form local anti-poverty programmes and affect discretionary practices with their clients. Despite this, we know little about how social workers’ exposure to poverty shapes their attitudes towards poverty and their causal attributions for poverty. This study investigates social workers’ poverty explanations and the extent to which they depend on the level of local poverty. Data from a survey conducted among Hungarian social workers were analysed using multilevel linear regression models. To measure local poverty, we used a composite index of poverty, as well as a subjective measure of exposure to poverty. Our analysis revealed that most social workers explained poverty with structural causes, but individual blame was also frequent. Contrary to our hypothesis, the level of local poverty did not significantly increase the adoption of structural explanations but did raise the occurrence of individualistic ones. However, the effect of local poverty was non-linear: social workers tended to blame the poor for their poverty in the poorest municipalities, where multiple disadvantages are concentrated, while moderate poverty did not lead to such opinions. Our results suggest that efforts should be made to improve the poverty indicator framework to better understand the phenomenon of spatial concentration of multiple disadvantages and its consequences for the poor.
https://doi.org/10.1177/00472875211056684

Being unable to travel feels like being a caged bird for many and trapped in unwanted situations strengthens travel desire. This study contextualizes travel deprivation and subsequent desire thinking in relation to the concept of craving. It introduces lockdown captivity and travel craving as relevant factors to understand tourism demand when travel is impossible. This research demonstrates the usefulness of the elaborated intrusion theory in the tourism context and newly defines wanderlust in association with craving. Empirical support for the hypotheses that lockdown captivity and wanderlust are key determinants of travel craving is provided. Travel craving should be used as an alternative concept to travel intention in situations in which travel is curtailed or impossible. Tourism marketers and practitioners are advised to build on the caged bird metaphor to effectively communicate their offerings during crises that result in travel restrictions and to show their empathy toward would-be tourists.

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To win a policy debate, political actors may apply two analytically distinct counterframing strategies, rhetoric and heresthetic. Rhetoric is when counterarguments are formulated in the original dimension of the debate, while heresthetic is using arguments in a different dimension compared to the original frame. Although both rhetoric and heresthetic are ubiquitous phenomena in the process of public opinion formation, there are no general rules to specify their efficacy. Drawing on a survey experiment carried out in Hungary in 2020 (N = 2000), this paper uncovers the factors determining the effect of the two strategies. Introducing a conceptual distinction between open and trade-off framing situations, the paper demonstrates that the structure of the situation matters. While heresthetic has a robust effect in trade-off framing situations, rhetoric may have a strong impact in open framing situations. Moreover, the effectiveness of counterframing depends on the party affiliation of respondents and the strength of their related attitudes.

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Identifying investment patterns as part of customer segmentation is one of the most important tasks in retail banking. Clustering customers effectively is an important element of improving marketing policy and strategic planning. There are several methods for identifying similar groups of customers and describing their characteristics to offer them appropriate products. However, using machine learning
methods is rare, and the application is limited for certain types of data. The aim of this study is to investigate the benefits of using a two-stage clustering method using neural-network-based Kohonen self-organizing maps followed by hierarchical clustering for identifying the investment patterns of potential retail banking customers. The unique benefit of this method is the ability to use both categorical and numerical variables at the same time. This research examined 1,542 responses received for an online investment survey, focusing on the questions that are related to the respondents' investment preferences and their current financial assets. The research utilizes descriptive statistics and multiple correspondence analysis (MCA) to understand the variables and Kohonen self-organizing maps (SOMs), in combination with hierarchical clustering, to identify customer groups and describe the characteristics of these clusters. The analysis was able to identify clusters of potential customers with similar preferences and gained insights into their investment patterns related to their investment portfolio and investment behavior, including their savings profile, attitude to risk-taking, and preferences for investment advice. These findings were supported by additional insights through the application of multiple correspondence analysis (MCA) describing patterns of financial instruments and portfolios. The main contribution of the research is the combined application of the machine learning methods Kohonen SOM, hierarchical clustering, and MCA for investment pattern analysis in the retail banking business.


https://doi.org/10.1016/j.spc.2021.10.010

In discourses around sustainability, increasing eco-efficiency through technological developments are highly popular as they promise the continuation of business-as-usual and appeal to economic actors whose primary motivation is to follow the paths of economic growth. Dominant narratives and visions about the bioeconomy also fit into this line of thinking by giving a central role to technological problem solving and decoupling, the opportunities of sustaining economic growth and advancing the extended use of renewable resources. In 2020, major actors of the air transport industry under the frame of the Air Transport Action Group issued Waypoint 2050 a global, sector wide strategy to tackle climate change and halve CO2 emissions by the middle of this century. As we will establish in this paper, their sustainability strategies strongly rely on bioeconomic solutions such as sustainable air fuels and renewable energy, while their need to grow remains unquestioned. However, achieving sustainability is a wicked problem that needs clumsy solutions. And clumsy solutions only come about when highly different viewpoints are put on the table. Degrowth perspectives can most certainly enrich dialogues on sustainability transitions such as the current challenges the air transport industry faces. This paper aims to provide a critical review of Waypoint 2050, underlining why it is important for economists and policymakers to shift their understanding from pursuing endless growth toward Degrowth perspectives. We use the main arguments of Degrowth to interpret and analyse the air transport industry’s climate strategy and reframe the discussions around sustainable aviation. Our goal is to show that Degrowth approaches can contribute to positively influencing the discourses of air transport by assessing the consequences of the sector and its reform strategy through diverse lenses. The discourse reflected in this paper would also be appropriate when applied to other top carbon producing industries and our assessment of air transport is not a directed criticism but rather an example on why business-as-usual scenarios need to be revisited. (C) 2021 The Author(s). Published by Elsevier B.V. on behalf of Institution of Chemical Engineers.

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The majority of food- and culture-related studies of international students have focused on their consumption of specific ingredients or types of foods, or their attitude toward a local culture's traditional cuisine. However, the cultural perspective remains under-researched, particularly regarding the cultural factors that influence this adjustment. By mitigating the experienced culture shock, these factors may lead to a higher level of adjustment to the local cuisine and, subsequently, to the local culture. Twenty semi-structured in-depth interviews were conducted with international students and analyzed using inductive thematic content analysis. Food specific aspects (fresh ingredients, processed foods, eating out) and socio-economic factors (available budget and prior intercultural experience) were included to the analysis. The novelty and contribution of this study is in separating the factors influencing the adjustment to local food and culture into two main categories. The passive factors, which were difficult or impossible to change during the study program, entailed four main themes that may support adjustment: socioeconomic background, food-related convictions, encountered positive word-of-mouth, and the contribution of the institution. The active factors, which could be controlled, also comprised four main themes: connection to the local culture (before moving abroad), immersion in the culture through food, experimenting with traditional food, and personal development.


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Recent political developments suggest that political followership has played increasingly vital roles in modern democratic politics. However, scholarship seemingly lacks proper conceptual and methodological tools for analysing why and how citizens follow their leaders, and what the role of this relationship is in personalised politics and political leadership. Addressing the research gap, this article turns to generic leadership studies for help and introduces its follower-centric models into the field of political science. This venture opens with a review and comparison of some of the different perspectives about political followers in the scholarship on political leadership and personalisation, taking account of their limitations. It then moves on to assess follower-centric models and their empirical results, focusing on observers’ perceptions about the characteristics and behaviours of leaders in the attribution of leadership. Based on these models, the article offers a balanced perspective about leader-follower relations. Recommendations for future research directions are presented in the concluding sections.
https://doi.org/10.3390/rel12110908

Objective: To examine the effect of religion on negative attitudes and beliefs about suicide. Methods: We use data from a large nationwide survey conducted in Hungary covering more than 3000 individuals. Suicide-related stigmas are captured with three Likert-type measures that we combine into an overall indicator. Religion is measured by denomination (Catholic vs. Protestant) and church attendance (at least weekly vs. never or less than weekly). We employ logistic regression and the SPSS statistical software. Results: People attending religious services frequently have greater odds of stigmatizing self-killing than those reporting no or infrequent attendance. Compared to Protestants, Catholics are significantly less condemning of suicide. The two measures of religion also work in tandem, with denomination modifying the impact of church attendance. In particular, while church attendance strongly increases the odds of negative attitudes among Catholics, it has practically no effect among Protestants. Discussion and Conclusions: The results presented are in keeping with our expectations and suggest that a social climate that stigmatizes suicide without providing for people a strong community network that pressures individuals toward conforming to fundamental moral principles can be especially harmful for mental health.

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We introduce a factor approach to performance measurement of global ESG equity investments. We construct ESG pure factor portfolios (PFP) following Fama-MacBeth; then, applying FamaFrench (FF) spanning regressions that simultaneously test performance and the validity of adding new ESG factors to the FF 5-factor model. To address endogeneity, we use a GMM-IV estimator. Our ESG portfolios do not generate significant alphas during 2015-2019, corroborating the literature’s neutrality argument. We find no sufficient evidence for ESG factors to complement FF5. PFPs, nevertheless, may serve as ESG indices to quantify investment portfolio sustainability risks via performance attribution of the ESG factor tilt.

https://doi.org/10.1057/s41269-021-00223-6

As deliberative and participatory practices play a greater role in political decision-making of democratic political systems in many parts of the world, political parties must adapt to demands of an increasingly more cognitively mobilized citizenry. While there is a growing body of literature about the functioning of such procedures in different social and political contexts, little is known about politicians’ reasons behind introducing them. Based on qualitative data collected among Hungarian politicians, this paper brings evidence to empirically assess why local politicians introduced Participatory Budgeting in
Budapest, Hungary. Our findings suggest that politicians accept theoretical arguments for promoting citizens’ participation, newly elected local politicians expect to increase their party's local embeddedness by creating new contact opportunities and emphasize that the introduction of Participatory Budgeting is a ground for experimentation. The article ends with a discussion about arguments that are put forth in the literature on European Participatory Budgeting but missing from the views of politicians, and concludes by highlighting the risks of institutionalizing Participatory Budgeting.
Books and book chapters


https://m2.mtmt.hu/api/publication/32532675


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In K. Kovács, G. Csibra, & J. Gervain (Eds.), A Life in Cognition (pp. 163–174). Springer International Publishing.

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