

# New labour market developments in the context of digitalisation and social change

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Zoom



## Report of Abstracts

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## Approaches towards a circular economy and economic development

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Sustainable economic development covers different areas of society – economic, social, cultural, and environmental. The circular economy is viewed not only as an environmental opportunity but also as a new business model that provides employment opportunities. Knowledge transfer has an impact on economic development in different forms. The aim of the research is to detect the latest trends of circular economy and economic development in the scientific literature. Bibliometric analysis as a method was employed to total the frequency and progression of publications in the Clarivate Analytics database using keywords related to the circular economy and economic development. Moreover, the methods and indicators used in the most recent publications were overviewed. The results of the searches covering topics circular economy, GDP, R&D, and FDI verify the increasing interest in the circular economy as publications with the following topics are discoverable since 1997, and the tendency of exponential growth is seen from as late as 2015 to the present. The literature reveals that economic indicators are often related to environmental issues through different relationships.

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## Could everybody work from home? Personality traits and the labour supply for remote jobs

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This paper investigates the link between personality traits and the willingness to work at home. The COVID-19 crisis generated a sharp increase in the number of remote jobs. The types and proportions of ‘teleworkable’ jobs have been extensively studied, but the future of teleworking depends crucially on its impact on workers’ productivity and wellbeing. Some recent studies document a detrimental effect of remote working on mental health and productivity. Exploiting a large-scale survey including more than 1700 recent teleworkers providing information on the “Big Five” personality traits, we document strong links between personality and the willingness to work from home post-pandemic. *Ceteris paribus*, extravert individuals tend to be less willing to keep working from home, whereas it is the opposite for conscientious individuals and those open to experience. Likewise, Conscientiousness and Openness to Experience are positively associated with the perception of remote work as more productive than in the office. Among females, Extraversion is negatively associated with the perception of work in the office as more productive than from home. This heterogeneous effect of remote working suggests that a one-size-fits-all policy is unlikely to maximize neither firms’ productivity nor workers’ satisfaction. It also highlights that when estimating firm-level ability in switching to remote work, characteristics of individual workers should be considered.

Keywords: Teleworking, personality traits, productivity, worker wellbeing.

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## Geodata Approach to Measuring Accessibility of Public Services

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Although secondary education is not compulsory in Latvia, it plays an important role in professional development. Firms are looking for well-educated employees, especially with qualifications in STEM disciplines. We ask whether secondary education programs potentially leading to such qualifications are widely available in the country. To answer this question, we focus on four program types: (i) programs with orientation in Science, Technology, Engineering and Math (STEM programs); (ii) programs with orientation in Humanities and Social Sciences; (iii) programs without special orientation (general programs); (iv) programs implemented in state gymnasiums. For each program type, we develop walking and driving accessibility rings at five-minute intervals, based on estimated access time on a working day at 8:00 in the direction of the place of receipt of the service. In total, 12 rings (five minutes to one hour) were generated for each program type and travel mode. Estimates of the number of young people aged 15 to 18 living within each accessibility ring are based on the data from Population and Households Census 2021, obtained by a special agreement with the Central Statistical Bureau of Latvia. Other inputs were extracted from the State Education Information System and the State Land Service. The results of the study indicate that the spatial distribution of state gymnasiums in Latvia makes it difficult for students living in remote areas to receive higher-quality education. The access to STEM programs from remote rural areas is also poor, which facilitates the migration of future engineers to large cities in Latvia or migration to other countries.

**Keywords:** Access to secondary education, regional disparities, STEM programs, geodata.

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## One Size Does Not Fit All: What do Employees and Employers Make of Their Teleworking Experience?

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During the first half of 2021, 18% of employees in Latvia were most of the time working remotely. For most teleworkers and their employers, this was a new experience. How do teleworkers and their employers evaluate this experience? What will be the impact of this experience on the post-pandemic labour market? Our paper offers nuanced answers to these questions using data from two recent surveys conducted in Latvia: a representative survey of managers of private sector firms (N = 750) and a weighted web survey of recent teleworkers (N > 1700). The main finding from both surveys is substantial heterogeneity, even within industries, of preferences regarding the post-pandemic use of teleworking. However, employers are somewhat less enthusiastic than employees are in this regard. In the public sector (apart from education and health care), 64% of current (or recent) teleworkers post-pandemic would prefer to work only or mostly from home, while 25% have opposite preferences. In the private sector, these figures are similar: 68% vs. 26%. However, among private-sector employers practicing remote work those planning to let a majority of current teleworkers continue working mostly from home represent 33% of the workforce in this segment, while those planning to return all or most teleworkers back to office represent 57%, and 10% have not decided. We also analyse workers' perception of productivity at home and compare perceived challenges of teleworking among employees and employers. Commuting time and cost are important determinants of worker attitudes towards teleworking. Finally, we show that workers which prefer working from home (respectively, in the office) attach a substantial monetary value to the preferred mode. For those who prefer teleworking this value is well above commuting costs but seems to be in line with the value of commuting time.

**Keywords:** teleworking, worker vs employer perceptions, commuting, the value of time.

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## THE CONCEPTS OF KNOWLEDGE TRANSFER TOWARDS SOCIAL INNOVATION

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**Abstract:** Knowledge and technology transfer are defined as driving force for new business models, social innovations and economic development. The concepts of technology transfer and knowledge transfer are integrated into other multidisciplinary theories and fields of study such as business management, economics, engineering, medicine, computer science, environmental studies, and the etc. Such integration and analysis in various fields of study, proves that technology and knowledge transfer is a significant tool for development of the field. **Problem statement** is to compose the model of new knowledge and technology transfer that leads to social innovations. **The aim of the research** is to carry out detailed literature analysis in order to create new framework of technology and knowledge transfer that contributes to social innovation. Research methods. In order to clarify the concepts and models of technology and knowledge transfer, the analysis and synthesis of the scientific literature has been used. To explore the level of investigation and latest trends of the topic, the article provides bibliometric analysis on knowledge and technology transfer. **Main findings.** More than 5,000 articles have been found with the keywords technology transfer and knowledge transfer in the database WoS indexed over 30 years period, at six well-established citation indexes. **Results** of this study integrates concept of social innovation into theory of knowledge-based of firms. The model of knowledge transfer that contributes to social innovation has been proposed. Thereby, our article contributes to theory of knowledge-based of firms and the concept of social innovation.

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## The attractiveness of Baltics for inward FDI from Nordics

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Foreign direct investment (FDI) flows to the Baltic states have not been marked by consistent growth: there have been plunges short-lived recoveries, and now their growth remains sluggish. This situation risks putting the Baltic states in a 'middle-income trap', as FDI is a channel for transferring knowledge and technology, especially when FDI is received from advanced countries in the field of innovation. In this work, the authors analyze the attractiveness of the Baltic states for FDI from Scandinavian countries, which are leaders in innovation in Europe. The analysis starts by examining FDI by separate economic sectors in the Baltic States, then moves towards possible factors for attracting more significant FDI flows.

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## The effects of foreign direct investments on wages: Does the FDI's country of origin matter?

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It is well established in the scientific literature that employees in foreign-owned firms earn higher wages on average than their otherwise similar counterparts in domestic firms. This paper contributes to this strand of research by looking into whether the country of origin of the FDI accounts for differences in the wage gain from FDI. The analysis is based on Estonian matched employee-employer data for the years 2006-2018. The most frequent FDI in Estonia – Scandinavian – is compared to FDI from other regions and domestic firms. Mincer wage equations (ordinary least squares models with firm fixed effects) show that employees working in firms with Scandinavian FDI earn more on average than employees in firms with FDI from other regions, and the wages in Estonian capital owned firms lag further behind. However, the Mincer equations for particular groups of employees indicate that this is true for men and Estonians. Still, for women and other nationalities, there is no difference between the three groups of firms. For employees with tertiary education, the origin of FDI does not change the wage gain; only domestic (Estonian capital owned) firms pay less than firms with foreign FDI. For employees with primary and secondary education, the gain from working in firms with Scandinavian FDI is statistically significantly larger compared to working in the other two groups of firms. The changes in time and differences between economic sectors are important aspect in the analysis. For instance, the gender wage gap used to be the largest in firms with Scandinavian FDI but has decreased to be the smallest across the studied groups of companies in the latest years.

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## Using digitalisation for creating accessible statistics of a total enterprises' population on the Family Business example.

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Family businesses are among the most important contributors to the creation of wealth and employment in economies all over the world, and they range from small enterprises to large conglomerates that operate in multiple industries and countries (Ramadani & Hoy, 2015).

According to official data Family businesses employ 62% of the workforce and contribute 64% of the GDP in the United States (van der Vliet, 2021). Within Europe, studies tend to vary significantly.

But the statistical data on family firms is extremely limited. Previous family business studies to date have been confined to either listed firms, smaller samples of firms, or individual firm case studies.

We offer an improved and affordable methodology of identifying family firms in a total enterprises population data in different contexts. Our methodology is based on up-to-date digitalisation tools and allows identifying family firms with greater accuracy, as well as obtaining various performance indicators of family companies.

Using our proposed digitalization tools for creating accessible statistics on family business will contribute to a better understanding of various aspects of family business development, which, in turn, will lead to the development of various forms of family business and, therefore, build a more efficient labour market.