

SIMPACT PROJECT REPORT

Report **Task 7.1**

Ex-Ante Impact Assessment & Value Network Analysis for SI

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SIMPACT

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EXECUTIVE SUMMARY

In this report, a conceptual framework is presented to conduct an ex-ante impact assessment for social innovation. The building blocks for an ex-ante impact assessment are goal formulation; developing the relationships between inputs, outputs and outcomes; determining the role of stakeholders to achieve the objectives; calculating the impact; and deciding on the social innovation. These building blocks are sequentially interconnected to each other. In conclusion, our conceptual framework aims to be a practical guide to both assessor and assessee by structuring the development and decision process. A toolbox has been developed, which consists of a series of steps sprung from our conceptual framework.

NEED FOR MIXED METHODS FOR ESTIMATING IMPACT OF SI

Impact assessors face complications when it comes to estimating the socio-economic impact of social innovations from an ex-ante perspective. Five complications are discussed: in conceptualising the value of social innovations; in understanding the foundation of mixed-method approaches; in integrating the multiple outcomes of mixed-method approaches; in understanding the transfer of impact measurement results across time and space; in mixing different methods to get the whole picture of social innovations.

Evaluation research helps us to understand how to untangle these complications. Social innovations are context-specific, which means that analysing the impact and transferring results, will require epistemological, methodological and practical considerations. The proposal is to adopt mixed-method estimation approaches, in order to better accommodate the multi-dimensionalities associated with the socio-economic impacts of the social innovations. Such mixed-methods help to grasp the different values social innovations can have.

Referring to «evaluation theory tree» from Alkin and Christie (2004), due to the diverse nature of the subjects addressed by social innovations, the social inquiry areas and the epistemological underpinning of research methods concerning SI impact assessment, a unitary estimation approach for SI is not really possible. Does this mean that all assessments will remain 'local' and not 'transferable'? This is not the case, but it requires a great sensitivity of researchers to deal with social innovations. Evaluating impact assessment requires understanding of contingency factors such as collective behaviour and organisational culture.

While the above-mentioned explanations point to the manifold of questions that the issue of «transferability» of SI impact assessment approaches faces, the chap-

ter proposes to adopt the pragmatic approach of mixed-method estimation for SIs. Connected to this, and following the lead of Morgan (2007), the chapter advocates for adoption of an «empirical» approach when dealing with the dichotomy of contextual versus generalizable SI impact assessment results, to make their transferability and upscaling more meaningful and legitimate. Such an approach could boost the impact of social innovations across different contexts within Europe by making them more transferable.

ECONOMIC IMPACT AS PART OF SOCIAL IMPACT ASSESSMENTS

The next question is what the meaning is of social and economic impact of social innovations. When looking at economic impact of a social innovation, one tries to identify changes in (business) output, value creation, employment levels, income levels and wealth measures. These economic impacts should however always been seen in relation to social impacts. What are these social benefits? We understand from our analyses that these benefits are very context specific. Considering the the result that an impact assessment of social innovations is possible, the final question is how do we identify real impact? This means that it is insufficient to look for changes in economic and social parameters, but it is also necessary to check for intention for change, for counterfactual results, for additionality of the impact above what would otherwise have occurred naturally, for alternative factors that may have induced the effect, for displacement effects, and for possible drop-off effects.

PREDICTION OR EXPLORATION?

Given the fact that assessing the economic and social impact of social innovations is a complicated matter, the following question is how to approach the ex-ante part of the impact assessment. Ex-ante means that the impacts should be predicted. We have looked at the lessons of one of the most developed predictive models, Exploratory Modelling and Analysis. The lesson from this model for policy makers and investors, is that the predictive exercise helps to learn us what inputs helps to influence social and economic outputs and outcomes, but also to see how 'much' outcome could be influenced. Using these lessons helps to build benchmarks such as the IRIS (Impact Reporting and Investment Standards) and GIIRS (Global Impact Investment Rating Systems). Scenarios can be built and help us learn us how to deal with future change once these impact futures move in the direction of one of the scenarios calculated. Building these scenarios is also helpful for identifying the risks that possibly influence the achievement of the required economic and social impacts. It is important to understand which enablers and barriers there are for achieving the impacts. Within social innovation, the possible social benefits are more or likely to happen. This means that to achieve these benefits, an impact assessment should also take into account which risks exist that may reduce the

likelihood to achieve the social impacts. A good assessment will also deliver a risk management plan. Risk management will need to deal with more types of risk: for instance consequential, organisational and behavioural risks Osborne (2015). A collaborative co-creative approach with stakeholders and other parties is needed to develop a risk management plan that can encompass all of these risks.

EX-ANTE IMPACT ASSESSMENT AS A CO-CREATION PROCESS

In estimating social and economic impacts, the implication of stakeholders in a co-creation process is of prime importance. The impacts of a social innovation are not a simple given thing. Impacts are subjective, require context and are connected to the interests of stakeholders in the social innovation. Social innovators and other stakeholders need to co-create the impact assessment. The process should be done in such a way that the role of the stakeholders needs to be clear. Borrowing from the *Measuring Impact Framework*, stakeholders should only be integrated if the estimations have been prepared. Stakeholders should have a clear view on what they can bring in their ideas.

To estimate the impacts, it is also necessary to have a clear view on how the stakeholders co-operate, share and exchange value in the social innovation. The instrument of Value Network Analysis is helpful for mapping this value exchange. The Value Network Analysis gives an overview of the network-as-is. It is equally important to also have a view on the actions needed to achieve the required impacts. A Logic Model or Theory of Change is helpful in identifying how the required impacts are linked to sub-goals and to the inputs in the social innovation. Discussing these causal explanations is helpful for uncovering the preferred impacts in the social innovation.

INTEGRATING OF COMPONENTS INTO A CONCEPTUAL FRAMEWORK

The building blocks for an ex-ante impact assessment are goal formulation; developing the relationships between inputs, outputs and outcomes; determining the role of stakeholders to achieve the objectives; calculating the impact; and deciding on the social innovation. These building blocks are sequentially interconnected to each other. These five steps need clarification:

- Step 1 - Determining goals, socio-economic outcomes of the social innovation: what are the goals of the social innovation? Which outcomes should be achieved? A general list of socio-economic goals is not possible, but may be deducted from what policy makers find important. Probably, the following questions are important for policy makers: are there social vulnerable groups that aren't being addressed through normal social policies?; Can we find new social approaches that can help us redefine social policies? How can we bene-

fit from social innovations in the private sector and then apply them to the process of policy making? In the USA, the «Impact Investing Policy» identifies eight policy areas in which social innovations need to be supported (Grace et al., 2015). Such a list could be useful at the different policy levels.

- Step 2 - Determining causation: once the goals are clear, it is necessary to relate the outcomes to the inputs. Several methods are possible such as for example the 'impact value chain' (Clark et al., 2004), Logic Model (Rizzo et al., 2015) or a Theory of Change (Clark and Taplin, 2012).
- Step 3 - Determining the role of stakeholders: for the impact assessment, it should be clear who will play a role in the assessment process, when and how. The main role of the stakeholders is to agree with the assessor (creating a common ground) and to support the assessor with decisions in the process and with selecting criteria, if needed.
- Step 4 - Calculating impact: an important step is to calculate the possible impacts from the social innovation. Social, economic and enterprise impact can be assessed with the use of existing tools. The impact assessment should be accompanied by a set of tests needed to check the counterfactual nature of the results. For each of the impacts, the degree of uncertainty (likelihood) should be estimated. In addition, attention should be spent on barriers and enablers to achieve the goals and objectives.
- Step 5 - Decision process: the outcome of the impact assessment should be presented and discussed with the stakeholders. With social innovation, stakeholders are part of the community and the specific networks that are built when addressing a social challenge. Discussing the decision process to value social and economic outcomes with stakeholders, can give a lot of insight on the context where social innovation is applied and the target groups they are addressing. Many social target groups can only be addressed through stakeholders that have a know how in the contexts where these innovations might be developed.

Steps 2 and 3 need to be conducted in parallel after Step 1. Steps 4 and 5 follow sequentially after these first steps.

1 INTRODUCTION

1.1 The Need for Ex-Ante Impact Assessment

This report delivers an ex-ante methodology for the measurement and evaluation of impact of social innovations. Social innovators and social investors want to do good, but as many commentators acknowledge, they lack a framework to decide upfront what is needed and how to choose between actions (Brest and Born, 2013). If social innovations were to work in an efficient market context, market rate returns and market rate performance could help innovators, investors and policy makers decide between actions. As Brest and Bron (2013) state, social innovations arise in ‘market niches’ and when there are ‘market frictions’. They enumerate some six market frictions that may deter ‘socially neutral investors’ to support social innovations. The most telling of these frictions is that there is considerable scepticism about achieving both financial and social impact. Decision makers will not be able to only use monetary information or market return rates to prepare their investment. Citizens and (market) actors take up roles to tackle social issues such as poverty and social exclusion without precise insight into costs and benefits of these activities. **The question is then how their actions can become sustainable and how ‘to scale up’ these actions?** With scaling up, we mean transferring results across time and space. Social innovators and social investors are in need of instruments to learn how to get more impact from their investment. The starting point, however, is also that the social innovators need more financial support. You need to attract finances or combine different financial sources, even if social innovators are not looking for an economic profit or ways to cover the financial costs. The SI-DRIVE project shows that nearly all social innovators are in great need of finances to start-up and to maintain their efforts (Howaldt *et al.*, 2016). A good insight ‘ex-ante’ is therefore not a luxury, but a necessity.

To build up the methodology of an ex-ante impact assessment, first the main definitions of ex-ante impact assessment are discussed (1.2). Next, the focus is on the assumptions for our methodology (1.3). In 1.4, the report placed in the context of the other work within the SIMPACT-project. At the end of this chapter, the structure of the report is given (1.5

1.2 What is a Socio-Economic Ex-Ante Impact Assessment of SI?

Ex-ante means a preview of possible impacts of an investment in or management of a social innovation. This is different from ex-post evaluation of social innovations. Most of the social impact assessment tools to date are ex-post: this means that the data on the social innovation is readily available (Grieco *et al.*, 2015). An ex-post analysis is mainly focused on comparing results of a project to the formulated objectives of this project. For an ex-ante assessment, the art is to give guidance to stakeholders without possessing the full picture of what can happen with a social innovation. Ex-ante assessments necessarily are incomplete and speculative: such an assessment offers the best possible advice to stakeholders, using historical data and new assessments or judgements by experts and non-experts.

As Grieco (2015) insists, **impact** can only be understood from the perspectives of outcomes. «Outputs are the results that organizations can measure or assess directly, as tangible results of their activities (...), while the outcomes are the wider changes, benefits and knowledge that they attempt to elicit in the world in the medium and long term (...)». The challenge is to identify that part of the total outcome that has occurred due to the social innovation activities, above and beyond what would have happened anyway (cit. Clark *et al.*, 2004, in Grieco, 2015). Outcomes refer to changes in society. We are in fact interested in the net-impact of these activities.

Assessing impact is about measuring impacts in a systematic way. Measuring brings us into a major methodological debate about what can and may be measured in the field of social innovations. The question is how in-depth such an assessment of socio-economic impact should be. The OECD (2015) points to the fact that the development of socio-economic impact measurement is ridden with conceptual and practical challenges:

«Conceptual challenges include ensuring that:

- measurement is a tool for achieving greater impact, rather than focusing on accountability and reporting;
- the private, public and social sectors have an equal voice so as to carve out a true hybrid space;
- guidelines do not restrict innovation in the social sector;
- difficulties in measuring social impact do not discourage funding interventions in areas that are harder to measure but socially important.

Practical challenges include ensuring that:

- social impact requirements are not overly burdensome for social enterprises;
- social enterprises have adequate resources and capacities to measure impact, and measuring is proportionate;
- the needs of both the stakeholders and the social enterprise are aligned.» (OECD, 2015, p.14)

Chapter 2 of this report is focused on this debate. It starts with some starting points of measurement of social innovations and then digs into the 'special' nature of social innovations.

The definition of **social innovation** is the main definition of the SIMPACT-project in which the scope of social is limited to vulnerable groups¹. Social innovation refers to novel combinations of ideas and distinct forms of collaboration that transcend established institutional contexts with the effect of empowering and (re)engaging vulnerable groups either in the process of social innovation or as a result of it (Rehfeld *et al.*, 2015, D1.1, p.6).

The meaning of **socio-economic impact** will be developed in chapter 3. In this report, we follow the advice of Grieco (2015), to see socio-economic impact as that part of total outcomes that occurred due to a social innovation, and beyond what would have happened anyway. Grieco insists to adopt a socio-centred perspective, in which 'organisational' efforts are fully addressed to benefiting society through the fulfilment of economic and environmental, as well as societal, goals.». These impacts will be measured at different societal levels, and will necessarily be tangible and intangible. The following section develops this idea. The section also clarifies which complexity is connected to the measurement of impacts of social innovation.

1.3 Assumptions Used in the Methodology

Economic evaluation of impacts or economic impact assessment (EIA) is a limited area of evaluation, being part of a larger approach to impact assessment, called Social Impact Assessment (SIA). We will develop the conceptual framework for socio-economic impact assessment of social innovations in line with the study of Grieco (2015) on SIA. Within the concept of SIA, we will also take into account how to include stakeholders by using Value Network Analysis (VNA) to assess the role and influence of stakeholders in developing social innovations. These actors

¹ In the SI-DRIVE-project, social innovations are identified in seven policy areas. Poverty and vulnerable groups are only one of these policy areas (Howaldt *et al.*, 2016).

require different measures and different kind of tools². We see impact assessment as a truly co-creative effort of these stakeholders and assessors.

The report builds on report D5.1 in which a first discussion of impact assessment was made (Glott *et al.*, 2016). The main conclusion of this report is that the measurement of social innovation is complicated, but the measurement of impacts even more so. The advice is to focus on use values of social innovations and not too much on economic or financial impacts. To measure impact, a 'mixed method' approach would be needed.

Assumptions for an ex-ante socio-economic impact assessment

The assumptions of the conceptual framework for the ex-ante socio-economic impact assessment are the following:

- Socio-economic impacts of social innovations can be quantified to a great degree, but there will always remain some judgement because of non-quantifiable measures. Traditional input/output analysis as the basis of economic impact analysis has limited value for social innovations. Such input/output analysis mainly relies on monetized data: with social innovations, social value is central which means the value for others. Other approaches than monetary approaches need to be included into our methodological framework. This assumption is discussed in great degree in Chapter 2.
- The assessments need to be conducted at several levels: the level of the separate social innovations (how to maximize impact?); at the level of regions or communities (how to choose between social innovations?; how to support social innovations and capacity building for social innovations?); at the level of countries (how to build policy context for supporting social innovations and helping these investments achieve greater and more sustainable impact?). Such greater and sustainable impact can be in different directions: becoming more a social policy investment on the one hand; either helping the investment to become a self-financing market activity. The different levels need to take into account different stakeholders such as policy makers, investors, social entrepreneurs, but also the target groups that benefit from social innovations. This means that ex-ante impact assessments will necessarily be a co-creation effort (see Chapter 6). In this report, socio-economic impact assessment will be limited to three main actors in networks: a social innovator; a social investor; and a regional, national or EU-policy maker.
- It is important to mention the difficulty to connect the micro, meso, and macro levels of impact assessment. The problem of scalability of social innovations

² However, in cases that two of these actors is embodied in a single / same entity (e.g. when the government is also investor, which is the case of many social innovations in non-residual welfare regimes), this challenge can ease.

results in the difficulty in connecting the impact assessment at the three levels.

- There exists a whole set of impact assessment instruments which can help decision makers. For overviews, see Maas and Liket (2011) and Grieco *et al.* (2015). These overviews will be integrated in our conceptual framework. This integrating framework will have been tested in several (at least three) pilot environments. The results of the tests will be included in the toolbox (D7.2).
- The toolbox (D7.2) will eventually be focused on delivering guidance to the different stakeholders on the co-creative process to conduct an ex-ante impact assessment. The co-creative nature of the process is crucial, more so than the exact numbers and figures the assessments come up with. The framework will insist on the quality of stakeholder involvement (i.e. also on public support for social innovations), risk management and how to create a better contribution of social innovations to society (IFC, 2008).

The development of such a conceptual framework (D7.1) and toolbox (D7.2) is a complicated matter. The need for such a framework is great, so expectations are great. However, the field is far from fully developed. Even in the USA, where market actors use the technique of ‘impact investing’ to support social innovations, «most of the actions to date [*to develop a notable infrastructure undergirding investments for social outcomes*] have been disparate and uncoordinated» (Grace *et al.*, 2015). The work in SIMPACT is a next step into delivering socio-economic underpinning of social innovations, but certainly not the last. The ambition is that the report can sketch the state-of-the-art and the pathways to better instrumentation for and support of social innovations.

This report has been written by (1) surveying existing social innovation-literature on relevant concepts (with reference to WP5), (2) reviewing data sources including results from WP3 and WP4 to match theoretical concepts with data availability. A lot can be borrowed from existing impact assessment tools, - as was stated above. Grieco *et al.* (2015) made an inventory of more than one hundred of such tools. A cluster analysis was performed to get some insight into what these tools were looking for. Using seven main distinctive characteristics of the instruments (impact typology, purpose, complexity, sector, time frame, developer, data typology), it is able to identify four clusters of impact assessment instruments: simple social quantitative instruments; holistic complex instruments; qualitative screening instruments; and management instruments. Qualitative screening is the largest cluster and focused at the level of organisations. However, most of these instruments are ex-post methods that work on a lot of data to evaluate the past performance of social innovations. For D7.1, ex-ante assessments need to deal with uncertainty in the measurement and quantification of inputs, outputs and outcomes. The framework will necessarily be more limited than with ex-post assess-

Matching theoretical concepts with data availability

ments. Concerning the outcomes to be evaluated, Grieco (2015) advises to not limit such impact assessments to only economic variables, but to see the economic variables as part of broader social impacts. This approach will be developed in chapter 3.

1.4 Relationship of Report to Overall SIMPACT Project

This report builds on the results of work packages 2, 3, 4, 5 and 6.

- The report builds on report D5.1 in which a first discussion of impact assessment was made (Glott *et al.*, 2016). This D5.1 report gave a first assessment of the possibilities there are for ex-ante impact assessment. In this D7.1 report, we will build on these conclusions and work out a co-creation process to conduct ex-ante impact assessment for social innovations.
- The D7.1 report also builds on D6 on policy approaches for social innovations. Mainly the policy maker as an actor in developing and supporting social innovations is further developed in this report. Policy makers can learn about which impacts are interesting for them and what is needed for their decision process.

The D7.1 report has a strong relationship with the report on the Business Modelling for Social Innovations (development of the Business Canvas Model for social innovations D4.1) (Rizzo *et al.*, 2015; but also D3 (Terstriep *et al.*, 2015)). Rizzo *et al.* develop a methodology to calculate a business case at level of a separate social innovation. They point out how social innovators need to apply 'bricolage' (i.e. collecting funding and resources from a lot of sources and dealing with these resources-at-hand). Assets from social innovators may to a high degree be quite antagonistic (Hockerts, 2015), meaning that not all resources will help to achieve the intended goals in the same way. To deal with bricolage and antagonistic assets, social innovators will require networks to help them develop the business model. Rizzo *et al.* (2015) also show that within social innovations, the client is sometimes the customer, but also sometimes the co-producer of the social innovation. The report describes three possible ways in which beneficiaries of social innovations can be included in the social innovation. Integrating these co-creating partners requires social innovators to develop hybrid organisational forms to achieve their goals. All of these factors are also of importance when looking at the possible impacts social innovations may have. There is a partial overlap between the two reports. The following table shows what the scope is of both reports.

- The D7.1 report contains several references to the scenario building for social innovation developed in WP2.

Table 1. Comparison between Business Model Canvas and Ex-Ante Impact Assessment approach

| Business Model Canvas (D4.1; Rizzo et al., 2015) | Ex-ante Impact Assessment (D7.1) |
|--|---|
| Focuses on the project or enterprise level. | Focuses on the micro-level (project, enterprise), meso-level (regional, programs) and macro-level (country, EU, world). |
| The Business Model Canvas (BMC) helps to assess the viability of business model for such a project or enterprise. The BMC helps to estimate the financial and social return needed for a social innovation to survive. | The D7.1-report focuses on this project or enterprise level, but uses a broader set of impact indicators than is used in the BCM. |
| The BCM is mainly focused on the broad set of inputs and outputs linked to a social innovation. | For the D7.1 report, the main focus is to estimate impacts and to help decide on achieving a balanced set of social and economic impacts. The D7.1 report also focuses on impact assessment at the level of region or even a country. |
| The BCM-report is interested in the balance between costs and benefits, but also taking into account what social value is achievable. | The ex-ante impact analysis tries to bring a broader perspective to costs and benefits of social innovations, developing in greater detail social and economic impacts and linking them to different roles in the decision process of social innovators, social investors and public funders. |

2 NEED FOR MIXED-METHODS FOR ESTIMATING THE IMPACT OF SOCIAL INNOVATION

2.1 Introduction

This chapter elaborates on the complications that (ex-ante) impact assessors face when it comes to estimating the socio-economic impact of social innovations. Five complications are discussed: in conceptualising the value of social innovations; in understanding the foundation of mixed-method approaches; in integrating the multiple outcomes of mixed-method approaches; in understanding the transfer of impact measurement results across time and space; in mixing different methods to get the whole picture of social innovations.

Evaluation research helps us to understand how to untangle these complications. Social innovations are context-specific, which means that analysing the impact and transferring results, will require epistemological, methodological and practical considerations. The chapter proposes the adoption of mixed-method estimation approaches, in order to better accommodate the multi-dimensionalities associated with the socio-economic impacts of the social innovations. Such mixed-methods help to grasp the different values social innovations can have.

Referring to «evaluation theory tree» from Alkin and Christie (2004), due to the diverse nature of the subjects addressed by social innovations, the social inquiry areas and the epistemological underpinning of research methods concerning SI impact assessment, a unitary estimation approach for SI is not really possible. Does this mean that all assessments will remain 'local' and not 'transferable'? This is not the case, but it requires a great sensitivity of researchers to deal with social innovations. Evaluating impact assessment requires understanding of contingency factors such as collective behaviour and organisational culture.

While the above-mentioned explanations point to the manifold of questions that the issue of «transferability» of SI impact assessment approaches faces, the chapter proposes to adopt the pragmatic approach of mixed-method estimation for SIs. Connected to this, and following the lead of Morgan (2007), the chapter advocates for adoption of an «empirical» approach when dealing with the dichotomy of contextual versus generalizable SI impact assessment results, to make their transferability and upscaling more meaningful and legitimate. Such an approach could

boost the impact of social innovations across different contexts within Europe by making them more transferable.

2.2 Tackling the Different Values of SI

When looking at the socio-economic outcomes of social innovation, this means more than the enhancement of economic outcomes. Considering what motivates people to engage in or fund a social innovation, the issue inevitably centres upon what added value is created by that engagement/innovation. As Donati and Archer (2015) argue there is more than one form of value that actors in the social world seek. For them, activity in the social world produces manifold values. One of these values is economic, represented by **Exchange value**. This profit-maximising behaviour has dominated capitalist development from Adam Smith through to the current neo-liberal economists. However Donati and Archer (2015) see three other distinct 'values' sought by social actors. Following Marx's lead they point to **Use Value**, where value is realised in the functionality and utility of an activity that either meets people's needs or helps them attain their goals. In addition to these extrinsic values, they describe two other intrinsic values; **Relational Value** or the creation of social or cultural bonds and through those, the gaining of resources that actively empower subjects. The final intrinsic value is **Value as Dignity** where value is realised through the gaining and recognition of a worthwhile social identity (for instance the reintegration of marginalised and excluded groups). Therefore when one considers socio-economic impact we must be aware that the 'goods' produced by socially innovative activities can be both extrinsic and intrinsic with the latter being equally, and sometimes more, important to the actors as the extrinsic ones. Bassi (2012) in a similar vein to Grieco (2015) talks about social innovation creating added value with four distinct aspects - Social, Cultural, Economic and Political, and the necessity to look at the total added value of SI's across all of these value areas. Bassi attempts to outline a methodology that could capture these distinct and differing values but accepts that academics are at an «initial phase of analysis and elaboration of tools for the measurement of social impact» (Bassi, 2012, p. 335). However, what these studies do illustrate is that socio-economic impact of social innovation cannot be reduced to a single form of value. Even though it is difficult to measure the other values produced in the course of social innovation they illustrate the need for both recognition and the creation of more sensitive forms of social value accounting.

Evidence on impact can be used in many ways in for example policymaking; primarily one sees indicators or aggregated data used within national, regional and local government. The question is whether such data is adequate or even useful when one seeks to measure the impact of the social innovations that are of interest to this project. Why is this? A number of points stand out immediately:

Indicators and aggregated data to measure the impact of social innovation

Social innovations do not have a common format; it is highly varied in its scope and subject.

- Social innovations are operable at a variety of levels; some being international whilst many are based upon small group or even individual interventions.
- Social innovations stray from the arena of economics and the tools and evaluation methods one finds there.
- Social innovations bring in differing objectives and aims to those pursued by national governments of public sector agencies. Many pursue socio-cultural aims that have intangible aspects and results that have no measurement analogues or proxies at present. Intangible aspects are also very connected to the context where social innovations are developed, compromising its transferability and scalability to other regions or to the establishment of common methodologies to measure their impact. In this sense, social innovations may have a huge impact in some contexts in terms of their social value and their economic impact, and fail when they are extrapolated or applied to other environments.
- Social Innovation measurement processes are not widespread and have no agreed protocols.

Tangible & intangible
impact at different levels—
micro, meso, macro level

The simple application of macro- or micro-economic techniques will be largely inapplicable or difficult to sustain when faced with this set of complex features. Therefore, before rushing into applying inappropriate tools, one needs to stand back and appraise the possible field, scope and differential nature of measurement that the issue of social innovations presents us with. Firstly, we must look at the differing levels of analysis the issue contains, operating across macro, meso and micro situations; this promotes immediate problems for measurement and what can be produced as evidence of impact. To represent this graphically we need one continuum that displays the multiplicity of levels that social innovation operates across, however this is not sufficient in itself as we need another continuum that captures the problematic nature of the measurement process when trying to capture socio-cultural outcomes that have important intangible impacts largely unmeasured and hence ignored. We therefore need a cross-cutting continuum that displays the differing degrees of tangibility and intangibility that impacts have. Figure 1 graphically represents this.

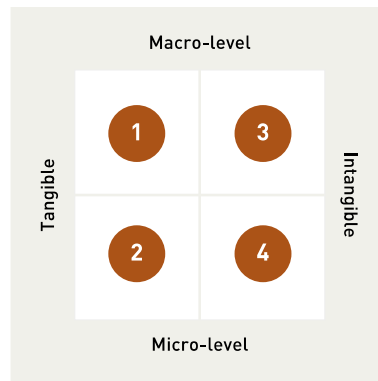


Figure 1. Social Innovations: Operating across multiple levels and tangible/intangible outcomes

This figure sets the field of measurement necessary to account for value emanating from social innovations; here we find four distinct areas each with different measurement characteristics. In *quadrant one* on the top left hand corner we have a range of social innovation forms that are large in scale and which display and produce tangible outcomes that can be relatively easily portrayed. For instance, national organisations aiding the unemployed would have clear evidence regarding return to employment and can produce and use indicators and/or proxies to financialise those outcomes at this meso to macro level.

Quadrant two shows the impacts of social innovations operating at the meso to micro level where quantitative and performance data is available demonstrating cashable savings. These savings may be augmented by other data that shows economic benefit for the locality, group or individual.

Quadrant three refers to outcomes that are desired and sought but by their nature are more difficult to quantify; so, meso to macro social innovations may seek to improve community cohesion, cultural integration/identity or seek improvements in wellbeing, integration and solidarity. Relational goods such as these may have qualitative indicators but by their nature, these are less tangible and more difficult to operationalize as a definite financialised amount.

Finally, *quadrant four* looks at the micro intangible area where many of the social innovations may score highly but do not focus on any accounting systems; here the beneficial outcomes are valued but more ephemeral possibly relating to issues of social and psychological wellbeing, social re-integration, family harmony or the enhancement of personal dignity. Here we find few tangible indicators but more qualitative social evidence that needs a process of interpretation prior to any possible use as a quantitative indicator.

Therefore, when looking at the current state of accounting for socio-economic impact it can be seen that the left hand side of the figure is better developed and less

problematic than the right side. Cost benefit analysis, microeconomics and rational accounting methods have a developed history and legitimation. Whereas social accounting methodologies that might capture the macro to micro intangible benefits of social innovation are much less developed and crucially less accepted and legitimate. But analysing impact of social innovation requires looking at the different kinds of value of such a social innovation. This requires a methodology that covers the dimension of tangible and intangible outcomes, but also to integrate results at the micro and macro level.

As it will be discussed in this chapter, adoption of mixed-method approaches can provide a basis for combined implementation of measures assessing tangible and intangible value creations, thereby addressing the above-mentioned challenge.

2.3 Mixed Methods: Lessons from Evaluation Thinking

As explained in the previous paragraphs, impact assessment will only lead to understandable and useful results if the methodology is customizable to the different values connected to social innovation. «Mixed-method approaches» are the best way to customize the impact assessment to the nature of the social innovation.

Identifying effective reforms

The foundations for social impact assessment were laid by Donald Campbell in his major work, *Factors Relevant to the Validity of Experiments in Social Settings* (1957). This book introduced concepts that are now critically important components of social science methodology, including internal and external validity, experimental design, and quasi-experimental design. In fact, Campbell's «Experimenting Society,» an early intellectual vision of the role of evaluation in society, proposed a society committed to identifying effective reforms suitable for broad implementation, or as we now call it, upscaling (Shadish and Luellen, 2004).

Evaluation Theory Tree

Alkin and Christie's evaluation theory tree (2004; Alkin, 2012) incorporates a large array of diverse evaluation thinking, in which the influential scholars in evaluation research have been placed on three main branches (see Figure 1). Alkin and Christie place Campbell on the «methods» branch of their theory tree, referring to him as a «methodologist who has influenced evaluation.» It is important to understand the connection between the roots of this 'evaluation theory tree' and the branches, to be able to grasp the specific nature of impact assessment of social innovation.

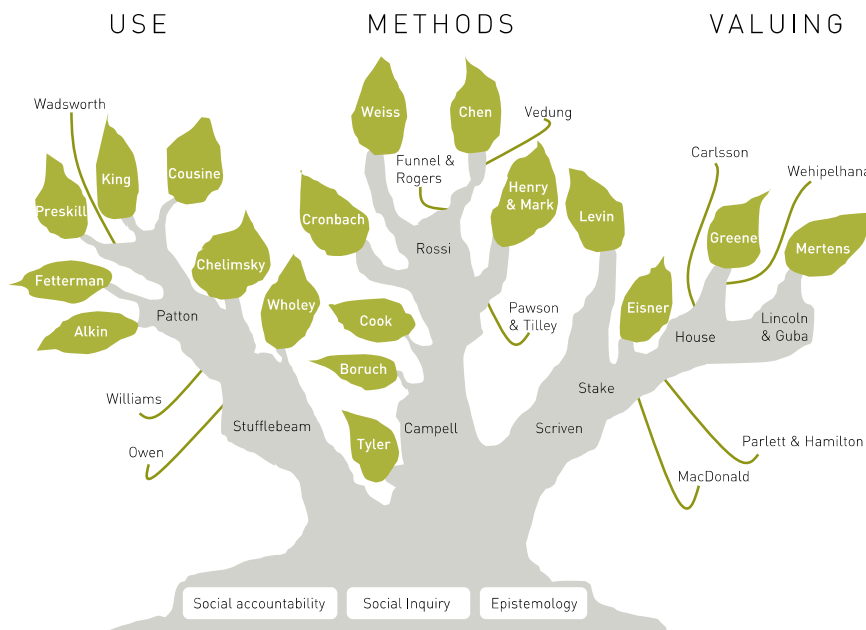


Figure 2. Evaluation theory tree (Source: Alkin, 2012)

The three «roots» of the evaluation theory tree, i.e. social accountability, systematic social inquiry, and epistemology, serve as a foundation for evaluation work, providing the rationale on which the evaluation theory tree and its branches have grown. Social accountability refers to answerability regarding goals, procedures and outcomes, and hence, refers to the *raison d'être* of the evaluation. Social inquiry refers to the systemic study of the behaviour of groups of individuals in various kinds of social settings by a variety of methods (e.g. statistical methods, anthropology, etc.). Epistemology refers to a range of theoretical traditions dealing with the way in which knowledge is constructed, clarifying what can be known and how can we know it.

As Alkin and Christie (2004) explain, the main branch of the tree is the evaluation as research, or evaluation guided by research *methods*, branch. This branch is designated as «methods» since in its purest form, it deals with obtaining generalizability, or «knowledge construction,» as Shadish, Cook, and Leviton (1991) refer to it. The second major branch is called the *valuing* branch. Initially inspired by the work of Michael Scriven (1967), the valuing branch firmly establishes the vital role of the evaluator in valuing. Those on this branch maintain that placing value on data is perhaps the most essential component of the evaluator's work. Some subsequent theorists extend the evaluator's role to include in a systematic way the value placed by others (e.g., Guba and Lincoln, 1989). The third major branch is *use*, which, with the pioneering work of Daniel Stufflebeam (initially with Egon Guba) and the work of Joseph Wholey, originally focused on an orientation toward evaluation and decision making. In essence, work done by theorists on this branch

expresses a concern for the way in which evaluation information will be used and focuses on those who will use the information.

According to the evaluation theory tree, then, the social impact evaluation **methods**, the placing of **value** on the respective data, and the **usage** of these elements in the decision making process, would necessarily stem from the fundamental tenets underpinning the accountability requirements regarding the social initiative, existence of procedural routines for social inquiry, and the nature of the sought knowledge (affecting the epistemology).

What does this mean for the impact assessment of social innovations?

With reference to this construct, however, social innovation - and its impact assessment - is characterized with such a diverse and heterogeneous modes and levels of sponsoring, governance, and substantiation, that establishing a unitary evaluation theory for it seems not easily achievable. Nevertheless, these arguments by no means imply that impact assessment for social innovations is not possible. The point here is that, contrary to purely business-oriented innovations, where more standard models for impact evaluations can be identified due to routinized inquiry procedures and epistemological foundations, impact measurement for social innovations requires considerably more space for **customization** of the methods to accommodate the **diversity** of social change logics attributable to various **social spheres of influence** (e.g. social inclusion, political empowerment, medical rehabilitation etc.).

This argument becomes even more evident when the assessment is to be conducted in the ex-ante mode. The reason for this is that, **collective behaviour** - which is an integral characteristic of any social change initiated by mainly voluntary social activities (like in the case of many social innovations) - cannot be determined based on summing up the predictions about individual behaviours. Indeed, **the individual's values and norms can change during the engagement in a collective action**, leading to unpredictability of collective behaviours. Consequently, ex-ante assessments of social impact would be exposed to even more uncertainty inherited from their attribution with «collective» nature of the social change. Social innovations often bring together heterogeneous set of stakeholders, usually with different - if not divergent - goals from their participation in the initiative. Hence, the stage of consensus-making in the social innovation process - or *enrolment* in Actor-Network Theory terms (Moghadam Saman and Kaderabkova, 2014) becomes more complicated and would need higher level of «**bridging**» social capital. This means that the impact assessment of social innovations is not only dependent on the specifics of social sphere of influence (various social policy areas) and uncertainties associated with hardly-predictable collective behaviour of the stakeholders (e.g. degree of actors' flexibility regarding the values and norms), but also broader contextual characteristics like the level of social capital and such alike.

2.4 Integrating Multiple Outcomes?

Multiple values and mixed-methods necessarily will lead to a multitude of results. How do you come to conclusions? As mentioned in the previous section, there are specifics attributable to the study of social innovation and its various dimensions which make it distinct from the study of innovations in the more conventional understanding of the word «innovation».

Multitude of results & diversity

As Moulaert *et al.* (2005) pointed out

«If we were engaged in a mainstream debate on innovation, we would argue that an innovation process is effective if it contributes to higher productivity and greater competitiveness of a firm, an organization or a community. But of course the concept of social innovation is more comprehensive, more context- and community-dependent, and not so easily assessable as within the mainstream approach to innovation. Therefore, we need to use a more indirect assessment approach.» (p.8).

The existence of many variables in the formation of a social innovation, makes the issue of its impact measurement truly diverse in its **content** as well as in its **form**. Such variables include:

- *The mode of social innovation:* whether the innovation is a technological, legislative, cultural, organisational or other type of novelty (and the possible combinations of these);
- *The stage at which the innovation is:* whether it is at the ideation stage, piloting stage, implementation stage etc. (and the possible overlap of these);
- *The sector or the target group which is the main focus of the social innovation:* whether it is aimed at economically marginalized, socially disadvantaged, community development, etc. (and the possible combination of these);
- *The stakeholder for whom the measurement of impact is done:* whether the economic efficiency is defined from the perspective of broader society, individual stakeholder (e.g. innovator or target groups alone), etc. (and the possible combination of these).

These variables (and more) all can have decisive effect on the choice of the 'type' of estimation which is deemed most appropriate for sake of impact assessment. Further to these factors, the impact measurement of social innovations itself entails some other delicate considerations such as how to attribute the (social) impact of social innovations in society to each specific social innovation. For in-

stance, the European Commission Expert Group on the social business initiative (GECES) has adopted the following definition for social impact measurement

«The reflection of social outcomes as measurements, both long-term and short-term, adjusted for the effects achieved by others (alternative attribution), for effects that would have happened anyway (deadweight), for negative consequences (displacement), and for effects declining over time (drop-off).»

GECES Sub-group on Impact Measurement,
Proposed Approaches to Social Impact Measurement, 2014, p. vii

Demarcating the actual social impact attributable to the social initiative requires a sound level of scrutiny to avoid any potential overestimation.

Measuring social impact by levels of results
– output & outcome

In addition, measuring social impact entails assessment of at least two related levels of results for a project, namely its output(s) and outcome(s). While the outputs are the direct immediate-term (short term) results associated with a project, the outcomes refer to the medium- and long-term term consequences of the project.

Based on all the above-mentioned specifications of the impact measurement in the context of social innovation - i.e. the heterogeneity of the phenomena per se, the delicate process of demarcating the real social impact, the timing of the substantiation of the different levels of impact – it is logical to find that the impact assessment methods potentially usable for the estimation of the social innovation results are so diverse. This diversity makes it difficult to categorize the available methods on only one or two criteria, except if it is done in a very general manner.

Methods that measure impact by monetization and in a long-term perspective

Maas and Liket (2011) classified thirty contemporary methods for social impact measurement using the characteristics of purposes, time frame, orientation, length of time frame, perspective, and approach. Despite the seemingly diverse combination of characteristics, the authors indicate that only eight out of the thirty methods truly measure impact. And if, for instance, we require monetization to be necessarily possible, then we end up with three of those eight, namely OASIS, SCBA and Robin Hood Foundation Benefit-Cost ratio. Furthermore, since for social impact measurement the length of time frame needs to include long-term perspective, we end up with only the last two, i.e. SCBA and RHF's B/C ratio. This conclusion can indicate that, overall, methods constructed on the cost-benefit principle deliver most «tangible» / «monetisable», long-term oriented impact evaluation results. But we pointed out in the previous sections that impact of social innovation should be seen as a multidimensional concept.

However, having pointed out that social innovation initiatives are heterogeneous and how complicated the role of the evaluator is in «valuing» the evaluation data, more often than not, intangible value creations (e.g. improved job satisfaction, enhanced learning capacities, social skills, feeling of inclusion, subjective wellbeing) are pervasive in the social innovation results (cf. Glott *et al.*, 2016, D5.1 of SIMPACT). Hence, as stated earlier in this chapter, the type of evaluation method suitable for a specific social innovation greatly depends on the relevant social inquiry field, epistemological rationales in accordance to the nature of the social change, the stage of the innovation at which the evaluation is conducted (prospective; formative; or summative).

Connected to this, in the next section we reflect on the issue of transferability of ex-ante social impact measurement approaches in the context of social innovation.

2.5 Are Results of Impact Assessment Transferable Across Space and Time?

Morgan borrows the idea of *transferability* of research results from Lincoln and Guba (1985), who treated the question of whether the things learned in one context can be applied in another as an «empirical» issue, stating that (Morgan, *ibid*, p.25):

«[...] we cannot simply assume that our methods and our approach to research make our results either context-bound or generalizable; instead, we need to investigate the factors that affect whether the knowledge we gain can be transferred to other settings. The classic example is assessing whether the results from one particular program evaluation have implications for the use of similar programs in other contexts. This advocacy of transferability thus arises from a solidly pragmatic focus on what people can do with the knowledge they produce and not on abstract arguments about the possibility or impossibility of generalizability. Instead, we always need to ask how much of our existing knowledge might be usable in a new set of circumstances, as well as what our warrant is for making any such claims.»

This insight from Morgan is applicable to the use of mixed-methods for analysing impact of social innovations in general. This section discusses the required sensitivity the evaluation task requires for impact measurement in the context of social innovation. Impact assessment of social innovations need to be sensitive to the

contexts of these social innovations, to the use of different methods and account for multiple outcomes of the analyses. The question is if results for one social innovation are useful for other social innovations. The analysis builds on the separate elements of the evaluation tree that was described in the previous sections, but adds insights from organisational culture to the argument. We need to understand if from an epistemological perspective, outcomes from an impact assessment are understandable and applicable to other contexts. But also: can we use the same methods of social inquiry to any social innovation? Is the usage of the results always the same?

Epistemological departure point

The result of an impact evaluation depends on the epistemological departure points concerning knowledge construction (see introduction of this chapter). The degree to which this result is transferable to other social innovations, necessarily depends on the comparability of the nature of social inquiry areas between any pair of social impact assessment cases. For instance, the existence of deliberately assigned treatment and counterfactual group in the quasi-experimental designs of evaluation, would provide a possibility to deliberately choose comparable treatment and counterfactual groups in two or more quasi-experimental designs, making it possible to argue in favour of transferability of the results. In other words, when the evaluator has a possibility to choose the individuals involved in a pair of studies, s/he can select the study subjects in both studies in a way that the results from one evaluation study be transferable to the other one based on her/his possibility to choose similar individuals across the two studies.

Social experimentation as an example

An example in this regard could be the way social experimentation works. The principle of social experimentation is to test a policy intervention on a small population to evaluate its efficacy before deciding whether it should be scaled up. There are two main actors involved in social experimentation: policymakers and evaluation teams (usually made up of consultants or researchers). Referring to the evaluation theory tree, we can take the policymakers as the user of the social experimentations, while the evaluation teams are better suited for valuing the related data, as they design the experimentation. As the social inquiry area in a social experimentation is the same as its target policy area, the transferability of social experimentation outcomes to the broader society (by taking the ex-post results of the experimentation as an ex-ante assessment for the outcomes in the broader implementation) is more easily accepted. It is important to note that the sample undergoing the experimentation is assumed to have similar contextual characteristics as the broader society to which the results will be transferred.

Nevertheless, in the non-experimental designs of impact evaluation – i.e. where the evaluation designer does not have control over the selection of the «impact-ed» group - the comparability of the contextual, network-related and individual characteristics of those who are subject of evaluation in two distinct studies are

exposed to more uncertainties, and hence, the chances for legitimate transfer of the assessment method results decreases.

The epistemological base of the mixed-methods approach is generally considered to be «pragmatism». The table below helps to visualize the differences among the qualitative and quantitative paradigms and the pragmatic approach.

Table 2. A pragmatic alternative to the key issues in social science research methodology

| | Qualitative approach | Quantitative approach | Pragmatic approach |
|----------------------------------|----------------------|-----------------------|--------------------|
| Connection of theory and data | Induction | Deduction | Abduction |
| Relationship to research process | Subjectivity | Objectivity | Intersubjectivity |
| Inference from data | Context | Generality | Transferability |

Source: Morgan, 2007, p.71

As the table from Morgan (2007) indicates, the inferences derived from implementation of mixed-method approaches in the evaluation research are best suited to facilitate the transferability of the inferences.

Apart from these epistemological considerations in relation to transferability of social impact assessment results, the evaluation theory tree implies that the methods (and hence, their result's transferability) are also influenced by systematic social inquiry procedures. In fact, Alkin and Christie (2004) clearly state that the main branch of the evaluation theory tree (i.e. evaluation as research method) is the continuation of the social inquiry trunk. A perennial question in social inquiry is which methods are appropriate for the study of society, social groups, and social life, and why do people in social groups act as they do? Applying fundamental questions, to a topic like social innovation, where the phenomenon of social change takes place in quite diverse spheres of social life, would lead to potentially diverse answers depending on the substance of the «treatment» of the target group. For example, a social innovation which aims at empowering an economically deprived community through educating the target group in exploiting an available local resource (like eco-tourism) would probably require a combination of pedagogical and professional skills development methods (and their impact assessment). In case a social innovation aims at integrating elderly citizens into social life through an engaging activity, a more psychological inquiry method (and their assessment) would be required. While the former example can rely more on **empirical** evaluations of the innovation process, the latter example would rely more on **cognitive** modes of evaluation (i.e. purely theoretical inferencing with-

Social inquiry

out an actual experimentation), as the psychological treatment of the target group can't be open to all seemingly-innovative ideas.

Usage and social accountability

Next to the epistemological and social inquiry area considerations, the evaluation theory tree implies that the usage made of the evaluation in the decision making process also influences the choice of evaluation mode, and this aspect appears to be closely related to the social accountability trunk in the evaluation theory tree.

Related to this aspect, Moulaert *et al.* (2005) points to *path and context dependency* as the dynamic of «being driven by history and social context», asserting that these are generally relevant to the study of social innovation in social space in general:

«[...] This is partly structural, partly institutional determination. Structural: community development in a «raw» capitalist environment is a different challenge from that in a «welfare state» or «mixed economy» environment. Institutional: a long tradition of private-public cooperation in local development will also point the direction of new future institution building and social innovation in governance relations.» (p. 19).

Obviously, these structural and institutional determinants have direct implications on the elements of social accountability and the division of responsibilities regarding the social change, also leaving their trace on who will use the evaluation results for what purpose.

Organisational culture and context-specificity

It needs to be mentioned that, when it comes to the discussion of the influence stemming from the context, the argument is not limited to the social innovation literature only. Indeed, the dynamics of the innovation culture or organisational culture literature provide us with lines of thinking useful for comprehending the context-specificity of the «soft» elements in any innovation activity.

For example, the Schein Culture Model (Schein, 1992) and the Sackmann Iceberg Model (Sackmann, 1991) explain the relevance of implicit, more or less hidden, or invisible dynamics of innovation within social structures and organisations.

Edgar Schein's model of organisational culture contains the following layers (see Figure 3):

- Artefacts: refers to visible organisational structures and processes (hard to decipher).
- Espoused values: refers to conscious strategies, goals and philosophies.

- Basic underlying assumptions: refers to unconscious, take-for-granted beliefs, perceptions, thoughts, and feelings (ultimate source of values and action).

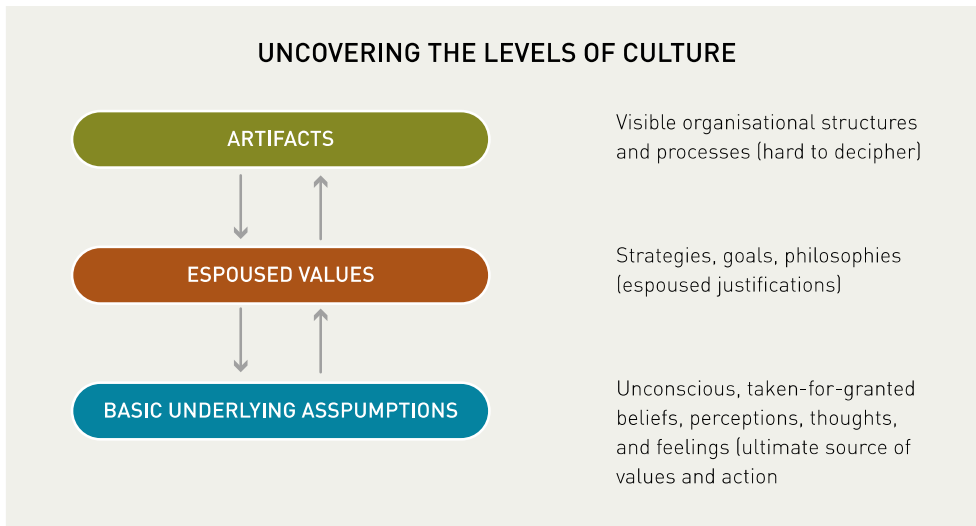
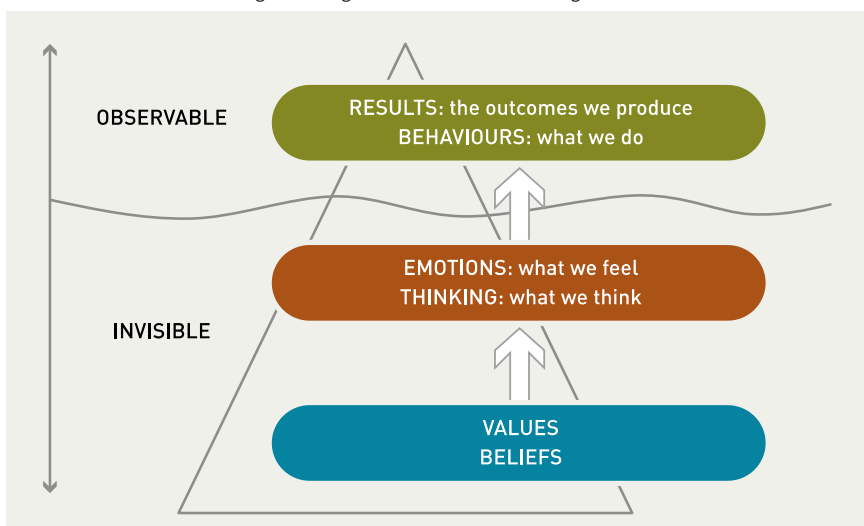


Figure 3. Schein's organisational culture model (Source: Schein, 1992)

Similarly, Sackmann (1991) uses the analogy of an iceberg to differentiate between the visible aspects of culture, such as artefacts and observed behavioural regularities (the tip of the iceberg), and the central cognitive components of culture; values and beliefs regarding priorities, processes and causes (the underlying bulk of the iceberg) (see Figure 4).

Figure 4. Organisational Culture Iceberg Model



Source: Adapted from Sackman, 1991

Both of these models highlight fundamental but hidden cultural elements which can profoundly affect the process of innovation in organisations. Since social in-

novations are even more probable to be exposed to «soft» factors like underlying values and philosophies (compared to purely business-oriented innovations), the importance of such hidden cultural elements increases. Consequently, it can be argued that, as social innovation often deals with new combinations of values, norms, roles and relations (Hochgerner, 2011), its dynamics is interrelated with hidden cultural elements affecting the innovation process, and inevitably, the trajectory of collective behaviour of the stakeholders during the innovation process.

Accordingly, the transferability of ex-ante impact assessment results is more questionable, as in the case of ex-ante assessments, the non-experimental designs - like cost-benefit analysis, feasibility studies, contribution analysis and alike, in which the comparability of the subjects of evaluation in any pair of studies is hardly insurable - dominate the scene of applied methods. Further to this, ex-ante studies are (compared to ex-post or mid-term assessments) more subject to uncertainties associated with unpredictable collective behaviour of heterogeneous stakeholders in different potential scenarios during the innovation process.

While the argument above can imply that due to the manifold of factors jeopardizing the transferability of (ex-ante) social impact measurement results in the context of social innovation, the transmission of social impact measurement results across the space and time for upscaling purposes is faced with serious questions, any final answer to the question of transferability would logically remain dependent on the degree to which the adopted impact assessment method is capable of accommodating (or remaining neutral to) the differences between the circumstances surrounding any two (or more) evaluation subjects. The following example can clarify this point further:

Eurofound's study (2014) on **social cohesion and well-being in the EU** concludes that «inequality plays out more negatively in cohesive societies, specifically for psychological functioning and social well-being» (Eurofound, 2014, p.18). In other words, a finding of the report is that living in a cohesive society does not shield Europeans from the negative role of inequality – social cohesion is not an effective buffer. This means that it is necessary to tackle inequality more directly (than via social cohesion) in those societies that already have achieved advanced levels of affluence and cohesion. On the other hand, the report asserts, in the less affluent Member States of the European Union, life evaluation – life satisfaction and happiness – is enhanced by strong cohesion, but other dimensions of individual well-being are not.

Based on this observation, if a social innovation's impact in a «less-cohesive» society is evaluated regarding improvement of subjective well-being through improving the cohesion, before transferring the results of the assessment, the implemented impact assessment method shall ideally be examined for its capability to accommodate the social «weight» given to the cohesion factor in other context where «social cohesion» is in higher level, and the inequality is

more strongly assessed. This assertion implies that the implemented impact assessment methodology shall ideally have a possibility for incorporating «social weight» of different social indicators across different levels of welfare development, for instance. Referring to the culture level models mentioned above, **the weight given to the cohesion-oriented initiatives might be considered as an invisible element of the culture, which then, according to the evaluation theory tree, it is upon the evaluator to attach adequate value to the data pertaining to the cohesion in accordance to the specific context of the reference society, where the impact assessment is conducted.**

All the points made in this section indicate that, impact measurement in the context of social innovation requires overall approaches potent enough in accommodating the multifaceted sensitivity of the evaluation task to the elements external to the innovation subject itself. To address such a necessity, we believe that adoption of mixed-method approaches for assessment provides a way forward in this direction. The next section discusses how to mix methods when conducting an impact assessment.

2.6 How to Mix Methods?

Glott *et al.* (2016, D5.1) consider the issue of selecting the methodology with which to approach social innovation impact measurement as a gap that should still be addressed by the scholars. They point out that accounting and return on investment approaches clearly lean too much towards a purely quantitative approach, and are very costly, and propose the use of mixed methods in the collection of meaningful data to assess impact of social innovation as the most likely and productive way forward (Tashakkori and Teddlie, 2003). The mixed methods approach entails a convergence of both the quantitative and qualitatively focused methods.

The *Journal of Mixed Methods* (2006), in its call for papers defines mixed methods as ‘research in which the investigator collects, analyses, mixes, and draws inferences from both quantitative and qualitative data in a single study or a program of inquiry’. The possibility to combine qualitative and quantitative data in evaluation research helps us to understand and to overcome some of the limitations associated with implementation of one-sided, qualitative or quantitative methods of social impact assessment, which as mentioned earlier, can limit the transferability of the assessment results due to various factors in the context of social innovation research. Often, mixed-method approaches capture a wider range of perspectives than might be captured by a single method, opening a possibility for including

more contextual elements while maintaining the common elements across distinct assessments.

Six strategies for mixing methods

Mason (2006) counts six strategies for mixing methods in social science research. These strategies include:

- *Mixing method with a rhetorical logic.* The logic of this kind of approach is inherently rhetorical – that is to say, from whatever their starting point (qualitative or quantitative), the researcher uses the other form of data (i.e. quantitative or qualitative) to add some breadth or depth to their analysis, but it is not really considered to be a necessary part of the argument.
- *Mixing method with a parallel logic.* This kind of approach is governed by a parallel logic, meaning any approach (qualitative or quantitative) is not necessarily subsumed within the broad strategy of another. Instead, each part of the study parts has its own logic of design, data generation, analysis and explanation, and these run in parallel, and are not drawn into any form of integrative whole or overall argument.
- *Mixing method with an integrative logic.* The integrative logic is usually there from the start of the study, sometimes very explicitly, sometimes less so, in the assumptions about what part the different types or layers of data can play in the overall story. The point with this approach is that each method would be intended to produce data on a specific part of a whole. Indeed, in this approach different methods (qualitative and quantitative) are deployed because in combination they give a better sense of the whole and because they can address a meaningful group of questions in the study.
- *Mixing method with a corroborative logic.* In this logic, different forms of data and method are used to corroborate what they are measuring, or to corroborate each other. In other words, the social phenomenon is ‘measured’ from two or more different vantage points, in order to pinpoint the phenomenon, or to improve, test or validate the accuracy of the observation.
- *Mixing method with a multi-dimensional logic.* The argument is that different methods and approaches have distinctive strengths and potential which can help us to understand multi-dimensionality and social complexity. It means that instead of ultimately producing one integrated account or explanation of whatever is being researched (integrative logic), or a series of parallel accounts (parallel logic), one imagines instead ‘dialogic’ explanations which are based on the dynamic relation of more than one way of seeing and researching. This requires that researchers factor into their accounts the different ways of asking questions and of answering them.

- *Mixing methods opportunistically (with no intrinsic logic).* This is relevant when mixing methods and data can become possible more by accident than design, especially where existing data sets become available unexpectedly or serendipitously, or where access is available to a potential data source.

While each of the above-mentioned six strategies for mixing methods can be relevant to some cases of social innovation impact assessment, but when we propose adopting mixed-method approach for the impact assessment of social innovations, it is most frequently due to the fact that value created by social innovations are usually composed of both tangible and intangible values – or *exchange-* and *use values*, although each of these may materialize at different points in time (e.g. as an output or as outcome). Hence, the more relevant logic (among the above-mentioned six logics) for adopting mixed-method approaches for estimation of social innovation impact would be *integrative* and *multi-dimensional* logics, as they are more directly supportive of linking and co-interpreting different value creation types.

Bamberger (2012, p.7) pinpoints that mixed method approach is particularly helpful when:

«Many processes and outcomes are difficult to observe, or in some cases even to know they exist. This is particularly important for evaluating the situation of vulnerable groups and for programs that affect illegal or socially disapproved activities, such as drug use, sex work or illegal immigration. All of these challenges are multiplied for post-conflict, humanitarian and other kinds of emergency relief programs.»

This indicates clearly, that for social innovations which lie within the definitions of SIMPACT (i.e. those social innovations that address the needs of vulnerable groups in society), adoption of mixed-method approaches for assessing impact is truly relevant.

The adoption of a mixed-method approach is in line with SIMPACT's goal of middle-range theorising for social innovations, as middle-range theorising is an approach to sociological theorising aimed at integrating theory and empirical research. In other words, instead of choosing / deducing the impact assessment method for social innovation from already existing quantitative or qualitative assessment methods, an empirical investigation of the particular social innovation shall lead to developing the appropriate, most probably mixed-method approach for the impact assessment. This is specifically important when we consider the diverse nature of social innovations.

Mixed-Method approach in line with SIMPACT's goal of middle-range theorising

Within the context of the SIMPACT project, the implication of the above-mentioned argument would be that, each of the subject areas of *unemployment*, *immigration*, and *demographic change* would «impose» their own requirement for impact assessment methodology, leading to – presumably – different sets of quantitative and qualitative methods to be mixed in a mixed-method approach, in order to adapt to the middle-range theories relevant to each of these three subject areas of intervention³.

³ Nevertheless, as we will discuss in chapter 6, there are certain elements and aspects to the ex-ante socio-economic impact assessment process which can remain common for all the social innovations irrespective of the SIs' respective social inquiry area.

3 ECONOMIC IMPACT AS PART OF SOCIAL IMPACT ASSESSMENTS

In this chapter, the discussion is shifted to the meaning of social and economic impact of social innovations. When looking at economic impact of a social innovation, one tries to identify changes in (business) output, value creation, employment levels, income levels and wealth measures. These economic impacts should however always be seen in relation to social impacts. What are these social benefits? From the previous chapter, we understand that these benefits are very context specific. Considering the conclusion of the previous chapter that an impact assessment of social innovations is possible, the final question is how do we identify real impact? This means that it is insufficient to look for changes in economic and social parameters, but it is also necessary to check for intention for change, for counterfactual results, for additionality of the impact above what would otherwise have occurred naturally, for alternative factors that may have induced the effect, for displacement effects, and for possible drop-off effects.

3.1 Introduction

Social innovators need to demonstrate the impact of their proposals, not only to be accountable to their investors or supporters, but also to be able to later demonstrate results of their social innovations. Stakeholders and policy makers expect such results. However, which results should be in focus? The starting point of the SIMPACT-project is that economic results should be the core of our results. A traditional economic impact assessment focuses on five types of impact: increase in turnover, value creation, employment, wages and property (Weisbrod and Weisbrod, 1997). From literature, it is clear that social innovations cannot only be analysed from perspective of monetarised outcomes. More attention is needed for a broader approach on impacts. In this sense, the advice from Grieco (2015) will be followed to see economic impacts as a part of a social impact assessment. Such a view is a shift from dominant thinking in impact assessment, in which social impact assessment is seen as a part of environmental and/or economic assessment (Weisbrod and Weisbrod, 1997). This broader approach is also visible in a recent impact assessment instrument, the Impact Assessment for Social Innovations (IA4SI), which distinguishes between economic, social, environmental and political outcomes that should be measured for the evaluation of collective awareness platforms (<http://ia4si.eu>).

The starting question for this chapter is which impact? In chapter 2, we have pointed out that impact should be a multidimensional concept linking different societal levels and tangible/intangible factors. A simple answer is that social innovations need specific inputs (finances, collaborations, networks, time) to produce social change. This social change can directly result in terms of outputs (the products, the built networks, ...), but also in terms of the outcomes. If the social innovation is really producing such (multidimensional) outcomes, it should be able to show counterfactual results: delivering change that would not have happened without the social innovation. This chapter starts with a discussion on the meaning of economic impact (4.2) and then looks at a broader definition of social impacts (4.3). The final part of this section is how to identify or measure real impact, if any (4.4).

3.2 Economic Impact

Economic Impact Assessment (EIA)

Economic Impact Assessment (EIA) deals with changes in several core economic parameters such as increase in turnover, value creation, employment, wages and property (Weisbrod and Weisbrod, 1997). Most of these indicators can easily be monetarised. From our discussion in chapter 2, we must be careful not only to focus on such ‘tangible results’. Social innovations not only create more employment, they also want to give employees better skills to survive on the labour market. Measuring these better skills is not easily quantifiable. Weisbrod and Weisbrod (1997) relate economic impact assessment to the regional and more macro societal levels. However, a separate analysis of economic effects is needed at the level of the individual social innovation too. All these venues are explored in this section.

Macro and regional level

The analysis of economic impact (EIA) of social innovation examines the effect of a social innovation on the economy in a specified area, ranging from a single neighbourhood to the entire globe. The (public) concern is that supporting social innovations may have economic impacts. It is argued that a social innovation only has economic impact if the innovation shows a change in the economy⁴, above what would have happened if there wasn't an investment or social innovation. The economic impact analysis of a social innovation attempts to measure or estimate the change in economic activity at the level of a specific region, caused by a social innovation. For instance, social innovation may generate more jobs. The study region can be a neighbourhood, town, city, county, statistical area, state, country, continent, or the entire globe.

⁴ Examples of these attempts are seen in the urban context as Urban Social Innovations. For example, how they can reduce gentrification by integrating socially excluded groups inside the neighbourhood or the local economy, through job creation, improvement of health and sanitary conditions, public transport, etc.

EIA of social innovations can be used for different purposes: to examine the consequences of social innovation development projects and efforts to support social innovation (projects); to increase community support for these projects; to help obtain grants and tax incentives; to see if successful social innovation initiatives can operate as a substitute of general social policies and so help privatize public sector actions; to detect private socio-innovative actions that might be more efficient and effective than standard social policies; to reflect the positive and the negative side and interests of the support of social innovations. The following economic variables are considered in an economic impact assessment:

- Increase in business output (sales revenue).
- Increase in the regional value added or gross regional product: this impact estimates the increase in local employee wages plus local business profits.
- Increase in jobs or number of jobs in the region.
- Increase in personal income, wages, and labour income.
- Increase in regional wealth, measured by property values.

Some of these indicators (e.g. business output and value added) show overlap. Some are more conservative than other in estimating the economic change. To assess gross or net economic effect several methods are used in practice:

- Input-output models (I/O model) for analysing the regional economy: these models rely on inter-industry data to determine how effects in one industry will impact other sectors. In addition, I/O models also estimate the share of each industry's purchases that are supplied by local firms (versus those outside the study area). Based on this data, multipliers are calculated and used to estimate economic impacts.
- Economic simulation models: these are more complex econometric and general equilibrium models. They account for everything the I/O model does, plus they forecast the impacts caused by future economic and demographic changes.
- Benefit/cost analysis: in such an analysis, the (net) present values of benefits are compared to the social innovation costs. If the benefits cannot be quantified, the ratio of cost per unit of desired results (cost per person served, supported or helped) can be used to get a sense of cost effectiveness of the social innovation.

- Multipliers: this type of indicator helps to understand what extra investments in social innovations can have as extra impact on the identified economic indicators (output multipliers, job multipliers).

It is important to look at the economic impacts of social innovations. If they do not generate the growth in any of the five economic variables (see above), it is then questionable if social innovations should be an instrument for policy makers or an investment option in the market. At the same time, looking at impacts at the regional level is insufficient for SIMPACT. The treatment according to Weisbrod and Weisbrod (1997) limits the analysis to the regional level. For SIMPACT, the economic and social impact needs to be measured at the level of the separate social innovations too. In the USA, such a framework is available under the heading of «impact investing». Brest and Born (2013) treat impact mainly at the level of an investment. They distinguish between *enterprise impact*, *investor impact* and *non-monetary impact* of an investment (see 3.3). From these three impacts, enterprise impact can be seen as the main approach to identify economic impact at the level of a separate social innovation. The authors distinguish within enterprise impact, product impact (does the product or service with a social outcome, deliver the financial return to make the activity sustainable?) and operational impact (does the enterprise or activity itself function in a responsible way and still be beating the costs?). It is clear that the economic performance should immediately be seen in relationship with social impact: social innovations that are only focusing on improving profits will experience scope drift. Both outcomes need to be monitored at the same time.

3.3 Social Impact

Social innovations can create societal change. This change is called social impact (Grieco, 2015, 44). As explained in chapter 2, these social innovations cover tangible and intangible dimensions. All of the impacts of these social innovations includes direct, indirect and induced effects, negative and positive effects, long and short-term effects. Outputs are directly the result of the social innovation; outcomes are the wider changes by a social innovation, also the main objective of social innovators. It is important to understand that the outcomes can also be influenced by other factors than the social innovations. For Grieco (2015), social impact is that part of total outcomes that occurred due to a social innovation, and beyond what would have happened anyway. She insists to adopt a socio-centred perspective, in which 'organisations' efforts are fully addressed to benefiting society through the fulfilment of economic and environmental, as well as societal, goals.» (p.49).

This social impact assessment is also at the core of what in the USA is called ‘impact investment’. Grieco (201a) shows what impact investing can mean in respect to social impact analysis. Impact investing is a recent trend in the USA in which philanthropic and non-philanthropic investors try to link economic performance of their investments to social performance. SIA is a precondition for helping develop investments that are meant to be socially good. Grieco points out that the «lack of standardized practices to assess goal achievement could severely hamper the further development of these innovative sources of funding (...)». Brest and Born (2013) spend time to ‘unpack’ the impact in impact investment. It is clear from their approach that the focus of impact is solely at the level of the social innovations itself. As was indicated in the previous section, they distinguish between *enterprise impact*, *investor impact*, *non-monetary impact*. They also point out that more work is needed to develop frameworks to analyse these different impacts. Their short definition of social impact is:

Social impact assessment (SIA) similar to the impact investment in the USA

$$\text{SOCIAL IMPACT} = \frac{\text{SOCIAL BENEFIT} * \text{LIKELIHOOD OF SUCCESS}}{\text{PRODUCTION COSTS}}$$

This idea will be leading in our conceptual framework. We will however need to relate this social value to different stakeholders and levels of analysis. The social benefit needs to be related to the interests of each of the stakeholders. Integrating each of these benefits into one result will be (near) impossible to achieve, as we have learned from chapter 2. The analysis at the regional level, as is done in economic impact assessment, should not be excluded from this perspective. However, for social innovations, the set of indicators and inputs is too diverse to catch within traditional I/O analysis. It is unclear which relationship between sectors and social innovators exist, and as has been said many times already impact does not only have a monetary form. The total expenditure with social innovations is too difficult to judge and this also makes multipliers difficult to assess. Even so, there are examples within the field of microfinance that do analyse the broader economic and social impacts. Such analyses are however quite expensive and generally surpass the means of most social innovators in practice (Saad and Duasa, 2011).

Taking the interest of stakeholders into account

This treatment does not clarify which social impacts should be selected. Is there a possibility to identify which social impacts are important? In general, this will be difficult. It is also important to consider the political and cultural context. For this reason, it is interesting to look at the approach selected by the Obama administration in the USA to formulate eight societal goals which help to identify relevant

social impacts (Grace *et al.*, 2015). The following excerpt shows these eight societal goals.

Figure 5. Obama-administration: sector targets to maximize discrete social and/or environmental impacts



Source: Adapted from Grace *et al.*, 2015

In chapter 6, a further treatment of inputs, outputs and (socio-economic) outcomes will be presented.

3.4 Identifying Real Impact

Important elements
needed to intent social
impact

Brest and Born (2013) discuss several important elements that need to be reviewed to discern a ‘real’ social impact. They first point out that social impact can only be assessed if there is the intention to have these social and economic impacts. In practice, in all activity you can identify positive social impacts. In most cases, these impacts are unintended. However, without intent, we cannot speak of social impact in these cases. The FP7 IA4SI-project, intended to measure social impact with digital social innovations, also insists on this idea, by looking at what the innovation makes it distinguishable from other innovations. They operationalise the idea by looking at four elements of social innovation: social innovations are more efficient, more effective, more sustainable (surviving end date of financing), fairer than other innovations. They provide questions to help evaluators look for these dimensions of social innovations. The IA4SI is however mainly an ex-post evaluation tool (<http://ia4si.eu>). A second point Brest and Born (2013) make is that actors produce social outcomes that would not have occurred otherwise. This is the idea of counterfactual results. If the outcome can be related to other factors than the social innovation, then there is no impact. In measurement of impact, you need to control for such effects that would have happened anyway, the so-called ‘deadweight’. Brest and Born (2013) thirdly point to the fact that the social innovation should show additionality: an investment shows additionality if it increases the quantity or quality of the enterprise’s social output beyond what would otherwise have occurred.

The Group of Experts of the European Commission on Social Entrepreneurship (GECES, 2014) added some more elements which would be needed to be controlled in order to prove impact. Close to the idea of a counterfactual result, it is possible that the impact has been the result of other factors (**alternative attribution**). This effect should be eliminated from the result. There is only real impact if there are no negative consequences of the social innovation for other social groups (**displacement effects**). GECES also points out that impact may be **declining over time** (drop off effect) (GECES, 2014; Farr *et al.*, 2014).

The problem of course with an ex-ante instrument is that it is near impossible to control for most of these effects. The main point is to foresee management practices and corrective actions to deal with these effects when implementing or improving the social innovation. For our purposes, the following table shows how we can deal with these impact related aspects in an ex-ante framework for social innovations.

Table 3. Discerning real impact in an ex-ante framework

| Characteristics of impact | How to deal with these effects in an ex-ante framework? |
|---------------------------|---|
| Intentionality | Check for the goals of the social innovation. The outcomes should be clearly identified. |
| Additionality | Use a technique to check for the causation of the outcome. This can be done by use of a Theory of Change or using the Impact Value Chain (see chapter 5). The counterfactual effect cannot be 'proved' ex-ante, but only assumed because of previous evidence base of impact (for example because of development with a RCT). |
| Counterfactual | Check for deadweight, by comparing results to the cost of inaction. Another approach for counterfactual effect is to measure the willingness to pay (WTP) by actors. Within such a measurement, not only attention should be directed at the WTP for use of the social innovation, but also for non-use. (Andersson <i>et al.</i> , 2012). |
| Alternative attribution | As with additionality, there should be a clear idea of the possible other factors or activities that may cause the outcomes. A Theory of Change may help to identify such causes. Research may indicate which possible other causes there could be. Results from ex-post analyses may be taken into account reducing the impact of the social innovation. Sensitivity analysis can be conducted to reduce a positive bias in results. See Farr <i>et al.</i> , 2014. Contribution analysis may help to control for alternative attribution in an evaluation (ex post-mode). |
| Displacement effect | Social innovations focused on vulnerable groups may have a tendency to displace the problems from the vulnerable groups to their financiers or supporting agencies. A clear guidance to deal with displacement is not easy to give, but it requires some preparatory work from all to try to identify such effects. A Theory of Change may be helpful. See Farr <i>et al.</i> , 2014. |
| Drop off effect | As with other effects, these are not easy to calculate. Reference should |

be made to existing sources that indicate how impacts are reduced over time. See Farr *et al.*, 2014. The experience from the New Member States says that «financing» issue is the most important risk leading to the drop-off effect over time (due to exhausting of the financial supports to the innovations, exacerbated by the non-existence of legal frameworks supporting social economy sector in some of the NMSs. Hence, the prospect of sustainability of the SI after receiving support from the investors, might be one of the good estimates for this factor (i.e. drop-off effect) at the ex-ante assessment stage.

Direct & indirect effects

One of the issues with an ex-ante instrument is that most of the attention will be mainly focused on direct effects of the social innovation. Direct effects can be included in multiplier calculations. However, there should also be attention to indirect effects, caused by the direct effect, but not directly attributable to the social innovation itself. Next to indirect effects, there should also be attention to induced and dynamic effects:

- Induced effects: results of increased new (economic) outcome caused by the direct and indirect effects.
- Dynamic effects are caused by geographic shifts over time in populations and businesses. Simulation techniques and/or scenario planning may be useful to identify such effects in the ex-ante mode.

Within an ex-ante framework, there can only be some guesswork for such indirect, induced and dynamic effects. Historical data may show how such effects have taken place in the past. In most cases, risk management should indicate how to look for such non-direct effects.

4 PREDICTION OR EXPLORATION

4.1 Introduction

Given the fact that assessing the economic and social impact of social innovations is a complicated matter, the following question is how to approach the ex-ante part of the impact assessment. Ex-ante means that the impacts should be predicted. In 4.1, we are looking at the lessons of one of the most developed predictive models, Exploratory Modelling and Analysis. The lesson from this model for policy makers and investors, is that the predictive exercise helps to learn what inputs helps to influence social and economic outputs and outcomes, but also to see how 'much' outcome could be influenced. Using these lessons helps to build benchmarks such as the IRIS (Impact Reporting and Investment Standards) and GIIRS (Global Impact Investment Rating Systems). Scenarios can be built and help us learn us how to deal with future change once these impact futures move in the direction of one of the scenarios calculated. Building these scenarios is also helpful for identifying the risks that possibly influence the achievement of the required economic and social impacts. It is important to understand which enablers and barriers there are for achieving the impacts. Within social innovation, the possible social benefits are more or likely to happen. This means that to achieve these benefits, an impact assessment should also take into account which risks exist that may reduce the likelihood to achieve the social impacts. A good assessment will also deliver a risk management plan. Risk management will need to deal with more types of risk: for instance consequential, organisational and behavioural risks Osborne (2015). A collaborative co-creative approach with stakeholders and other parties is needed to develop a risk management plan that can encompass all of these risks.

4.2 Ex-Ante Impact Assessment: Prediction or Exploration

Ex-ante assessments can be seen as making predictions or forecasts about the future: should you invest?; should policy makers support social innovations to alleviate social problems and reduce or make better use of taxes?; should policy makers use social innovations to reduce costs in social policy and privatize public services through social entrepreneurship and third sector initiatives, as advocated by neo-liberal economists? The use of predictive models for such investments is problematic. Added to the fact that it will be complicated to predict multidimensional impacts, prediction generates a lot of distrust. Kwakkel and Pruyt (2013)

Forecasts about the future

classify three responses to the use of predictive models: «the forecast is always wrong» (Ascher, 1978), «all models are wrong» (Sterman, 2002), and «arithmetic for such systems is useless» (Pilkey and Pilkey-Jarvis, 2007). For social innovations, the lack of systematic data is a major hurdle to develop quantified predictions, but also prediction on qualitative aspects of social innovations. The use of a technique such as Exploratory Modelling and Analysis (EMA) would be instructive to the field of social innovation, but it is still quite out of reach because of the lack of data and information on inputs, outputs and outcomes (Kwakkel and Pruyt, 2013). Possibly, the fact that social innovations 'live' in the realm of market niches or in domains subject to market frictions, makes it hard to collect large data sets. The 1000 social innovation cases of the SI DRIVE-project could be used for further analysis, but this data will only come available after the SIMPACT-project (Howaldt *et al.*, 2016).

Treating uncertainty
with inputs & out-
comes

Even so, the lessons from EMA in areas with more data available are useful for our purposes. Ex-ante assessments need to have a procedure to treat uncertainty with inputs and, eventually, outcome parameters. Kwakkel and Pruyt (2013) see that even partial information in an EMA can inform policymaking or planning even when prediction and optimization are not possible by using the available partial information in a systematic and transparent way. They ascertain:

«Uncertainty is increasingly recognized as being a major problem for the use of models in decision-making. (...) EMA can have profound implications for the way in which uncertainty is treated and models are being used to support decision-making. (...) Where traditionally, often the uncertainties in the inputs to models are reduced as much as possible, in order to come to a best estimate of model outcomes, EMA shows how one can embrace the full range of uncertainties on the input side to models. (...) EMA can also be used in case there is uncertainty about models, while focusing on the consequences decision-makers care about most: the model outcomes. (...) Alternatively, EMA offers the potential to support the process of creatively imagining possible futures.» (p. 430).

Benchmarks and refer-
ence datasets are
needed for an ex-ante
impact assessment

For policy makers and investors, it would be good to use ex-ante assessment to experiment not only with the inputs (amount of investment, type of social innovation), but also to see how 'much' outcome could be influenced. Then, the development of benchmarks and reference datasets is needed as for example the IRIS (Impact Reporting and Investment Standards) and GIIRS (Global Impact Investment Rating Systems) (Brest and Born, 2013). Even if the standardized benchmarks of the IRIS and GIIRS are too limited on the outcomes side (Brest and Born, 2013), the further development of such datasets can help the decision making process for different stakeholders to a great degree. The GIIRS ratings are based

on a survey spanning five categories: Leadership, Employees, Environment, Community, and Products and Services. The last one is output-oriented, the former are operational (Brest and Born, 2013). For our purposes, we need to understand that in an ex-ante impact assessment framework, the choice of the inputs, outputs and outcomes, but also the range of these variables are riddled with uncertainty. Many well-established techniques, such as Monte Carlo sampling, factorial methods, and optimization techniques, can be usefully and successfully employed in the context of EMA but also in the context of ex-ante impact assessment of social innovations (Lempert *et al.*, 2003; Agusdinata, 2008; Kwakkel and Pruyt, 2013). As with EMA, it is not so much the strategy to reduce this uncertainty surrounding outcomes, but to use the uncertainties to create possible futures. It is this exploration, rather than prediction, that can help guide stakeholders. This exploration can be supported with the help of scenarios. The scenarios are not necessarily real 'futures', but these scenarios can teach us how to deal with future change once these futures move in the direction of the scenario (see for example WP2 of SIMPACT). For social innovation, learning to use uncertainty in this way, helps to see what may be needed to achieve the social outcomes that are desired.

4.3 Risk Management

Section 3.3 gives a definition of social impact. The social benefits connected to a social innovation are more or less likely to happen. There are factors that may hinder or help improve the impacts a social innovation promises. An important feature of assessing ex-ante impacts of social innovations is the identification of risks connected to these social innovations. Social innovators and investors (public, private) should see which risks there are to achieve the promised economic and social outcomes. It is even needed to understand to which degree each of the risks influence the outcomes, and if trade-offs exist. The development of an impact assessment should identify which elements in the inputs, but also in the context in which the social innovation shall be developed, are possibly blocking the achievement of the outputs and outcomes. The assessment should produce an overview of such enablers and barriers. These can be deducted from other social innovations, but also from a systematic evaluation of each of the inputs (money, time, effort). Simulation can be used to evaluate these risks. For example, in WP2 of SIMPACT, use of «threshold models of collective behaviour» for simulation of SI behaviour scenarios is presented. The threshold models show how the threshold level (or resistance level) of individuals in joining social networks change based on the behaviour they perceive from others in joining the network. In case of social innovations, these models can help in identifying the stakeholders / individuals who have higher «social weight», when they encourage others to join the initiative by their own joining to the network. With the same logic, these models can explain the risk of break-down of the network due to «re-increasing» of the

Identifying risks of social innovation as forecasting instrument

threshold level of the stakeholders when they perceive for some reason that the network is losing its cohesion. Leaving the SI network by stakeholders with high social weight poses an important risk to the SI initiatives. In the following chapter, we will discuss Value Network Analysis as an instrument to help identify such risks in the relationships within a social innovation. The result of the analysis should be a risk management plan how to minimize possible impact of barriers, and to maximize possible enablers in the development of social innovation.

How to manage risk

Social innovation widens the concept of risk beyond the primarily calculative 'prospects of success' perspective; taking into account issues regarding social harm, sustainability and environmental impact that might flow from the particular social innovation proposed. Often the principle of 'do no/least harm' is adopted to mitigate possible impacts. Osborne (2015) suggests that social innovators should consider how to manage risk in three analytically distinct areas; *consequential risk* where there is a direct risk to stakeholders arising from the implementation of the social innovation; *organisational risk* with possible harm to the reputation or legitimacy of the innovators and *behavioural risk* where stakeholders and or the community may be affected. He also suggests that the process of assessing those risks is best undertaken using an 'open systems' collaborative / co-creational approach because of the nature of social innovation and its often fragmented format and importantly because social innovation requires a more democratic and open form of decision making.

5 EX-ANTE IMPACT ASSESSMENT AS A CO-CREATION PROCESS

In estimating social and economic impacts, the implication of stakeholders in a co-creation process is of prime importance. The impacts of a social innovation are not a simple given thing. Impacts are subjective, require context and are connected to the interests of stakeholders in the social innovation. Social innovators and other stakeholders need to co-create the impact assessment. The process should be done in such a way that the role of the stakeholders needs to be clear. Borrowing from the *Measuring Impact Framework*, stakeholders should only be integrated if the estimations have been prepared. Stakeholders should have a clear view on what they can bring in their ideas.

To estimate the impacts, it is also necessary to have a clear view on how the stakeholders co-operate, share and exchange value in the social innovation. The instrument of Value Network Analysis is helpful for mapping this value exchange. The Value Network Analysis gives an overview of the network-as-is. It is equally important to also have a view on the actions needed to achieve the required impacts. A Logic Model or Theory of Change is helpful in identifying how the required impacts are linked to sub-goals and to the inputs in the social innovation. Discussing these causal explanations is helpful for uncovering the preferred impacts in the social innovation.

5.1 Introduction

After the previous chapters, we understand the complexity of measuring social impacts of social innovations aimed at vulnerable groups. We have also discussed which impacts should be measured for social innovations. Social and cultural outcomes are to a large degree subjective (Brest and Born, 2013; see previous chapters). From an ex-ante perspective, we have shown to what degree estimation of impacts is possible. It is time to close in on the motives of the stakeholders connected to the social innovation and link them to the impacts that need to be estimated. The process of the impact assessment is therefore a co-creative process in which stakeholders of the social innovation collaborate with the assessors. This starting point is common with the collaborative approach suggested for the business modelling of social innovation (Rizzo *et al.*, 2015). Co-creation means that business models require the participation of all stakeholders to make a working social innovation. A major part in estimating and calculating social and economic

impact can be done from an expert position, but the discussion in the previous chapters has shown that context of social innovations is important and that the impacts or social benefits are very well connected to the interests of the stakeholder networks. Saying that an ex-ante impact assessment is a co-creation effort, will require that the assessment consists of several components:

- Identifying the right stakeholders in the social innovation and their use of impact assessment (6.2);
- Identifying the interests of these stakeholders and aligning their interests using value network analysis (6.3);
- Finding the right moment to implicate these stakeholders in the co-creation process (6.4);
- Ensuring the understanding of what will happen with the social innovation using causal network thinking, helping to shape the components of the impact assessment (6.5).

The implication of the stakeholders in the process is therefore an important element for making a good impact assessment.

5.2 Stakeholder and Use of Impact Assessment

Addressing producers,
investors & policy
makers

It has become clear that the impact of social innovations will necessarily have different significance for different actors and stakeholders. Actors and stakeholders operate also at different societal levels, so the goals of social innovations will be quite different. For the development of an ex-ante impact assessment tool, each of these levels will require a different interaction with stakeholders. It is therefore quite understandable that all impact assessment tools provide ample room to develop with the help of stakeholders the goals for social innovations, and, connected to these goals, the impact that should be measured. Von Jacobi *et al.* (2015: 17-19) point out that any social impact measurement should start with the unit of analysis. A measurement may be performed on the micro-level and thus capture (marginalized) individuals, families or enterprises and other organisations, on the meso-level, capturing groups, neighbourhoods, or municipalities, provinces and regions, or on the macro-level and capture a whole country. As Glott *et al.* (2016) clarify, each level requires specific indicators. **An ex-ante instrument should be focused on at least three stakeholders: the producers (social innovators), the investors (private and/or public) and policy makers.** The 'clients' or beneficiaries served by the social innovations could be a separate stakeholder, but their interests should be covered by what policy makers want. In the business modelling approach that SIMPACT developed (Rizzo, Komatsu and Deserti, 2015)

the distinction is made between beneficiaries as actors of social innovation, as customers of social innovation and as users of social innovation. The interests of these clients are not always aligned with other stakeholders and in developing a working business model, this alignment should be central activity. In the USA, the impact investment market has shown that investors have specialised into separate niches: philanthropic impact investors (Etzel, 2015), start-up financiers (Kay and Muller, 2015), and impact investors. Philanthropic impact investors may be less interested in getting a market rate return on their investment, and concede financial return for more social or economic impact. Start-up financiers may also concede financial return, but are focused on a phase of the development of a social innovation. Impact investors may want both: a market rate of return and social and economic impact. In Europe, these roles may not yet be that developed.

The following table shows what the three stakeholder groups would be most interested in, using an ex-ante impact assessment instrument.

Table 4. Use of ex-ante impact assessment of social innovation according to stakeholder group

| Stakeholder | Use of ex-ante impact assessment of social innovation |
|------------------|---|
| Social innovator | A producer of social innovations can learn two things from an impact assessment: to identify 'new markets' (new products, new social innovations) and to improve performance (either operationally, either in achievement of outcomes). An impact assessment can help producers to learn from other cases (benchmarks). Not only does this give information about new outcomes and new inputs (or methods), it also helps to show producers what they can improve in their operations to become more efficient and effective. Impact assessments help innovators to be more transparent to financiers and other stakeholders. Social Innovators can also learn about the scope of their activities, how have they caused a change in peoples' lives, the impact on the users of their social innovations. Finally, impact assessment can also help to achieve more scaling and diffusion. |
| Investor | An investor can use an ex-ante impact assessment to evaluate the rate of return of their investment and weigh the results with the outcomes (social and economic outcomes). The results can help to make the trade-offs between actions proposed, but also to help select between different social innovations (opportunity costs). Investors can be specialised: Philanthropic impact investors: for such investors, the social outcome is more important than the profit from the investment. Philanthropic impact investors are also called non-concessionary investors, who do not require market rate returns ⁵ . Sometimes, these investors are mainly to help (social entrepreneur) start-ups, not only with funds or grants, but also with non-monetary support such as advice and expertise. Start-up investors, 'first-loss' capital: these are investors who are focused on giving social innovations a first funding to start-up. This fund- |

⁵ Philanthropic investors also invest to indirectly reduce their taxing payments inside their countries. Philanthropy to support NGO's, social entrepreneurs, etc., have huge taxing benefits that attract the interest of investors.

| | |
|--|---|
| | <p>ing is used as a leverage to attract other funding. There may be overlap with philanthropic investors (Kay and Muller, 2015). Impact investors: for such investors, social impact is of prime importance, but these investors do most of the time require market rate returns. The investment may be somewhat more risky, so even these risks may need to be covered by the return.</p> |
| <p>Public policy maker; intermediaries</p> | <p>Public policy makers may be interested in social innovations for totally different reasons than social innovators and social investors. On the one hand, they may be focused to shift public tasks to the 'market' and thereby reducing the need for public aids (see further D7.2 Skandia-tool), on the other hand they may just be interested in the social impact of social innovations (maximizing and optimizing outcome). Ex-ante assessments can learn them which social domains are prone to social innovations and shifting their efforts; and they can help understand how to support social investors and innovators and which combination of public/private funding is most optimal to achieve their public goals (Grieco, 2015). The Obama-administration has selected ten public domains (affordable housing, community development, education, environment, health, sustainable cities, manufacturing, small business, sustainable agriculture, workforce development) for which impact investing should be used to support social innovations (Grace <i>et al.</i>, 2015). Ex-ante impact assessment plays an important role in developing new policies (Dunne, 2014) and/or selecting the best supporting instruments such as tax credits, subsidies, pay-for-success approaches, public-private financing (Grieco, 2015). The amount of public investment may be reduced with social innovations, but there will always be a need for public funds to support the innovations. The weighing of social outcomes can also show policy makers if they are crowding out markets with their support (Brest and Born, 2013). It is also important to understand at what level policy makers are active. A commune will look differently at supporting social innovators than national policy makers will.</p> |

5.3 Value Network Analysis

Investigating relationships between stakeholders

A process perspective requires also investigating the relationships between all stakeholders in the development of the social innovations. A Value Network Analysis should be performed at the level of each social innovation to identify the exchange relationships between the stakeholders, to understand the possible costs and benefits for each of the participants. Again, because the assessment is done ex-ante, such an analysis should limit itself to estimations of the possible exchange of impacts. The added value of more in-depth techniques to conduct Value Network Analysis will remain limited (Allee, 2008).

Another important contribution of VNA to impact assessment of social innovations lies in its clear highlighting of 'intangible' values exchanged among the network members. Intangible values, as discussed in chapter 2, are prevalent among inputs, outputs and outcomes of social innovations (e.g. knowledge, subjective

well-being, self-esteem). Not only VNA maps the intangible value exchanges along with the tangible ones, but it also traces the conversion of these values into each other. **Value conversion** is the act of altering or transforming one type of value into another, such as transforming an intangible output or asset into a tangible deliverable or outcome.

The value network, as introduced by Allee, maps the value exchange as a flow diagram where arrows represent the tangible and intangible exchanges. The mapping is followed by three types of analyses, namely *exchange analysis*, *impact analysis*, and *value creation analysis*.

Exchange analysis, impact analysis & value creation

- *exchange analysis* is concerned with investigation of the general pattern of the exchanges in the network, sufficient reciprocity, existence of weak or inefficient links.
- *impact analysis* asks if an involved party can create value from the received inputs.
- *value creation analysis* is the assessment of the value increases that an output from each party triggers for the other parties and how each focal party itself benefits from it.

Within the subject of social innovation, the exchange analysis shall help to identify those stakeholder relationships (or lack thereof) which can undermine the sustainability of the innovation partnership (specifically in the long-run) due to insufficient or inadequate interactions or reciprocity in value exchanges. The VNA's impact analysis could be helpful in understanding how the inputs every stakeholder receives from other stakeholders can be exploited best for the purpose of improving the efficiency of the provided solution. The value creation analysis can be a useful initial step in defining the outputs (and perhaps outcomes) which the existing or envisaged social innovation is going to deliver, providing a qualitative basis for the impact assessment.

Furthermore, the value conversion question runs through both the impact and value creation analyses but the spin on the question is slightly different in each (Allee, 2006). In the impact analysis, the question would be «how is each party converting its inputs into value (tangible and intangible) for itself? How is this helping it build its tangible and intangible assets?» In the value creation analysis, the question would be «how each party is utilizing its tangible and intangible assets to create value for its partners and the target group?» Answers to such questions are of paramount value to impact assessment of social innovations as they can clarify the «measurability» specifications of the concerned social innovation, and if / how they can be improved.

Value conversion as mix of impact & value analysis

All in all, these three analyses can provide valuable inputs for the *risk analysis* of the social innovation, as they highlight the potential weaknesses within the relationships and arrangements in the social innovation network. Allee (2009) counts a number of value network indicators regarding the vitality of an organisation, which we believe can be applied in connection to our purpose of risk analysis of the social innovation network:

- *Resilience* requires the right balance of formal structure to informal knowledge sharing.
- *Value Creation* indicators show the capacity for each role to generate both tangible and intangible value.
- *Perceived Value (Brand)* assesses the level of value, individual actors feel they receive from individual deliverables, from other roles, and from the network as a whole.
- *Asset Impact* indicators are used to consider which assets are most affected by the network behaviour as a whole and by the actions of specific roles.
- *Reciprocity* indicators can point to a more hierarchical structure or show instability.
- *Structural Dependency and Risk* indicators include role centrality. In VNA high centrality for any one role may actually be a risk factor for the network – or certain patterns of clustering may serve the overall value creation dynamics in unique ways.
- *Structure and Value* relationships are revealed by incoming and outgoing deliverables for each role.
- *Agility* depends on how quickly information can move around the network and how easy it is for any individual to reach the person who might be able to solve a specific problem.
- *Stability* is revealed by measures of network density, the overall connectedness of the network.

Based on the nature of each social innovation (i.e. its subject and the configuration of its stakeholder network), however, the relevance of each of these indicators can vary.

One specifically interesting aspect in VNA and its related analyses in connection to the impact assessment of social innovations, is when the transformation of outputs to outcomes are concerned. The VNA's impact analysis and value creation

analysis can be quite informative in this regard, specifically when the transformation includes conversion of either of intangible or tangible values to the other one. This is in fact an aspect in the impact assessment, which quantitative methods can be complemented and supported by getting inputs from VNA. This characteristic of VNA is also useful for the next section.

This whole process of going back and forth with the stakeholder networks represents a form of Double Loop Learning.

5.4 Role of Stakeholders

In chapter 2, we proposed a middle-range theory for ex-ante impact assessment of social innovations. The methodology for evaluation of any social innovation would be akin to the social inquiry area from which the social innovation stems. That would mean that, whether or not any specific quantitative or qualitative method is suitable for evaluation shall be decided based upon the nature of the subject area dealt with by the SI. Hence, approaches requiring high stakeholder involvement (like Social Return On Investment) can, for instance, be relevant to the cases where the SI knowledge is highly dispersed among the stakeholders (e.g. employment of groups with mental disabilities). The question then is when to involve these stakeholders in the process of assessment.

Involving stakeholders in the process of assessment

In their overview of instruments, Maas and Liket (2011) find that a main difference between different existing impact assessment instruments is when and how stakeholders play a role in the impact assessment (Maas and Liket, 2011). In general, two approaches seem to be used: stakeholders play an essential role from the beginning of the assessment, or they play a restricted and 'managed' role in the process. In the principles for SIA for example (ICGPSIA, 1994), the first principle is to involve the diverse publics. Interested and affected publics should be included in all steps of the social impact assessment process. It is understandable that stakeholders should be involved, but including stakeholders from the beginning gives the assessor a difficult task to manage expectations from (possibly) conflicting positions or interests with the social innovation.

Stakeholders play an essential or restricted role

The restricted and more 'managed' approach to stakeholders can be seen in the Measuring Impact Framework (MIF; IFC, 2008). The framework is built with the knowledge that there are important complications of engaging stakeholders during the selection of social impact goals and estimating possible uncertainty, risks and solutions. The MIF contains a four-step methodology in which stakeholder engagement is at the core. For each step, the methodology describes the possible role of stakeholders. The general approach proposed in the MIF that the assessors should first define their own goals, then the direct and indirect impacts, the level

Measuring Impact Framework

of engagement of stakeholders and finally, and only at the end of the process, the management response to the assessment. Only by having the goals and measures of an innovator firmly grounded at the beginning can a discussion with stakeholders be fruitful. Stakeholders have a role to help the assessors with their own viewpoints but not be at the core of the assessment itself. For our conceptual framework, this position is most sensible.

The quality of the process of integrating stakeholders from the beginning of the assessment is important. Only then, the scope of the social innovation can be clearly described. Stakeholders help producers from straying off the proposed path later on in the process (Brest and Born, 2013).

5.5 Developing Causal Explanations with Stakeholders

Causal relationship between inputs and outcomes of social innovation

A last element in the process of ex-ante impact assessment is the development with the stakeholders of a perspective on the causal relationship between the inputs and the eventual outcomes of a social innovation. Stakeholders can help assessors to develop such relationships in two ways: from input to impact; from impact to input. In the first approach, the logic of an impact value chain is followed (Clark *et al.*, 2004). The analysis helps to identify and reveal the mechanisms of change involved in moving from inputs to desired results (Ebrahim and Rangan, 2010, in Grieco *et al.*, 2015). However, stakeholders and assessors can also work the other way round from the planned outcomes to the required inputs. Such an approach, common to Theory of Change and to Logic Models, helps to clarify the understanding of the network what it takes to get to the required outcome (Clark and Taplin, 2012). In the SIMPACT-report on business modelling (Rizzo *et al.*, 2015), the Logic Model is developed as a tool to identify the right inputs or resources, the required activities to be carried out in the social innovation, the possible outputs and outcomes (see also: Terstriep *et al.*, 2015).

VNA and this part (i.e. causal relationships) complement each other by combining a cross-cutting horizontal overview of the value creation among the stakeholders, and vertical overview of value creations (transformation of values across the time vector). This, if done, can be a worthwhile step in developing new assessment tools, as it gives a more comprehensive understanding of the dynamics underpinning the social value creation. VNA covers the causal relationship in the sense of an «As-Is» scenario, as envisaged by the stakeholders. Nevertheless, this causal stage can imply to the «To-Be» scenario, meaning that after development of the VNA, another step can be undertaken to improve the current form of value exchanges to an «ideal» or «improved» version, which can be resulting from the three typical analyses done in VNA (exchange analysis, impact analysis, value creation analysis).

6 INTEGRATING OF COMPONENTS INTO A CONCEPTUAL FRAMEWORK

6.1 Assessing Impacts from Three Points of View

The goal of this Deliverable 7.1 is to propose a conceptual framework for ex-ante impact assessment of social innovations. The previous chapters have delivered us the building blocks for a conceptual framework for an ex-ante impact assessment of social innovation. These building blocks will be integrated into a stepwise approach to conduct an ex-ante impact assessment.

Ex-ante impact assessment for social innovation is a tool in decision making among different stakeholders. Because the field of social innovations is still in its development phase, and maybe it may never develop into a clearly manageable reality because of the many market frictions connected to it but also because of the complexity of the social innovations (see chapter 2), the assessment has to be a process in which stakeholders take on a co-creation role. In the previous chapters, main issues have been discussed that need to be taken into account when conducting the co-creation process of an ex-ante impact assessment. The impact assessment will necessarily be different in process and outcome, when looking at the different stakeholders involved in a social innovation. The conceptual framework in this report will limit itself to three main actors: **social innovators, social investors and (public) policy makers**. In the following section, the decision situation of these three actors is explored. The analysis shows how the stepwise approach will necessarily be different for these actors.

Ex-ante impact assessment as tool for decision making

6.2 Nine Different Assessment Situations

Figure 6 identifies the three main stakeholders for which an ex-ante impact assessment should deliver results. These actors need to consider plans for social innovations in different development phases: social innovations can be in the **start-up phase**, they can be in the **phase of consolidation or sustainability**, and they can be in the **phase of upscaling**. The demands on the assessments will be different for each of these situations. There is also the issue if a single project is considered or deciding between different projects. At the level of a social innovator, it is assumed that only single projects are the issue. The following figure shows which assessment situations can arise.

Stakeholders and development phases for an ex-ante impact assessment of SI

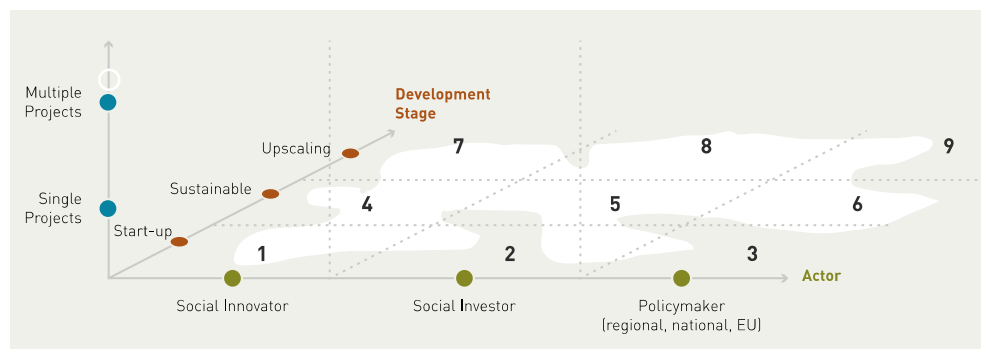


Figure 6. Different decision situations for ex-ante impact assessment of social innovation

The following table shows which questions are central in the decision situation.

Table 5. Main questions for the impact assessment decision situations

| | Start-up | Sustainable situation | Upscaling |
|-------------------------|---|---|--|
| SOCIAL INNOVATOR | | | |
| Single project | What do I need to organise to maximize impact? How can comparable cases help me? What financial support would I need? | Which of my previous experiences can help me best for future plans? Which balance between social and financial goals is best in formulating the new plan? | What is different from the start-up and sustainable situation, in formulating social impacts and financial support? How to up-scale project to new markets, new regions, other communication channels? |
| Multiple projects | What do I need to organise to maximize impact? How to choose between projects? How can comparable cases help me? What financial support would I need? | | |
| SOCIAL INVESTOR | | | |
| Single project | What investment is required? Is plan viable (payback time, amount of investment)? Which trade-off is there between social and financial goals? | How can previous pay-back experience and 'social' impact experience help to decide if current plan helps to create a sustainable social innovation? | Is the current plan financially sufficient to achieve the up scaled social impact? Investigate which side-effects may occur when changing from a specific target group to a larger level? |
| Multiple projects | How to set-up multi-criteria analysis of goals? Which project delivers best pay-off in terms of social and financial impact? | | |
| POLICYMAKER | | | |
| Single project | Which social impacts are | Is the balance between | Does the policy support |

| | | | |
|-------------------|--|---|--|
| | in line with the policy goals? Which support can be given to maximize support for 'aligned' social impacts (which policy means: taxation, rules, ...)? Is the support network sufficiently strong to achieve the impact? | social impact and the policy support, sustainable from a policy perspective? Is the current plan what is needed from policy side? | need to change to achieve the up scaled social impact? |
| Multiple projects | How to set-up multi-criteria analysis of goals? Which project delivers best pay-off in terms of economic and social impact and policy support? | | |

6.3 Five Steps in the Ex-Ante Impact Assessment

The building blocks for an ex-ante impact assessment are goal formulation; developing the relationships between inputs, outputs and outcomes; determining the role of stakeholders to achieve the objectives; calculating the impact; and deciding on the social innovation. These building blocks are sequentially interconnected to each other.

Building blocks for an ex-ante impact assessment

These five steps need clarification:

- *Step 1 - Determining goals, socio-economic outcomes of the social innovation:* what are the goals of the social innovation? Which outcomes should be achieved? A general list of socio-economic goals is not possible, but may be deducted from what policy makers find important. Probably, the following questions are important for policy makers: are there social vulnerable groups that aren't being addressed through normal social policies? Can we find new social approaches that can help us redefine social policies? How can we benefit from social innovations in the private sector and then apply them to the process of policy making? In the USA, the «Impact Investing Policy» identifies eight policy areas in which social innovations need to be supported (Grace et al., 2015). Such a list could be useful at the different policy levels.
- *Step 2 - Determining causation:* once the goals are clear, it is necessary to relate the outcomes to the inputs. Several methods are possible such as for example the 'impact value chain' (Clark et al., 2004), Logic Model (Rizzo et al., 2015) or a Theory of Change (Clark and Taplin, 2012).
- *Step 3 - Determining the role of stakeholders:* for the impact assessment, it should be clear who will play a role in the assessment process, when and how. The main role of the stakeholders is to agree with the assessor (creating a

common ground) and to support the assessor with decisions in the process and with selecting criteria, if needed.

- *Step 4 - Calculating impact:* an important step is to calculate the possible impacts from the social innovation. Social, economic and enterprise impact can be assessed with the use of existing tools. The impact assessment should be accompanied by a set of tests needed to check the counterfactual nature of the results. For each of the impacts, the degree of uncertainty (likelihood) should be estimated. In addition, attention should be spent on barriers and enablers to achieve the goals and objectives.
- *Step 5 - Decision process:* the outcome of the impact assessment should be presented and discussed with the stakeholders. With social innovation, stakeholders are part of the community and the specific networks that are built when addressing a social challenge. Discussing the decision process to value social and economic outcomes with stakeholders, can give a lot of insight on the context where social innovation is applied and the target groups they are addressing. Many social target groups can only be addressed through stakeholders that have a know how in the contexts where these innovations might be developed.

Steps 2 and 3 need to be conducted in parallel after Step 1. Steps 4 and 5 follow sequentially after these first steps. The following figure shows the process.

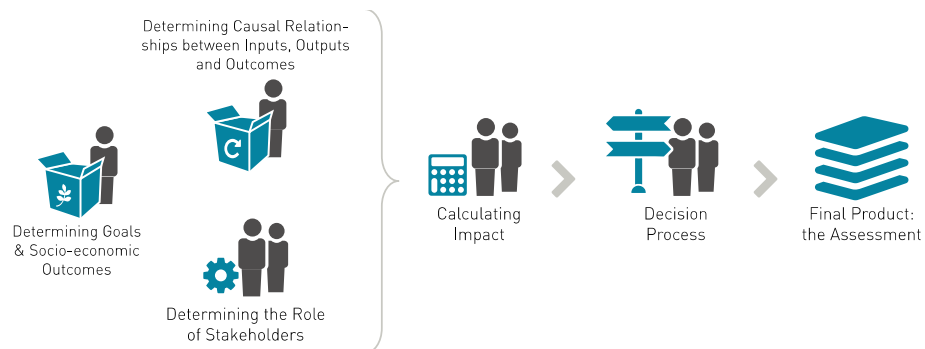


Figure 7. Five steps for ex-ante impact assessment of social innovation

The steps need to be all executed to formulate an assessment for start-up, sustainable business and upscaling situation. Not all steps are equally relevant for all actors. For the three identified main actors, the following table shows which steps are of main importance.

Table 6. Stepwise approach for different actors

| | Step 1 | Step 2 | Step 3 | Step 4 | Step 5 |
|------------------|--------|--------|--------|--------|--------|
| Social innovator | + | + | + | + | + |
| Social Investor | + | | | + | + |
| Policy maker | + | | + | + | + |

Clarification of this table:

- Social innovators will need to conduct each of the steps.
- Social investors will be looking at plans and ideas of social innovators. They will be interested in helping to decide the main goals and outcomes. They may also advise the social innovator on other projects and possible networks to use, but the work will be with the social innovator. In the calculation phase, possibly the social investor will be making a personal assessment that can be compared to the analysis of the social innovator. The assessment of multiple projects will probably done in step 4 and 5.
- The policy maker will be connected to step 1 if the social innovator requires some form of policy input or support. The assessment of multiple projects will probably done in step 4 and 5.

7 FINAL PRODUCT: TOOLBOX

In conclusion, our conceptual framework aims to be a practical guide to both assessor and assessee by structuring the development and decision process of social innovation investments. Structuring the decision process in a stepwise ways provides a grip to social innovators, social investors and policymakers, because most of the times when an impact assessment is not used, processes are less rational, manageable and difficult to reconstruct. In this decision process, the following information should be included:

- What to do to keep the social innovation within scope.
- How to deal with the uncertainty of your predictions: when to use bandwidth of estimation and/or scenarios. Your predictions should help you to decide on further investment, what to improve, which goals to manager?
- The assessment should identify the trade-offs and give guidance how to choose.
- How to select between projects using a multi-criteria assessment of these projects.
- Finally, an indication which risks should be managed to achieve the estimated impacts.

An impact assessment does not necessarily have to be a complex process. The process however should be thoroughly co-creative. Only with the support of the stakeholder network, can the decision process be prepared. Relatively simple tools, the use of historical data and a little bit of help from a fresh pair of eyes can help most social innovators prepare their estimations. SIMPACT has developed this toolbox for this purpose, which is framed in a series of steps sprung from our conceptual framework. The building blocks for an ex-ante impact assessment are goal formulation; developing the relationships between inputs, outputs and outcomes connected to the social innovation; determining the role of stakeholders to achieve the objectives with the social innovation; calculating the impact; and deciding on the social innovation.

The toolbox itself is included in deliverable D7.2. This deliverable presents a selection of tools for performing a social impact assessment, ranging from complex and refined towards simple and straightforward. Even the more complex tools can be used to deduce important steps and food for thought. Possible tools for per-

forming a social impact assessment are not limited to those proposed in this toolbox. In fact, customization is advised and needed to fit to the scope and stage of a social innovation, and the available time, budget and knowledge resources. It is key to provide a tailor-made ex-ante assessment of social innovation.

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