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INDUSTRIAL ORGANIZATION: PRODUCTIVITY, INNOVATION & TECHNOLOGY eJOURNAL

["Information Intermediaries and Mutual Trust: The Role of Social Capital in Facilitating Innovation and Creativity"](#) 

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This paper criticises the prevailing intellectual property theories and introduces the notions of social capital and mutual trust as significant elements which facilitate innovation and creativity.

["Public R&D Spending and Cross-Sectional Stock Returns"](#) 

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We examine how cross-sectional variation in stock returns is influenced by research and development (R&D) spending funded by the public sector, which accounts for a substantial portion of total U.S. investments in innovation. Firms located in states with more public R&D spending earn significantly higher abnormal stock returns. A long-short portfolio constructed using information on public R&D spending earns a monthly abnormal return of about 0.9%. The results persist after accounting for conventional pricing factors and state-level variables. Such an effect is likely due to market mispricing.

["Learning by Driving: Evidence from Taxi Driver Wages in Singapore"](#) 

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The significance of “Learning by doing” (LBD) in the economy has been disputed by economists. We use a unique dataset from a Singaporean taxi fleet consisting of 3,250 drivers with over 520 million data points that track cabdrivers’ minute-by-minute work routines for two years to test if taxi drivers exhibit LBD. After controlling for individual-level differences, i.e. socio-economics, we find strong evidence of LBD. We document this mechanism and show taxi drivers learn through temporal (when) and locational (where) and technology (booking) optimization. The study has implications for the contribution of LBD behaviour to the economy and its direct impact on individual wages. We also discuss the implication of our findings for taxi markets experiencing a rise in use of technology (i.e. booking systems based on applications), which has recently drawn the interest of policymakers.

["What Technology Says About Decision-Making: Evidence from Cricket's Decision Review System \(DRS\)"](#) 

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We assemble and analyze a novel data set that provides evidence on the quality of decision-making by on-field umpires and teams in the sport of cricket. The decision review system (DRS), introduced in November 2009, gives teams a limited right to challenge

an on-field umpire's decision. Of the 1201 on-field umpire decisions that were challenged in test matches by 9 playing teams between 2009 and 2014, 310 (25.81%) were reversed by a 3rd umpire. Controlling for several match and team characteristics, logistic regressions show that decisions that are ruled "out" (as opposed to "not out") by the on-field umpire are between 75% and 182% more likely to be reversed when the challenges involve LBWs. When challenges involve catches, decisions that are ruled "out" are equally likely to be reversed as decisions that are ruled "not out". For both LBW and caught challenges, home and away teams are equally likely to win a 3rd umpire reversal. Interacting a time variable with the main regressors, we are unable to reject the null hypothesis that the coefficients on the interaction terms are stable through time.

["Does Innovation Capacity Constraint Economic Growth in Republic of Macedonia"](#)

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The main goal of the paper is to answer the question if the lack of innovation capacity and low productivity is binding constraint to economic growth of Macedonian economy. To fulfill this goal we use two empirical techniques. Growth accounting production approach is a useful technique which estimate the relative contribution of technological progress to economic growth rate and allow us to identify the current growth pattern. The estimated results by applying growth accounting based of decomposition production approach show that the capital accumulation has significant contribution to growth of Macedonian economy. But, what is more worrying here is the fact that capital accumulation based on recent investment is not appropriately followed by technological progress, giving us a strong argument that this capital structure is not capable to promote the long-run economic growth. For illustration, our estimated results show that the contribution of technological progress as a part of total factor productivity is negligible (only 8.5% of the average rate of economic growth in the analyzed period is based on technological progress) compare with its contribution in more developed countries.

The other method that was used in the paper so as to fulfill the main goal of the paper is the international benchmark analysis. This empirical tool allowed us to investigate the innovation capacity of Macedonian economy in a comparative manner with the countries in the wide region via number of patent's application and firms' capacity for adaptation and transfer of new technology. The number of registered patents is much larger than expected from a country with such a size and development level as Republic of Macedonia, but the analyze of applicants structure show that non-resident applicants are a bit larger than the resident applicants, indicating that domestic science and R&D sector is not enough competitive. Additionally, the analysis indicates the Macedonian companies lagging behind the companies in more countries in the region regarding the expenditure on R&D and the abilities to

adopt new technology. This paper tend to give a useful insights to policymakers in Macedonia that the process of creation national innovation system.

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This eJournal distributes working and accepted paper abstracts covering studies of productivity, innovation, technological progress, and intellectual property. Specific areas of focus include measurement issues, the relationship between market structure and innovation, patents and patent races, sources of technological progress, R&D, and both diffusion and imitation of new technologies. The topics in this eJournal include the subjects in sections L1 and O3 in the JEL Classification System.

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