

## IARIW-ESCoE Conference

### “Measuring Intangible Assets and Their Contribution to Growth”

---

#### Vocational Training Support and SME Innovation: Panel Study of Korean Firms

*Vladimir Hlasny, Ewha Womans University, vhlasny@gmail.com*

This study examines the effect of government support for SME competencies on firms' innovation. We investigate SMEs' patent applications under varying degrees of government support, accounting for firms' market position, ownership and management structure, prior changes in firms' technology, product and processes, and other firm characteristics. Alternative hypotheses about management motivation – lazy manager, career concerns, and special East-Asian institutional constraints hypotheses – are evaluated. We use censored-data methods on unique panel data of 595 Korean firms over 2005–2015 from the Korean Human Capital Corporate Survey, Intellectual Property Office, and National Investment Commission. Regression discontinuity estimator accounts for potential endogeneity of government support for vocational training at firms.

Preliminary results show that firms receiving training support are more innovative than firms without support, but latent time-constant effects could play a role. However, the regression-discontinuity model suggests that firms that succeeded only marginally at receiving support have higher innovative output than non-recipient firms near the eligibility threshold. This suggests that public support had the desired effect on firms' technological capabilities, which cannot be discounted as a simple crowding-out effect. We also confirm that management–ownership separation within firms is conducive to innovation, that market competition has an inverse-U shaped effect, and that management–ownership separation has a substitutable relationship with competition in overcoming managers' effort avoidance.