

<b>Workpackage number:</b> WP 3.3		<b>Start date or starting event:</b> month 10					
<b>Workpackage title:</b> <i>The Impact of Non-Economic Motivations and Socio-Cultural Attitudes on the Knowledge Process and Characteristics of Knowledge</i>							
<b>Participant id:</b>	UTN	IWH	NIFU-STEP	SPRU	CEE	IER	
<b>Person-months per participant:</b>	10	8	1	2	5	2	

**Objectives:**

The overarching objective of this workpackage is to develop our understanding of the relationship between socio-cultural attitudes/non-economic motivations and the knowledge processes with particular reference to the different characteristics of knowledge (content/type and properties).

- 1 The first objective is to study the link between non-economic motivations and knowledge creation, use, and dissemination processes in relation to the specific characteristics of knowledge in the non-profit sector.
- 2 The second objective is to study in firms the impact of socio-cultural attitudes as relevant determinants on different dimensions of the knowledge processes (market and network relations as well as human capital), and the effect on the resulting knowledge characteristics in the respective arrangements.
- 3 The third objective is to study the mutual perception of science and industry, its impact on formal/informal arrangement of the science-industry, and the effect on the resulting knowledge characteristics in the respective arrangements. This is complemented with the perceptions of policy makers on the science-industry dynamics.

**Description of work:**

- 1 The first objective scrutinises the research question, whether there is a link between non-economic motivation (such as fairness, reciprocity, self-esteem, personal relations, ethic principles) and the knowledge process. The research is especially applied to the non-profit sector, since non-economic motivations are particularly strong in this sector. On the theoretical side, the research attempts to provide explanations for the following questions: (i) whether and how norms and values as well as conformism lead to innovative forms of organisation and product innovations (which are usually not provided by firms in the profit sector), (ii) and how this impacts on the characteristics of knowledge generated, used and disseminated. These issues will be studied empirically using two methods: through controlled experiments, and through a survey of a representative sample of social-cooperatives active in the Italian non-profit sector (e.g. provision of social care, entertainment). The implications for policy relate to the institutional design for non-profit organisations, policies for labour training and policies for stimulating employment, and for incorporating non-profit organisations into the knowledge based societies.
- 2 The second part of this research considers the role of socio-cultural attitudes for knowledge processes and resulting knowledge characteristics in firms. Here, we consider dimensions such as: the impact of socio-cultural attitudes of the society in general (level of acceptance of technology/progress, environmental concerns, belief in life-long-learning etc.), attitudes relevant to market relations (e.g. role of trust in technology transfer to customers/suppliers), attitudes relevant to network relations to other firms (e.g. exchange of human capital, role of trust in patent disclosure), attitudes toward the science-university links (as input for third objective). This research is realised by conducting focused interviews or group discussions with leading representatives of firms in knowledge intensive industries in one particular East German region, such as: the chemical triangle of Central Germany or the high-tech micro-electronics industry around Dresden to allow a comparison of impacts of socio-cultural attitudes on innovation between domestically oriented and foreign controlled enterprises in an intensively transforming environment.
- 3 Research to fulfil the third objective employs a comparative case study approach to scrutinises the essential question that has hardly been addressed before, namely, the mutual perceptions of science and

industry. The research aims at examining ways of reconciling these two images as an essential precondition for a functioning science-industry link, not only for an improved transfer and production of knowledge, but for the public acceptance of science, too. Three aspects are analysed: (i) which mutual images are dominant with respect to the science-industry-link, (ii) how does this impact on existing formal/informal arrangements of the science industry link, and (iii) what are the characteristics of knowledge resulting from these respective arrangements. The latter refers to content/type of knowledge (tacit, explicit, narrative) as well as knowledge properties (public/private good, reliability, credibility, scientific excellence etc.) The analysis is conducted in a four-step procedure: firstly, establishment of common approach for national teams. Second, analysis of white papers of science (university, ministries of science) and industry corporations to illustrate the implicit and explicit dimensions of convergence and difference in perceptions. In the third step, expert interviews with representatives of science and industry will be carried out in four countries: Norway, Slovenia, Germany and Austria. The main issues to be addressed in these interviews are their own and mutually perceived norms and values, as well as practical experiences with the science-industry-link. This part will be complemented with findings from WP 2.1 (deans' attitudes towards commercialisation activities). In the fourth step, the results of step one and two will be presented to policy-makers in workshops. Here, research will use the technique of participating behaviour and ex post recording analysis applied in order to analyse (i) the policy-maker's perception of the critical factors determining the interaction of industry and science and (ii) to analyse the scope of their explanations and models for reinforced relationships between the two sectors.

#### **Deliverables:**

- D27 *Workshop on complementarity of research methods employed in WP 3.3.* Responsible: UTN (month 9)
- D28 *Report on non-economic motivations and the knowledge process.* Responsible: UTN (month 20)
- UTN: Summary on state-of-the-art in researching (month 20)
  - UTN: Non-economic motivations and the knowledge process - evidence from controlled experiments (month 20)
  - UTN: Non-economic motivations and the knowledge process - evidence from a survey of social cooperatives in the Italian no-profit sector (month 20)
  - UTN: The interrelatedness of policy making and non-economic motivations (month 20)
- D29 *Policy-briefing/open workshop with stakeholders involved on non-economic motivations.* Responsible: UTN (month 20)
- D30 *Report on socio-cultural attitudes in knowledge creation.* Responsible: D. Paier (CEE) (month 32)
- CEE: Summary on state-of-the-art in researching socio-cultural attitudes in knowledge creation
  - IWH: Socio-cultural attitudes and the knowledge process in firms, with sectoral findings from section 1 (inclusion of results 'Fortschrittsbericht Ostdeutschland') (month 32)
  - CEE: Socio-cultural norms and attitudes - barriers and encouragements of industry oriented activities in Slovenia, Germany, Norway and Austria (month 32) (fieldwork also NIFU-STEP, IER, IWH)
  - CEE: 'Orientation matrix' of perception on science-industry relation (month 32)
  - NIFU-STEP: Attitudes to commercialisation of university research (month 32)
- D31 *Policy-briefings/open workshop with stakeholders involved in respective countries of report.* Responsible: CEE, NIFU-STEP (month 32)

#### **Milestones and expected result:**

- 13 The role of socio-cultural attitudes and/or non-economic motivations on the knowledge creation, use, and diffusion and knowledge characteristics in firms, non-profit organisation, universities and policy making bodies