

RESEARCH AND DEVELOPMENT

**SCHOOL OF BUSINESS
AND GOVERNANCE**



2024

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SCHOOL OF BUSINESS AND GOVERNANCE



SCHOOL OF BUSINESS AND GOVERNANCE

Dean: Senior Lecturer
MARI AVARMAA
e-mail: mari.avarmaa@taltech.ee

Vice-Dean for Research: Tenured Full Professor
TIINA RANDMA-LIIV
e-mail: tiina.randma-liiv@ttu.ee

MAIN FIGURES 2024

(as of Dec. 31, 2024)

187 Academic staff Incl. 32 professors
67 researchers

82 Doctoral students 9 Defended doctoral dissertations

213 Scientific publications*

* Data from the Scopus (as of February 28, 2025)

DEPARTMENTS

DEPARTMENT OF BUSINESS ADMINISTRATION

Director: MERLI REIDOLF, merli.reidolf@taltech.ee

DEPARTMENT OF ECONOMICS AND FINANCE

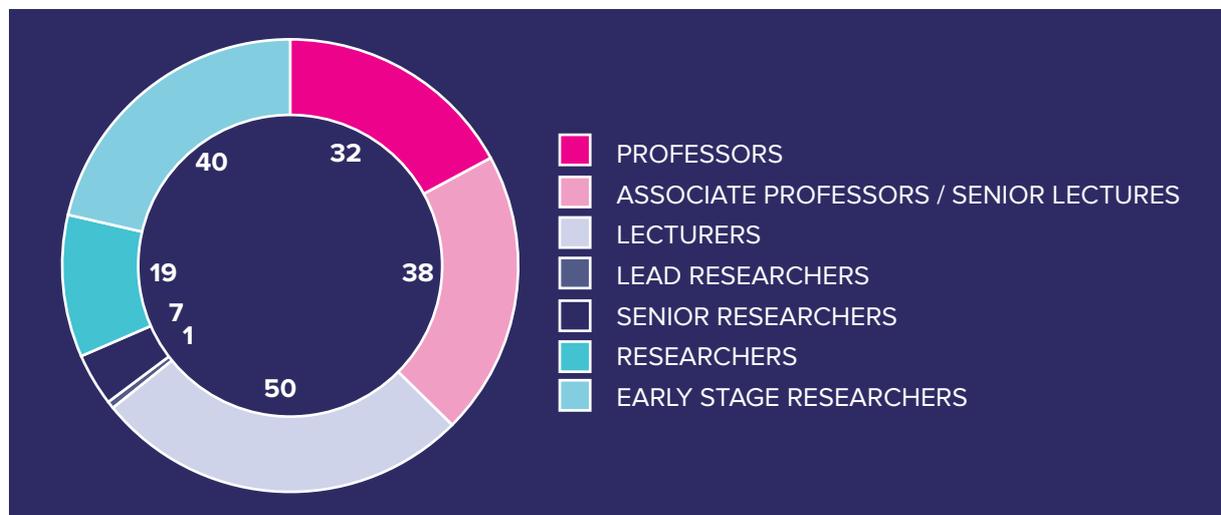
Director: Associate Professor KARIN JÖEVEER, karin.joeveer@taltech.ee

DEPARTMENT OF LAW

Director: Tenured Full Professor TANEL KERIKMÄE, tanel.kerikmae@taltech.ee

RAGNAR NURKSE DEPARTMENT OF INNOVATION AND GOVERNANCE

Director: Tenured Full Professor ERKKI KARO, erkki.karo@taltech.ee



DEPARTMENT OF BUSINESS ADMINISTRATION

Director: **MERLI REIDOLF**,
merli.reidolf@taltech.ee

MAIN FIGURES 2024

(as of Dec. 31, 2024)

83 Academic staff Incl. 13 professors
27 researchers

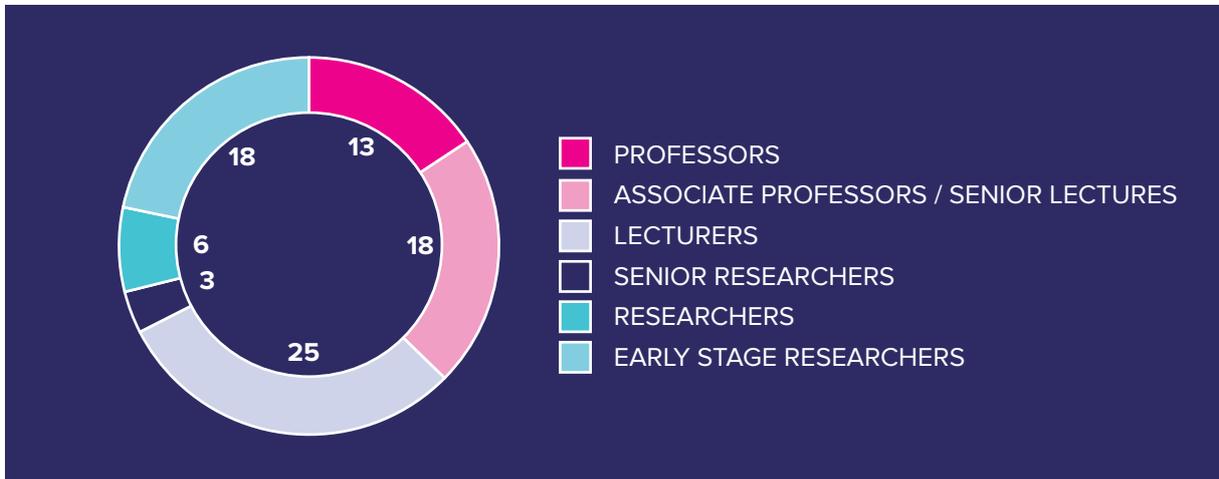
31 Doctoral students 1 Defended doctoral dissertations

97 Scientific publications*

* Data from the Scopus (as of February 28, 2025)

THE DEPARTMENT CONDUCTS RESEARCH WITHIN 5 RESEARCH GROUPS:

- **ACCOUNTING RESEARCH GROUP.**
Head: Visiting Professor JIRI STROUHAL, jiri.strouhal@taltech.ee
- **ENTREPRENEURSHIP RESEARCH GROUP.**
Head: Tenured Associate Professor AKI HARIMA, aki.harima@taltech.ee
- **MARKETING RESEARCH GROUP.**
Head: Associate Professor IIVI RIIVITS-ARKONSUO, iivi.riivits@taltech.ee
- **ORGANISATION AND MANAGEMENT RESEARCH GROUP.**
Head: Tenured Associate Professor MARI-KLARA STEIN, mari-klara.stein@taltech.ee
- **SUSTAINABLE VALUE CHAIN MANAGEMENT RESEARCH GROUP.**
Head: Tenured Associate Professor WOLFGANG GERSTLBERGER, wolfgang.gerstlberger@taltech.ee



ACCOUNTING RESEARCH GROUP

Head: Visiting Professor JIRI STROUHAL, jiri.strouhal@taltech.ee

Members: Sefik Istemihan Demirag, Mari Avarmaa, Natalie Aleksandra Gurviš-Suits, Tarmo Kadak, Paavo Siimann, Vaiva Kiaupaite-Grušniene

Postdoctoral researcher: Levani Bzhalava

Doctoral student: Hla Thel Phyu

TOPICS AND COMPETENCES

KEYWORDS: international accounting harmonisation, financial performance evaluation, critical perspectives in accounting, ESG reporting, accounting education, real-time accounting and digitisation, costing and budgeting, strategic management accounting, green accounting, cash flow management, earnings management, accounting for financial innovations, performance management

The accounting group is active in various related research fields, using both quantitative and qualitative research methods. The research is interdisciplinary and uses critical research methods to explore some of the above research themes.

The group has active and growing links with business organisations both in Estonia and worldwide and is also actively consulting Estonian government institutions on their strategic development and training.

IN 2024 The Accounting research group continued in its projects focused on the linkage between financial reporting and corporate social responsibility (CSR) with two major projects



(EU Taxonomy Reporting Automation; Training Finance Sector Professionals on Environment Social Governance Projects and Investments). Since 2024, the group has been a co-executor in an applied research project funded by the Chartered Institute of Management Accountants, focusing on ESG Reporting from the perspective of Czech and Estonian stakeholders (the main investigator is Skoda Auto University, Czechia). The focus on this area will continue also in future years, gained data promise relevant research paper outputs from year 2025 onwards.

SELECTED PROJECTS

- VERT23088 “*Training Finance Sector Professionals on Environment Social and Governance Projects and Investments*” (2023–2026)
- TF23058 “*EU taxonomy reporting automation*” (2023–2024)
- VEU22026MM1 “*Demo project “Creating and validating a prototype of a software robot based on artificial intelligence for automatic modeling, planning, and optimization of production processes at Aktaprint Ltd”*” (2024–2024)

SELECTED PUBLICATIONS

Laidroo, L.; Küttim, M.; Rumma, K.; Siimann, P.; Avarmaa, M. (2024). *Mandatory annual report filings of private companies – why late or missing?* *Baltic Journal of Management*, 19, 1, 123–144. DOI: 10.1108/BJM-11-2022-0431.

Kadak, T.; Laitinen, E. K. (2023). *How different are performance management systems? Empirical typology of performance management systems.* *Journal of Business Economics and Management*, 24 (2), 368–386. DOI: 10.3846/jbem.2023.19248.

Avarmaa, M.; Torkkeli, L.; Laidroo, L.; Koroleva, E. (2022). *The interplay of entrepreneurial ecosystem actors and conditions in FinTech ecosystems: An empirical analysis.* *Journal of Entrepreneurship, Management and Innovation*, 18 (4), 79–113. DOI: 10.7341/20221843.

More information: <https://taltech.ee/en/departments/business-administration/research-groups#p22765>

ENTREPRENEURSHIP RESEARCH GROUP

Head: Tenured Associate Professor **AKI HARIMA**, aki.harima@taltech.ee

Members: Susanne Durst, Sirje Ustav, Urve Venesaar, Jan Harima, Basel Osama Sayed Ahmed Hammoda

Doctoral students: Airi Noppel, Tommaso Aguzzi, Elisabeth Paula Martina Kraut, Ekaterina Demiankova, Talshyn Tokyzhanova, Johann Timo Anton Wenzel Theisen, Ruzlin Akter, Jaime Joel Rodriguez Santiago

TOPICS AND COMPETENCES

KEYWORDS: entrepreneurial ecosystems; entrepreneurship education, inclusive entrepreneurship; migration; transnationalism; entrepreneurial competencies, entrepreneurial growth, social entrepreneurship, sustainable entrepreneurship; student and academic entrepreneurship; digitalization; twin transitions

The Entrepreneurship research group is dedicated to pioneering research and fostering innovation in the field of entrepreneurship.

We focus on key areas such as entrepreneurial ecosystems, transnational entrepreneurship, and entrepreneurship education. Our work spans both national (Estonian) and international contexts, ensuring that our research is comprehensive and globally relevant. We are committed to responsible research practices, aiming to enhance the conditions that foster entrepreneurial activity and growth and providing insights that can inform policies and practices to support diverse entrepreneurial endeavors.



Our mission is to advance the field of entrepreneurship research, develop and deliver innovative educational programs, and make a significant social impact.

IN 2024 the members of the group conducted GEM (Global Entrepreneurship Monitoring) study. An overview of the current situation of the Estonian business landscape and the functioning of the business ecosystem was prepared, and the opportunities and obstacles for business development were identified.

SELECTED PROJECTS

- KOHTO7 “*Building a Resilient Entrepreneurial Ecosystem: Unpacking Resource Recycling Mechanisms*” (2024–2026)
- VERT21043 “*Knowledge Management Training for KIBS SMEs*” (2021–2024)
- MINM23017 “*Global Entrepreneurship Monitor 2023 Estonia Study*” (2023–2024)

SELECTED PUBLICATIONS

Harima, A.; Harima, J.; Freiling, J. (2024). *Ecosystem Orchestration: Unpacking the Leadership Capabilities of Anchor Organizations in Nascent Entrepreneurial Ecosystems*. *Entrepreneurship Theory and Practice*, 48 (6), 1404–1450. DOI: 10.1177/10422587241241824.

Marquardt, L.; Harima, A. (2024). *Digital boundary spanning in the evolution of entrepreneurial ecosystems: A dynamic capabilities perspective*. *Journal of Business Research*, 182, #114762. DOI: 10.1016/j.jbusres.2024.114762.

Winkler, C.; Hammoda, B.; Noyes, E.; Van Gelderen, M. (2023). *Entrepreneurship Education at the Dawn of Generative Artificial Intelligence*. *Entrepreneurship Education and Pedagogy*, 579–589. DOI: 10.1177/25151274231198799.

More information: <https://taltech.ee/en/departments-business-administration/research-groups#p22753>

MARKETING RESEARCH GROUP

Head: Associate Professor [IIVI RIIVITS-ARKONSUO](mailto:iivi.riivits@taltech.ee), iivi.riivits@taltech.ee

Members: Katrin Paadam, Linda Desire Hollebeek, René Arvola, Kristel Kaljund, Jana Kukk, Liis Ojamäe, Oliver Parts, Volker Kuppelwieser, Aditi Sarkar

Doctoral students: Helen Vaikma, Airi Freimuth, Huma Ittefaq, Eliis Salm

TOPICS AND COMPETENCES

KEYWORDS: customer experience, service marketing, urban studies, customer and stakeholder engagement, customer journey, stakeholder journey, service recovery management

Research within the group spans four separate sets of projects, which are closely aligned with novel learning and teaching.

Consumption is a significant topic incorporating consumer behaviour theorisations with a focus on the consumer/customer experience, consumer journeys, cosmopolitanism, consumer ethnocentrism, ethical and sustainable consumption.

The sub-stream of service design is focused around the new dLab initiative, building upon existing and forging new collaborations, including through the collaborative Service Design Conference. Another stream of services marketing focuses on applying gamification strategies in service failure and recovery of healthcare services.

In services and relationship marketing, the investigations focus on customer service-related engagement, digital value co-creation, disciplining and compliance-based interactions between providers and consumers. Empirical and conceptual studies from all four sub-streams of this research area have appeared in top journals in the area. The topic is led by Professor L. Hollebeek. Critical examinations of customer-provider relationships, service provision, recovery management, and customer engagement have produced new, state-of-the-art theories complementing research on the stakeholders' interplay in service/product innovation.



Urban and residential research stream focuses on transforming urban realities conceived within the interplay of socio-economic, cultural and spatial-material processes, as well as within the reciprocity of individual and institutional strategies. The interdisciplinary perspective introduced in the analysis of processes observed in residential and public spaces incorporates theoretical and methodological approaches applied in sociological, architectural, planning and business studies.

IN 2024 Adjunct Professor Linda D. Hollebeek was selected for the fifth consecutive year among Clarivate's Highly Cited Authors. A total of 6886 researchers are included in the list globally, and 41 in Economics and Business. Only 7 Marketing Professors are on the list in 2024.. Linda Hollebeek focuses her research on customer/consumer and stakeholder engagement using digital technologies (including social media, online communities, and artificial intelligence), including innovation, ethics, and value creation.

SELECTED PROJECTS

- TF23058 "[*EU taxonomy reporting automation*](#)" (2023–2024)
- LMMEE23109 "[*The Qualitative Part of the Analysis of the Measures Provided by ETAG to Support Foreign Science Collaboration*](#)" (2023–2024)
- VHE22005 "[*RENEW. Re-cycling of Epoxys from Nonferrous E-Waste*](#)" (2022–2024)

SELECTED PUBLICATIONS

Hollebeek, L.D.; Anselmsson, J.; Adomaviciute-Sakalauske, K.; Krumm, K.; Jansson, J.; Wait, M.; Ooi, B.; Riivits-Arkonsuo, I.; Lubbe, I. (2024). [*Online Content Creators' and Viewers' Interdependent Journeys*](#). *Services Marketing Quarterly*, 45 (3), 296–318. DOI: 10.1080/15332969.2024.2364128.

Ittefaq, H.; Akhtar, N.; Siddiqi, U. I.; Islam, T.; Kuzior, A. (2024). [*The betrayal puzzle: Unraveling the connection between inauthenticity, corporate wrongdoing and brand betrayal with avoidance and reparation*](#). *Journal of Retailing and Consumer Services*, 76, #103597. DOI: 10.1016/j.jretconser.2023.103597.

Akhtar, N.; Ittefaq, H.; Siddiqi, U. I.; Islam, T.; Hameed, Z.; Kuzior, A. (2024). [*Zero-COVID and retail: Using multi-wave data to examine the role of perceived risk and psychological factors in shopping abandonment*](#). *Journal of Retailing and Consumer Services*, 78, #103737. DOI: 10.1016/j.jretconser.2024.103737.

More information: <https://taltech.ee/en/department-business-administration/research-groups#p22757>

ORGANISATION MANAGEMENT RESEARCH GROUP

Head: Tenured Associate Professor **MARI-KLARA STEIN**, mari-klara.stein@taltech.ee

Members: Karin Reinhold, Mike Franz Wahl, Marina Järvis, Merle Ojasoo, Liina Randmann, Maris Zernand-Vilson, Aive Pevkur, Piia Tint, Tiiu Kamdron, Tarmo Koppel, Marge Sassi

Postdoctoral researcher: Madison Winter Kurchik

Doctoral students: Velli Parts, Mari Kurashvili, Olga Tsenter; Rusudan Tsiskaridze, Maria Kütt, Ebru Metin, Kaspar Roost, Ljudmila Linnik, Amit Gupta, Artur Toikka, Anna Litvinenko, Akaki Tartarashvili, Mari-Liis Ivask, Olga Tšernikova

TOPICS AND COMPETENCES

KEYWORDS: leadership, well-being, responsible and ethical organizational development, leader-follower relationship, strategic management, knowledge and innovation management, risk management, HRM, change management, occupational health, organizational psychology, occupational safety and risks, future of work and digital transformation

The research group is active in a number of research fields related to organisation and management, using different theoretical lenses and research methods. The primary research interests can be grouped under leadership, future of work, well-being and responsible, ethical organizational development and sustainable management.

The group collaborates with a number of internationally renowned researchers working within the confines of organization and management, future of work, occupational safety and related research areas.

The purpose of the group is to extend the scientific body of knowledge concerning the related fields of organization and management and to contribute to practice, by presenting opportunities and challenges confronting Estonian organizations and beyond. The



overall interest of the group is to investigate how organizations transform their knowledge and access to new digital solutions into innovative outputs to achieve and maintain sustainable business development. The group members have a broad portfolio of expertise gained from working with a variety of national and international private and public organizations. The aim is to take advantage of it and use this expertise to develop it further for the greater good.

IN 2024, two internationally funded research projects focusing on platform work, digital education and gender diversity were initiated under the leadership or involvement of the group members. Additionally, internationally funded projects addressing occupational mental health, psychosocial risks, and active mobility continued.

SELECTED PROJECTS

- STP15 “*Work worth doing? Value of platform work in Estonia*” (2022–2024)
- VEU23077 “*The opportunities for industrial relations to prevent and manage psychosocial risks in post-pandemic workplaces*” (2023–2026)
- VIR23053 “*Mental Health Matters – Making Enterprises in the BSR more Resilient by Tackling Psychosocial Risks in the Workplace*” (2023–2025)

SELECTED PUBLICATION

Gol, E. S.; Avital, M.; Stein, M.-K. (2024). *Crowdworking: Nurturing Expert-Centric Absorptive Capacity*. *Information Systems Research*, 35 (4), 1657–1680. DOI: 10.1287/isre.2020.0413.

Lämsä, A.-M.; Ojasoo, M.; Jyrkinen, M.; Pučetaité, R. (2023). *Appearance-based discrimination against young women in the workplace*. *Qualitative Research in Organizations and Management An International Journal*, 18 (2), 125–141. DOI: 10.1108/QROM-02-2022-2292.

Kurashvili, M., Reinhold, K., & Järvis, M. (2022). *Managing an ageing healthcare workforce: a systematic literature review*. *Journal of Health Organization and Management*, (ahead-of-print).

More information: <https://taltech.ee/en/department-business-administration/research-groups#p22749>

SUSTAINABLE VALUE CHAIN MANAGEMENT RESEARCH GROUP

Head: Tenured Associate Professor WOLFGANG GERSTLBERGER,
wolfgang.gerstlberger@taltech.ee

Members: Gunnar Klaus Prause, Üllas Ehrlich, Tarmo Kalvet, Marek Tiits, Merle Küttim, Tarvo Niine, Jelena Hartšenko, Daria Podmetina, Tarmo Tuisk, Jaana Merisaar

Post-doctoral Researchers: Chahinez Ounoughi, Georgi Hrenov, Helery Tasane

Doctoral students: Vera Gerasimova, Tarlan Ahmadov, Mohammadhossein Bagheri, Mihhail Kirejev, Margit Kull, Arseni Kotov, Narmin Eynizada, Sina Atari

TOPICS AND COMPETENCES

KEYWORDS: sustainable business development, operations management, sustainable innovation, environmental economics, green economy, smart supply chain management, organizational learning, data science

Sustainable value chain management deals with tasks and processes aiming at preparing and supporting the implementation of growth opportunities and innovations within the constraints of a firm's strategy. Thus, sustainable value chain management is focused on preparing, planning, implementing and evaluating a continuous stream of potential innovations.

The research group investigates potential growth and innovation opportunities within and between organizations by using interdisciplinary approaches from business, sustainability management (e.g. "Circular Economy") and environmental economics, operations and innovation management, engineering, IT, design and social sciences in the context of the European agenda for smart, sustainable and inclusive growth. Consequently, the research group deals with innovations and growth opportunities in the areas of digitalization, smart production and Industry 4.0, Big Data, strategic alliances and networks as well as industrial strategy and competitiveness studies.



The research work usually takes place in the framework of European and/or national projects and in the context of the university – business cooperation.

IN 2024, members of the research team successfully participated in several studies:

- The latest international GEM 2023/2024 (Global Entrepreneurship Monitor) survey resulted in a report that was presented in Estonia in collaboration with the "Entrepreneurship" research group of the department.
- Participation in the S3 (Safety, Security and Safeguards) Expert Group, which consists of practitioners and academics from across Europe.

Contributions were made to cooperation with the scientific journal Academy of Management Proceed-ings, with a focus on the field of Multi-dimensional Time and Innovation Ecosystems.

SELECTED PROJECTS

- ÖÜF22 "*Just transition governance models and entrepreneurship pathways: monitoring and analyses*" (2024–2028)
- PRG1573 "*Economic Complexity, Machine Learning and Economic Policy*" (2022–2025)
- VFP20054 "*Industrial Strategy and Competitiveness Studies at TalTech*" (2020–2024)

SELECTED PUBLICATIONS

Kalantaridis, C.; Küttim, M. (2023). Multi-dimensional time and university technology commercialisation as opportunity praxis: a realist synthesis of the accumulated literature. Technovation. DOI: 10.1016/j.technovation.2022.102685.

Prokop, V.; Gerstlberger, W.; Zapletal, D.; Gyamfi, S. (2023). Do we need human capital heterogeneity for energy efficiency and innovativeness? Insights from European catching-up territories. Energy Policy, 177. DOI: 10.1016/j.enpol.2023.113565.

Ahmadov, T.; Durst, S.; Gerstlberger, W.; Kraut, E. (2023). SMEs on the way to a circular economy: insights from a multi-perspective review. Management Review Quarterly. DOI: 10.1007/s11301-023-00380-2.

More information: <https://taltech.ee/en/departments-business-administration/research-groups#p22761>

COMPANIES' PRODUCTIVITY, INVESTMENTS AND EXPORT COMPETITIVENESS

Head of the research group: Tenured Full Professor [KADRI MÄNNASOO](#),
kadri.mannasoo@taltech.ee

Members: Juan Carlos Cuestas Olivares, Tõnn Talpsepp, Simona Ferraro, Kaja Lutsoja, Jelena Matina, Kirsti Rumma, Heili Hein-Sula

Doctoral students: Kaido Kepp, Katriin Pakkas, Artjom Saia, Helery Tasane, Miina Höbenaël

TOPICS AND COMPETENCES

KEYWORDS: productivity, innovation, R&D, investments, export, digital economy

The line of research pursues micro-level or regional comparative empirical studies. The main research focuses are related to capital and labour productivity, innovation, investments and competitiveness for explaining the economic growth in small, open and export-oriented economies. The aim is to investigate the drivers and obstacles of companies' productivity enhancing investments into adoption of new technologies and production processes, training of employees, R&D and innovation.

The line of investigation seeks for a better understanding on regional convergence issues while integrating the spatial aspects and institutional factors into the research framework. The research aims at new evidence on digital innovation and digital empowerment and on their effect on productivity growth and economic welfare. The research employs contemporary quantitative economic research techniques and econometric estimations and contributes to policy making while providing evidence based quantitative estimations on the impact of macro- and business-environmental factors and individuals' and companies' decisions and incentives that have an effect on productivity, innovation and export competitiveness.

IN 2024: As a result of the studies, the members of the research group have produced diverse insights across social, economic, and educational domains.

The study by Männasoo, Höbenaël and Ridala has found that language skills, especially English, are associated with higher employment for younger men

in Latvia. Furthermore, the labor market advantages resulting from English language proficiency are more in favour of native Russian rather than Latvian speakers.

The first study by Cuestas et al. demonstrated that structural breaks in real exchange rates in Central and Eastern Europe, caused by the great recession, reveal competitiveness gains from capital inflows influenced by supply and demand factors. The second study has shown that gas price shocks in EU28 countries have short-lived and asymmetrical effects on real exchange rates and current accounts.

The study by Agasisti and Ferraro demonstrated that private schools are found to be more efficient than public ones, emphasizing the importance of assessing school performance systematically. The study of Löfstrom, Poom-Valickis, and Rumma showed how Estonian teachers' job satisfaction correlates with student-centred beliefs and the affective metaphors they associate with their role, underlining the interplay of beliefs, emotions, and professional contentment.

SELECTED PROJECTS

- VEU22057 "[*Text, functional and other high-dimensional data in econometrics: New models, methods, applications*](#)" (2022–2026)
- LMEAE22102 "[*Enablers and barriers to the introduction of circular economic practices*](#)" (2022–2023)
- RAM-KOS3 "[*Competence Center for the Development of Financial Literacy*](#)" (2024–2027)

SELECTED PUBLICATIONS

Männasoo, K.; Höbenaël, M.; Ridala, S. (2024). [*Language skills and unemployment: Post-Soviet bilingualism in Latvia. Post-Communist Economies*](#), 36 (2), 222–261. DOI: 10.1080/14631377.2023.2263215.

Cuestas, J.C.; Monfort, M.; Ordóñez, J. (2024). [*Have real exchange rates and competitiveness in Central and Eastern Europe fundamentally changed? International Review of Economics & Finance*](#), 89 (A), 618–628. DOI: 10.1016/j.iref.2023.07.072.

Cuestas, J. C.; Monfort, M.; Ordóñez, J. (2024). [*Gas price shocks, the current account, and the real exchange rate: an empirical analysis for the EU. Finance Research Letters*](#), 60, #104840. DOI: 10.1016/j.frl.2023.104840.



ECONOMIC PERFORMANCE: INTEGRATION, GOVERNANCE AND POLICY

Head of the research group: Tenured Full Professor [KARSTEN STAEHR](#),
karsten.staehr@taltech.ee

Members: Natalia Levenko, Alice Mikk

Doctoral students: Gerda Kirpson, Katri Urke, Ann Merit Toiger

TOPICS AND COMPETENCES

KEYWORDS: macroeconomics, international integration, international finance, public economics, labour economics, household economics, economic governance

The research group focuses on contemporary policy challenges and seeks to uncover macroeconomic and microeconomic relationships of societal importance. Key areas of research include macroeconomic dynamics, monetary economics, fiscal sustainability, inflation, expectations formation and financial stability.

The research is mainly empirical but always grounded in economic theory. The research typically uses contemporary econometric methodologies using data from public or proprietary sources.



Most of the group members also work in Bank of Estonia and in that capacity participate in decision-making and formulation of policies.

IN 2024: The members of the group worked on several projects that investigated the impact of policies, regulation and external developments on economic performance.

A study focusing on factors affecting euro area inflation found that demand shocks have been very important over time.

The long-term income convergence in post-communist countries was examined and it was concluded that convergence has been very slow, except in EU countries.

A study assessing the impact of regulation of bank lending on housing loans in Estonia found a clear negative relationship between regulation and loan volumes.

A project is underway to examine the impact of macroeconomic and fiscal shocks on the development of European countries' debts.

SELECTED PUBLICATIONS

Kirpson, G.; Staehr, K. (2024). *Do Individuals Expect the Phillips Curve? Evidence from the European Consumer Expectations Survey*. *Economics Letters*, 234, #111430. DOI: 10.1016/j.econlet.2023.111430.

Kirpson, G.; Randveer, M.; Reigl, N.; Staehr, K.; Uusküla, L. (2024). *Macroeconomic News and Sovereign Interest Rate Spreads before and during Quantitative Easing*. *Applied Economics*, 56 (56), 7487–7500. DOI: 10.1080/00036846.2023.2287556.

Staehr, K.; Tkačevs, O.; Urke, K. (2024). *Fiscal Performance under Inflation and Inflation Surprises: Evidence from Fiscal Reaction Functions for the Euro Area*. *Review of World Economics*, 160 (4), 1477–1504. DOI: 10.1007/s10290-024-00536-6.

FINANCE AND THE DIGITAL ECONOMY: FINANCIAL BEHAVIOUR, MARKETS, AND COMPETITIVENESS

Head of the research group: Associate Professor [LAIVI LAIDROO](mailto:laivi.laidroo@taltech.ee), laivi.laidroo@taltech.ee

Members: Karin Jõeveer, Mari Avarmaa, Kristjan Liivamägi, Tõnn Talpsepp, Triinu Tapver, Kalle Ahi, Pavlo Illiashenko

Doctoral students: Kaido Kepp, Silvia Viidik

TOPICS AND COMPETENCES

KEYWORDS: FinTech, financial intermediation, digital economy, financial economics, behavioural finance

The research group seeks to contribute to the international academic literature that deals with contemporary topics in financial economics. Special attention is paid to the emerging topics related to digitalisation in finance (e.g., crowdfunding, ICOs, cryptocurrencies, digital wallets, robo-advisory) as well as to the business models and ecosystems of FinTechs and sustainable finance. The research is also linked to the fields of industrial organisation and economic development, innovation, technological change and growth.

Traditional and behavioural finance theories are utilised to investigate topics related to corporate



finance, household finance, financial markets, and banking with the aim of enhancing the understanding of the financial behaviour of individuals, firms and financial intermediaries, and the linkages between them (mainly in the European context). Interdisciplinary approach is used to address questions related to business, legal and technological aspects of digitalisation in finance and its economic impact for determining the factors needed for improving the competitiveness and performance of the national economies through the employment of suitable regulative measures.

IN 2024, the group focused more on refocusing its research activities more towards household finance. It will take a while for these changes to be reflected in the publication activity of the group.

SELECTED PROJECTS

- LMEAE22102 *Financial literacy learning outcomes by age group to the Ministry of Finance* (2022–2023)
- RAM-KOS3 “*Competence Center for the Development of Financial Literacy*” (2024–2027)

SELECTED PUBLICATIONS

Laidroo, L.; Küttim, M.; Rumma, K.; Siimann, P.; Avarmaa, M. (2024). *Mandatory annual report filings of private companies – why late or missing?* *Baltic Journal of Management*, 19, 1, 123–144. DOI: 10.1108/BJM-11-2022-0431.

Będowska-Sójka, B.; Kliber, A.; Laidroo, L. (2023). *Has the pandemic changed the relationships between fintechs and banks?* *Operations Research and Decisions*, 33 (4), 15–33. DOI: 10.37190/ord230402.

Jõeveer, K.; Kepp, K. (2023). *What drives drivers? Switching, learning, and the impact of claims in car insurance.* *Journal of Behavioral and Experimental Economics*, 103. DOI: 10.1016/j.socec.2023.101993.

HUMAN CAPITAL, MENTAL HEALTH AND SOCIO-ECONOMIC INCLUSION FOR PROMOTING SUSTAINABLE DEVELOPMENT

Head of the research group: Tenured Associate Professor [AARO HAZAK](#),
aaro.hazak@taltech.ee

Members: Simona Ferraro, Merike Kukk, Tairi Rõõm

Postdoctoral Researcher: Leonardo Ivarola

Doctoral students: Liina Rebane, Vladislav Fjodorov, Miina Höbenaël, Helery Tasane,
Artjom Saia, Heili Hein-Sula

TOPICS AND COMPETENCES

KEYWORDS: institutions, sustainable economic development, efficiency, wellbeing, human capital, individual behaviour, mental health

The research group seeks to investigate the links between health related behavioural and institutional factors and various economic outcomes that can influence socio-economically sustainable development. In particular, the relationship between mental health and economic performance, human capital endowment, socio-economic inclusion and inequality, efficient implementation of modern technologies and work regulation/

practices are in focus of the studies, particularly in an interdisciplinary context. Also, sustainable development problems related to climate change are studied. The results may cast light on some possibly latent or underestimated factors contributing to development and wellbeing issues and for inefficiencies in the use of human capital and modern technology in economies.

IN 2024 research activities were conducted in cooperation with economics and psychiatry researchers from Helsinki and Aalto universities as continuation of the Horizon 2020 project “*Individual Behaviour and Economic Performance: Methodological Challenges and Institutional Context*”, recognised as a success story by the European Commission in 2024.

SELECTED PROJECT

- VFP20046 (H2020), *Individual Behaviour and Economic Performance: Methodological Challenges and Institutional Context* (IBEP) (2020–2023)

SELECTED PUBLICATIONS

Rebane, L.; Kukk, M.; Rõõm, T. (2024). *Wealth disparities between elderly immigrants and natives: a study of Estonia and Latvia*. *Baltic Journal of Economics*, 24 (2), 203–238. DOI: 10.1080/1406099X.2024.2395671.

Kukk, M.; Levenko, N. (2024). *Interest rate spreads: Different stories for different types of loan*. *Research in International Business and Finance*, 72 (A), 102524. DOI: 10.1016/j.ribaf.2024.102524.

Kukk, M.; Levenko, N. (2024). *Measuring the effects of borrower-based policies on new housing loans*. *Economic Analysis and Policy*, 82, 666–684. DOI: 10.1016/j.eap.2024.04.011.



DEPARTMENT OF LAW

Director: Tenured Full Professor
TANEL KERIKMÄE,
tanel.kerikmae@taltech.ee

MAIN FIGURES 2024

(as of Dec. 31, 2024)

24 Academic staff Incl. 4 professors
8 researchers

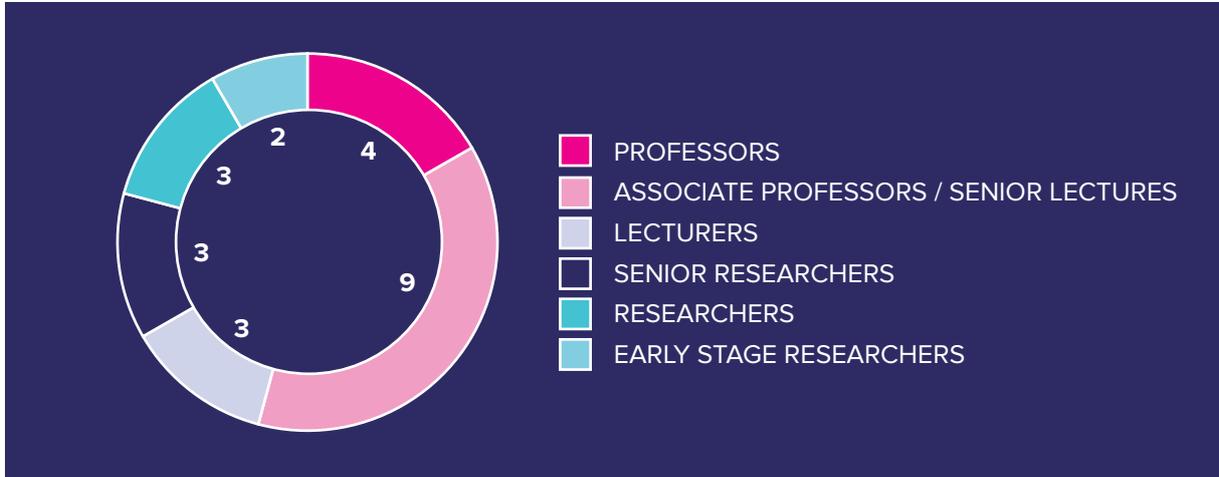
4 Doctoral students 3 Defended doctoral dissertations

25 Scientific publications*

* Data from the Scopus (as of February 28, 2025)

THE DEPARTMENT CONDUCTS RESEARCH WITHIN 3 RESEARCH GROUPS:

- **INTERNATIONAL RELATIONS, SECURITY, LAW AND TECHNOLOGY.**
Head of the research group: Associate Professor HOLGER MÖLDER holger.molder@taltech.ee
- **LEGAL POLICY AND NORMATIVE FRAMEWORK OF EU DIGITAL MARKET AND TECHNOLOGIES AND IT'S APPLICATION IN PARTNER COUNTRIES.**
Head of the research group: Tenured Full Professor TANEL KERIKMÄE, tanel.kerikmae@taltech.ee
- **PRIVATE LAW.**
Head of the research group: Tenured Assistant Professor THOMAS HOFFMANN, thomas.hoffmann@taltech.ee



INTERNATIONAL RELATIONS, SECURITY, LAW AND TECHNOLOGY

Head of the Research Group: Associate Professor HOLGER MÖLDER, holger.molder@taltech.ee

Members: Katrin Merike Nyman-Metcalf, Evhen Tsybulenko,
Antonius Johannes Hubertus Notermans, David Ramiro Troitino, Peeter Mürsepp,
Agnes Kasper, Maria Claudia Solarte Vasquez, Archil Chochia

Doctoral student: Javad Keypour

TOPICS AND COMPETENCES

KEYWORDS: cyber and information security; international relations and technological challenges; economic security; political economy; international law; European Union; history of science

The research topics are related to international relations, international security and technology.

- **International relations:** International conflicts (post-Soviet space, Middle East). Political and societal reforms of the European Union; the future of NATO; international relations in post-truth environment; East-Asia and Pacific region.
- **International security:** Information warfare and strategic communication; cyber threats and counter-activities; culture of fear; strategic narratives; hybrid threats; energy security.
- **Technology:** Information security and digital influence operations; internet and international relations; political and legal aspects of artificial intellect.

Senior lecturer Peeter Mürsepp is active in an independent field of research: history of science, philosophy of science.

More information: <https://taltech.ee/en/department-law-research-groups#p35014>

SELECTED PROJECT

- VFP20040 “*Mediatized Discourses on Europeanization and Their Representations in Public Perceptions*” (2021–2024)



SELECTED PUBLICATIONS

Mölder, H.; Chochia, A.; Nyman-Metcalf, K. (2023). *Elite Agenda, Media Framing and Public Perception of European Integration in Estonia*. *TalTech Journal of European Studies*, 13 (2), 63–110. DOI: 10.2478/bjes-2023-0016.

Mölder, H. (2022). *The Prospects of Strategic Imagination in Explaining International Security Challenges*. *Quality & Quantity*. DOI: 10.1007/s11135-022-01386-w.

Mölder, H.; Voinea, C. F.; Sazonov, V. (2023). *Cultural Change in Political Communities. The Impact of Populism and Extremism on the International Security Environment*. Cham: Springer Nature.

LEGAL POLICY AND NORMATIVE FRAMEWORK OF EU DIGITAL MARKET AND TECHNOLOGIES AND IT'S APPLICATION IN PARTNER COUNTRIES

Head of the research group: Tenured Full Professor TANEL KERIKMÄE,
tanel.kerikmae@taltech.ee

Members: Katrin Nyman-Metcalf, Ondrej Hamulak, Abel Polese, Archil Chochia, David Ramiro Troitino, Pawan Kumar Dutt, Maria Claudia Solarte Vasquez

Doctoral students: Olga Shumilo, Kärt Salumaa-Lepik, Melita Sogomonjan, Javad Keypour, Evelin Pärn-Lee, Alexander Antonov

TOPICS AND COMPETENCES

KEYWORDS: law and technology; EU legal policy; Digital Single market, artificial intelligence and law, regulating digital services, metaverse and law

The research topics are related to law and technology and transfer of knowledge of legal skills.

- **Law and eTechnologies:** e-residency, cryptocurrencies, smart contracts, 3D printing, software agents, digital evidence, artificial intelligence legal policies and modern technologies. Privacy law. Cyber security. Ethics of law and technology. General Data Protection Regulation (GDPR), human rights in European digital era. Rights and duties of digital e-trading.
- **ICT law:** freedom of expression, e-governance, regular legal analysis of media and communications legislations.

The research group has maintained its commitment to pioneering research at the intersection of law and technology throughout the past year.



Our efforts have yielded significant results, contributing to the advancement of legal scholarship and technological innovation on the international stage. Our research activities resulted into many project and publication outputs and collaborations with public and private sectors actors garnering widespread acclaim across Estonia and out partner countries.

More information: <https://taltech.ee/en/department-law-research-groups#p29732>

SELECTED PROJECTS

- VHE24001 “*Improving response to risks of discrimination, bias and intolerance in automated decision-making systems to promote equality*” (2024–2026)
- VHE22069 “*Caucasus and Central Asia Research Social Innovation: Development Assistance, Innovation and Societal Transformation*” (2023–2027)
- VERT23049 “*European Network on Digitalization and E-governance*” (2023–2026)

SELECTED PUBLICATIONS

Martínez-Ramil, P.; Kerikmäe, T. (2024). *Who is accountable for the algorithm? Assessing the effectiveness of the EU's approach towards AI liability*. In: Šišková, Naděžda (Ed.). *Legal Issues of Digitalisation, Robotization and Cyber Security in the Light of EU Law*. (232–248). Kluwer Law International B.V.

Joamets, K.; Solarte Vasquez, MC (2024). *Institutional components affecting the internationalization of higher education: a case study on Estonia*. *Baltic Journal of Law and Politics*, 17, 2, 100–115. DOI: 10.2478/bjlp-2024-00017.

Keypour, J. (2024). *Legal Challenges in Developing a Digitalised Electricity Market in the EU: The Case of Estonia*. *Scientific Papers of the University of Pardubice. Series D, Faculty of Economics and Administration*, 32, 2, #2091. DOI: 10.46585/sp32022091.

PRIVATE LAW

Head of the Research Group: Tenured Assistant Professor THOMAS HOFFMANN,
thomas.hoffmann@taltech.ee

Members: Agnes Kasper, Tatjana Evas-Peeters, Pawan Kumar Dutt,
Maria Claudia Solarte-Vasquez, Kaido Künnapas

Postdoctoral Researcher: Artem Boyarchuk

Doctoral students: Aleks Oskar Johannes Kajander, Alexander Antonov

TOPICS AND COMPETENCES

KEYWORDS: algorithm-based decision-making and liability, blockchain and smart contracts, legal frameworks for Industry 4.0/IoT, cyber security, consumer law, mixed methodologies (human-computer interaction), mediated transaction design, alternative dispute resolution methods (arbitration and mediation), labor law, Legal Tech

Our research group is committed to producing ambitious cutting-edge work in the field of private law, having a special focus on private legal relationships in digital environments. Primarily designed to iteratively develop expertise on these matters, members of the research group aim to share and disseminate their work to complement legal and social discourses and, where identifiable and necessary, actualize societal change therein. We aim to contribute to international, national and regional debates on these matters, address traditional and novel legal problems with a varied toolbox of methods, and, where appropriate, based on developed expertise, propose nuanced policy-recommendations and context-specific legal advice.



Big data, IoT, AI and the respective legal interferences of their implementation and use in society form the core subject of our research, but we have also focused on legal implications of the Gig-economy, competition law and data governance issues in Smart Cities, digital evidence, online dispute resolution and LegalTech. Also research on HCI and HCI research methods, mixed research methodology, international business transactions international mediation forms an essential part of our competencies.

The research group incorporates elements of the Value-Sensitive Design framework into discussions on societally acceptable, inclusive, human-centric and thus innovative governance mechanisms in private legal relationships.

More information: <https://taltech.ee/en/departments-law-research-groups#p42490>

SELECTED PROJECTS

- VEU24017 “*Digitalising European Uncontested Claims Enforcement*” (2024–2026)
- VEU22002 “*Small Claims Analysis Net II*” (2022–2024)
- VEU24054 “*I-tools to Design and Enhance Access to justice*” (2024–2026)

SELECTED PUBLICATIONS

Gakh, V.; Bahsi, H.; Hoffmann, T. Boyarchuk, A.; Khramov, O. (2024). *Enhancing privacy risk modeling in practice: a case study of an e-justice system*. *IEEE Access*, 12, 183851–183874. DOI: 10.1109/ACCESS.2024.3509332.

Kajander, A.; Hoffmann, T. (2024). *Smart City Data Commons and EU Competition Law – A Conflict in the Making? Scientific Papers of the University of Pardubice. Series D, Faculty of Economics and Administration*, 32 (2), 2092. DOI: 10.46585/sp32022092.

Dutt, P. K.; Cuong, N. T.; Hoffmann, T.; Kerikmäe, T. (2024). *VIETNAMESE INTELLECTUAL PROPERTY LAW – a concise overview in EU and ASEAN contexts*. De Gruyter.

RAGNAR NURKSE DEPARTMENT OF INNOVATION AND GOVERNANCE

Director: Tenured Full Professor
ERKKI KARO,
erkki.karo@taltech.ee,
+372 620 2661

MAIN FIGURES 2024

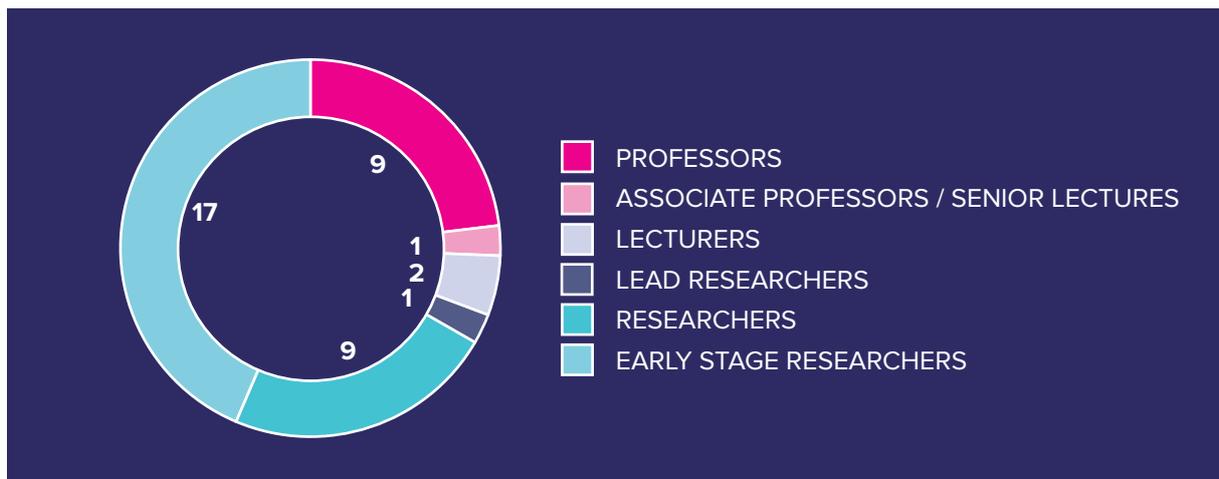
(as of Dec. 31, 2024)

39 Academic staff	Incl. 9 professors 27 researchers
27 Doctoral students	4 Defended doctoral dissertations
71 Scientific publications*	

* Data from the Scopus (as of February 28, 2025)

THE DEPARTMENT CONDUCTS RESEARCH WITHIN 7 RESEARCH GROUPS:

- **BIG DATA IN SOCIAL SCIENCES.**
Head of the research group: Tenured Associate Professor ANU MASSO, anu.mass@taltech.ee
- **GLOBAL GOVERNANCE.**
Head of the research group: Tenured Full Professor WOLFGANG DRECHSLER, wolfgang.drechsler@taltech.ee
- **FISCAL GOVERNANCE.**
Head of the research group: Tenured Full Professor RINGA RAUDLA, ringa.raudla@taltech.ee
- **PUBLIC MANAGEMENT AND POLICY.**
Head of the research group: Tenured Full Professor TIINA RANDMA-LIIV, tiina.randma-liiv@taltech.ee
- **PUBLIC SECTOR INNOVATION.**
Head of the research group: Tenured Full Professor VEIKO LEMBER, veiko.lember@taltech.ee
- **TECHNOLOGY GOVERNANCE AND INNOVATION POLICY.**
Head of the research group: Tenured Full Professor ERKKI KARO, erkki.karo@taltech.ee
- **TECHNOLOGY GOVERNANCE AND SUSTAINABILITY.**
Head of the research group: Tenured Full Professor VASILEIOS KOSTAKIS, vasileios.kostakis@taltech.ee



BIG DATA IN SOCIAL SCIENCES

Head of the research group: Tenured Associate Professor [ANU MASSO](#), anu.mass@taltech.ee

Post-doctoral researchers: Tayfun Kasapoglu, Anniki Puura

Doctoral students: Mergime Ibrahim, Pauline Baudens, Kateryna Lobanova

TOPICS AND COMPETENCES

KEYWORDS: big data and social datafication, social science methods and methodologies, spatial mobility, (digital) social transformations

The research group focuses mainly on basic research in the field of social datafication and related social transformations, combining methodologically computational social sciences and critical data studies.

IN 2024, the main research findings highlight the varying levels of trust, risk perception, and values among citizens of countries with different welfare models regarding the implementation of automated decision-making and data- and AI-based solutions. In addition to publishing high-level scientific publications,



the research team has transferred knowledge to society and participated in numerous implementation projects (e.g., novel gamification program, [Bicification](#)).

The research group has launched the [Eye-Tracking Lab](#) together with the Faculty of Economics and Business Administration to conduct semi-experimental studies and assess the social, economic and legal effects of data technologies (data, algorithms, artificial intelligence).

SELECTED PROJECTS

- ETAG20083 “[Critical understanding of Predictive Policing](#)” (2021–2024)
- VA21018 “[Automating Welfare in the Baltic Sea Region: Consequences of Automated Decision-making for Democratic Values](#)” (2021–2023)
- VFP19031 “[FINEST TWINS: Establishment of Smart City Center of Excellence](#)” (2019–2026)

SELECTED PUBLICATIONS

Masso, A.; Kasapoglu, T.; Kaun, A.; Galis, V. (2024). [Citizens’ perspectives on platformisation of police work: a scenario and story-based exploration in Estonia and Sweden](#). *Information Communication & Society*, 27 (13), 2400–2418. DOI: 10.1080/1369118X.2024.2333842.

Baudens, P.; Masso, A.; Soe, R.-M. (2023). [Women’s \(in\)mobility strategies and digital platform adoption. The case study of employees doing desk work in Pune, India](#). *Gender, Technology and Development*. DOI: 10.1080/09718524.2023.2260651.

Masso, A.; Kaun, A.; van Noordt, C. (2023). [Basic Values in Artificial Intelligence: Comparative Factor Analysis in Estonia, Germany, and Sweden](#). *AI & Society*. DOI: 10.1007/s00146-023-01750-w.

GLOBAL GOVERNANCE

Head of the research group: Tenured Full Professor [WOLFGANG JOHANNES MAX DRECHSLER](#), wolfgang.drechsler@taltech.ee

Members: Vasilis Kostakis, Christos Giotitsas, Shobhit Shakya, Alexandros Pazaitis, Christina Priavolou

Doctoral students: Lucas Barreiro Lemos, Pisith San, Nikiforos Tsiouris, Ülly Enn, Alicia Trepát Pont, Asimina Kouvara, Salah Chafik, Mehmet Orpak, Karin Kruup

TOPICS AND COMPETENCES

KEYWORDS: governance, P2P technologies, commons-based peer production, non-western public administration, global governance, development policy, sustainability

The Governance group deals with basic, as well as policy-focused, academic research focusing on the analysis of governance theories and paradigms in the context of modern socio-technical changes, led especially by the ICT diffusion. The group comprises the ERC Starting Grant '[Cosmocalism](#)', and two large grants, '[Centrinno](#)' and '[Smooth](#)', funded from the EU's Horizon 2020. The '[Fin-Est Twins: Helsinki and Tallinn as Smart and Sustainable Cities](#)' EU Teaming grant, 2019–26, originally emerged from this research group.

Special focus has been on the following topics:

- analysis of global paradigms of governance and comparison of Western and non-Western/Asian paradigms;
- the impact of technological changes on governance, including the emergence of the concept of smart city and the impact of P2P technologies on production and consumption traditions and governance models;
- alternative perspectives on sustainability, growth and post-growth, innovation and their metrics generally.

In all these fields the group is internationally recognized as a trailblazing think tank. This is best exemplified by the fact that both Prof. Drechsler and Prof. Kostakis are affiliates of Harvard University – at the [David Centre for Russian and Eurasian Studies](#) and the [Berkman Klein Centre for Internet and Society](#) respectively – and the former also at [UCL's Institute for Innovation and Public Purpose](#), all three usually recognized as the number one institution in their specific field globally.

IN 2024, the focus of the research group was on Buddhist and Islamic public administration, with Confucian public administration also not neglected.

SELECTED PUBLICATIONS

*Drechsler, W.; Kattel, R.; Chafik, S. (2024). [Islamic public administration and Islamic public value: Towards a research agenda](#). *Public Policy and Administration*, 39, 4, 608–624. DOI: 10.1177/09520767231201799.*

*Karo, E.; Drechsler, W. (2024). [The Future of the University in the Age of Sustainability: Balancing Transformation and Persistence](#). *Transylvanian Review of Administrative Sciences*, 2024, 72–79. DOI: 10.24193/tras.SI2024.10.*

PUBLISHED BOOK / MONOGRAPH

Kattel, R.; Drechsler, W.; Karo, E.; Jylhämmö, K. (2024). [Kuinka luoda yrittäjähenkinen valtio – eli miksi innovaatiot tarvitsevat byrokratiaa](#). Helsinki: Vastapaino.



FISCAL GOVERNANCE

Head of the research group: Tenured Full Professor [RINGA RAUDLA](mailto:ringa.raudla@taltech.ee), ringa.raudla@taltech.ee

Members: Egert Juuse, Aleksandrs Cepilovs

Doctoral students: Johanna Vallistu, Kerli Onno, Nastassia Harbuzova, Riinu Lepa, Olger Nõmm, Gerli Aavik-Märtmaa

TOPICS AND COMPETENCES

KEYWORDS: fiscal governance, public sector financial management, budgeting, financial regulation

The group studies the developments of fiscal governance in Europe with specific focus on the spread of new budgeting principles (participatory budgeting), the impact of fiscal crisis, the evolution of institutional and discursive context. The unique specialization of the group has been to study the impact of fiscal and financial policy bureaucracies (its structure, principles of policy coordination and learning, etc.) on fiscal and financial policies in the Baltic Sea area and EU as a whole. This is a relatively novel theoretical as well as empirical focus since the countries of the region are financially and politically highly interlinked but have also asymmetrical economic relations and politico-administrative differences.

The group has gained global recognition for its research work, e.g. Prof. Raudla is in the editorial board of *Governance* (the leading journal on governance and institutional analysis), in addition to seven other international academic journals. She leads the Permanent Working Group on Fiscal Governance and Administration at IIAS (a governance and public administration research society with the widest reach globally).

IN 2024 the key focus of the group was the implementation of the research project “Experimental approaches and institutional innovations in the domains of fiscal and financial policy” (PRG1125, funded by the Estonian Research Council).

SELECTED PROJECT

- PRG1125 “[Experimental approaches and institutional innovations in the domains of fiscal and financial policy](#)” (2021–2025)



SELECTED PUBLICATIONS

Raudla, R.; Mohr, Z.; Douglas, J. W. (2024). [Which managerial reforms facilitate public sector innovation?](#) *Public Administration*, 102 (2), 771–788. DOI: 10.1111/padm.12951.

Raudla, R.; Juuse, E.; Kuokštis, V.; Cepilovs, A.; Ylönen, M. (2024). [Drivers of fintech policy evolution: the role of policy learning and institutions.](#) *Policy & Politics*, 1–22. DOI: 10.1332/03055736Y2024D000000042.

Raudla, R.; Juuse, E.; Kuokstis, V.; Cepilovs, A.; Cipinys, V.; Ylonen, M. (2024). [To sandbox or not to sandbox? Diverging strategies of regulatory responses to FinTech.](#) *Regulation & Governance*, 1–16. DOI: 10.1111/rego.12630.

PUBLIC MANAGEMENT AND POLICY

Head of the research group: Tenured Full Professor [TIINA RANDMA-LIIV](mailto:tiina.randma-liiv@taltech.ee),
tiina.randma-liiv@taltech.ee

Members: Külli Sarapuu, Külli Taro, Leno Saarniit, Johanna Madleen Rodima

Doctoral students: Ayberk Soner Kalayci, Steven Nõmmik, Anne-May Nagel,
Eva Patricia Peeters

TOPICS AND COMPETENCES

KEYWORDS: public sector management, administrative reform, participation, collaboration, crisis governance, small states

Activities within the research group are based on three research themes, which all address reforms in public management, crisis governance and collaboration in public governance. Throughout the research themes, the members of the group explore both the Estonian case as well as global and European comparative perspectives. Most members of the group participate in the Horizon 2020 financed research project [*ROBUST \(Robust Crisis Governance in Turbulent Times – Mindset, Strategies, Evidence\)*](#). The project explores how European societies can harness flexible adaptation and proactive innovation to deliver effective crisis responses in situations, where going back to the way things were is neither possible nor desirable.

The members of the group are participating in different international academic networks and editorial boards. Dr. Sarapuu co-chairs [*EGPA*](#) permanent study group titled ‘Governance of Public Sector Organizations’. Steven Nõmmik is a member of [*NISPAcee*](#) steering committee. Külli Taro is Chairman of Estonian Public Service Ethics Council.



IN 2024, the research group has dealt with three major topics within the framework of on-going projects:

- The study of robust crisis management and, above all, the use of hybridity in crisis management, where a unique analytical framework was created, on the basis of which work will continue on collecting data from nine countries with the aim of conducting a comparative analysis.
- Exploring experimental approaches and institutional innovation in public sector management.
- A research project on the “triangle” of public service continued, where political-administrative relations in Europe are studied comparatively.

SELECTED PROJECTS

- VHE22035 “[*ROBUST Crisis Governance in Turbulent Times – Mindset, Evidence, Strategies*](#)” (2022–2026)
- VHE22044 “[*Public Administration Capabilities for Sustainable and Digital Transformation*](#)” (2022–2025)

SELECTED PUBLICATIONS

Verhoest, K.; Callens, C.; Klijn, E. H.; Brogaard, L.; García-Rayado, J.; Nõmmik, S. (2024). [*Designing cross-sector collaboration to foster technological innovation: Empirical insights from eHealth partnerships in five countries*](#). *Public Administration Review*, 84 (6), 1200–1217. DOI: 10.1111/puar.13785.

Sarapuu, K; Trei, M. (2024). [*Organizational dilemmas of EU-funded policy development: the case of Estonian government task forces*](#). *Public Money & Management*. DOI: 10.1080/09540962.2023.2203870.

Sarapuu, K.; Jugl, M. (2024). [*Guest editorial: Public administration and crisis governance in small states*](#). *Small States & Territories*, 7, 2, 193–202.

PUBLIC SECTOR INNOVATION

Head of the research group: Tenured Full Professor [VEIKO LEMBER](#),
veiko.lember@taltech.ee

Members: Piret Tõnurist, Jinxiao Luo

Postdoctoral Researcher: Peeter Vihma

Doctoral students: Johanna Vallistu,, Steven Nõmmik, Palwasha Ahmadzai Etebari, Kerli Onno, Luiza Schuch de Azambuja, Marc Kristersen, Gerli Aavik-Märtmaa, Karin Kruup, Olger Nõmm

TOPICS AND COMPETENCES

KEYWORDS: digital transformation, public sector innovation, governance of green transition, public-private partnerships

The Public Sector Innovation (PSI) research group focuses on the theory and practice of public sector innovation. Among its key research foci are topics such as the governance of green and digital twin transition, public sector digitalization and its consequences, and the foundations of public sector technological and innovation capacities.

The group has also produced important contributions to other PSI topics, e.g. public procurement of innovation, public service of co-production, public-private partnerships, sustainable communities, and the phenomenon of public sector innovation labs.

The research results from **2024** include:

- It was suggested that integrating high reliability principles into urban governance can significantly enhance cities' ability to manage climate crises ([Vihma, Hukkinen](#)). They introduce the Policy Operations Room (POR) framework, which combines top-down management with participatory scenario exercises to improve strategic decision-making in urban settings.
- The balance between stability and flexibility was examined in the context of research policy projects, focusing on the role of research advisors ([Vihma](#)). A case study related to the Estonian bioeconomy project highlighted how research advisors can navigate bureaucratic hierarchies and boundary objects to provide the flexibility needed for effective policy learning.
- Key success factors in public-private eHealth partnerships were analyzed across 19 projects in five European countries ([Callens et al](#)). The importance of partnership-level features, agency-related aspects, ICT use and user engagement in achieving successful digital transformation in eHealth was highlighted.
- The impact of public-private partnership structures on technological innovation was investigated ([Verhoest et al](#)). The results showed that small, centralized, and homogeneous partnerships are most successful in achieving technological innovation.



SELECTED PROJECTS

- VFP20041, H2020 projekt CENTRINNO “[New Centralities in Industrial Areas as Engines for Innovation and Urban Transformation](#)” (2020–2024)
- VHE22044 “[Public Administration Capabilities for Sustainable and Digital Transformation](#)” (2022–2025)
- VFP19031 “[FINEST TWINS: Establishment of Smart City Center of Excellence](#)” (2019–2026)

SELECTED PUBLICATIONS

[Vihma, P.; Hukkinen, J. I. \(2024\). *Bracing urban governance against climate crises: How to integrate high reliability into strategic decision-making?* Environmental Policy and Governance. DOI: 10.1002/eet.2129.](#)

[Verhoest, K.; Callens, C.; Klijn, E. H.; Brogaard, L.; García-Ryado, J.; Nõmmik, S. \(2024\). *Designing cross-sector collaboration to foster technological innovation: Empirical insights from eHealth part-nerships in five countries.* Public Administration Review, 84 \(6\), 1200–1217. DOI: 10.1111/puar.13785.](#)

[Randma-Liiv, T.; Lember, V. \(2022\). *Engaging Citizens in Policy Making: e-Participation Practices in Europe.* Cheltenham: Edward Elgar.](#)

TECHNOLOGY GOVERNANCE AND INNOVATION POLICY

Head of the research group: Tenured Full Professor [ERKKI KARO](mailto:erkki.karo@taltech.ee), erkki.karo@taltech.ee

Members: Erik Stenfeldt Reinert, Jan Allan Kregel, Carlota Elene Perez, Rainer Kattel, Egert Juuse, Margit Kirs, Jaanus Määr, Egert Juuse

Doctoral students: Palwasha Etebari, Mahardika Fadmastuti, Marc Kristerson, Mari Anne Rosalie Rohtla, Maive Rute, Joanna Laast, Karin Krupp

TOPICS AND COMPETENCES

KEYWORDS: innovation, innovation policy, technology governance

The group is the leading centre for science, technology and innovation systems and policies in Estonia.

The basic research of the group centres on the following topics:

- Techno-economic paradigms and the role of the state
- Future innovation systems and policies
- Innovation bureaucracies and management of innovation policies

The policy-oriented work of the group covers the following topics:

- Green transition and mission-oriented innovation policies
- Tackling societal challenges through innovation
- Drafting and implementing smart specialization strategies and policies in Europe and Estonia
- Management STI policies and instruments
- Evaluations of innovation policies and governance systems
- The impact of Global Value Chains on national innovation systems and policies
- Innovation in the context of smart cities

SELECTED PROJECTS

- VFP19031 “*FINEST TWINS: Establishment of Smart City Center of Excellence*” (2019–2026)
- PRG346 “*Reshaping Estonian energy, mobility and telecommunications systems on the verge of the Second Deep Transition*” (2019–2023)
- VFP21049 “*BoostEuroTeQ: strengthening institutional transformations for responsible engineering education in Europe*” (2021–2024)

SELECTED PUBLICATIONS

*Tiits, M.; Karo, E.; Kalvet, T. (2024). Small countries facing the technological revolution: fostering synergies between economic complexity and foresight research. *Competitiveness Review*. DOI: 10.1108/CR-03-2023-0051.*

*Juuse, E.; Karo, E. (2024). New Emerging Industries and Alternative Pathways into Global Value Chains: the Case of Estonian Automated Mobility and Delivery Industry. *Journal of the Knowledge Economy*. DOI: 10.1007/s13132-024-02236-w.*

Kattel, R., Drechsler, W., & Karo, E. (2022). How to Make an Entrepreneurial State: Why Innovation Needs Bureaucracy. Yale University Press.



TECHNOLOGY GOVERNANCE AND SUSTAINABILITY

Head of the research group: Tenured Full Professor [VASILEIOS KOSTAKIS](#),
vasileios.kostakis@taltech.ee

Members: Shobhit Shakya, Alexandros Pazaitis

Doctoral students: Karin Kruup, Alicia Trepant Pont, Mehmet Orpak, Ülly Enn, Asimina Kouvara, Nikiforos Tsiouris

TOPICS AND COMPETENCES

KEYWORDS: open-source technologies; sustainability; energy transitions; commons post-growth; science communication; impact assessment; action research; alternative organisations

The group explores novel approaches to creating inclusive and sustainable economic systems, intersecting political ecology, technology studies, critical management, and sustainability studies. The group examines how open collaborative practices reshape economic models and technological development, investigating the interplay between global knowledge sharing and local manufacturing. Using interdisciplinary methodologies, including participatory action research, the group co-produces knowledge with communities and stakeholders, maintaining strong ties to grassroots initiatives and commons-based networks.

Current work assesses energy communities, explores commons-based technologies' potential for environmental and social challenges, and investigates open-source solutions for local resilience and global sustainability. Supported by significant grants, including from the European Research Council, the group has published extensively in top-tier journals. It engages in knowledge transfer through academic publications, policy briefs, public lectures, and collaborative projects. By bridging theory and practice, the TGS group contributes to developing more equitable, democratic, and sustainable technological and economic systems.

The group achieved several significant milestones **IN 2024**.

The Kopli 93 and Tzoumakers makerspaces and community centers in Tallinn (Estonia) and Tzoumerka (Greece) secured municipal support and established themselves as vital community hubs. The group also published “Beyond the Final Whistle” (Pluto, 2025) and established the [AnotherFootball](#) foundation, which innovatively uses football to communicate complex research concepts to a broader audience. Additionally, the group produced influential research examining energy systems through the lens of ‘energy as commons’ versus ‘energy as commodity’, leading to an ERC Synergy Grant submission in collaboration with Vrije Universiteit Amsterdam and LUT University. For the third consecutive year, the group organized a summer school with 30 participants from Greece, Europe, and the United States, to Brazil and the Philippines. The group also co-organized the Wind Empowerment network’s biannual conference with over 40

organizations across 30 countries. Furthermore, the group produced several publications in top-ranked journals while participated in initiatives such as the EU LIFE COMET project and coordinated the climate resilient political economy research project (PUTJD1240).

SELECTED PROJECTS

- VFP21005 “[Educational Common Spaces. Passing through enclosures and reversing inequalities](#)” (2021–2024)
- VHE22044 “[Public Administration Capabilities for Sustainable and Digital Transformation](#)” (2022–2025)
- VFP19031 “[FINEST TWINS: Establishment of Smart City Center of Excellence](#)” (2019–2026)

SELECTED PUBLICATIONS

Kostakis, V.; Tsiouris, N. (2024). [How to Unite Local Initiatives for a More Sustainable Global Future](#). *Sustainable Futures*, 7, 100187. DOI: 10.1016/j.sftr.2024.100187.

Kostakis, V.; Giotitsas, C.; Kitsikopoulos, D. (2024). [Envisioning energy futures through visual images: What would a commons-based energy system look like?](#) *Energy Research & Social Science*, 118, #103771. DOI: 10.1016/j.erss.2024.103771.

Kostakis, V.; Lemos, L. B.; Kouvara, A. (2024). [Another Scalability is Possible! From Non-Scalability to Cosmolocal Scalability](#). *tripleC: Communication, Capitalism & Critique*, 22, 2, 620–629. DOI: 10.31269/triplec.v22i2.1535 .





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