

## Evaluation report

Evaluated point	Grade	Comments
Scientific impact of research	Good	<p>On average, the data suggest that academics are publishing more than one high-level paper a year, which is a reasonable level of activity, and that this has been steady rising over the evaluation period. Furthermore, category normalized citation impact (which corrects for the effect of publication recency) also suggests there has been a steady improvement in scientific impact of research. In this regard, TTU is performing at a nationally competitive level.</p> <p>High quality research activity is not entirely evenly distributed throughout different areas of Social Science research: some areas are performing very well, with publications in the best international journals but, even within the category of 1.1, there is variation in journal quality and the selection of journals does not always reflect the best journals in the field.</p> <p>R&amp;D income has risen steadily over the evaluation period, with income per FTE more than doubling. Some of the largest increases have been in international project funding, which indicates the success of TTU's strategic prioritisation.</p>
Sustainability and potential of research	Good	<p>The age distribution, with a good proportion of early career academics, indicates a sustainable academic base. TTU has already introduced reforms to recruitment contracts (i.e., the introduction of security of employment tenure) and there is optimism at management level that this will have the effect of attracting international scholars by reducing job insecurity. This is one example in which TTU demonstrates its commitment to action regarding fostering positive careers for staff. TTU has also adopted a multi-dimensional matrix to determine eligibility for tenure, career advancement and/or 'performance-related pay': in addition to weighting high-level publications, the matrix also acknowledges the importance of other elements of academic activity, including teaching and activities to promote societal impact. This is seen as particularly positive for Social Science research, which can be disadvantaged relative to, for example, the natural sciences, if less nuanced indices are used (i.e., simple counts of high-level publications or citation impact). Early-career researchers are also using this matrix to benchmark and self-assess their performance, enabling a clear sense of their career options. It is also used as a method to guide performance-related pay, which is an administrative tool to promote academic excellence and well received by staff. In an annual contest, a committee selects the best example of applied research; the best scientific article; all-round best</p>

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		<p>young researcher; and ‘researcher of the year’. This system is perceived positively, as it provides visibility and prestige to individual scholars and is motivating for career development.</p> <p>TTÜ has a consistent track record of recruiting international academics and international students.</p> <p>This is particularly important given that, in common with other academic institutions, changing demographics have resulted in a fall in undergraduate numbers.</p>
Societal importance of research	Good	<p>Academic staff interact with media and civic society in ways that are typical for a university. For example, there is evidence that individual academics have fostered good contacts with the business community (e.g., Bank of Estonia) and government Ministries (e.g., Ministry of Justice).</p> <p>As a technological institution, there might be opportunities for innovative engagement. For example, social scientists from a technical university are in the privileged position to be able to present the University’s technological research advancement in simple and accessible language to public experts, the business community, and the wider public. However, we did not see any particular emphasis upon, or novel approach, to societal impact.</p> <p>The research of TTÜ social science faculty has adopted the digital/IT focus of Estonia, with a strategic decision taken to profile TTÜ as a "digital university". This is innovative and potentially offers opportunities for TTÜ to develop a particular profile in this area.</p>
<p>Scientific basis in the field is sufficient to conduct doctoral studies. (This question should be answered only if: a) institution being evaluated is conducting doctoral studies and; b) The field being evaluated is proposed to grant positive evaluation. If these conditions are met then: a) If the level of scientific basis is</p>		<p>TTÜ is clearly putting thought into mechanisms of support for doctoral candidates, both practical (e.g., financial aid) and academically (e.g., training in professional skills – such as grant- and paper-writing – and opportunities to attend conferences and research visits internationally) and has recently instituted significant changes. For example, notwithstanding any increase in state stipend, the university has committed, with immediate effect, to provide an enhanced stipend, which will restore the level of PhD remuneration to that of average-earnings. This is expected to improve competition for PhD places, which will attract the best students from around the world and boost recruitment. It is also expected to result in fewer students relying on external employment.</p> <p>Doctoral supervision is spread through the staff fairly evenly: most academic staff are involved with PhD supervision, supervising one or more students, and the students do not perceive their supervisor to be overloaded.</p>

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sufficient for conducting doctoral studies in every structural unit being evaluated, then the answer should be „yes“; b) If the scientific basis is not sufficient in some structural units, then those units should be listed.)		Staff and students also reported a good sense of community and support.

## Summary assessment

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<p>Areas of special note as appropriate (Where necessary indicate sub-fields, assessment criteria, and/or structural units which, in the committee's opinion, were of a notably high level.)</p>		<p>TTÜ is in the process of administrative reorganisation, with many new initiatives. Although these initiatives are yet to embed and show results, the fact that the institution recognises the necessity to change and willingness to monitor the impact of change-initiatives is positive.</p>
<p>Areas in need of improvement as appropriate (Where necessary indicate sub-fields of the field being evaluated, assessment criteria, and/or structural units which, in the committee's opinion, revealed significant shortcomings.)</p>		<p>The evaluators noted no significant shortcomings in the Social Science R&amp;D at TTÜ.</p>
<p>Assessment proposal to the Minister of Education and Research</p>	<p>To grant positive evaluation</p>	<p>TTÜ is a strong research institution, with an appropriate scope and level of research. It is sufficiently self-reflective to initiate changes in areas where it is aware that it can perform at a yet-higher level. This ambition in the staff is commendable and bodes well for the future of the institution.</p>

## Feedback

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<p>Feedback for institution (This question should be answered only if the institution asked for feedback from the evaluation committee in the self-report (about up to three specific areas of R&amp;D which it finds to be currently important, e.g., related to its development plan).)</p>	<p>TTÜ asked for feedback on 'how to evaluate scientific excellence and societal impact of interdisciplinary social science research in a technical university'.</p> <p>Clearly, easily gathered metrics that are commonly used to monitor scientific excellence (e.g., citation impact; grant income) vary as a function of discipline, and this is also true within the social sciences as it is between social, natural and physical sciences. It is important to recognise that these quantitative measures could distort and may undervalue qualitative differences. There are also soft-indicators, less readily (and therefore less commonly) measured, such as societal influence or enhancement of the reputation and profile of the university. There are areas of impact in which social science research has particularly much to offer and the evaluation team notes that there are ways to measure contributions in these areas (e.g., press mentions; government policy impact).</p> <p>TTÜ also asked for feedback on 'how to secure faculty renewal and development in a highly competitive and excellence-driven R&amp;D funding system'.</p> <p>This is clearly a topic to which TTÜ staff members have devoted much thought, and from which has been generated staffing initiatives, such as 'tenure-track' recruitment. The evaluation team would not presume to have greater insight into the issues facing TTÜ in these matters, but commend the institution for giving them thought and being prepared to take bold initiatives.</p>
<p>Suggestions for unit, institution, state etc. (As appropriate, committee can give additional feedback for the structural unit, the institution, or the State (please specify whom feedback is directed to) according to the directive assessment criteria for regular evaluation (article 7).</p>	<p>State: Variation is arising in the sector in the funding of PhD students. This should be monitored, in particular, to assess the effect of enhancement of PhD stipends on submission times and graduation success rates.</p>