



## Evaluation of Societal Impact

Prepared by Alar Kein and Marge Sassi

HEISE Bilbao meeting on May 29<sup>th</sup>, 2017

## Outline of the presentation

- Clarification of the meaning and dimensions of "societal impact"
- Economic approach towards evaluation of societal impact
- Theoretical framework individual utility function, its components and society's welfare function
- Channels of impact
- Typology of indicators
- Available methodological framework and its critique
- Issues to discuss

## Definition of "Societal Impact"

- There is no unique definition various and rather different interpretations of *"societal impact"* exist, arising primarily from various interpretations of the term *"*impact".
- Besides, often the terms "societal impact" and "social impact" are used as synonyms, while in some frameworks, "societal impact" refers to broader term than the "social impact".
- Constrained (biased) definitions of "social impact", which account for "intended positive effects" only and often tend to forget the costs, are rather common in the literature.
- Often, the societal impact is defined and discussed without any supportive theoretical framework, which could establish the channels of impact and a well-founded structural framework for the analysis of societal impact.

## Suggested Definition of "Societal Impact"

- Considering the definitions used in the existing literature, and taking into account their shortcomings, we propose the following generalized and simplified definition:
- "Societal Impact" of an activity undertaken in the society is a <u>change</u> in the <u>society's welfare</u>, which occurs (<u>purely</u>) as a result of given activity."
- This definition allows for positive and negative changes, large and small changes, intended and unintended changes, adheres to the *ceteris paribus* principle, i.e. emphasizes the isolation of possible impact of other activities on the observable change and views society's welfare as a benchmark against which the changes should be evaluated.
- This definition, however, leads us to a new term "Society's Welfare" that requires clarification and theoretical approach, which would be suitable in the context of HEISE project.

## A Simple Model

- We assume that the society's goal is to maximize society's welfare.
- Society's welfare (W) could be viewed as a function of utilities (U<sub>i</sub>) of its members. In intergenerational setting, also the utility of future generations is accounted for.

• The utility of each member of the society could be viewed as a function of material goods (M) and non-material values (NM) consumed, possessed or experienced.

- Some of the non-material values (NM<sub>ii</sub>) that determine individual's utility are independent of the utility of other members of society. These are considered hereafter as "individualistic non-material values".
- However, some of the non-material values (NM<sub>io</sub>) that determine individual's utility, could be affected by the utility of other members of society. These are considered hereafter as "altruistic non-material values".
- We also assume that both types on non-material values are dependent on the information set available for individual *i* at time *t*, which is denoted by  $\Phi_i$ .

• Similarly,

- This model reveals <u>5 possible channels of impact</u> of activities undertaken:
- a direct impact on individual's consumption of material goods and thereby on individual's utility (U<sub>i</sub>) and society's welfare
- a direct impact on individual's consumption of "individualistic" nonmaterial goods (values) and thereby on U<sub>i</sub> and society's welfare
- an indirect impact on individual's utility via changes in the utility level of other members of society, which determine part of the individual's consumption of material goods
- an indirect impact on individual's utility via changes in the utility level of other members of society, which lead to changes in the individual's "consumption" of "altruistic" non-material goods (values)
- an indirect impact on the utility of members of society and thereby on society's welfare via changes brought into the available information set.

- Which of these channels and why are relevant for HEIs and in the context of HEISE project?
- First, we need to examine the role of HEIs in the society.
- Traditionally, the HEIs have been the centers of enhancement of knowledge, skills and innovation.
- The role of HEIs in contemporary society, however, has widen and a social dimension emphasizing the promotion of values contributing to multidimensional human development, "consumption" of "altruistic" non-material values and increase in society's well-being, has gained importance.
- These tasks are largely accomplished by HEIs via enhancement of information, reduction of asymmetric information and engagement of different stakeholders.
- Thus, the activities of HEIs can have societal impact via multiple channels.
- But how to assess the impact that activities of HEIs have on the society?

# Main steps in preparing for the evaluation of Societal Impact

- Clear identification of the object of societal impact evaluation (this allows to set the focus on specific activity and establish the boundaries for the study)
- Clarification of the main objectives of activities/project undertaken; this allows to focus on main stakeholders and (expected/intended) outputs
- Identification of potential stakeholders affected (either positively or negatively; either directly or indirectly; either immediately or with a timelag) by the activities undertaken
- Setting of time, location and other boundaries
- Selection of applicable methodology; addressing the issue of "pure impact"
- Identification of relevant, reliable and verifiable data (proxies) needed (estimation of the costs of collecting the data); identification of representative sample (if relevant)

## Typology of Indicators for Evaluating Societal Impacts\*

- <u>COMMUNITY INDICATORS</u>
- quality jobs
- engaged, caring, and safe communities
- quality of life
- health
- well-being
- sustainability
- violent crime rates
- motor vehicle theft rates
- incarceration rates
- injury death trends

\* Please note that this list (presente on the current and following two slides) is compiled based on the indicators outlined in EU guidelines and other studies. This typology serves as an example for workshop purposes only, as it is not the original work of the authors of this presentation.

#### <u>ACADEMIC INDICATORS</u>

- Number of students employed
- Difference in the number of students employed before and after the course
- Achievement of research projects outcomes vs. objectives
- Fit between framework and data
- The power to address previously unsolved questions
- Number of publications and patents
- MANAGEMENT AND COORDINATION INDICATORS
- Improved or new networks with public/private organizations
- Networks with global partners
- Systematic dialogue with policymakers, customer involvement in project planning
- Efficiency of the research results vs. resources used

#### • END USER IMPACT INDICATORS

- Public-policy initiatives, new business initiatives
- Long-term product or service development
- Advantages and stability of the research results
- <u>SOCIETAL IMPACT INDICATORS</u>
- Implementation of research output by policy field, industry or other societal stakeholders
- Active use of implemented research output by societal groups
- Contribution of priority setting, e.g. future research goals
- Contribution to strategy processes of public and private organizations
- Established norms, standards, regulation
- Encouragement of potential for future research
- Quality of dissemination through the website
- Level of engagement received by society from the project
- Extent to which the project produced a helpful networking

## Methods for Evaluation of Societal Impact

- A wide variety of different methodological frameworks exist, of which most common are:
- Social Cost-Benefit Analysis (SCBA):
  - Methods based on observed Behaviour
  - Contingent Valuation Methods
- Economic Impact Analysis
- Social Return on Investment (SROI)
- Social Auditing
- Qualitative studies; Case studies
- Google Analytics
- The choice of a method depends on the purpose and type of evaluation (*ex ante, in media res* and *ex post* evaluation) and on the constraints faced.

## Critique of Indicators and Methodologies

- No standard methodology, nor a set of standardized indicators exists
- Typically the indicators provided in studies are rather vague or too generally defined; proxies are neither discussed nor provided
- Often outputs instead of outcomes or impacts are considered given the difficulties to measure outcomes and impacts directly and within reasonably short time-frame.
- Issue of quantification, standardization, monetization and comparability
- Absence of well-defined boundaries for "time" and "society"
- Failure to distinguish between rather permanent (persistant) effects and temporary effects
- Methodological framework developed is rather suitable for *ex post* analysis, while *ex ante* analysis, has found less attention
- Lack of empirical studies that could provide input data for forming reasonable expectations in *ex ante* analysis.

## Other issues

- Subjective evaluation vs. objective evaluation, normative criteria
- Time frame (short-term, long term, temporary, persistent impact)
- Incorporation of feedback into planning of further activities and into the decision-making process
- Technological change and measurement techniques
- Consideration of costs and benefits, assignment of economic prices
- Consistency and comparability of evaluation practices
- Boundaries of society
- The impact value chain
- Internal and external impact
- Implied impact, proven impact, optimized impact

### Issues to discuss within the framework of HEISE

- In line with these planned outputs, the work in pairs serves the following aims:
- - specification (formulation) of research questions
- - clarification of the methodology to be applied in planned empirical research
- identification of those activities/projects/objects, which could be selected as the research objects for planned empirial studies in participating countries
- clarification of the role and contribution of AO2/A1, AO2/A2 and AO2/A3 to the project's other objectives
- - discussion of the potential engagement of students in empirical work

## Specific Questions to Address

- How should we constrain the meaning of "societal impact" in the empirical studies to be undertaken?
- How would the research on social impact measurement benefit the overall objectives of the project? What specific research questions should be addressed to meet the overall project aims in a best possible way, given the time and labor constraints faced? What kind of research outputs should we channel into the teaching process and how exactly?
- Which type of organizations (stakeholders) in participating countries should be selected for empirical studies that focus on evaluation of the current level of competence of organizations in measuring societal impact? Which organizations (concretely named) should be in the list? Should we use comparable organizations from each participating country?

- Which arts-related activities, objects or projects should be evaluated? Should these be limited to those, which are directly related to relevant higher education institutions?
- How do we ensure the interest of organizations in participation in the study? Who
  would help to compile the list and facilitate the establishment of contacts in each
  participating country?
- Should we focus also on specific projects? E.g. MAPSI as well as HEISE and evaluate these as a case study? Considering the purpose of HEISE project, isn't such "self-evaluation" rather "natural"? If yes, then how should we conduct such self-evaluation?
- How should we analyze participators' capability to societal impact assessment?
- What methodology (methodologies) should we apply (questionnaires, structured interviews, regression analysis, etc.)? Should we aim at "case study"-type research or should we undertake a comprehensive representative study (via survey and structured interviews)?

- Which specific and standardized indicators should be used for valuation of societal impact in HEIs?
- Should we focus more on *ex post* or more on *ex ante* evaluation of societal impact?
- How much should we address cross-country and cross-institutional differences?
- Could we involve students in the empirical study? If yes, how exactly (e.g. within the course work assignments or through the supervisory process)?
- Where could we present and publish the empirical studies?
- Which ways of presentation and dissemination could be most effective and would provide the largest positive societal impact?
- Which questions still require attention before the launch of empirical studies?

## Thank you!