## IARIW-ESCoE Conference "Measuring Intangible Assets and Their Contribution to Growth"

## **Network Effects and Research Collaborations**

Dennis Essers, National Bank of Belgium, dennis.essers@nbb.be

Francesco Grigoli, International Monetary Fund, fgrigoli@imf.org

Evgenia Pugacheva, International Monetary Fund, epugacheva@imf.org

Co-authored research papers are a key channel through which knowledge and ideas are generated and diffused. This paper studies how research collaborations are structured, initiated, and maintained, drawing on the co-authorship network of the International Monetary Fund (IMF)'s Working Papers series over almost three decades. Being a widely read research outlet where authors express their personal views on topics of their interest, and given that IMF staff does not face the typical "publish-or-perish" incentives of the academia, the IMF Working Papers series constitutes an ideal testing ground to examine the endogenous nature of co-authorship formation, especially when combined with rich demographic and employment information on authors. We show that the co-authorship network is characterized by many authors with few direct coauthors, yet indirectly connected to each other through short co-authorship chains. We find that, above all, two researchers are significantly more likely to collaborate if their distance in the coauthorship network is shorter, particularly in the case of first-time collaborations. In addition, more productive authors (with more well-cited papers) and authors with different co-author network sizes are more likely to start and continue collaborations, possibly reflecting synergies between senior and junior researchers. Our results also indicate that being employed in the same department and having citizenship of the same region help to start and repeat collaborations, while greater overlap in broadly defined research areas does not.