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Linking Social Innovation to National Accounts

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SIMPACT

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Linking Social Innovation to National Accounts

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ABSTRACT

In this Statistics Brief we look at Social Innovation through a macro-economic lens. We explore the possibilities for integrating the economics of social innovation into National Accounts and discuss pros and cons of requirements to do so. At the same time, we acknowledge that key to measuring the full impact of Social Innovation is to refer to wider non-financial impacts, including the well-being of individuals and communities, social capital and the environment. We therefore emphasise the (macro-)economic dimensions of Social Innovation both in a National Accounts and a 'beyond GDP' perspective. We conclude that if one wants to set-up a measuring framework to fully address the economic relevance of Social Innovation at the national level, this could be done in a Satellite Account to the National Accounts – building on the approach and thematic indicators as recommended by the Conference of European Statisticians to measuring Sustainable Development. However, this would first require a clear and standardized operationalisation of Social Innovation activities, inputs, outputs and impacts.

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EXECUTIVE SUMMARY

This report is the second *Statistics Brief* as part of SIMPACT Deliverable D5.2. It is written in succession to the statistics brief of Wintjes et al. (2016b) that focusses on improved measurement of the economics of Social Innovation. The current report explores the possibilities for integrating the economics of social innovation into National Accounts and discusses the pros and cons of requirements to do so, building on a feedback workshop ('data lab') with experts from supra-national and national statistical bureaus and institutions. The aim of this 2nd Statistics Brief is to address the economic dimensions of social innovation in the context of National Accounts, and the impact social innovation has on economic indicators.

The National Accounts comprise official statistics that provide an overview of an economy, based on macro-economic indicators such as economic growth, budget deficit, disposable household income, as well as indicators on consumption, investment, imports and exports, and employment. The existence of a causal relation between Social Innovation (activities and outcomes) and such macro-economic indicators is thus a pre-condition for capturing Social Innovation in National Accounts. In SIMPACT's third work package, several Social Innovation initiatives in Europe have been identified, most of which suggest some causal relations between Social Innovation and the (macro) economy. 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 innovation, or as a result of it.»*

The National Accounts framework sets a very clear boundary based on which transactions are recorded as production or not, and determining whether these transactions are accounted for. This so called 'production boundary' of the National Accounts therefore is a strict conditional boundary for possibilities to linking Social Innovation to the framework. As far as Social Innovation involves «market transactions», i.e. activities of one of the five institutional sectors of the National Accounts, moreover, transactions that resulted in traded goods and services (as «market output»), these transactions are already integral part of the National Accounts. However, as such they might not always be easy to find in the National Accounts due to the aggregated accounting at macro-level.

Due to Social Innovation, there might occur changes in the role of actors and type of transactions, for example if households (e.g. through a bottom-up social initiative) provide services that used to be delivered by market producers. This would then be a shift from households in their 'traditional' role as consumer to a role of producer. Depending on whether or not there are still priced «market goods or services» involved, the shifts can cause transactions to fall outside the production boundary, which make that they are no longer accounted for in the National Accounts (hence, they are 'pushed' in the «beyond GDP sphere»). To be able to account for such (potential) shifts in economic- or social transactions, one must be able to link activities and outcomes both within and beyond the National Accounts' production boundary. Such linkages can be made in Satellite Accounts. Therefore, the best way to link Social Innovation activities and outcomes thereof to the National Accounts, is to reason along the lines of Satellite Accounts.

Looking through a macro-economic lens at Social Innovation, wider economic benefits arise, either as an immediate effect in the process of Social Innovation activities (through expenditures and investments), or as a result of it, i.e. the outcomes and impact caused by the Social Innovation activities. Accordingly, the ease with which one can connect the economics of Social Innovation to a macro-economic framework such as the National Accounts, is determined by the level (micro-, meso-, or macro) at which activities with their respective governance structures take place. In the analysis of macro-economic principles of social innovation, emphasis should in particular be placed on the interplay between actors, their networks, policy makers and the market on the one side, and processes in support of scaling-up and diffusion on the other. For measurement in the National Accounts it matters to what extent shifts of responsibilities and interactions between actors can be traced back in actual expenditure flows from the one institutional unit to the other.

We conclude that elements of Social Innovation are (to a certain extent) addressed by different 'reg-

ular' National Accounts transactions, where the institutional units accounted for have an acting role in the process of Social innovation (e.g. as producer or beneficiary). However, due to the micro-level at which transactions take place, Social Innovation is difficult to identify as separate phenomenon in the National Accounts. Therefore, it remains quasi unidentifiable in regular National Accounts transactions.

Building on the economic mechanisms at work in Social Innovation case study examples, we can conclude that Social Innovation certainly has a relation with changing roles of institutional actors, direction of (monetary) flows, provision of services and capital goods for free, etc. We assess that especially outcomes and effects of Social Innovation have a higher chance to fall outside the current production boundary and therefore fall beyond the scope of National Accounts. To connect monetary transactional flows related to Social Innovation to the broader societal outcomes and impacts, a broader analytical framework is therefore needed.

We conclude that given the limits of the current production boundary of the National Accounts, one should not try to fully integrate Social Innovation in the National Accounts. Too many relevant non-production aspects of Social Innovation will otherwise need to be neglected. Our recommendation is to combine the best of all statistical worlds, by using the relevant elements from the National Accounts, various satellites to the National Accounts, as well as statistics in non-economic domains. These statistics should furthermore be analysed in a framework that allows to incorporate quality of life and human well-being in order to fully assess all aspects of Social Innovation and its outcomes and impacts, including those in the 'beyond GDP' realm. We consider the analytical and conceptual framework as adopted by the Conference of European Statisticians to Measuring Sustainable Development (UNECE, 2014) relevant and useful to structure causal linkages of all aspects (i.e. the full cause and effect chain) of Social Innovation.

Good insight in these causal relations is needed to determine what type of information (auxiliary to information from National Accounts) should be combined to arrive at a statistical product, that addresses the economic dimensions of Social Innovation as well as the broader societal benefits, and can function as relevant knowledge base for policy development and decision-making. The CES-framework takes human well-being as central notion, and acknowledges that the fulfilment of wants and satisfaction of human needs, directly or indirectly relies on the use of resources, i.e. flows and stocks of economic-, natural-, human- and social- capital. The latter are the four types of capital that are central in the CES-framework. We assess that, in addition to the standard economic flows that address relevant aspects of Social Innovation, in this context [of Social Innovation], human capital and social capital have more relevance than natural capital.

The next step towards measuring Social Innovation in a Satellite Account to the National Accounts would be to develop a corresponding measuring framework with subsequent indicators. The CES-measuring framework with corresponding (ideal) thematic indicators could be used as a basis for capturing Social Innovation. However, further assessment and elaboration is needed in order to select appropriate indicators to measure Social innovation activities and its outcomes and impact.

A complicating issue is that in order to completely capturing Social Innovation in an accounting framework (through Satellite Accounts to the National Accounts), a clear and exclusive description of subsequent concepts, actors, etc. of Social Innovation is required. The current definition of Social Innovation (see the second paragraph of this executive summary) does not yet foresee in this.

1 INTRODUCTION

It is believed that Social Innovation (SI) plays an important role in the social well-being of individuals. It is even argued that, due to the impact of increased global competition on the behaviour of corporations, and the corresponding changes in the role of governments, Social Innovation becomes even more relevant with respect to supporting those groups in society that are most negatively affected by the subsequent forms of market and policy failure.

Relevant actors such as policy makers or even social innovators themselves, however, lack statistical information that captures the relevance of Social Innovation for society. This Statistics Brief, written within the context of SIMPACT's Work package 5, Task 5.4, therefore explores the opportunities to link Social Innovation to National Accounts.

In Chapter 2, we briefly introduce the two main concepts of this report: Social Innovation and the System of National Accounts (SNA). Social Innovation is a rather recent subject in research, and a widely adopted definition is still lacking. We first explain the central concept of the SNA and its specific characteristics. In the second section of the chapter, we describe the Social Innovation concept, building on previous work within the SIMPACT project.

In Chapter 3, we analyse how Social Innovation is currently captured in the System of National Accounts. We conclude that certain aspects of Social Innovation are covered, but not labelled or identifiable as such in National Accounts data.

In Chapter 4, we therefore explore the possibilities to indicate the relevance of Social Innovation in so-called Satellite Accounts. We also build on the analytical and conceptual framework as adopted by the Conference of European Statisticians (CES) to measuring sustainable development (UNECE, 2014).

2 A PRIMER ON NATIONAL ACCOUNTS AND SOCIAL INNOVATION

2.1 The (System of) National Accounts

> *The National Accounts comprise official statistics that provide an overview of an economy, based on macro-economic indicators (e.g. economic growth, budget deficit, disposable house-hold income) as well as indicators on consumption, investment, imports and exports, and employment. The rules and concepts that constitute the accounting framework, according to which the official statistics are collected and presented, are defined by the System of National Accounts. In this Statistics Brief, we primarily refer to the European System of Accounts.*
>
> *(ESA, 2010)*

The European System of Accounts (ESA, 2010), the national accounting framework of the EU, is a framework for a systematic and detailed description of a total economy (that is, a region, country or group of countries), its components and its relations with other total economies.

The European national accounting framework builds on the internationally harmonized System of National Accounts (SNA, 2008), developed under the auspices of the United Nations (UN). As such, the main characteristics of National Accounts are internationally compatible, and harmonized with other social and economic statistical systems.

The first purpose of National Accounts is to describe income, expenditure and financial flows, and balance sheets by grouping institutional units into sectors based on their principal functions, behaviour and objectives.

Institutional units are economic entities that are capable of owning goods and assets, of incurring liabilities and of engaging in economic activities and transactions with other units in their own right.[1]

National Accounts can then accordingly be used to analyse: i) the structure of the economy; ii) specific parts or aspects of an economy; iii) the development of an economy over time; iv) a total economy [of a country, region or group of countries] in relation to other economies.

Figures from the National Accounts play a major role in formulating and monitoring social and economic policies in the EU and its Member States. For example, Member State's performance against the criteria of the European Economic and Monetary Union (EMU) as well as the excessive deficit procedures for government deficit and debt are checked based on the National Accounts. Moreover, the main aggregates (Gross Domestic Product and Gross National Income) are used as basis to determine the financial contribution of Member States to the EU and function as criteria for redistributive funds, e.g. from the EU Cohesion Policy.

2.2 The Concept of Social Innovation

Within the SIMPACT project:

> 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.

In SIMPACT's empirical phase, several Social Innovation initiatives in Europe have been identified (see Terstriep et al., 2015). These initiatives suggest a causal relation between Social Innovation and the (macro) economy. The existence of such a causal relation is a pre-condition for capturing Social Innovation in National Accounts. Several relevant examples in this perspective are described below, all taken from Terstriep et al. (2015).

COOPANAME – business and employment cooperative

Coopaname is a Paris-based business and employment cooperative enabling new and starting entrepreneurs (i.e. single professionals with precarious jobs), to experiment with their business idea while benefiting from a secure income in the form of a part-time contract with the cooperative. This implies in practice that Coopaname is a cooperative of entrepreneurs in which each entrepreneur is at the same time a salaried employee of the social cooperative.

The effectiveness of the activities of the new and starting entrepreneurs (i.e. the success rate) is enhanced by additional services provided by Coopaname related to advice and consultancy, delivered by the other actors in the network as an in-kind contribution. The entrepreneurs of the network subsequently adopt different roles in the network (e.g. financier, producer, etc.).

The initiative as such addresses several forms of market failure, notably those associated to limited access to capital by new/starting firms (e.g. information asymmetry between entrepreneur and financier).

The initiative has been adopted by different regions. Local public authorities support such cooperatives through creating new legal status to facilitate the creation of micro-enterprises and implementing specific low tax rates. In addition, public authorities support this logic by creating subsidized contracts to be used by enterprises.

Broodfondsen - social security by entrepreneurs for entrepreneurs

A Broodfonds (Breadfund in English) is an association of self-employed workers in the Netherlands who individually invest money in a savings fund to collectively cover risks bound to temporary disabilities. It operates by members supporting each other based on solidarity and trust, instead of supervision and exclusion. Contributions to the fund, and payments by the fund to its members,

[1] Five mutually exclusive domestic institutional sectors are defined in the National Accounts which together make up the total domestic economy: i) Non-financial corporations; ii) Financial corporations; iii) General government; iv) Households; v) Non-profit institutions serving households.

are in the form of gifts. This sum is meant to support the minimum costs of living, as a basic provision. The participants in a bread fund are responsible for its management.

The founders of the first Broodfondsen (plural of Broodfonds) were initially interested in solving their own personal problem, and only later, they have taken charge of scaling up the solution through the establishment of an overall community. From then on, their main role has become that of providing advice and support for the creation of new groups, which has led them to found the Dutch BroodFondsMakers (Bread Fund Makers).

The Dutch cooperative Solidair - an association of companies and non-profit organisations that are working on new solutions for a sustainable and inclusive economy - sup-ported the founders in giving shape to the new solution and took a concrete step providing a financial contribution to the first Broodfonds, playing a relevant role in materialising the idea of the founders.

The Broodfondsen originate from a specific form of government failure: self-employed workers not eligible for (an important part of the) social security system in the Nether-lands. Insurance companies are not able to offer similar services for a reasonable price (i.e. because of information asymmetries).

The participants in the Broodfondsen subsequently adopt different roles besides the one resulting from their self-employment.

Hill Holt Wood - education provision for children excluded from school

Hill Holt Wood located in the UK (East Midlands) is a community-controlled for profit social enterprise «offering alternative education provision for children excluded from school, and supports people struggling to assess training and jobs by sustainably managing fourteen hectare of ancient woodland».

This Social Innovation initiative responds to changes in the UK national education policy in 2013, according to which all young people are required to participate in some form of education until the end of the academic year in which they become eighteen. While the government's intention is to enhance levels of education attainment and employability, traditional schools and college education will not be suitable for many young people at this age.

Hill Holt Wood has established a wide range of additional income sources (e.g. grass cutting, managing specialist nature sites, litter picking) in order to stay profitable and subsequently sustain its social purpose. «Trust, grounded in both openness and delivery, lies at the heart of the relationships the initiators of Hill Holt Wood have established with local stakeholders and this has enabled them to forge mutually beneficial relationships with local authorities, universities and private sector companies.»

DORV Zentrum – multifunctional franchising shop

DORV Zentrum is a multifunctional franchising shop located in small villages in Germany aimed at «meeting the challenges of rural de-population by offering the most important essential goods and services consoli-dated in a single location

The actual launch of the DORV Zentrum required a loan that could not be granted by the local bank or for example the local agriculture agency. The initiators subsequently were forced to establish the project with the village's own resources through a forerunning solution: emitting shares that citizens could buy and constituting a financial company to manage those assets in combination with the company for operating the center. They convinced the citizens to buy shares on the premise that they could expect an improvement of their quality of life rather than any financial profit from their investment.

The initiative is not only hindered by specific forms of market failure associated to the financing of new firms. In practice, the profitability in economic terms of such an initiative seems limited. The role of (local governments) involved in rural policy addressing de-population seems not to include such an active intervention.

The local citizens subsequently adopted the role as financiers and owners of a multi-functional franchising shop.

3 SOCIAL INNOVATION IN THE SYSTEM OF NATIONAL ACCOUNTS

In this chapter, we explore how Social Innovation is currently included in the National Accounts. In the first section, we therefore describe the structure, rules and definitions of the System of National Accounts in further detail. We subsequently assess in the next sections the economic principles underlying Social Innovation, and how this fits within the core concepts of the SNA the accountancy system.

3.1 The Production Boundary in the System of National Accounts

The system of National Accounts is built around a sequence of interconnected accounts: the current account, accumulation account and balance sheets. The current account deals with economic production, generation, distribution and redistribution of income and accordingly the use of income in the form of consumption and eventually saving. The accumulation accounts cover changes in assets, liabilities and changes in net worth. Balance sheets show, at the end of the accounting period, stocks of capital and net worth.

National Accounts thus record **flows** of the creation, transformation, exchange, transfer or extinction of economic value. Flows refer to actions and effects of events within a given period. Accordingly, the framework reports **stocks,** reflecting the holdings of assets at the beginning and end of a period, on balance sheets. The coverage of stocks is limited to those assets that are used in economic activity and that are subject to ownership rights. This meaning that, in the **central national accounting framework**, stocks are **not** recorded for assets such as human capital and natural resources (due to difficulties to envisage ownership rights for these forms of capital).[2] Moreover, National Accounts are primarily focused on describing the economic process **in monetary and readily observable terms**. Stocks and flows that are not readily observable in monetary terms, or that do not have a clear monetary counterpart, are not recorded in the National Accounts, following the (SNA2008) and (ESA2010) accounting rules. Non-monetary transactions must therefore be measured indirectly or otherwise estimated. Most often only 'soft linkages' are possible with monetary flows that are recorded in the central framework.[3]

The National Accounts framework sets a very clear boundary based on which transactions are recorded as production or not:

> ***Production*** *is «an activity carried out under the control, responsibility and management of an institutional unit that uses inputs of labour, capital and goods and services to produce out-puts of goods and services». (ESA2010, paragraph 3.07)*
>
> *(ESA 2010, paragraph 3.07)*

The production boundary includes (SNA2008, paragraph 6.18; 1.20 and 1.22):

- the production of all individual or collective goods or services that are supplied to units other than their producers, or intended to be so supplied, including the production of goods or services used up in the process of producing such goods or services;
- the own-account production of all goods that are retained by their producers for their own final consumption or gross capital formation;
- the own-account production of housing services by owner-occupiers and of domestic and personal services produced by employing paid domestic staff.

Activities that fall outside the so-called 'production boundary' of (ESA2010) are:

- domestic and personal services produced and consumed within the same household, e.g. clean-

[2] However, in satellite accounts to the central accounting framework, aspects such as the latter can be included. (see Chapter 4).

[3] By their nature, the analysis of non-monetary stocks and flows is usually well-served by compiling statistics in non-monetary terms, e.g. in functional units such as the number of hours allocated to certain activities within the household or, in the area of education, the number of students enrolled, the average number of years of education before obtaining a diploma, etc.

ing, preparation of meals or care-taking of sick and elderly people;

- volunteer services that do not lead to the production of goods, e.g. care-taking and cleaning without payment;
- natural breeding of fish outside fish farms.

Yet, topics as listed under the first two bullets above are often considered a part, or at least to be related to, Social Innovation. It is therefore crucial to understand that the definition of production in the National Accounts functions as a strict conditional boundary for possibilities to linking Social Innovation to the central accounting framework.

According to (ESA2010), production can be carried out by:

- Market producers (of which the output can be sold on markets);
- Producers for own use (of which the output of goods and services are retained for own final consumption);
- Non-market producers (of which the output is provided to other units for free, or at prices that are not economically significant).

This distinction is relevant for the valuation of output and related concepts such as value added, GDP and final consumption expenditures as well as their allocation to institutional sectors. Non-market output is produced by the sectors Non-Profit Institutions Serving Households and/or General Government whereas market producers are companies. The sector Households is the only institutional sector that can produce goods and services for own use (e.g. agricultural products) whereas any institutional sector can accumulate capital for its own use (e.g. machine tools, own-account software).

As far as Social Innovation involves «market transactions», i.e. activities of one of the five institutional sectors, moreover, that resulted in traded goods and services (as «market output»), these transactions are already integral part of the National Accounts. However, as such they might not always be easy to find in the National Accounts due to the aggregated accounting at macro-level.

Probably, other monetary flows related to Social Innovation or outcomes thereof, are somehow included in transactions between Non-Profit Institutions Serving Households (NPISH), General Government and Households. Now, due to Social Innovation, there might occur changes in the role and type of these transactions. For example, if house-holds, through e.g. a bottom-up societal initiative, provide services that used to be delivered by market producers. This would then be a shift of role from households as consumers to households as producers. In this case it is important whether or not it concerns priced «market goods or services» (i.e. whether or not entering the domain of volunteer services that fall outside the production boundary of National Accounts).

Potentially, the implication is that societal welfare, from a 'beyond GDP' perspective, in-creases (provided that the quality of services improved, otherwise welfare would at least remain at more or less the same level) while economic production (hence GDP) actually declines. The latter occurs if the «production» of households is not priced and sold on markets and therefore falls outside the production boundary. A part of production (hence gross output) is then shifted to the 'beyond GDP sphere', and is therefore no longer accounted for in the National Accounts framework, hence lower GDP.

To be able to account for such (potential) shifts in economic- or social transactions, one must be able to link activities and outcomes both within and beyond the National Accounts' production boundary. Our intermediate conclusion therefore is that the best way forward to link Social Innovation activities and outcomes thereof to the National Accounts, is to reason along the lines of Satellite Accounts. We will elaborate on the latter in Chapter 4.

3.2 Social Innovation from an Input and Output Perspective

In this section, we will look at Social Innovation through a (macro-)economic lens. We will explore how wider economic benefits arise, either as an immediate effect in the process of Social Innovation activities (through expenditures and investments), or as a result of it, i.e. the outcomes and impact caused by the Social Innovation activities (which might have a longer-term perspective and can in-

clude externalities – a positive or negative impact on others or society at large). Building on case study examples of other SIMPACT work packages as introduced in Chapter 2, we will accordingly assess how these wider economic costs and benefits of Social Innovation relate to transactions that are recorded in the central framework of the National Accounts, or otherwise, how a connection to the National Accounts could (potentially) be made.

An important contextual aspect that influences the ease, with which one can connect the economics of Social Innovation to a macro-economic framework such as the National Accounts, is the level (micro-, meso-, or macro) at which activities with their respective governance structures take place. Regarding the latter, (Rehfeld et al., 2014) hypothesise that Social Innovation can imply new modes of governance related to policy-making, self-regulation and co-regulation of private and public actors – each actors with their own resource allocations to the set of (societal) objectives. Most often, social innovations are developed and implemented by multiple actors (Rehfeld et al., 2014).

We are reasoning from a starting hypothesis that policy- and/or market-actors (i.e. social entrepreneurs) develop social innovations with the aim to help solving social problems. The current practice, however, could be that market- or policy failure prevents issues from being solved. This could then be a trigger for individual citizens, or citizens organised in civil society organisations to take their own (innovative) actions to solve social problems. This is the line of reasoning which the FP7-project SI-DRIVE (Social Innovation: Driving Force of Social Change) follows to look at Social Innovation in the policy area. In SIMPACT we endorse this line of reasoning as it helps us to better understand driving forces that trigger (sometimes bottom-up) Social Innovation activities and to put these, together with their outcomes and impacts, finally in a macro-economic perspective.

In relation to SIMPACT's definition of Social Innovation (as stated in Chapter 2), the SI-DRIVE project notes that facilitating empowerment within innovation processes driving social change can and shall be a main result of social innovations. Thus, social innovations need to mobilise citizens to take an active part in innovation processes and thereby enhance society's generic innovative capacity. This requires new models of governance in favour of self-organisation and political participation, allowing sometimes unexpected results through the involvement of stakeholders. In the analysis of macro-economic principles of social innovation, emphasis should hence be placed on the interplay between actors, their networks, policy makers and the market on the one side, and processes in support of scaling-up and diffusion on the other (Howaldt et al., 2014).

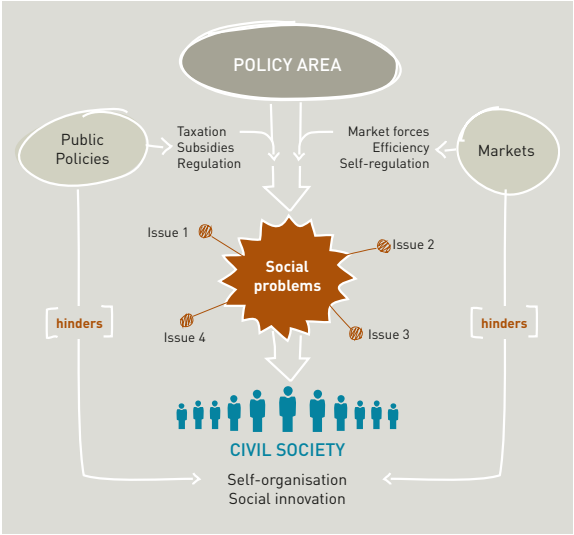

Figure 1. Social problems and Market/Policy Failure leading to Social Innovation and Self-organisation (Source: Adapted from Howaldt et al., 2014)

Translating such interplays between actors to the National Accounts then brings us to the question to what extent shifts of responsibilities and interactions between actors can be traced back in actual expenditure flows from the one institutional unit to the other. For example, are these transactions visible as such, or are they «hidden» in much more aggregated flows? Alternatively, is there a shift from monetary transactions to transactions in kind that fall outside the scope of the National Accounts' production boundary?

Similar to the SI-DRIVE project, SIMPACT emphasises that marginalized groups in society can be empowered by investing in social innovation (Wintjes et al., 2016b). It is believed that Social Innovation will help address the negative effects of market- or policy failures as mentioned above. Accordingly, it is believed that these investments in

Social Innovation will pay off in terms of economic growth (as well as broader welfare aspects, i.e. 'beyond GDP'), as is shown in Figure 2.

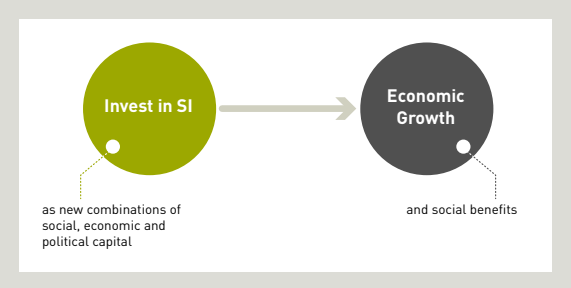

Figure 2. The Economic Framework of Social Innovation (Source: Wintjes et al. 2016b)

The key mechanism of investments in Social Innovation leading to economic growth, from a production and consumption, hence monetary [National Accounts] perspective, must then be **productivity gain**. In similar vein, investments in Social Innovation will then ultimately have an impact in terms of changes in the quantity and/or quality of [all relevant forms] of capital stocks.

3.3 Economic mechanisms at work in actual Social Innovation cases

In SIMPACT's first work package, Rehfeld et al. (2014) have constructed a Social Innovation typology. They describe that the components of Social Innovation comprise **actors**, **resources** and **institutions**. Actors and resources are considered the central production factors for Social Innovation and institutions the primary supporting elements. The marginalised and vulnerable in society constitute the main «aggregated actor» target group of social innovation, i.e. people in this aggregated group should be the main beneficiaries of Social Innovation outcomes and impacts. **Objectives of social innovation,** i.e. the goals and motivation of actors that embark on social innovation, are (for example): *empowerment, participation in society*, *social cohesion* and *equity*.

Rehfeld et al. (2014) state that the 'traditional economic perspective' of firms, households and government is too narrow when considering the components of social innovation. They describe that **actors from civil society** can be both social innovators (i.e. «suppliers») and the target group (i.e. beneficiary or «final consumer») of Social Innovation outcomes. In turn, **economic actors** can facilitate Social Innovation by:

- developing and supplying products and services that address societal challenges;
- adapting internal processes, procedures and business models that incorporate social innovation-related issues, and;
- promoting Social Innovation outside their core business in a philanthropic or altruistic way through, e.g. sponsoring.

Whereas **governmental and political actors** can set and change institutional rules and ideally support social innovation. Table 1 categorises the actors involved in Social Innovation processes.

We note that, perhaps contrary to the notion of Rehfeld et al. (2014) of a 'too narrow traditional economic perspective', the actors as listed in Table 1 in fact have much similarities with some of the five institutional sectors included in the National Accounts (see earlier in section 2.1).

Actors operating in		
Civil Society	**Economic Field**	**Political Field**
(I) Informal - Crowds - Mobs - Encounter Groups - Social Movements - Citizens' Initiatives - Projects - Foundations (II) Formal - Associations - NGOs - Political Parties - Welfare Organisations	- Social Entrepreneurs - Shareholder-oriented companies - Stakeholder-oriented companies - Public enterprises - PPPs	Political decision makers at: - Local level - Regional level - National level - European level - Global level

Table 1. Typology of Social Innovation Actors (Source: Rehfeld et al., 2014)

We stress that civil society actors in fact belong to either Households (i.e. «informal actors») or Non-Profit Institutions Serving Households («formal actors»). Moreover, as far as foundations, associations, citizens' initiatives and the like have a more formalized governance structure, hence are some kind of legal entity, they are in fact integral part of the NACE[4] (2008) sector 94.9 «Activities of other membership organisations».

This group includes the activities of units (except business and employer organisations, professional organisations, trade unions) that promote the interests of their members. It can be: religious organisations, political organisations, or other membership organisations. The latter comprise activities of organisations (not directly affiliated to a political party) furthering a public cause or issue by means of public education, political influence, fund-raising etc. Examples given in the NACE classification are: citizen's initiatives or protest movements. An important conclusion is thus that some civil society actors as described by Rehfeld et al. (2014) might be a part of a 'regular' producing sector as included in the National Accounts framework.

Furthermore, the institutional sectors Households, NPISH and Government are highly relevant 'regular' institutional sectors that have a role in social innovations. Monetary expenditure flows related to Social Innovation are therefore in principle already integral part of the National Accounts. Next to these financial resources, Rehfeld et al. (2014) categorised other type of resources that are essential for Social Innovation processes:

Economic Resources	Political resources	Personal/Social Resources
- Labour - Capital - Land - Knowledge	- Right to vote - Right to build coalitions & associations - Social and human rights - Ideologies	- Education & professional qualification - Means of violence & protest - Leadership - Social/relational capital

Table 2. Typology of Social Innovation Resources

[4] The standard classification of economic activities in the European Community, used in the National Accounts.

Table 3 summarises the economic mechanisms that are present in the Social Innovation case study examples introduced in Chapter 2, and their linkages to the National Accounts.

Social innovation	Economic mechanisms	Elements related to National Accounts?
Coopaname	Cooperative to provide capital to starting entrepreneurs as well as in kind provision of consultancy/ advice	- Output of the cooperative or individual entrepreneurs: **Production Statistics** - Salaries of the self-employed entrepreneurs: **Household Accounts** (primary income) - Tax revenue (lower): **Government Account**
Broodfondsen	Provision of social security to self-employed. Contribution to the fund by the self-employed in the form of gifts.	- Income of self-employed: generation of income account, either through **Production Statistics or Household Accounts (primary income)** - Contribution to the fund: gift as **consumption expenditure**
Hill Holt Wood	For profit social enterprise providing alternative education services to children (as «social objecttive») The enterprise is providing market services such as woodland management, grass cutting, & other forms of nature management.	- Output of the enterprise generated through nature management services (as main economic activity): **Production Statistics.** - «Social production» not visible because 'in kind' or 'informal economy' (as well as auxiliary economic) activity.

continued

Social innovation	Economic mechanisms	Elements related to National Accounts?
DORV Zentrum	Citizens are financing a start-up (with shares), which they self-operate. However, no financial reward (interest) is associated with these investments. Benefits are in the sphere of increased quality of life.	- Output of the franchising shop: **Production Statistics** - **Inv**estment of citizens: **Household consumption expenditure.**

Table 3. Overview of Social Innovation Case Studies' Relations to National Accounts

3.4 Conclusions on the Economic Mechanisms and their Relation to the National Accounts

The four case study examples of Social Innovation confirm that elements of Social Innovation are (to a certain extent) addressed by different National Accounts transactions. Due to the micro-level of some transactions, Social Innovation as separate category is difficult to identify in the aggregated flows. Moreover, Social Innovation might be an auxiliary activity that remains «hidden» in the National Accounts' way of allocating all flows to the main economic activity of the statistical kind of activity unit involved. Social Innovation then remains quasi un-identifiable in regular National Accounts transactions.

On the other hand, the four examples of mechanisms at work in actual social innovations show that market- or policy failures can indeed trigger actions from novel (combinations of) actors, implying that they take a different role – sometimes multiple roles at the same time, i.e. both producer and consumer/beneficiary at the same time. This results in monetary flows as well as flows of services that originate from 'unusual suspects' from a traditional National Accounts perspective. Transactional flows are now following a different direction: 'traditional' final consumers (i.e. Households) are for example becoming producers.

As a result, the barrier between «market transactions» and provision of services for free or transactions in kind becomes less clear. The shifts of transactions between institutional actors and different roles they take can imply that certain aspects that used to fall within the production boundary now fall beyond and hence are no longer part of the National Accounts. They do remain relevant for assessing the full chain of Social Innovation efforts and the outcomes and impacts thereof, however.

Similar 'challenges' to the National Accounts production boundary occur in the context of the «sharing economy» where consumer-to-consumer transactions (e.g. households that are providing 'unincorporated' products and services to other households through «sharing websites») are gaining importance. In this context, some National Accounts statisticians (Smits, 2015; Edens et al., 2015) stated that it can be questioned if the pro-vision of services for free, or novel forms of financial capital and insurance/social security provision, etc. can be adequately captured in the current production boundary of the National Accounts.

Edens et al. (2015) explain that the SNA is clear in that it is about measuring economic activity, not welfare. Yet, the authors acknowledge that the increase of business models based on (partly) free consumption [and sometimes even free production in the «sharing economy»; an example is provision of information through Wikipedia] has driven a larger wedge between measures of [economic] activity and measures of welfare. Their conclusion therefore is that the National Accounts seems to need adjustments to cope with novel type of transactions and business models as they appear in the «sharing economy» of today.

Building on the economic mechanisms in the four Social Innovation case study examples, we can underscore this conclusion. Social Innovation certainly has a relation with the changing roles of institutional actors, direction of flows, provision of services and capital goods for free, etc., as they arise in the «sharing economy». Especially outcomes and effects of Social Innovation have a higher chance to fall outside the current production boundary and therefore fall beyond the scope of National Accounts. To connect monetary transactional flows related to Social Innovation to the broader societal outcomes

and impacts, a broader analytical framework is thus needed. We therefore conclude that given the limits of the current production boundary of the National Accounts, one should not try to fully integrate Social Innovation in the National Accounts. Too many relevant non-production aspects of Social Innovation will otherwise need to be neglected.

A different approach is even more needed since elements of Social Innovation that are in principle integral part of the National Accounts, are simply not labelled or identifiable as (a result of) social innovation. Moreover, it is required to combine both monetary and non-monetary transactions, and both market and non-market transaction to assess the full cause and effect chain of social innovation. Combining the best of all statistical worlds, using the relevant elements from the National Accounts, various satellites to the national accounts, as well as statistics in non-economic domains, and a framework that allows to incorporate quality of life and human well-being themes is, in our opinion, the best way to fully assess all aspects of Social Innovation and its outcomes and impacts. The next chapter will explore further this approach.

4 ALTERNATIVE APPROACH: CAPTURING SOCIAL INNOVATION IN A SATELLITE ACCOUNT

The analysis in Chapter 2 indicates that the System of National Accounts (ESA 2010) does not provide a basis for the complete capturing of the relevance of Social Innovation for society. It is therefore suggested to explore the use of satellite accounts to address this issue. The first section of this chapter describes the characteristics of Satellite Accounts. In the next section, we introduce the basis for the approach we will adopt for our further analysis: the CES framework. We conclude with suggestions for indicators addressing different forms of capital that we link to Social Innovation.

4.1 Characteristics and Use of Satellite Accounts

The scope of the central framework of National Accounts can be enlarged, e.g. by adding non-monetary information, in so-called Satellite Accounts. In Satellite Accounts more specific information needs can be addressed, by modestly stepping away from core concepts, definitions and classifications, for example by breaking down and re-grouping various transactions that are relevant for the topic of investigation and adding relevant information from auxiliary statistics or data sources. However, links to all basic concepts and classifications of the central National Accounts framework should then be made clear and explicit. In this way, the central framework retains its role as a framework of reference while in the Satellite Account needs that are more specific are addressed. Various Satellite Accounts currently exist:

- Agricultural accounts;
- Environmental accounts;
- Health accounts (that analyse the costs and financing of healthcare);
- Household production accounts (that analyse the value of unpaid services produced within households, including efforts to account for volunteer work);
- Labour accounts and Social Accounting Matrices (SAMs);
- Productivity and growth accounts (focussing on aggregate and industrial-level multifactor productivity);
- R&D accounts (where expenditures on research & development are recognized as capital formation of knowledge and intellectual property rights, i.e. investment);
- Social protection accounts (that describe social protection benefits, their financing and administrative costs involved);
- Tourism satellite accounts (showing the economic value of tourism).

A more recent development in relation to Satellite Accounts is the recognition of human capital as assets in the national economy. For this purpose, a Task Force of the UN Economic Commission for Europe (UNECE) has been established in 2013. In general terms, human capital has certain characteristics in common with capital stock items that are included in the present production boundary of the (SNA2008)/(ESA2010). Just like other forms of capi-

tal, human capital accumulates through investments and declines through obsolescence. There are different mechanisms at work, however. Contradictory to forms of capital accounted for in the SNA that normally depreciates through use over time, human capital typically grows through use and experience, while it depreciates due to lack of use, obsolescence of knowledge, population ageing and many other factors (UNECE, 2016).

The (SNA2008)/(ESA2010) recognises the importance of including knowledge based capital in National Accounts statistics. For example, expenditures on research and development are now accounted for as investments that add to the stock of productive capital, in addition to previous inclusion of intangible knowledge related expenditures in SNA1993 (i.e. [1.] mineral exploration and evaluation; [2.] software and databases; and [3.] entertainment, literacy and artistic originals). A methodological and measurement problem with human capital is, however, that **all types of knowledge, skills, competences and attributes are invisible in economic flows**. This means that the activities of learning, studying, practicing etc. are fully embodied in a person and cannot be transferred or sold as separate item on the market to another person. As such, these activities cannot be «produced», and therefore fall outside the production boundary of the SNA, even though that formal educational services fall within this boundary.

In the SNA2008/ESA2010 education services produced by schools, colleges, universities, etc. are treated as being consumed by students in the process of their acquiring of knowledge and skills. This type of education is treated as final consumption. When training is given by an employer to enhance the effectiveness of staff, the costs are treated as intermediate consumption. On the other hand, the (SNA2008) did recognize human capital as an important item on the research agenda, hence the establishment of the UNECE Task Force on Measuring Human Capital in 2013 with priority to developing experimental Human Capital Satellite Accounts to the National Accounts central framework.

We note some similarity between the acquisition of knowledge, skills, competences and attributes of a person, as part of human capital, and efforts of Social Innovation projects that e.g. aim to «empower vulnerable groups» (as part of increasing the capabilities of individuals). At least partially, human capital relates to topics with a Social Innovation connotation.

4.2 Towards an Operationalisation: The CES Framework

In this section, we will elaborate on the analytical and conceptual framework as adopted by the Conference of European Statisticians to measuring sustainable development (UNECE, 2014).[5] We consider this a very relevant framework to structure causal linkages of all aspects (i.e. the full cause and effect chain) of social innovation, including the broader welfare benefits beyond the realm of economic production. We will try to emphasise as much as possible how auxiliary statistical domains can shed light on aspects of Social Innovation that we could not identify as part of National Accounts. In doing so, we connect to one of the important findings of earlier research efforts within SIMPACT's WP5 (Wintjes et al., 2016a), that key to measuring the impact of Social Innovation is to refer to wider non-financial impacts, including the well-being of individuals and communities, social capital and the environment.

Building on the renewed interest in 'beyond GDP' concepts (van Bree and Slob, 2016) and reflections on the limits of GDP as a measure of broad welfare (e.g. Stiglitz et al., 2009; OECD, 2011; UNECE, 2014) we acknowledge that people's well-being is not only determined by their current income and consumption (i.e. their economic well-being) and material living conditions but also by much broader aspects, including 'non-economic' or intangible assets they own. The latter encompasses non-monetary dimensions (e.g. capabilities) and types of capital such as human capital (including skills and knowledge) and social capital.

Investments in intangible assets such as capabilities and human capital have, in addition to direct

[5] This framework is based on the work of a joint task force of the United Nations Economic Commission for Europe, OECD and Eurostat. In 2015 a follow-up task force is established to adjust the CES recommendations on measuring Sustainable Development to the Sustainable Development Goals (SDGs) as adopted during the UN General Assembly of 25 September 2015.

economic returns of monetary flows to e.g. the educational system, wider 'non-economic' benefits that improve people's individual well-being or have positive externalities to society at large. Private non-monetary benefits include better health status and higher [life] longevity, civic awareness and participation, job quality and job satisfaction, social connections, subjective well-being and personal security. Public non-monetary benefits to society as a whole include higher productivity, lower social spending, higher public health and safety, and stronger social inclusion (UNECE, 2016).

Social Innovation has linkages with investments in social capital and, through capabilities, to human capital. In turn, outcomes and outputs of Social Innovation will touch upon non-market and most often non-monetary subjects as mentioned in the previous paragraph, most of which might not fall within the scope of the National Accounts production boundary. In fact, we can say that these investments aim to enhance human well-being. It is for this reason that we propose the more inclusive CES-framework to track and trace causal relations between Social Innovation [as means] to enhance human well-being [as end].

In addition, we will incorporate recent insights stemming from the EU-funded project DESIRE where, in a work package on novel reference indicators 'beyond GDP and value added', Usubiaga et al. (2015) integrated Max-Neef's (1992) Human Scale Development and Human Needs in this framework. We believe that looking at Social Innovation through the lens of Max-Neef's human needs will help us to better understand causal linkages between (drivers or reasons for) investments in Social Innovation, social capital and human capital, and the outcomes or impacts that, in general, all aim to enhance human well-being.

Good insight in these causal relations is needed to determine what type of information (auxiliary to information from National Accounts) should be combined to arrive at a statistical product, that addresses the economic dimensions of Social Innovation as well as the broader societal benefits, and can function as relevant knowledge base for policy development and decision-making.

4.3 The CES-Framework: Linking Forms of Capital to Human Well-being

Stiglitz et al. (2009) concluded that it is crucial to pay attention to both the present and future aspects of human well-being. However, it is stressed that the two aspects should be reported in different parts of the measurement system. The UNECE (2014) framework for measuring sustainable development therefore distinguishes between the dimensions «now» and «later» (see Figure 3). The central notion in the framework is human well-being, a concept that goes well beyond consumption of goods and services as sole satisfiers of needs and wants. The concept of human well-being has many connotations, incorporating concepts from various academic fields such as (modern) welfare economics, social sciences, psychology and medicine. In general, human well-being can be understood as synonym for the quality of people's life.

In this framework, human well-being – both of the present and future generations – is a reflection of the extent to which needs and wants are satisfied [and individuals are satisfied with their lives and achievements]. Human well-being, or the fulfilment of wants and satisfaction of human needs, relies directly or indirectly on the use of resources, i.e. flows and stocks of economic-, natural-, human- and social- capital. The latter are the four types of capital that are central in the CES-framework.

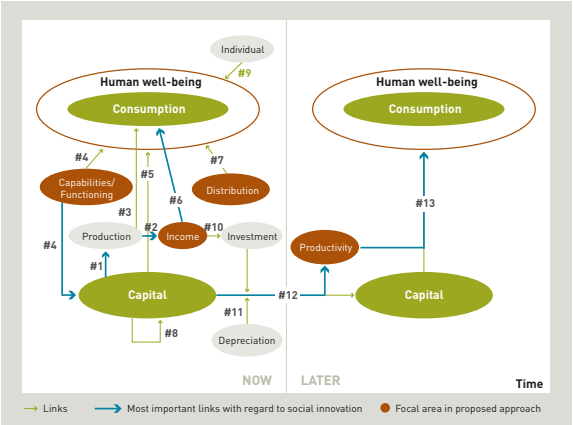

Figure 3. Sustainable Development: «now» versus «later» (Source: UNECE, 2014; adjustments TNO)

These capital flows first of all provide the inputs to the economic production process, where they are transformed into intermediate means – or satisfiers

– that mainly take the form of market goods and services [#1 in Figure 3]. The allocation of production factors (capital) is «rewarded» with income [#2]. With that income, goods and services can either be consumed by final consumers [#3] or added to the stock of economic (manufactured) capital. The latter is in fact [#10] where part of the generated income is invested in capital stocks. These can depreciate over time [#11] and be used in the future [#12]. This is in fact a traditional (monetary) way of looking to economic production and investments or capital accumulation. It are also the type of transactions that are recorded in the National Accounts.

Now, the CES-framework expands this traditional economic model by acknowledging that the economy, in close interaction with its socio-cultural environment, also produces non-monetary capital. Examples of the latter (i.e. human capital and social capital) include knowledge and skill transfer through different channels (e.g. the educational system, cultural institutions, etc.) and the services provided by health services aimed at generating productive members of society. Moreover, elements of the economy such as cooperatives can influence the generation of social capital, although it is acknowledged that the institutions and relationships between individuals play a more prominent role in this respect.

Understanding that economic goods and services only cover one part of the satisfiers used to meet our needs is critical for the framework. For this reason, economic activity cannot be valued for its own sake and should be understood as one of many means to increase quality of life or human well-being.

Although income correlates to human well-being [#6], preserving natural capital (environmental quality, resource efficiency, etc.) and capabilities, skills and competences, for example, also directly contribute to human well-being [#4 and #5]. This, again, relates to the notion that «utility» or «welfare» has a much broader connotation than consumption of goods and services or possession of commodities (i.e. material well-being).

This is the point where we see value to add Max-Neef's concepts of human needs as they not only explain the multiple dimensions that human well-being comprises but also connote to aspects of social innovation. In particular, the human needs are helpful to understand the ultimate outcomes or impacts social innovators aim to achieve. Max-Neef et al. (1991) identified nine types of human needs: *subsistence*, *protection*, *affection*, *understanding*, *participation*, *leisure*, *creation*, *identity* and *freedom*. These needs are finite, few, classifiable, and non-hierarchal. Satisfiers, on the other hand, are infinite and changeable. They represent the forms of *being*, *having*, *doing* and *interacting* that people use in a specific time and place to meet their needs. Satisfiers do not necessarily have a positive contribution to human need satisfaction (Usubiaga et al., 2015). Table 4 provides a summary overview of the nine human needs, proving that much of them do not relate to economic production.

Need	Being (qualities)	Having (things)	Doing (actions)	Interacting (settings)
Subsistence	physical and mental health	food, shelter, work	feed, clothe, rest, work	living environment, social setting
Protection	care, adaptability, autonomy	social security, health systems, work	co-operate, plan, take care of, help	social environment, dwelling
Affection	respect, sense of humour, generosity, sensuality	friendships, family, relationships with nature	share, take care of, make love, express emotions	privacy, intimate spaces of togetherness
Understanding	critical capacity, curiosity, intuition	literature, teachers, policies, educational	analyse, study, meditate, investigate,	schools, families, universities, communities,
Participation	receptiveness, dedication, sense of humour	responsibilities, duties, work, rights	cooperate, dissent, express opinions	associations, parties, churches, neighbourhoods
Leisure	imagination, tranquillity, spontaneity	games, parties, peace of mind	day-dream, remember, relax, have fun	landscapes, intimate spaces, places to be alone

Need	Being (qualities)	Having (things)	Doing (actions)	Interacting (settings)
Creation	imagination, boldness, inventiveness, curiosity	abilities, skills, work, techniques	invent, build, design, work, compose, interpret	spaces for expression, workshops, audiences
Identity	sense of belonging, self-esteem, consistency	language, religions, work, customs, values, norms	get to know oneself, grow, commit oneself	places one belongs to, everyday settings
Freedom	autonomy, passion, self-esteem, open-mindedness	equal rights, means of communication	dissent, choose, run develop awareness	anywhere

Table 4. Fundamental Human Needs (Source: Max-Neef et al., 1991)

Max-Neef (1992) argues that satisfiers can take different forms than market goods and services, such as political structures, social practices, subjective conditions, values and norms, types of behaviour and attitudes, etc. Overall, they represent the means available to the population to actualise their human needs and by extensions, to improve their quality of life. They can be seen as the forms of being, having, doing and interacting that ultimately determine whether one or various human needs are fulfilled. The non-market satisfiers are mainly associated with the non-economic use of social-, human- and natural capital (Usubiaga et al., 2015).

Now, going back to the CES conceptual framework, the last type of flows are from the present to the future [#12 in figure 3]. This link is relatively easy for economic and natural capital where the resulting stocks after depreciation and investment can be transmitted to future generations. The UNECE (2014) describes that for knowledge capital (such as R&D), as well as human and social capital, this link is provided by the mechanisms of path dependency.

«Path dependency explains how the set of decisions one faces in any given circumstance is limited by the decisions made in the past. The choices made by societies typically have long-term effects. For example, due to the huge investments in building up institutional frameworks (relating to different areas such as the knowledge system — national system of innovation, education system, legal systems — or civil society structures, etc.), high transaction costs may make it hard for societies to break away from the existing structures and move to new ones. Therefore, investments in human and social capital are not only relevant for the current generation, they also impact on the well-being of the next generation» (UNECE, 2014, p20).

Lastly, due to efficiency gains, less capital might be needed in the future to generate the same amount of economic output and human well-being produced today: productivity gain [i.e. #13 in **Figure 3**]. This is the mechanism we already mentioned in Chapter 3, when we referred to Wintjes et al. (2016a) who relate investments in Social Innovation to economic growth and wider societal benefits. For as far economic production processes are involved, more output can then be generated with less capital inputs (meaning more efficient production processes due to e.g. new fixed capital assets (machinery) and/or a more knowledgeable and skilled workforce. The latter is a result of investments in human capital. Productivity gains in other areas than economic production processes result more in changes in quality rather than quantities of capital stocks.

We assess that, in addition to the standard economic flows that address relevant aspects of social innovation, in this context [of social innovation], human capital and social capital have more relevance than natural capital. For this reason, we will elaborate on human capital and social capital and explain how we consider them to be related to social innovation.

Human Capital

There are many definitions of human capital most of which stress the economic returns of human capital investments, e.g. «acquired skills and knowledge», to distinguish between the qualities 'skilled' and 'unskilled' labour. Similarly, human capital is also defined as «the skills, capacities and abilities possessed by an individual which permit him to earn income» (Penguin Dictionary of Economics, 1984). In addition, a World Bank definition of 2006 mentions the productive capacity embodied in indi-

viduals, with a particular focus on the contribution to economic production (UNECE, 2016).

Especially in current knowledge-based economies, human capital enhances both individual's and country's competitiveness. Yet, the (UNECE, 2016) Task Force on measuring human capital underscores that there are many non-economic benefits of human capital investments, such as improved health status, enhanced personal well-being and greater social cohesion. Moreover, these broader benefits for society are often believed to be larger than economic benefits in terms of higher earnings and economic (i.e. GDP) growth.

As a result, the OECD has gradually extended its definition of human capital (from a OECD report of 2001), towards a more recent (2011), see Figure 4, all-embracing definition that incorporates various skills and competences that are acquired through learning and experience but also includes innate abilities and non-cognitive skills such as interpersonal interaction skills (UNECE, 2016).

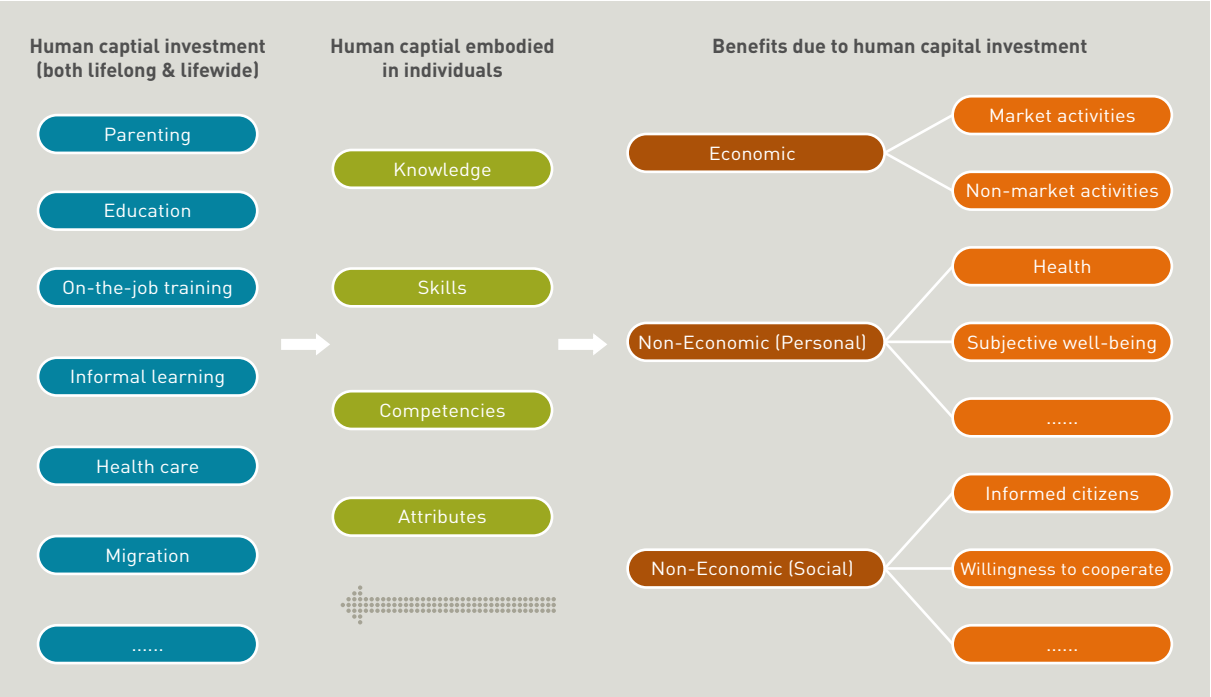

Figure 4. Human capital: a sketch of its formation, composition and benefits generated (Source: Adapted from UNECE, 2016 taken from OECD 2011)

Social Capital

Besides human capital, also social capital plays a (complementary) role as a resource to factors of production, and ultimately to human well-being (see Rehfeld at al., 2014). In practice, there are many different definitions of the concept of social capital. We build on the work of (Scrivens & Smith, 2013) for an assessment of the different definitions, as well as a further interpretation of this concept, as a basis for linking Social Innovation to a statistical product as suggested in the previous section.

In Scrivens and Smith (2013), it is argued that the different existing definitions «[...] can be traced back to the key contributions of Pierre Bourdieu, Robert Putnam, and James Coleman [...]». In (Rehfeld at al., 2014) these contributions are summarized as follows: «Economic resources, organizational competences and social capabilities constitute the basis for entrepreneurial choices and actions when engaging in social innovation. Bourdieu (1986) defines three types of capital: economic, cultural and social, with the latter defined as a scope of actual or potential resources derived from belonging to some networks, associations and communities.

According to Coleman (1990, 1996), social capital can be viewed as entities that facilitate individual actions in different organized structures. Putnam (1993) regards social capital as an attribute of a community and defines it as features of social life such as network, norms, and trust that enable participants to act together more effectively and provides impetus to the pursuit of objectives shared by all members of that group».

According to Scrivens and Smith (2013): «One of the main differences in the perspective of these three authors, and in the social capital literature in general, is whether social capital is a resource for the individual who 'owns' it (i.e. whether it is a private good [Bourdieu's view]) or whether it generates benefits for other members of society (i.e. a public good [Putnam's View]). […] within the private good approaches, social capital tends to be defined as consisting of both network structure (i.e. the people you know and your relationship with them) as well as the benefits or resources stemming from those relationships. Similarly, within the public good approach, social capital is usually defined as a combination of the structural – i.e. networks – and the cognitive – i.e. shared norms and trust – which can themselves be seen as a form of collective resource».

In Scrivens and Smith (2013) it is argued that «[w]hen it comes to operationalising social capital for analytical purposes, the combination of structural and resource aspects becomes problematic». The most relevant contribution of the paper (and the subsequent OECD's «Better Life Initiative» (OECD, 2015) for our statistics brief related to Social Innovation is a proposal for four main approaches for the conceptualisation and measurement of social capital (including data collection):

- ***Personal relationships*** refer to people's networks (i.e. the people they know) and the social behaviours that contribute to establishing and maintaining those networks, such as spending time with others, or exchanging news by telephone or email. This category concerns the extent, structure, density and components of individuals' social networks. As such, it takes people's social relations as the subject of interest, and addresses questions relating to the impacts – good or bad – that a given personal structure of social relations has on a range of well-being outcomes. While people's relationships are a direct source of social network support (see next category), the focus here is on the level and nature of social contacts rather than what people get out of those relationships. In addition, while interaction at the individual level may have positive spill over effects at an aggregate level, the opposite may also be true. The negative effects of personal relationships are sometimes labelled as the 'dark side' of social capital.
- ***Social network support*** is a direct outcome of the nature of people's personal relationships and refers to the resources – emotional, material, practical, financial, intellectual or professional – that are available to each individual through their personal social networks. The strength and quality of each person's social network support can have an immense impact on individual social and economic outcomes. This category places emphasis on the support people are able to access and focuses on questions relating to the causes and consequences of being able to access such support. The extent and quality of personal relationships is one driver of social network support, but not the only one. Social network support can help people both to «get by» in times of need or to «get ahead», by improving their position both in absolute and relative terms.
- ***Civic engagement*** comprises the activities through which people contribute to civic and community life, such as volunteering, political participation, group membership and different forms of community action. Civic engagement focuses on the nature and extent of collective activities. This category facilitates analysis of the impact of civic engagement on other outcomes as well as identifying the drivers of civic engagement. High levels of volunteering and civic action can contribute to institutional performance as well as being a driver of levels of trust and cooperative norms within a society (see next category). However, civic engagement can also impact on individual well-being by allowing opportunities to meet new people, and bringing enjoyment, a sense of purpose and even new skills to participants. Further, civic engagement may be seen as desirable in its own right regardless of whether it is an important determinant of how other social and economic outcomes are 'produced'.

- ***Trust and cooperative norms*** refers to the trust, social norms and shared values that underpin societal functioning and enable mutually beneficial cooperation. The concept is fundamentally concerned with those intangible factors embodied in people's social norms and expectations that contribute directly to better social and economic outcomes. Although trust and cooperative norms are highlighted, the scope of this category may be extended to cover any social institutions that contribute to better social and economic outcomes at the collective level. This category addresses the question of what elements of the informal structure and functioning of society have a 'productive' role, where the term productive is understood in both economic and social terms. This category is clearly a collective resource (i.e. it is an enabler of collective action) and is significantly correlated to a number of important outcomes of government policy, such as economic growth, government performance, environmental stewardship and social cohesion.

We argue that the *social network support* interpretation of the concept of social capital provides the best basis for linking Social Innovation to a statistical product that captures its impact on human well-being (although it may very well be not the only appropriate interpretation of the concept). In practice, this interpretation captures best the anticipated impact of Social Innovation as described in the definition adopted within the framework of SIMPACT, and reflected also in the examples provided in section 2.2 and their economic mechanisms described in section 3.3, namely that it transcends established institutional contexts with the effect of empowering and (re)engaging vulnerable groups. As stated in Scrivens and Smith (2013):

- Social network support defines a person's stock of social capital in terms of the level of resources or support that a person can draw from their social contacts […]. There are many different types of support that an individual can potentially access through their networks: information and advice (e.g. for business opportunities, job searches, for a life decision); emotional support (e.g. in the event of divorce or loss of a family member); financial support (e.g. being able to borrow a given amount of money in an emergency); practical help (e.g. helping out with housework, caring or home maintenance); material support (e.g. receiving a house, borrowing a car).
- The different types of social support available to people are a major determinant of well-being across a number of domains. Social network support can be seen to play a clear role in a number of the areas such as health status, education, subjective well-being, jobs and earnings.
- The types of support available to an individual through their network are largely dependent on the nature of their personal relationships: whom they know, how they know them and what their relationship is like. However, a number of factors might impact a person's ability to make use of the resources available through their personal relationships, which are related either to the characteristics of the individuals concerned or to contextual factors.

4.4 Conclusions on the Formulation of a Measuring Framework

The next step towards measuring Social Innovation in a Satellite Account to the National Accounts would be to develop a corresponding measuring framework with subsequent indicators. Within the framework of the CES, a measuring framework is suggested that includes fourteen themes that are considered relevant to address specific aspects of human well-being. Accordingly, the measuring framework is built around the different forms of capital and their contribution to the generation of thematic aspects of human well-being. Building on the impacts of capital on human well-being, (ideal) indicators are finally identified that fit within the themes.

This CES measuring framework with corresponding indicators could be used as a basis for capturing Social Innovation. However, further assessment and elaboration is needed in order to select appropriate indicators to measure Social Innovation activities and its outcomes and impact. It is not obvious whether the causal relation between Social Innovation and human- and social capital can be captured completely/sufficiently (after careful selection of existing and/or new indicators to measure

Social Innovation activities and outcomes). The underlying issue here is that our current understanding of Social Innovation is perhaps not yet sufficient. Capturing Social Innovation in a formal accounting framework requires a clear and exclusive description of subsequent concepts, actors, etc. The current definition of Social Innovation does not yet foresee this.

5 CONCLUSIONS

Why linking Social Innovation to the System of National Accounts?

This report explores ways how the concept of Social Innovation can be linked to the System of National Accounts. This implies that Social Innovation activities and their impact need to be captured in accordance with a uniform and exclusive set of definitions and rules constituting a commonly adopted accounting framework.[6]

The rationale to linking Social Innovation to the National Accounts framework is to allow for the assessment of the economic relevance of Social Innovation over different years, and over different countries / regions. This will provide policy makers with a basis for the design of dedicated policy with corresponding effective interventions addressing Social Innovation.

How is Social Innovation already included in the National Accounts?

Our analysis indicates that Social Innovation expenditures and final consumption of outputs and outcomes of Social Innovation are, at least partially, already captured in the existing central National Accounts framework. In particular, in production of both market and non-market services by, and final consumption of, Non-profit Institutions Serving Households, General Government and Households. However, the associated expenditure- and final consumption flows are not labelled as «Social Innovation» and subsequently not observable as such. It would require great effort to derive statistics on Social Innovation from the current (macro-level) flows in the SNA.

We suggest an alternative approach - in line with/building on CES

Some aspects of Social Innovation are not yet covered within the SNA. The production boundary is for that purpose too restrictive as a condition to identify Social Innovation. Social innovations have an objective, that is to improve the human and social capital of persons (and therefore of societies). In order to address this objective of Social Innovation, we explore ways to go beyond the current inputs and outputs covered by National Accounts. We build on the approach embraced for this purposes by the statistical community that has developed techniques to cover information on auxiliary topics in Satellite Accounts. More specifically, we elaborate on the analytical and conceptual framework as adopted by the Conference of European Statisticians to measuring sustainable development (UNECE, 2014).[7]

Linking Social Innovation to the SNA still requires addressing a series of issues

Our analysis suggests that fully linking Social Innovation to the SNA through Satellite Accounts is an ambitious objective. Specific issues will need to be addressed:

- Capturing Social Innovation in the National Accounts framework requires the introduction of a new (or the adjustment of the existing) set of accounting rules with corresponding exclusive definitions. The current understanding of what Social Innovation comprises is ambiguous, however: examples of specific cases refer, amongst others, to improvements in the educational level / skills, employability and access to social security services of different target groups. Social Innovation and its characteristics such as its typical inputs and outputs or effects need to be further and exclusively defined. The current perception and

[6] The European System of Accounts (ESA, 2010), the national accounting framework of the EU.

[7] This framework is based on the work of a joint task force of the United Nations Economic Commission for Europe, OECD and Eurostat. In 2015 a follow-up task force is established to adjusting the CES recommendations on measuring sustainable development to the Sustainable Development Goals (SDGs) as adopted during the UN General Assembly of 25 September 2015.

understanding of the Social Innovation concept is perhaps not yet sufficiently clear.

- To illustrate this last point: we suggest for the design of a Satellite Account with linkages between Social Innovation and human- and social capital. It is not obvious whether the causal relation between the two can actually be measured (with existing or new indicators).
- Our suggestion to linking Social Innovation to human and social capital is in line with the more traditional approach as adopted in the SNA that builds on the concept of a production function.
- However, other approaches could also be explored. During the Data Lab on the 2nd of July 2016, a 'system approach' was for example suggested as alternative. In such an approach, one could think of analyses that link Social Innovation to changes in e.g. risks, resilience, vulnerability of the wider system (i.e. society, nature, etc.).
- Either way, the feasibility of fully addressing Social Innovation within the National Accounts framework is defined by the extent to which data reflecting Social Innovation at individual project level can be aggregated to the macro-level. Moreover, one should then also understand the value added of measuring Social innovation at a national level over direct impact assessment of individual projects or cases. Experts questioned the latter during our Data Lab on the 2nd of June 2016.
- Is there in fact legitimacy to consider Social Innovation as a separate category at the national level? In the European Union policy context, this seems to be the case as the Innovation Union Flagship started to mention the importance of social innovation as part of economic policy.
- Yet, for the ultimate design of a national-level measuring approach, it is important to realise that there is a trade-off between accuracy in capturing Social Innovation on the micro-/project level and completeness on the aggregated macro-economic level.
- A statistical product that fully captures all aspects of Social Innovation will require the collection of new data to indicate the contribution and relevance of Social Innovation to society at large. Besides such causal linkages are not yet clearly defined, the design and implementation of a dedicated statistical process might be costly.
- Starting with setting-up a clear and standardized operationalisation of Social Innovation activities, inputs, outputs and impacts, it would accordingly be best to link efforts to measuring Social Innovation in a national accounting framework, where possible, to existing initiatives and indicators (e.g. the Community Innovation Survey, EU-SILC, CES-thematic indicators to measuring Sustainable Development etc.).

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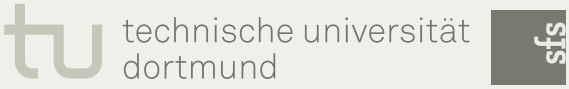
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