Cr E S S I

Creating Economic Space for Social Innovation

CRESSI Working papers

The CRESSI project explores the economic underpinnings of social innovation with a particular focus on how policy and practice can enhance the lives of the most marginalized and disempowered citizens in society.

CRESSI Working Papers No. 34/2017

Comparison of four cases of social innovation in Europe: a statistical report

By Enrica Chiappero-Martinetti, Nadia von Jacobi, Lara Maestripieri, Rafael Ziegler, Martin van der Linden, Cees van Beers

CRESSI Deliverable 7.2

ISBN: 978-0-9955387-5-7



"Creating Economic Space for Social Innovation" (CRESSI) has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no 613261.



1

Creating Economic Space for Social Innovation

Suggested citation

Chiappero-Martinetti, E., von Jacobi, N., Maestripieri, L., Ziegler, R., van der Linden, M., van Beers, C. (2017). Comparison of four cases of social innovation in Europe: a statistical report. CRESSI Working Paper no. 40/2017. A deliverable of the project: "Creating Economic Space for Social Innovation" (CRESSI), European Commission – 7th Framework Programme, Brussels: European Commission, DG Research and Innovation

CRESSI

"Creating Economic Space for Social Innovation" (CRESSI) has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no 613261. CRESSI is a collaboration between eight European institutions led by the University of Oxford and will run from 2014-2018.

Acknowledgements

Special thanks to György Molnár (Centre for Economic and Regional Studies, Hungarian Academy of Science) for contributing with the Hungarian case study. We thank Toa Giroletti, Marco Gavazzoni and Daniele Guariso (University of Pavia) for their contribution to sections 13-15 and Justus Lodemann, Mara Nothers, Nadine Reinwardt and Hendrik Sönnichsen (GETIDOS, University of Greifswald) for support during the implementation of the data collection and follow-up trouble-shooting during the analysis of data.

Date: November 2017

CRESSI Deliverable no: D7.2

Author(s):

Dr Enrica Chiappero-Martinetti,

Dr Nadia von Jasahi

Dr Nadia von Jacobi, Dr. Lara Maestripieri, Dr Rafael Ziegler, Martijn van der Linden, Dr. Cees van Beers

Lead partner: University of Pavia

Participating partners: Delft University of Technology &

University of Greifswald

Contact person: Dr Enrica Chiappero-Martinetti

CRESSI Deliverable 7.2

Comparison of four cases of social innovation in Europe: a statistical report

Summary of the report

PART I - Contents and methods	15
1. Introduction	15
1.1. Bridging theory to practice: how does the content of the present report link to theoretical model	
1.2. Keywords	15
1.2.1. Social Innovation	15
1.2.2. Marginalisation	16
1.2.3. Autonomy and agency	16
1.2.4. Social Forces (Cognitive Frames, Institutions, Networks)	17
1.3. Summarizing the research questions	17
1.3.1. How and to what extent can social innovation address marginalisation?	17
1.3.2. How and to what extent can social innovation affect autonomy?	17
1.3.3. How and to what extent do social forces play a role in the relation between social innovation and marginalisation?	
2. Contents and Aims of this Report	18
3. Methodology adopted	18
3.1.1. Logic and rationale in the chosen methodology	19
3.1.2. Social innovators phase: pre-qualitative questionnaire and semi-structured interviews	20
3.1.3. Beneficiaries phase: focus groups and survey	21
4. Case studies description and rationale	22
4.1. Short description of the case studies: commonalities and specificities	22
4.1.1. Italian case: Solidarity Purchasing Groups	23
4.1.2. German case: IKT water management	26
4.1.3. Dutch case: complementary currencies	29
4.1.4. Hungarian case: Kiútprogram	33
PART II - Empirical evidence for the three comparable social innovation cases	35





Part II.1 - Social innovation and marginalisation	35
5. Characteristics of the social innovation	35
5.1. Insights from qualitative analysis	35
5.1.1. Italian case: Solidarity Purchasing Groups	36
5.1.2. German case: IKT water management	38
5.1.3. Dutch case: complementary currencies	42
5.2. Comparative qualitative analysis	46
5.3. Comparative quantitative analysis	48
6. Characteristics of the beneficiaries	53
6.1. Insights from qualitative analysis	53
6.1.1. Italian case: Solidarity Purchasing Groups	53
6.1.2. German case: IKT water management	54
6.1.3. Dutch case: complementary currencies	54
6.2. Comparative qualitative analysis	55
6.3. Comparative quantitative analysis	56
7. Marginalisation/vulnerability	60
7.1. Insights from qualitative analysis	60
7.1.1. Italian case: Solidarity Purchasing Groups	60
7.1.2. German case: IKT water management	62
7.1.3. Dutch case: complementary currencies	65
7.2. Comparative qualitative analysis	67
7.3. Comparative quantitative analysis	68
Part II.2 - Social forces	78
8. Cognitive frames	78
8.1. Insights from qualitative analysis	78
8.1.1. Italian case: Solidarity Purchasing Groups	78
8.1.2. German case: IKT water management	79
8.1.3. Dutch case: complementary currencies	81
8.2. Comparative qualitative analysis	83
8.3. Comparative quantitative analysis	84
9. Networks	94





9.1. Insights from qualitative analysis	94
9.1.1. Italian case: Solidarity Purchasing Groups	94
9.1.2. German case: IKT water management	95
9.1.3. Dutch case: complementary currencies	96
9.2. Comparative qualitative analysis	97
9.3. Comparative quantitative analysis	102
10. Institutions	106
10.1. Insights from qualitative analysis	106
10.1.1. Italian case: Solidarity Purchasing Groups	106
10.1.2. German case: IKT water management	107
10.1.3. Dutch case: complementary currencies	109
10.2. Comparative qualitative analysis	110
10.3. Comparative quantitative analysis	113
Part II.3 – Towards a measurement of social impact	117
11. Autonomy	117
11.1. Focus group analysis: comparison between the dimensions	118
11.2. Comparative quantitative analysis	120
PART III – Zooming in	127
12. A focus on gender	127
13. A focus on measuring autonomy	136
14. A focus on Hungary	161
14.1. Characteristics of the social innovation case	161
14.2. Characteristics of the beneficiaries	163
14.3. Marginalisation of the beneficiaries	168
14.4. Cognitive frames	173
14.5. Networks	176
14.6. Institutions	177
15. A focus on Solidarity Purchasing Groups	180
15.1. Political Participation	180
15.2. Community Involvement	181
15.3. Trust in Institutions	181



15.4.	Voluntary Activities	183
15.5.	Friendship and Relations	184
15.6.	Characteristics of the enterprise	185
PART	T IV – Appendix	191
16.1.	Questionnaires	192
16.2.	Prequalitative template	205
16.3.	Qualitative template	210
16.3.	Focus Groups template	218



Summary of tables and figures

Table 1 – The social innovation groups interviewed for each of CRESSI case-studies
Table 2 – Key numbers of the three coordinated data collections that feed into the CRESSI survey data 22
Table 3 – Few basic facts about the case studies in CRESSI
Table 4 – Characteristics of the social innovation in the opinion of the interviewees, number of yes for each item of the mobile dashboard set of questions – GASs.
Table 5 – Intensity and types of incremental innovations introduced in the last three years – Italian case 38
Table 6 – Characteristics of the social innovation in the opinion of the interviewees, number of yes for each item of the mobile dashboard set of questions – IKTs
Table 7 – Intensity and types of incremental innovations introduced in the last three years – German case 4:
Table 8 – Characteristics of the social innovation in the opinion of the interviewees, number of yes for each item of the mobile dashboard set of questions – CCs
Table 9 – Intensity and types of incremental innovations introduced in the last three years – Dutch case 45
Table 10 – The answers to the mobile dashboard set of questions – count of yes for each item [Which of the following keywords would you use to describe your social innovation activity?]
Table 11 – People ever having heard of the social innovation, absolute numbers and <i>percentages</i>
Table 12 – People that have been active in the social innovation, absolute numbers and <i>percentages</i> 48
Table 13 – Nr of years of participation among past participants
Table 14 – Replies to questions on involvement: absolute numbers, all participants
Table 15 – Financial contributions to social innovation in euros per year: median and mean values and absolute numbers of those declaring to ever having contributed, all participants
Table 16 – Hours of voluntary work devoted to social innovation the social innovation per week: median and mean values and absolute numbers of those declaring to having ever contributed, all participants 52
Table 17 – Perception regarding the main beneficiaries of the social innovations [In your view, are "see table for inserts" prior beneficiaries of the social innovation?]
Table 18 – How social innovations address marginalisation in the opinion of social innovators 68
Table 19 – Benefitting from the social innovation in other terms: case-specific domains, all cases
Table 20 – Expected impacts of the social innovation among beneficiaries, absolute numbers of replies and column percentages, all cases
Table 21 – Main domains of cognitive frames mentioned in qualitative interviews, all cases
Table 22 – Internal networks of social innovations
Table 23 – External funding of social innovations, % of yes



Table 24 – Collaboration with public actors	100
Table 25 – Geographical level of reference of mentioned institutions	111
Table 26 – Influence on local decision-making process	113
Table 27 – Aspects through which participation in the social innovation contributes to empowermen life-dimensions in three countries	
Table 28 – Participating in the social innovation, by gender – percentages and absolute values, all c	ases 127
Table 29 – Participating in the social innovation, by age – percentages and absolute values, all case	s 128
Table 30 – Labour market participation and gender, comparison between social innovation benefici their control group, <i>percentages</i> and absolute values, IKTs case	
Table 31 – Labour market participation and gender, comparison between social innovation benefici their control group, <i>percentages</i> and absolute values, GASs case	
Table 32 – Labour market participation and gender, comparison between social innovation benefici their control group, <i>percentages</i> and absolute values, CCs	
Table 33 – Gender gap (male – female) for beneficiaries and control group in labour market activate percentages and absolute values, all cases	
Table 34 – Agreement to "One should not start a business if there is a risk it might fail", by gender percentages and absolute values, all cases	
Table 35 – Scores in the self-perceived autonomy ladder (1=low autonomy, 10=high autonomy), by percentages and absolute values	-
Table 36 – Percentage of agreement to the prompt "the participation in the social innovation has immy autonomy" in the given dimension, absolute values for n° of respondents, all cases	•
Table 37 – Self-perceived agency, by gender, <i>percentages</i> and absolute values, all cases	132
Table 38 – Percentage of individuals by their level of economic security, by gender, absolute values respondents, all cases	
Table 39 – Self-perceived economic dependency, by gender, percentages and absolute numbers, all	cases 134
Table 40 – Participation in the social innovation and economic situation, by gender, <i>percentages</i> an absolute numbers, all cases	
Table 41 – Mean scores in perceived life satisfaction (1=totally dissatisfied, 10=totally satisfied), by percentages and absolute numbers	
Table 42 – Randomized compositions of questionnaires used for the pilot study: random selection of construct in specific NACEMP dimension	
Table 43 – Distribution of evaluations of vignettes, all questionnaires of the Italian pilot study	140
Table 44 – Summary statistics of the first vignette (<i>No Control</i>) for each dimension	141



Table 45 – Summary statistics of the second vignette (<i>External Regulation</i>) for each dimension	. 142
Table 46 – Summary statistics of the third vignette (Introjected Regulation) for each dimension	. 143
Table 47 – Summary statistics of the fourth vignette (<i>Identified Regulation</i>) for each dimension	. 144
Table 48 – Summary statistics of the fifth vignette (<i>Integrated Regulation</i>) for each dimension	. 145
Table 49: Summary statistics of the sixth vignette and the one repeated for each questionnaire	. 146
Table 50: Italian vignettes corresponding to the levels of autonomy and the dimensions of the NACEMP model	
Table 51: the matching between the vignettes and the dimensions	. 148
Table 52: Summary statistics of all vignettes for each group of respondents	. 148
Table 53: The summary statistics of the third and the sixth vignettes	. 149
Table 54: The summary statistics of the sixth vignette and the one repeated (into parenthesis is written the level of autonomy represented by the vignette)	
Table 55: Categories of Ci defined anchoring the self-assessment question	. 151
Table 56 – Kiútprogram finances between 2010 and 2012 (%)	. 161
Table 57 – Number and share of respondent to baseline and follow-up questionnaires, beneficiaries and control group	. 162
Table 58 – Average gross value of the first loan by batches, beneficiaries	. 162
Table 59 – Average gross value of the loan and average net value of the loan, beneficiaries	. 162
Table 60 – Average duration of the first loan by batches, beneficiaries	. 162
Table 61 – Average duration of the loan, beneficiaries	. 162
Table 62 – Average amount paid back and percentage on the gross value of the first loan, beneficiaries	163
Table 63 - Average amount of arrears and percentage on the gross value of the first loan, beneficiaries	163
Table 64 – Distribution of the Roma and non-Roma population of 15 years of age and older, by highest educational level attained. Values in percentage	. 164
Table 65 – Educational level, beneficiaries and control group. Values in percentage	. 165
Table 66 – Years in school, beneficiaries and control group	. 165
Table 67 – Marital status, beneficiaries and control group. Values in percentage	. 166
Table 68 – Relationship to head, beneficiaries and control group. Values in percentage	. 166
Table 69 – Percentage of unemployed in the sample and months of unemployment, beneficiaries and congroup	



Table 70 – Settlement location, beneficiaries and control group. Values in percentage	166
Table 71 – Ethnicity, beneficiaries and control group. Values in percentage	167
Table 72 – Roma as first or second nationality, beneficiaries and control group	168
Table 73 – Income delta, beneficiaries and control group. Values in percentage	169
Table 74 – Chance to do something to improve life, beneficiaries and control group. Values in percentage baseline interview	_
Table 75 – Dwelling material, beneficiaries and control group	171
Table 76 – House assets, beneficiaries and control group, % of positive answers	172
Table 77 – Debiting situation, beneficiaries and control group, Average value in EUR, baseline interview	w 173
Table 78 – Attitudes, beneficiaries and control group, average value on a scale from 0 to 10	173
Table 79 – Attitudes towards the Roma in Hungary, 2011. Agreement with the statements, in %	176
Table 80 – Source of borrowing and its average value, in euro equivalent	177
Table 81 – Participation in affairs, beneficiaries. Values in percentage	177
Table 82 – Institutions, selected responses, values in percentage	177
Table 83 – Institutions (2), selected responses, values in percentage	178
Table 84 – Typologies of worker in the enterprise, mean and median values and number of respondents	186
Table 85 – Type of production of the enterprise (selected options - multiple choice possible)	187
Figure 1 - Overall architecture of CRESSI's WP7 data collection	19
Figure 2 - Duration of participation in the social innovation, currently active members, all cases	49
Figure 3 - Age profile of short term (less than 4 years, left) and long-term (longer than 6 years, right) participants, currently active members, all cases	49
Figure 4 - Degree of involvement of current (left) and past (right) participants, all cases [How often do y participate in discussions and decisions?]	
Figure 5 - Financial involvement of current (left) and past (right) participants, all cases [Do you contribution with any money (e.g. membership fee) to support this social innovation?]	
Figure 6 - Involvement of current (left) and past (right) participants through voluntary work, all cases [L you devote voluntary work for this social innovation?]	
Figure 7 - Overall evaluation of the social innovation by current (left) and past (right) participants, all ca [Would you recommend this social innovation?]	
Figure 8 - Gender (left) and age (right) profile of current and past participants, all cases	56





Figure 9 - Educational profile of current and past participants, all cases
Figure 10 - Labour market participation (left) and prevalent type of activity if unemployed (right), current and past participants, all cases
Figure 11 - Employment status of current and past participants who are active on the labour market, all cases
Figure 12 - Declared number of hours worked per week, current and past beneficiaries, all cases
Figure 13 - Ability of beneficiaries to make ends meet with household total income, all cases
Figure 14 - Ability to afford an unexpected expense, current and past beneficiaries, all cases
Figure 15 - Declared personal net monthly income, entire sample populations, all cases
Figure 16 - Differences in declared personal net monthly income, beneficiaries vs. control groups, all cases
Figure 17 - Compared to previous three years, income of the household this year has been "inferior", "same" or "higher", entire sample populations, all cases
Figure 18 - Personally benefitting from the social innovation, current (left) and past (right) beneficiaries, all cases
Figure 19 - Benefitting from the social innovation in terms of money or income, current (upper) and past (lower) beneficiaries, all cases
Figure 20 - Benefitting from the social innovation in terms of friendship, current and past beneficiaries, all cases
Figure 21 - Benefitting from the social innovation in terms of business relationships, current and past beneficiaries, all cases
Figure 22 - Benefitting from the social innovation in terms of knowledge, current and past beneficiaries, all cases
Figure 23 - Risk aversion of beneficiaries and control groups, all cases [One should not start a business if there is a risk it might fail]
Figure 24 - Adherence to specific cognitive frames, comparison between social innovation beneficiaries and their control group, IKTs case
Figure 25 - Adherence to specific cognitive frames, comparison between social innovation beneficiaries and their control group, GASs case
Figure 26 - Adherence to specific cognitive frames, comparison between social innovation beneficiaries and their control group, CCs case
Figure 27 - Extent to which beneficiaries and their control groups do not worry about enterprise failure, all cases [I don't worry that my enterprise might fail]



Figure 28 - Extent to which certain behaviours are assumed, comparison between social innovation beneficiaries and their control group, IKTs case) 0
Figure 29 - Extent to which certain behaviours are assumed, comparison between social innovation beneficiaries and their control group, GASs case)1
Figure 30 - Extent to which certain behaviours are assumed, comparison between social innovation beneficiaries and their control group, CCs case) 3
Figure 31 - % of participants in the social innovation with a tertiary degree - estimates of the social innovators in three countries	98
Figure 32 - types of actors within the social innovations' external networks	9
Figure 33 - Did your organization collaborate with the external actor when setting up the initiative? 10)0
Figure 34 - How often does your organization communicate with this actor now?)1
Figure 35 - Did the relation between your organization and the actor change because of the on-going activity?)2
Figure 36 - Frequency of contact with different actors and entities, comparison between social innovation beneficiaries and their control group, IKTs case)3
Figure 37 - Frequency of contact with different actors and entities, comparison between social innovation beneficiaries and their control group, GASs case)4
Figure 38 - Frequency of contact with different actors and entities, comparison between social innovation beneficiaries and their control group, CCs case)5
Figure 39 - Type of institution: who promotes/enforces the rule or practice	L 1
Figure 40 - Perceived impact of institutions on social innovation activities	L2
Figure 41 - Relative diffusion of the institution within context of reference [How widely is this rule or practice accepted/respected in your context?]	L2
Figure 42 - Degree of respect/acting in accordance with different institutions, comparison between beneficiaries and their control group, IKTs case	L4
Figure 43 - Degree of respect/acting in accordance with different institutions, comparison between beneficiaries and their control group, GASs case	L5
Figure 44 - Degree of respect/acting in accordance with different institutions, comparison between beneficiaries and their control group, CCs case	۱6
Figure 45 - Differences in current perceived autonomy, comparison between beneficiaries and their control groups, all case [Self-assessment question: Considering your life in general, on which step are you today?]	2O
Figure 46 - Differences in past-perceived autonomy, comparison between beneficiaries and their control groups, all case [Self-assessment question: Considering your life in general, on which step were you before getting in contact with the social innovation/ three years ago?]	



Figure 47 - Differences in perceived autonomy change in the natural dimension, comparison between	
beneficiaries and their control groups, all case [Considering the natural dimension, has your	.1
participation in the social innovation contributed to your autonomy/ how do you feel compared to	
years ago?]	122
Figure 48 - Differences in perceived autonomy change in the artefacts (technological) dimension,	
comparison between beneficiaries and their control groups, all case [Considering the technological	l
dimension, has your participation in the social innovation contributed to your autonomy/ how do y	
feel compared to three years ago?]	
Figure 49 - Differences in perceived autonomy change in the cultural dimension, comparison between	
beneficiaries and their control groups, all case [Considering the cultural dimension, has your	
participation in the social innovation contributed to your autonomy/ how do you feel compared to	three
years ago?]	123
Figure 50 - Differences in perceived autonomy change in the economic dimension, comparison between	
beneficiaries and their control groups, all case [Considering the economic dimension, has your	1
	41
participation in the social innovation contributed to your autonomy/ how do you feel compared to	
years ago?]	124
Figure 51 - Differences in perceived autonomy change in the security-related dimension, comparison	
between beneficiaries and their control groups, all case [Considering the security-related dimensio	n,
has your participation in the social innovation contributed to your autonomy/ how do you feel	,
compared to three years ago?]	125
Figure 52 - Differences in perceived autonomy change in the political dimension, comparison between	
beneficiaries and their control groups, all case [Considering the political dimension, has your	
participation in the social innovation contributed to your autonomy/ how do you feel compared to	three
years ago?]	125
Figure 53 - Distribution of vignette evaluations of different levels of autonomy as defined in RAI, Italia	
pilot study	139
Figure 54 - Distribution of the first vignette, Italian pilot study	141
Figure 55 - Distribution of the second vignette, Italian pilot study	142
Figure 56 - Distribution of the third vignette, Italian pilot study	143
Tigure 30 Distribution of the time vighette, furnan phot study	1-5
Figure 57 - Distribution of the fourth vignette, Italian pilot study	144
Figure 50 Distribution of the fifth signature Italian wilet study	1 4 5
Figure 58 - Distribution of the fifth vignette, Italian pilot study	145
Figure 59 - The vignettes' distribution, beneficiaries and control group	149
Figure 60 - Distribution of the self-assessment (left) and the DIF-free self-assessment (right) of current	
autonomy of beneficiaries, in %	152
autonomy of ochemicaries, in 70.	132
Figure 61 - Distribution of the self-assessment (left) and the DIF-free self-assessment (right) of past	
autonomy of beneficiaries, in %	152



Figure 62 - Distribution of the self-assessment (left) and the DIF-free self-assessment (right) of autonom beneficiaries "three years ago", in %	•
Figure 63 - Distribution of the self-assessment (left) and the DIF-free self-assessment (right) of current autonomy of the control group, in %	154
Figure 64 - Distribution of the self-assessment (left) and the DIF-free self-assessment (right) of autonomethe control group "three years ago", in %	•
Figure 65 - Distribution of the DIF-free self-assessment of current autonomy of beneficiaries (left) and t control group (right), in %	
Figure 66 - Distribution of the DIF-free self-assessment of past autonomy of beneficiaries (left) and the control group (right), in %	155
Figure 67 - The variation of the level of autonomy, by gender, beneficiaries	156
Figure 68 - The variation of the level of autonomy, by levels of education, beneficiaries	157
Figure 69 - The variation of the level of autonomy, by age, beneficiaries	157
Figure 70 - The variation of the level of autonomy, by employment status, beneficiaries	158
Figure 71 - The variation of the level of autonomy, by household status, beneficiaries	158
Figure 72 - The variation of the level of autonomy, by geographical origin, beneficiaries	159
Figure 73 - Total arrears amount, beneficiaries, HUF	163
Figure 74 - Age, beneficiaries and control group	164
Figure 75 - Respondents' Ethnicity, beneficiaries and control group	167
Figure 76 - Income per capita in follow-up questionnaire, beneficiaries and control group, HUF	168
Figure 77 - Income per capita in baseline questionnaire, beneficiaries and control group. Values in HUF	. 169
Figure 78 - Life Satisfaction, beneficiaries and control group, average value in a range from 0 to 10, bas interview	
Figure 79 - Financial satisfaction, beneficiaries and control group, average value in a range from 0 to 10 baseline interview	
Figure 80 - Share of total population not having a toilet with flush in the dwelling.	172
Figure 81 - Attitude towards risk, beneficiaries and control group	174
Figure 82 - Planning tasks carefully, beneficiaries and control group	174
Figure 83 - Make up my mind quickly, beneficiaries and control group	175
Figure 84 - Take several activities at the same time, beneficiaries and control group	175
Figure 85 - Direct an activity rather than helping out, beneficiaries and control group	176



Figure 86 - Overview of political attitudes of participants to GAS groups	180
Figure 87 - How often do you take part in discussions or decisions regarding your community or neighbourhood?	181
Figure 88 - Trust in institutions, sample population	182
Figure 89 - Trust in institutions, Italian reference population	183
Figure 90 - Extent (left) and intensity (right) of engagement in voluntary activities, sample population	184
Figure 91 - Sociability of the Italian sample (left) and of the Italian reference population (right) [How often do you see your friends, relatives or colleagues in your free time?]	
Figure 92 - Type (left) and origin (right) of the beneficiary enterprises	185
Figure 93 - Number and type of employees in the enterprise: dependent workers (upper left); members of social co-operative (upper right); seasonal or casual workers (lower left) and family workers (lower right)	
Figure 94 - Financial help received through solidarity purchasing groups: incidence (left) and amount received (right)	187



PART I - Contents and methods

1. Introduction

1.1. Bridging theory to practice: how does the content of the present report link to the theoretical model

The CRESSI project has so far produced extensive theoretical material to analyse social innovation processes and their potential role for society: social innovation has been defined and - by joining literatures and background knowledge of different social science disciplines - we have traced a model that seeks to explain why it can play a crucial role for the reduction of socio-economic marginalisation, how it may offset societal change by exerting pressure on existing social forces and therefore change them. This report takes our theoretical framework to the next level, a first empirical test: we present findings of four European social innovations and try to link their existence, working mechanisms and social impact to our conceptual framework. Three of the four case studies presented are based on a dedicated primary data collection, which aimed at maximising comparability across the different social innovations investigated. The fourth - Hungarian - case is based on different data but its presentation follows the conceptual pillars of our model.

1.2. Keywords

In what follows we briefly introduce those keywords and concepts that will repeatedly be used in this report. In phrasing social innovation, marginalisation, autonomy and social forces we build upon previous deliverables of the CRESSI project.

1.2.1. Social Innovation

Social innovation in CRESSI is defined as the development and delivery of new ideas and solutions (products, services, models, markets, processes) at different socio-structural levels that intentionally seek to change power relations and improve human capabilities, as well as the processes via which these solutions are carried out. The definition is broad and leaves space for social initiatives at different scales and with very different goals. It also leaves it open whether people advance social innovations with or without a formal, organizational setup. However, because social innovation as a concept is malleable and susceptible to reinterpretation, we stress the normative benchmark character of our definition, which explicitly refers to capabilities as an evaluative space.

The social innovation cases presented in this report comprise consumption purchasing groups (Italy), interest communities that fight for decentralized drinking water supply and wastewater removal (Germany), complementary currencies (The Netherlands) and a social micro-credit program that envisages a "way out" (*Kiut*) of social exclusion (Hungary).

We analyse these cases drawing on the CrESSI conceptual framework, the "Extended Social Grid model". The "social grid" is due to an insight by economic sociologist Jens Beckert (2010), which proposes an analysis of economic change in terms of three interrelated forces: social networks, institutions and cognitive frames. These reproduce marginalization and exclusion, but they are not deterministic thereby leaving potential opportunities or 'spaces' for social innovation. As social innovation is not limited to markets (Beckert's focus), we extend the model with further sources of power, as elaborated by Michal Mann (1986, 1993, 2008) and extended by Risto Heiskala (Heiskala 2015): natural/environmental,



artefactual/technological, cultural, economic, military/security-related and political. For a longer exposition of this model, the social forces and sources of power see Nicholls and Ziegler (2015).

1.2.2. Marginalisation

Marginalisation in CRESSI is understood as the "result of a social process through which personal, social or environmental traits are transformed into actual or potential factors of disadvantage" (von Jacobi, Edmiston and Ziegler, 2017 building upon Chiappero-Martinetti and von Jacobi, 2015). Such framing puts at its centre the dynamic nature of marginalisation: social processes change and different factors concur in shaping them. Marginalisation itself is not an inborn characteristic: it emerges in connection with other social phenomena. Where personal traits or those of the socio-environmental context in which a person lives result in marginalisation, people are increasingly exposed to socio-economic vulnerability. In the cases presented in this report, the potential factors of disadvantage that - embedded within existing social processes - may lead to marginalisation are different in the three cases investigated:

- size of enterprises (e.g. family businesses) and processes of production (e.g. organic and ethic ones) which are embedded within increasing economies of scale inside of the food distribution system (Italy);
- geographical remoteness and a political preference for self-determination (e.g. having a say in decisions that affect one's life) within the context of larger agricultural developments and the expansion of a freshwater model that does not "fit" with hamlets (Germany);
- alternative scopes of economic exchange within monetary monopoly such as in the Euro system (The Netherlands) and
- ethnic belonging, e.g. being Roma within the restructuration of the Hungarian economy after a system change, which provoked quick devaluation of unskilled labour (Hungary).

As we will see, it is not a single cause but rather the combination of personal, social and environmental traits in a social process that causes disadvantage, and with it marginalisation or even exclusion.

1.2.3. Autonomy and agency

Autonomy in this report is used for the operationalization of the concept of *agency*, which refers to an individual's freedom to both reflect on and assert, as well as to achieve her ends. As Sen puts it, and agent is "someone who acts and brings about change, and whose achievement can be judged in terms of her own values and objectives, whether or not we assess them in terms of some external criteria as well" (Sen 1999, 18), Within the capability approach, individual agency enables individuals to be *empowered* and, roughly speaking, it represents the ability to realize their own life plans (von Jacobi *et al.* 2015). Therefore agency and empowerment - in particular of marginalized groups - is of key interest when investigating the impact of social innovation.

In framing our measurement of autonomy, we refer to Self Determination Theory (SDT) as formulated by Deci (1971), according to which an individual's motivation varies along a continuum of perceived self-determination, ranging from non-self-determined (or controlled) to self-determined (or autonomous) forms of behavioural regulation (Wilson, Sabiston, Mack, and Blanchard, 2012). The concept of autonomy grasps constraints in behaviour that may be driven by the intra-household decision-making process or societal arrangements, which may both be crucial elements of the so-called "social process".

In the cases presented hereafter (except for the Hungarian case), a single measure of autonomy is used, which tracks the perceived ability to autonomously act in the environmental, technological, cultural, economic, security-related and political dimensions. We hypothesize that social innovation increases



perceived autonomy of beneficiaries/participants in social innovations (as compared to the perceived autonomy of control groups, which are not part of the social innovation process).

1.2.4. Social Forces (Cognitive Frames, Institutions, Networks)

In our model, social forces are used to analyse the social processes to which individuals are exposed. They can be conceived at very different levels of analysis (from local to global) and they can be thought to make up the 'context' within which an individual lives. CRESSI's focus on Beckert's framework helps us to group a large number of possible contextual factors into three overarching groups: networks, institutions and cognitive frames. Networks are non-casual groupings of individuals, organizations or firms (von Jacobi *et al. 2015*). Cognitive frames are culturally shared meaning, or the 'mental organization of the social environment' (Beckert, 2010:610). They can refer to the mind-frames of people: their beliefs and mental structures, which affect their perception of reality. Institutions are systems of rules, whether formal (dictated and enforced by the state) or informal (including social norms and prevalent behavioural patterns, that may e.g. be shaped by tradition and culture). In the empirical cases presented in this report, attention has been paid to detect and understand the mechanisms through which specific social forces either facilitate or constraint social innovation process; where possible we disentangle those social forces that contribute to the marginalization of specific groups.

1.3. Summarizing the research questions

The case-studies presented in this report serve as test for the main research questions that the CRESSI project has put forward:

1.3.1. How and to what extent can social innovation address marginalisation?

In order to succeed in addressing marginalisation, social innovation must somehow affect and change some elements of the social process in a way that certain traits cease to be factors of disadvantage. For example, small size of enterprise ceases to be an obstacle to access markets (Italy); geographical isolation ceases to cause loss of effective political participation (Germany); alternative goals of exchange cease to cause isolation on the market (the Netherlands); ethnic belonging ceases to doom people to unemployment and to social exclusion (Hungary).

In order to detect possible effects of the social innovation, we compare statistics of beneficiaries - or people who have been involved/exposed to the social innovation - and of control groups - or people with characteristics that are similar to the beneficiaries, but that have <u>not</u> been involved/exposed to the social innovation.

1.3.2. How and to what extent can social innovation affect autonomy?

One way to detect social impact of our case-studies is a focus on increases/decreases in empowerment that may be the result of the social innovation process. As mentioned, empowerment is identified as a key by-product of *agency*, whose measurement is difficult, however. Therefore, the case studies seek to detect changes in autonomy, which we frame as a subjective measure of agency/empowerment in our data collection. We try to observe whether the participation in a social innovation experience can increase perceived autonomy, in particular in six different dimensions namely: autonomy in the environmental, technological, cultural, economic, security or political dimensions. We rely on self-assessment questions (see methodology section for details.)



1.3.3. How and to what extent do social forces play a role in the relation between social innovation and marginalisation?

Given our conception of marginalisation as being the result of a social process, social innovation can play a role for marginalisation especially through the *interplay* between the innovation process and existing social forces. Therefore we would expect resistance to social innovation embedded in the functioning of existing institutions, networks or cognitive frames. So what are the tensions that we observe between the (reproduction of) social forces and the change aspirations of social innovation? Are there leverage points within the social process that generates and reproduces marginalisation? Can social innovation successfully address such leverage points in order to overcome marginalisation?

2. Contents and Aims of this Report

This report aims at doing the following:

- a) To describe the mixed (qualitative and quantitative) method applied for investigating the three adhoc case studies implemented respectively in Italy, Germany and the Netherland;
- b) To present and compare first empirical findings, including some descriptive statistics as emerging from the primary data collection implemented in the three above mentioned countries;
- c) To integrate this empirical evidence on social innovation with a fourth case study, previously conducted in Hungary, and to highlight common conceptual elements with the other three case studies where possible.

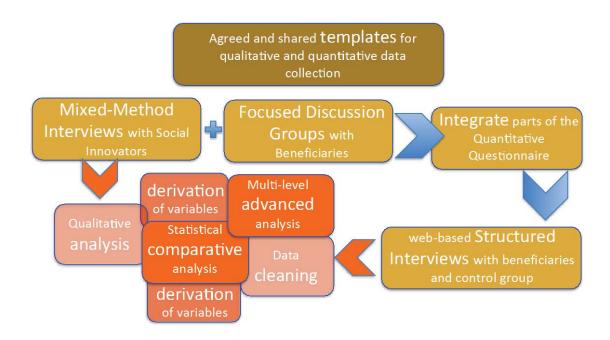
The document is structured as follows: section 3 describes the methodology adopted for the primary data collection. Section 4 introduces the four social innovation case-studies in Italy, Germany, The Netherlands and Hungary which are the object of comparison. The second part of this report focuses on the empirical evidence gathered following CRESSI's theoretical framework. It therefore presents comparable statistics on the features of social innovation processes (section 5), its main beneficiaries (section 6), elements of marginalisation, which are being addressed (section 7), and the social forces (sections 8, 9 and 10) which emerge as relevant for the process. Part III of this report is dedicated to different thematic ', ins', such as gender-driven marginalisation (section 12), methodological details on the measurement of autonomy (section 13) and specifics of the Hungarian case study (section 14) which has been investigated through existing (longitudinal) secondary data ¹ instead of ad hoc primary data as in the other three case-studies. In the Appendix, the full set of questionnaires and templates used for the qualitative and quantitative primary data collection is provided.

3. Methodology adopted

In the next paragraph, we briefly summarise the methodological approach and logic behind the choice of the techniques used in the WP7 data collection. In the appendix, templates for each research phase are made available for those willing to check in detail how and through which questions the phenomenon was investigated, and for those attempting to replicate similar research. The different tools used in the two distinct phases of the data collection are all interlinked and inform each other, as can be seen in figure 1, which synthetically describes the overall architecture of the WP7 data collection.

¹ The development of the data collection, as well as monitoring and evaluation methodology was financed by the *Pan-European Coordination of Roma Integration Methods – Roma Inclusion* Pilot Project of the EU and implemented by the World Bank and UNDP, in cooperation with the Kiútprogram.

Figure 1 - Overall architecture of CRESSI's WP7 data collection



Source: UNIPV training WP7, internal documents

3.1.1. Logic and rationale in the chosen methodology

The methodology adopted for CRESSI's primary data collection is multi-layered. Social innovation being a relatively unexplored terrain, we needed to combine two different scopes of investigation: on one hand, explorative methodologies were needed as drivers, trajectories and impacts of social innovation processes are largely unknown even in theory, so far. On the other hand, we were trying to test a conceptual framework and wanted to compare our empirical findings with other existing theory, e.g. on technological innovation. Most of the methodology's rationale has been described in a dedicated deliverable (see D3.5, the *Methodology Toolkit*). Therefore, a mixed-method approach fitted at best the empirical needs of CRESSI' scopes: qualitative methods are more adequate for theory construction; quantitative methods are more adequate for theory testing. In particular, we have tried to capitalize as much as possible from qualitative investigations by also allowing for partial re-categorization and combination with quantitative results. In many cases, elements collected during the qualitative phases of data collection have provided guidance for the precise formulation of questions inserted in the qualitative - the survey - phase.

The primary data collection process can broadly be subdivided into two major phases: one centred on social innovators and one centred on their beneficiaries. All data are therefore - from the start - conceived as being nested: each beneficiary *belongs* to a particular social innovation "context". Interviews with social innovators provide information on the emergence and contextual difficulties/challenges/types of support experienced. Information collected among beneficiaries allows for the recognition of perceived impact of the social innovation process. While the social innovators phase makes predominantly use of qualitative tools of analysis, the beneficiaries phase is predominantly centred on the questionnaire tool, which requires a quantitative analysis.



3.1.2. Social innovators phase: pre-qualitative questionnaire and semi-structured interviews

The collection of information among social innovators has been implemented with the use of two different tools: semi-structured interviews have served as guideline in order to gather context-specific information of the social innovation, which however remains partially comparable within and across different countries investigated through the use of a common template for each of the case studies involved in WP7. These interviews have combined open-ended questions with partially pre-structured ones, especially aimed at the construction of social innovation measures as the so-called mobile dashboard (ref. D3.5). The second tool used was a questionnaire, comprising several pre-determined questions about the social innovation organisation, which has been sent to our interviewees beforehand in order to reduce the duration of the interview. The so-called "pre-qualitative questionnaire" therefore gathers rather standardised information such as number of members, or year of constitution and also makes use of more articulated questions that either seek to gather information that is comparable with existing innovation surveys (e.g. the Community Innovation Survey). In particular, one of the most important information collected via the pre-qualitative questionnaire related to the networks in which the social innovation takes places. During the face-to-face interview, researchers were typically able to go through the pre-qualitative questionnaire and to dwell further on it together with the interviewee. In total, we implemented 93 semi-structured interviews and their

corresponding pre-qualitative questionnaire with social innovators in three different countries (also see table

For the selection of social innovation contexts, we proceeded with a stratified sampling: first, all potential social innovation contexts (defined at the Municipality-level) have been listed for each country and categorized according to their vulnerability. Since a list of population was not previously available – with the sole exception of the Italian case although with certain limitations deriving from the actual reliability of the list dating back to 2010, the German and Dutch research teams have proceeded in compiling a list of the potential social innovation cases. The list comprised the actual experiences taking place in their countries, based on which we implemented the sampling of contexts to be included in the survey. We were particularly interested in keeping an eye on differences in context-level vulnerabilities and therefore aimed at stratifying our three samples according to some common measure of vulnerability: we constructed a composite index that weighs the at-risk-of-poverty rate (NUTS2 level) the employment rate (NUTS3 level) and GDP (NUTS3 level) with a harmonic mean². Indicators were taken from Eurostat database for regional statistics (available at http://ec.europa.eu/eurostat/data/database). For each country separately, we then divide the "universe" of social innovation contexts into three degrees of vulnerability: high vulnerability (highest quartile), medium vulnerability (two middle quartiles) and lowest vulnerability (lowest quartile) and then randomly select 10 social innovation contexts for each vulnerability group.

Table 1 – The social innovation groups interviewed for each of CRESSI case-studies

	Germany	Italy	Netherlands
Total n° of SI contexts	58	990	44
Sampling selection	30 units	10%3	30 units
Units in Low vulnerability contexts	10	12	10
Units in medium vulnerability contexts	11	13	14
Units in high vulnerability contexts	9	10	6
Total interviews with SI	30	35	30

Source: CRESSI elaborations on sampling strategies

1 in section 4).

² We have opted for the harmonic mean after implementing a thorough sensitivity analysis in which arithmetic, geometric and harmonic means have been assessed as potential aggregation operators.

³ For Italy, the local research unit has randomly selected about 100 cases (correspond to 10% of the total population of social innovation's groups), divided in 30 units for the group with low vulnerability, 30 units for the group with medium vulnerability and 40 units for the one with highest vulnerability. The 35 interviews are those who accepted to participate in the study at the end of this selection process.



3.1.3. Beneficiaries phase: focus groups and survey

In case of a phenomenon as social innovation, one of the most important obstacles to overcome during quantitative data collection is the missing availability of a list of potential individuals involved. The first issue was thus creating a database of beneficiaries' contacts. Several strategies were implemented. First, primary contacts to beneficiaries have been collected during the first phase, meaning that social innovators informed about actual or potential beneficiaries of their own social innovation context whenever possible. Secondly, further contacts to beneficiaries and the control group have been gathered in additional, country-specific strategies mostly via networking with relevant associations that could allow us to get in contact with potential interviewees. For the sample identification of beneficiaries, we start by concentrating on contacts provided by social innovators in order to include beneficiaries of the randomly selected contexts: where contacts were insufficient we step-wise included other beneficiaries - also of other contexts - in order to increase our survey size.

A second issue regards the assessment of the potential impact of the social innovation. In order to clarify it, the research design comprised a data collection that distinguished between actual beneficiaries and potential ones (the so called "control groups"), which are social groups similar for characteristics to the social innovation beneficiaries, but that at the moment of the interview had never participated in it.

Regarding data collection among beneficiaries of the social innovation, two different tools have been used in this second stage: for each country case, one focus group⁴ and one survey. In the implementation of both tools, we combined a comparable "core" with case-specific parts, in order to guarantee comparability without risking a superficial analysis in which details of the studied cases could not emerge.

The first step has seen the CRESSI research groups organising one focus group for each of the case involved: these have gathered between six and ten beneficiaries of the country-specific type of social innovation. Aim of the focused discussion was the identification of possible ways in which the participation/exposure to the social innovation process could affect autonomy. An important piece of the CRESSI conceptual framework has been tested here: as we departed from six ideal type power dimensions within which the social innovation process could potentially deploy effects (see Heiskala, 2015), we verified whether these dimensions were significant in the definition of autonomy for beneficiaries and what their pragmatic declinations could possibly be for the different cases. Focus groups therefore invited the beneficiaries to concentrate on actual benefits they experienced thanks to the participation in the social innovation. Suggestions were gathered in the first phase of the discussion and then - with the help of the moderator subsequently attributed to the six pre-determined dimensions. The practical, every-day aspects of life mentioned by the beneficiaries have constituted the main resource for specifying the self-assessment questions that measure perceived autonomy of all beneficiaries comprised in the survey (see templates and questionnaires in PART IV - APPENDIX).

The second step represents the "heart" of the WP7 data collection: a questionnaire was implemented via an online platform, which combined a comparable core with a set of questions that have been adapted to the case-specificities thanks to the information gathered in the first phase. Where the online tool has been deemed inadequate to capture the entire population of beneficiaries (e.g. due to insufficient ICT capacities) or where response rates have been low due to other reasons, additional data collection strategies have been used: in some cases, a paper version of the questionnaire has been sent out via post (Germany and Italy), in

_

⁴ The technique used in this phase is called brainstorming (Bezzi, Baldini, 2006); this is a group interview aimed at producing knowledge by using a bottom-up approach in which the knowledge is co-constructed in a group discussion directly with interviewees. This technique is usually employed for bottom-up definitions of indicators for assessing a specific process or outcome. For simplicity reasons we refer to 'focus groups' and not to 'brainstorming' in this report.



others additional call-ups via phone (Italy) have allowed to increase the number of completed surveys (see templates and questionnaires in PART IV - APPENDIX).

Table 2 synthesizes the key numbers of the three coordinated data collections implemented for WP7. Numbers refer to those observations for which the information on their participation in the social innovation (yes - beneficiary or no - control group) is available.

Table 2 – Key numbers of the three coordinated data collections that feed into the CRESSI survey data

	IKT	`s	GASs		CCs	
Nr of social innovation	16		32	28		
contexts						
Sample population	236		2965	240		
Current beneficiaries		72	7	50		185
Past beneficiaries		29	1	75		16
Control group		135	20	40		39

Source: CRESSI survey data, 2016

4. Case studies description and rationale

4.1. Short description of the case studies: commonalities and specificities⁵

Comparing different social innovations that are being put forward in different countries is no easy task: the social needs addressed and the level at which the action is being implemented may be profoundly different. Yet, CRESSI developed a conceptual framework that has the ambition to grasp fundamental mechanisms of social innovation processes. Therefore, the primary data collection implemented in WP7 (and future analysis of these data) engages in this difficult acrobatics of comparing different social innovations on hand of some common, conceptual elements while however recognizing that case specificities need to be accounted for. Which were the characteristics that were required for each case study in order to "qualify" for the primary data collection?

First, we looked out for cases in which some kind of marginalisation could be identified, even if the types of marginalisation addressed by the case studies are rather different. Yet, they can all be brought back to our broad definition of marginalisation according to which some social process is transforming personal, social or environmental traits [e.g. remoteness from urban centres, or particular social practices, or ethnic belonging etc.] into potential disadvantage within the current society.

Second, we were looking for situations in which "nested" data could be collected: this implies conceiving of beneficiaries and the social innovation at two different levels. On one hand, beneficiaries/participants lead their own life with ambitions, agency levels and some achievements. On the other hand, the social innovation process assumes necessarily some sort of collective nature: it requires a plurality of individuals to engage/participate into some activity. The distinction is necessary to stay in line with CRESSI's conceptual framework where individual life achievements (as informed by Amartya Sen's Capability Approach) interact with and are influenced by social forces (as defined by Jens Beckert), which exactly take on such collective form to some extent: institutions, networks and cognitive frames all require a plurality of individuals to exist, de facto.

⁵ In this paragraph, the authoring is as following: the Italian case is presented by Lara Maestripieri, the German case is presented by Rafael Ziegler and the Dutch case is presented by Martijn J. van der Linden. The Hungarian case is authored by Marco Gavazzoni.



Within this nested structure, we were looking for social innovations that had at least 30 geographical contexts of implementation within the same country. Such requirement was necessary in order to apply some sort of statistical analysis for the scope of identifying and comparing different local social forces that may in fact affect the social innovation process. Within each social innovation context, we were further looking for beneficiaries and potential members of a control group. While the numbers of beneficiaries and control group members within each social innovation context needed not to be balanced, our aim was to include some of them. In most cases this was possible (except for some cases in Germany).

The identification of a control group was necessary as we set out for an impact evaluation. The control group is ideally a group of people who share the same context of social forces as the group of beneficiaries, but that do not participate/are not exposed directly to the social innovation process. This part of the research design has been particularly difficult to implement for different reasons: in some cases it was difficult to properly identify a control group as the exposure to the social innovation could not clearly be estimated (in Germany and Italy, for example) or because the access to contacts of European citizens that are not part of social innovation processes was difficult (in The Netherlands and Germany, for example). Further, the boundaries of action of social innovation processes are very hard to define (and to recognize), this means that we encountered quite some overlaps between different social innovation contexts (in Italy, for example). Moreover, it has not always been easy to properly distinguish between social innovators and their beneficiaries (in The Netherlands and Germany, for example) as the roles of members/participants are often multiple and not formally defined - much in line with definitions of social innovation in which the active involvement of citizens represents one of their social "means".

Our research design required the social innovation to already be in place, possibly still be on-going, although in many cases our team found out that the actual process had already finished some time ago: again, the informal nature of social innovation makes it difficult to properly track the "mortality" of initiatives. In all cases, however, the social innovation contexts have engaged or are currently engaged in some activity, we did not include any proposals or planned activities that may take place only in the future.

Summing up, in comparing the three different social innovation cases for which CRESSI has collected primary data, we are now able to identify and to describe the social innovation from a common interpretational point of view, to adopt a common interpretation of its social impact (perceived autonomy changes in six dimensions of social power) and to identify relevant social forces in line with CRESSI's conceptual framework.

4.1.1. Italian case: Solidarity Purchasing Groups

Solidarity Purchasing Groups (GAS) are "groups of individuals that decide to organise themselves in order to buy collectively food or any other everyday good, selecting suppliers on the basis of solidarity and critical consumption" (Altraeconomia, 2015: 14). Such definition is coherent with CRESSI's definition of social innovations as long as GAS movements promote new processes that open up the market for marginalised suppliers (as for example small organic producers, local artisans or social cooperatives that employ vulnerable individuals). The novelty lies in the process of consumption: groups allow consumers to avoid intermediation and to promote critical consumption principles by choosing ethical suppliers.

Citizens who join a GAS are extremely active and supportive in social and political terms. They also have usually a good expense capacity and they use GASs mostly to access food and other basic everyday goods, such as clothes or detergents. The usual *gasista* (the way members of a GAS call themselves) is a middle-aged woman with a medium-high educational level, who represents a family composed by children and a partner. Just a minority among the *gasistas*' families belongs to the working class or low-educational level strata of the population: GASs are an expression of an affluent middle-class dual-workers family, even if they should more be considered part of a cultural elite than of an economical one (Forno et al, 2013).



Members of a GAS are usually counted on the basis of families more than the sole member who is responsible for purchases: the common presence of females thus is evidence of a still strong genderization that characterises food supply in Italian families (59,3% of the time devoted to food and services purchasing is provided by women in Italian families, source: ISTAT, 2012). In the last years, the increasing diffusion of GAS groups has favoured the entrance of participants who are less engaged politically, but more interested in the practical aim of accessing safe and healthy food.

The GASs movement was born "officially" in 1994, with the constitution of GAS Fidenza association, even if autonomous groups had already started their activity before this year and without any coordination. After 20 years, it is now possible to identify a series of different steps in its evolution, which has been influenced by the economic cycle of the country but also by the diffusion of ICT technologies among the population and among the producers:

- Before 1994: the precursors phase. Scattered groups were forming in order to collectively buy food or fair trade products; there was neither coordination nor a defined model.
- 1994: the Fidenza group which had already started its activities in the previous years was born as an association; it defined the name of the experiences (solidarity purchasing groups) and set up the benchmark that was used in the following years to create new groups.
- Between 1994 and 2001: the pioneering phase. In this phase the number of groups started to grow, although at a relatively slow pace. According to Forno and Graziano (2016), the number of groups passed from 2 in 1994 to 54 in 2001. The first article on Altreconomia (the main journal for alternative economy in Italy) appeared in 1999.
- From 2001 to 2007: the sustaining phase. The pace of diffusion of the groups started to increase (from 54 to 358 groups, source: Forno and Graziano, 2016): mainstream media began to devote articles about and broadcast on the phenomena. This is what has been called the phase of activists by many of the key informants: fairs as "Fà la cosa giusta" were born (2003), the main website got online (2004), the first meetings at national level started to be organised.
- From 2007 to 2013: the scaling phase. The number of the groups increased rapidly (reaching 977, source: Forno and Graziano, 2016), also thanks to the increasing attention given by mainstream media. Key informants reported that in this phase the opening of the social innovation to the general public has put in question the uniformity of their identity, with many persons joining groups only to access an alternative form of consumption rather than for political activation against the traditional economic system.
- From 2013 to now: Systemic change or stagnation?

In general, given its extremely local functioning (as it requires the coordination of households who live near to each other for shipping and distribution of food) a GAS happens at town level (in the smallest localities) or at neighbourhood level (in the biggest cities). Groups comprise about 20-50 families in average; more affluent localities and urban scale favour their diffusion: the generally higher level of prices of products impede their diffusion in the poorest areas of the countries (i.e. southern localities or among the working class) while the easier relations between producers and consumers in the countryside reduce the need for this group compared to urban areas.

According to our knowledge, the GASs movement has not implemented any impact measurement at the present time, neither oriented to groups' members nor to beneficiaries. The only systematic quantitative analysis so far has been mostly concentrated on GASs groups and their members, with a specific attention to the political activation of the consumers via GASs (Forno et al, 2013; Grasseni, 2014; Forno and Graziano, 2014; Forno and Graziano, 2016), but none of the previous researches has shown interest in the impact of GASs experiences on suppliers' marginalisation as in our CRESSI focus. The informal and networked



structures that characterise the movement at national and local level have impeded the formalisation of approaches for impact measurement at the institutional level. It is possible that in the past, some experiments of impact measurement have been carried out at local level, but we have not encountered any in our literature review nor in our empirical investigation until the present time.

About 100.000/400.000 participants are estimated at country level (Forno and Graziano, 2016): it is quite difficult to distinguish between households and individuals, as in most of the cases only one representative per household is actively involved in the group but he/she is in charge for the entire food consumption of the household. Females are supposed to be the majority among involved individuals. As long as they are groups with a low hierarchical structure, there is no clear distinction between social innovators (as initiators/promoters of the social innovators) and active members. The GAS participants distribute themselves on about 1.000 groups. Estimation is based on a list published on the website www.retegas.org. The subscription to the list is completely optional for the groups: studies (Forno et al, 2013) showed that the list is not entirely able to map the phenomenon, therefore under-estimating its diffusion in the country.

Targeted beneficiaries and social problem

The main social problem addressed by the GASs movement lies in the emergence of big distribution chains in the sector of basic goods (i.e. food, clothes or hygienic products, as detergents or cosmetics) that impede small producers to access traditional forms of food supplies for households. The targeted population in the opinion of the research team is twofold.

The first group are small and family-run businesses that produce primary goods for household consumption with sustainable procedures. This target is likely to be exposed to marginalisation in the following dimensions:

- Their small dimensions might lock them in a subaltern position in economic relations within the
 market. Intermediaries and GDO (the acronym refers to supermarkets and it stands for big organised
 distribution) are in a power position that is usually used to reduce the buying prices for their goods,
 concentrating revenues at the intermediation level instead of the production level of the food supply
 chain.
- Again, the small dimension doesn't allow them to access regular markets as they don't have the production's volumes required to access organic supermarkets or big retailers.
- The familial management might expose them to possible risks of inefficiency in conducting their business.
- The geographical distribution of some productions (placed in deprived areas or in isolated territories
 as in the case of oranges or oils) might impede access to alternative food networks already
 established in the most affluent areas, such as farmers' markets.
- The choice of organic production increases costs and decreases productivity. It might result in being less competitive with traditional production (price-based competition). At the same time, their small dimensions might impede their access to organic certification.

A second type of beneficiaries can be found in social cooperatives, which usually produce the same goods as the target one, or, in alternative, they are active in providing logistic services for GASs groups such as delivery, intermediation or storehouse. In addition to the previous risks, we can add that social cooperatives employ individuals that are exposed to the risk of labour market marginalisation: people with physical or mental handicaps, migrants, women or men that experienced negative episodes in their past (i.e. prostitution, imprisonment, drug addiction).



The control group (§3.1.3) has been selected starting from the national associations of small farmers and self-employed agricultural workers In general, they are male with low educational level and a quite old age, although a renovation in the sector has been going on in the last years with educated (male and women) youngsters who have promoted several innovative start-ups in the food sector. The sector is in general characterised by a strong male occupational segregation. The control group distinguishes itself from beneficiaries for the type of production proposed (traditional industrial agriculture vs. organic farming) and the access to the privileged distribution chain: supermarkets or local markers vs. solidarity purchasing groups and farmers' markets.

Beneficiaries are small farms, local artisans and social cooperatives that cooperate with solidarity purchasing groups, while the control groups comprises those actors that don't sell their goods via GASs. It is difficult to assess the number of potential beneficiaries of GASs, as there is no obligation of becoming part of a list and the collaboration with groups usually occurs at an informal level. In the main online repositories (www.retegas.it and www.eventhia.it), self-proposed suppliers for solidarity purchasing groups are around 2.000. This is a completely voluntary action and it is not possible to estimate how many among the beneficiaries' population have promoted their activities via the websites.

Speaking about the control group, numbers are clearer as we can refer to national surveys:

- small farmers (with no distinction between organic and traditional ones) are 1.230.000 enterprises (controlling less than 5ha) (Source: National Institute of Statistics, ISTAT General Census on Agriculture and Industry 2011).
- social cooperatives are about 11.200 (without any distinction between the type of cooperative A is for cooperatives that offer services for education and health, while B offers working integration for social disadvantaged individuals. This last type is the only one interested by GASs activities) (Source: Legacoop, 2013).

4.1.2. German case: IKT water management

The IKT – Interessengemeinschaft kommunale Trinkwasserversorgung (Interest community for communal drinking water supply) is a network for the promotion of decentralized drinking water supply and wastewater treatment. It was established in Bavaria (Germany) in 1986 out of a concern that the new threshold values for nitrate (no more than 50 mg/litre) would in the light of high de facto nitrate values provoke a push towards large freshwater supply systems and eliminate communal freshwater supply at the level of the community (towns and villages, and especially hamlets as their subunits). The IKT was founded to push instead for the restoration (Sanierung) of the communal freshwater supply (IKT 1986). In 2002, the IKT also added decentralized wastewater treatment to its mission.

The restoration goal of the IKT along with the structure and approach is noteworthy from a social innovation perspective (in the sense defined above): There is an intentional attempt to retain and improve human capabilities, and more specifically the control of citizens over their environment (i.e. here the decentralized water management) as well as their health (i.e. safe water supply). It phrases this issue as an intergenerational one: "Our grand-children have a right to a healthy and own freshwater supply" (IKT 1986, own translation⁶). In the light of changing societal practices, especially the increased use of fertilizers and pesticides in agriculture and the emergence of drinking water norms at the global, European and national level (Schimpf and Ziegler 2016), this goal calls for new ideas and solutions so as to restore the water management at the community level: social and technical efforts at the level of local sources and fountains, policy efforts at the provincial, national and EU level that secure a space for communal solutions in a context of a strong trend towards more centralized, expert solutions provided by water professionals. For this, the

⁶ "Unsere Enkel haben ein Recht auf eine gesunde und eigene Trinkwasserversorgung."



involvement of citizens at the communal level of interest communities (Interessengemeinschaft) as well as at the provincial and country level (IKT network) is needed for the discussion of goals and their implementation.

The citizens involved in the IKT are primarily citizens affected by a challenge to decentralized freshwater supply or decentralized wastewater treatment. Paradigmatic examples are homeowners of fountains and hamlets with own communal freshwater supply under pressure to close down their fountain, or hamlets and communities that either want to restore or build a new, decentralized wastewater treatment (instead of connecting their wastewater to a central wastewater plant, typically located in a nearby community or town). In response, citizens form interest communities or protection communities (Schutzgemeinschaften) with the goal of a) peer exchange about water management and experiences with it, b) information of other citizens and communal politicians about the possibilities of alternatives (i.e. decentralized solutions), c) exert political pressure so that public subsidies for water management can be used for such solutions (IKT 1986). A second, prevailing feature of IKT members is the geographic location in the rural area, and here especially in the subparts of communities, i.e. hamlets. As part of the Bavarian community reform in the 1970s, these hamlets often became a part of larger communities. Finally, many members have a strong affiliation with nature conservation: seven out of 15 interviewees' local interest communities have such an affiliation, typically to the BN Bayern, a nature conservation NGO. In turn many local chapters of this NGO are members of the IKT. The co-founder of the IKT and current chair, Sebastian Schönauer, was prior to the IKT already strongly involved in an initiative that successfully prevented the flooding of the valley Hafenlohrtal so as to supply freshwater supply for the town of Würzburg. In this sense at least one important origin of the IKT is a nature conservation conflict.

A second institutional type of member of the IKT should also be mentioned: communal water works of Bavarian towns. For example, the communal water works of Würzburg, TWV Würzburg, were an important partner of the struggle against the construction of a dam in the Hafenlohrtal. The communal water work partners share the emphasis on communal, public water management rather than the privatization of services (5 out of 5 interviews). Their membership could be characterized as one of solidarity of aim and as partners in restoration. For example, the communal water works of Würzburg and Aschaffenburg both created programs to restore the watershed level (and reduce nitrate level) via a change in land-use practice in the watershed protection area.

A brief chronology:

- The IKT was founded in January 1986, initially with a focus on decentralized drinking water supply and a geographical focus on Northern Bavaria (Franken). This focus was already extended to all of Bavaria in August 1986 (IKT Dienst #3,1). During this time, interest groups had emerged in various villages and via the network foundation they came to better know of each other (IKT Dienst #2, 1986, 2). In 1986, 30 communal interest groups were part of the network (IKT Dienst #4, 1986).
- In 1990, the IKT becomes officially registered as a non-profit association (gemeinnütziger Verein)
- In 1990, the IKT also organizes a national conference to discuss the possibility of a federal water alliance (IKT #20, 1990). This lead to the idea of an IKT for the province of Baden-Württemberg, located in the South-West province, neighbouring Bavaria (IKT #23, 1990, 4). It was founded in 1992 and functional until 2004, when then IKT Baden-Württemberg re-joined the IKT (IKT #49, 2004, 16). No other provinces established provincial IKTs
- In the 1990s decentralized wastewater management becomes increasingly important for the IKT. In
 its 1997 "Schalkhamer Erklärung", it now states the goal of both communal drinking water supply
 and decentralized, ecological wastewater supply as the basis of a healthy, communal politics (IKT



Dienst #39, 1997⁷). In 2002, this leads to a change in the IKT constitution (by unanimous consent): §2 now includes a high quality, decentralized wastewater treatment as a goal

• In October 2016, the IKT celebrates its 30-year anniversary. While the IKT has no archive of its own local groups and not attempted to measure its impact (or have its impact measured), our own research currently records 221 local contexts ⁸ that have been active or remain active for decentralized water supply. The majority of those were focused on freshwater supply (N=189), while 39 initiatives focused on wastewater or both, wastewater and drinking water. This is a conservative estimate based only on those initiatives for which we could find a record of activity. The size of these communities/hamlets ranges from about a 100 up to 2000 citizens (with an average 840, based on a sample of 21 interviews).

Targeted beneficiaries and social problem

The social problem addressed by the IKT is the lack of local control over water management and in a way that provides healthy, communal water supply for current and future generations. The network emerged in the political struggles of the 1980s and the centralizing tendencies, partly motivated by norms (nitrate directive, drinking water directive) linked to drinking water supply. A centrally organized freshwater supply had by this time become almost universally developed in the urban contexts (see Schimpf and Ziegler 2016), and was now also pushed to the rural contexts, including small hamlets and remote farms. This provoked a vibrant discussion over the political and economic ownership of freshwater supply and the "right" approach to meet the quality goals (decentralized versus centralized approaches). In the 1990s, decentralized wastewater supply emerged as a central theme for the IKT, complementing its approach to local freshwater supply.

Desktop analysis of grey literature about and by the IKT suggests that the primary beneficiaries in the IKT network are the inhabitants of the hamlets and communities, which the IKT aims to empower so that the water management restoration process is guided with a view to the will of the local citizens rather than being externally imposed. Among those local citizens, the primary beneficiaries are the owners of fountains (Hausbrunnen) or communal groups running a freshwater supply/decentralized wasted water system. The interviews confirm this analysis, and suggest as further beneficiaries listed here in decreasing number of mention: a) the citizens of the community more generally (11 times mentioned in 30 interviewes), i.e. not just the hamlet, a chief reason given here are the costs that the main community and the government save when a cheaper local solution is implemented, b) nature, when citizens take greater care of land use because of the concern for their water (5 times mentioned in 30 interviews), c) future generations that inherit a safe and affordable communal supply (2 mentions in 30 interviews), and d) farmers that receive compensation for their change in agricultural practice (2 mentions in 30 interviews). One local interviewee presented his community as a "model" for others, implying a more general societal benefit.

An important distinction among beneficiaries is between citizens in town and communities larger than 2000 inhabitants, and those of small villages and hamlets.

• The IKT approach of involving citizens in the ends and means of local water management applies primarily to citizens of those hamlets. Based on the estimate of 221 local initiatives with an average of 840 beneficiaries, about 185 640 actual beneficiaries have been involved one way or the other over the last 30 years. The potential beneficiaries depend on the following further questions: how many further Bavarian hamlets could be included? How many in Germany as a whole? How many in

⁷ "Die Erhaltung der Eigenständigkeit der kommnunalen Trinkwasserversorgung und eine dezentrale, naturnahe Abwasserbehandlung ist die Grundlage einer gesunden Kommunalpolitik"

⁸ This includes citizens' initiatives, communities, nature conservation groups and individual families; it excludes municipal water works.



Europe . . .? About 32% of Europeans are estimated to live in rural areas⁹. While there are many regional differences in geography, culture, technological approaches etc., the number still suggest that the "problem" addressed by the network is potentially relevant for many Europeans, let alone people worldwide.

• In towns and larger communities, freshwater supply is provided by water professionals. So here the issue is more one of the democratic accountability of these professionals and the respective organizational entities.

Marginalization is the "result of a social process through which personal, social or environmental traits are transformed into actual or potential factors of disadvantage" (von Jacobi, Edmiston and Ziegler 2017). There are various, interlinked processes in the IKT case as far as hamlets are concerned (for a more detailed account see 7.1. below):

- The increased use of fertilizers and pesticides puts pressure on local water sources, leading to health risks for humans and animals. Hence the IKT goal of restoring the local water supply (and likewise the alternative goal of bringing the water supply under a centrally controlled unit in charge of quality assurance). The potential harm to health is partly contested, but the main contestation is over the right means to deal with this disadvantage to rural communities.
- The trend towards centralized system removes control over water management from local citizens in rural areas. Where this process happens against their informed will, there is a risk of political marginalization or even alienation. Thus in the IKT-interviews, there were many instances of a perception that decisions are made elsewhere, for political and economic reasons that benefit those elsewhere, whereas the local citizens lose out and in the end have to pay the bill.

Similar risks obtain in the town case if a) there is regulatory failure with respect to water quality monitoring, and/or b) urban water supply is out of (effective) democratic control. Thus in the IKT network, there are also cases of town and cities where citizens form coalitions against the privatization of water management: as watch dogs against the risk of privatization or actively fighting attempts to privatize.

Following the community reform, many communities consist of hamlets. In many cases, citizens in one hamlet were able to keep/restore their own decentralized water management, whereas in neighbouring hamlets a connection to a central system for freshwater or wastewater was established. The distinguishing characteristic of the control group is therefore the difference in water management. As the interviews were conducted with members of the IKT network, there is no evidence concerning social characteristics of the control-group that emerges from the qualitative interviews with this group. However, due to the geographical closeness, much overlap in social, cultural, economic and environmental context can be expected.

4.1.3. Dutch case: complementary currencies

Complementary currencies (CCs) are private media of exchange that function alongside the official national currency — legal tender, in the Netherland the euro (see also Naqvi & Southgate 2013). CCs are generally used as tools to stimulate change in economic, social and environmental domains. Examples of CCs are local exchange trading systems (LETSs), regional money, time banks, commercial barter systems and crypto currencies. Seyfang & Longhurst (2013) found a total of 3418 CCs globally, and argue that "these CCs are developed with the aim of achieving a range of 'new-economics'-inspired sustainable development objectives, principally community-building and social capital creation, boosting local economies and valuing marginalised labour, and enabling collaborative consumptions to reduce environmental impacts of current life-styles" (2013: 75).

-

⁹ http://ec.europa.eu/eurostat/statistics-explained/index.php/Urban-rural_typology, last accessed 15.06.2016



Several researchers developed a categorisation of CCs in the last years (e.g. Blanc 2011, Seyfang & Longhurst 2013, Boonstra et al. 2013, and Dittmer 2014). Seyfang & Longhurst (2013) distinguish four categories of CCs: service credits (e.g. time banks), mutual exchange (e.g. LETSs), local currencies and barter markets. Dittmer (2014: 32) distinguishes between "LETS, time banks, HOUR currencies, and convertible local currencies (CLCs)". Boonstra et al. (2013) distinguish three categories of CCs: currencies with social objectives, currencies with economic objectives, and digital money systems (electronic & virtual money). Social currencies "aim to intensify underlying relations within a community, increase sense of selfesteem, offer a perspective and development to vulnerable groups, and fight social isolation. Social currencies try to activate reciprocity within a community. They work in domains where the regular currency can't be found and try to encourage participating in the informal economy" (Boonstra et al. 2013: 8). Economic currencies "aim to stimulate the local economy, strength the position of medium sized companies relative to large multinationals, support local regions in absorbing global or national shocks, diminish leakages from poor to richer regions, issue less expensive loans to entrepreneurs in poor areas, fight poverty by realising extra liquidity in underprivileged regions and increase economic diversity" (Ibid.). Digital money systems "mainly support economic goals", are increasingly becoming popular and "serve as a proper alternative for the regular monetary system, with both fiscal and juridical implications" (Ibid). In 5.1 the 30 contexts under investigation in this case study will be classified.

CCs are coherent with CRESSI's definition of social innovation, because CCs "intentionally seek to improve human capabilities, social relations, and the process in which these solutions are carried out" (Nicholls and Ziegler 2015: 2). The novelty lies in particular in the fact that social innovators and CC members themselves, and not institutions like central banks and commercial banks backed by the state, organize money, i.e. there is an intentional attempt to run and control the monetary system and the local environment by themselves to improve in particular social relations.

The research team distinguishes two types of social innovators: non-profit organizations and individuals who establish, promote and organize CCs. Two international well-known complementary currency organizations are based in the Netherlands: Social Trade Organisation (also called STRO, till 2007 Strohalm; Strohalm was founded in 1970 and became active in CCs in 1993) and Qoin (founded in 1998). Both organizations have played and still play an important role in the development and implementation of CCs in the Netherlands. The second group consists of individuals who set up a CC in their own city or town. These individuals are generally socially engaged, idealistic and interested in (solving) environmental issues. Most of them have a middle-class background, are between 40 and 80 years old and about two-thirds is female. In the aftermath of the financial crisis a new group of individuals became involved in a new type of CCs: crypto currencies. In crypto currencies mostly highly educated young men (20-45 years) participate. Their aim is often offering an alternative for the euro system, i.e. building a new global monetary system.

The research team estimates the number of active CCs in the Netherlands currently at 90, most of them local exchange trading systems (LETSs). Seyfang & Longhurst (2013: 70) estimate the number of LETSs in the Netherlands at 100; in this research process it has become clear that about 30 LETSs are not active anymore. Most CCs have a board with 3 till 6 members who run the organisation. On average 11 individuals contribute voluntarily to the organisation of CCs. Almost all of the board members and volunteers are also member of their CC; this means that there is an overlap between social innovators and beneficiaries. The two non-profit organisations employ 18 individuals; currently STRO has 6 employees and Qoin has 12 employees. The research team estimates that in total approximately 1.000 social innovators are active in CCs in the Netherlands.

CCs have a long history and it is hard to identify clear steps in the development because of the huge variety of CCs around the world, but the following steps are worth mentioning:



- In the 19th century free banking and alternative forms of money existed in some countries (e.g. USA and Scotland). In a system of free banking all banks are free to issue their own private (paper) currency. Some social innovators are still inspired by the free banking philosophy.
- In the interwar period in particular in Germany and Austria groups of people attempted to implement CCs; successful examples are Wära (1930-31) and Wörgl (1932-33); however, both were terminated by respectively the German central bank and the Austrian central bank.
- In 1934 a group of Swiss entrepreneurs founded the WIR (Wirtschaftsring, German for 'Economic Circle'). WIR still exists and has currently over 60.000 users.
- In 1983 Michael Linton launched the first local exchange trading system (LETS) in the world in Canada.
- In 1986 Edgar Cahn developed the first Time Bank in the world in US.
- In 1993 Strohalm founded Noppes in Amsterdam. Noppes was the first LETS of the Netherlands and continental Europe. Since 1993 the number of LETS in the Netherlands has increased till about 100 in 2013 (Seyfang & Longhurst 2013: 70). However, the activity within each LETS varies significantly.
- In 2002 TradExchange, the first commercial barter exchange in the Netherlands, was founded. TradExchange is based on the WIR model, and still exists today.
- In the 2000s a couple of towns and cities introduced regional money, examples are Chiemgauer in Germany (2003), BerkShares in US (2006), and Brixton Pound in UK (2009). A couple of years later De Dam (2013) and De Alphense Betaalwijze (2015) were founded in the Netherlands. In UK these currencies are often called transition currencies (e.g. Dittmer 2014: 54).
- In 2009 Bitcoin, the first decentralized crypto currency, was introduced.
- Last decade the number of regional currencies, social currencies, and crypto currencies has increased in the Netherlands.

The research team expects that the use of CCs will increase further in coming decades for three reasons. First, technological developments as 'blockchain' (distributed ledger technology) and 'tagging' (adding information to money, for example money could only be spent on ecological products or in a certain area) offer new opportunities and more social innovators will explore these opportunities. Second, there appears to be a wish among a (growing) group of (young) people to be more self-reliant, self-organizing, independent, and sustainable. CCs might be useful tools to facilitate this transition. Third, when public and private debts increase further and financial instability continues, more people will explore (or will be 'forced' to participate in) alternative monetary systems.

Currently, CCs are used all over the Netherlands. Most cities with 100.000+ inhabitants have at least one CC. Often the geographical context of a CC consists of a city or a town and the surrounding villages. The reason for this scale is ideological and practical. Most CCs aim at stimulating the local economy and improving social cohesion locally — the L of LETS emphasizes the local roots. The practical reason is short travel distances between the members; limited travel times make the exchange of goods and services easier. The introduction and emergence of crypto currencies changed the idea behind CCs radically; the key feature of crypto currencies is that they are global and not connected to any state or region. However, today, some social innovators in the Netherlands promote the use of crypto currencies in their own geographical context (city or the Netherlands as a whole); they create a local (or national) network around a global crypto currency. Their aim is to make digital payments without commercial and central banks possible.



In the view of the research team there is no differentiation in CCs between areas of low vulnerability (1) and areas of high vulnerability (3). The research team is aware of some impact measurement, data evaluation, and research on how CCs achieve their aims (e.g. Nakazato & Hiramoto 2012, Groppa 2013, Boonstra et al. 2013, NEF 2014, and Place & Bindewald 2015). However, the amount of impact research on CCs is scarce compared to the amount of research on development projects and impact investing (impact investments aim at specific social and / or environmental effects in addition to financial gain). Moreover, most evaluations don't use a qualitative or quantitative approach (see Place & Bindewald 2015: 154-155 for an analysis of different impact measurements of CCs). The main difficulty for impact measurement is the different objectives of the single types of CCs. Often the social, ecological, economic, or even moral vision of the founder(s) form the basis of the objectives of a CC. Place & Bindewald (2015: 153) emphasize the importance of the deployment of evaluation standards in CCs impact assessment. They distinguish four reasons to measure impact: internal viability, internal efficiency, external viability and external credibility.

In the Netherlands complementary currency organization STRO and Qoin, and Dutch researchers Boonstra et al. (2013) have attempted to measure the impact of CC. All conclude that it is not easy to realize a wellfunctioning CC; e.g. Boonstra et al. write, "When we look at the complementary currencies altogether we conclude that many projects are initiated with much enthusiasm and great objectives, but that many face a difficult route from there" (2013: 22). Research on a CC in El Salvador (Punto Transacciones, a project by STRO) concluded that "there is a greater spending multiplier in digital community currencies systems", although the impact "is still negligible from a macroeconomic point of view" (Groppa 2013: 45). A comparative case study of two community currency organizations, the Japanese Ichi-Muraok and the Swedish Bytesring Stockholm (BYTS), found two results, "(1) while the transfer of social support by community currencies does not affect the quality of life of all users in a significant way, it makes users aware that social support can be part of their lives if they become conscious of it; and (2) community currencies are peripheral and supplementary support sources for many local residents. These results show that community currencies are effective as a system to provide social support to local resident " (Nakazato & Hiramoto 2012: 124). Dittmer concludes his academic research review with "there is no clear success stories of local currencies as drivers of degrowth" (2014: 66). This research might contribute to a better understanding of the impact of CCs.

Targeted beneficiaries and social problem

The original idea behind LETSs was mainly to encourage local economic exchange, and to stimulate 'new economic thinking' linked to particular social and ecological economic worldview — in this case study 21 contexts are LETSs, 5 other CCs are also inspired by the idea of 'new economic thinking'. Generally these CCs have multiple objectives, often a combination of (local) economic, social and environmental objectives.

A second often mentioned problem is the dominance of the prevailing profit directed monetary system and its institutions. CCs aim to change the values behind the monetary system and to connect money to large transitions, such as the transition towards sustainable energy and the transition towards less inequality. The focus within the monetary system should, according to almost all social innovators, not be (short-term) profit maximization, but solving the problems of society (like climate change).

The social innovators target three groups of beneficiaries. The first group of beneficiaries consists of people who are discontent with the current monetary system, its institutions (in particular commercial banks), and its values. The second group of beneficiaries consists of people who want to improve social cohesion and/ or are socially excluded (live in social isolation). Social innovators emphasized that CCs create "community spirit" (CC05) and "neighbourship" (CC17, CC35, CC38). This group of beneficiaries uses CCs to participate in society, to meet (new) people and to improve social contacts. According to many social innovators in LETSs (21 contexts) the most important reason for individuals to participate in this category of CCs is social.



The third group of beneficiaries consists of individuals who have difficulties in participating in the mainstream economic system for various reasons (disabled, burn-out, mental diseases, unemployed, starting entrepreneurs). Participating in a CC gives them access to goods and services ("a little extra" in the words of social innovator CC31), and the opportunity to sell their products and services to others. By exchanging goods and services they develop as well their skills and/ or capabilities. E.g. freelancers who just started a business can practice their skills within a CC and expand their network.

It is hard to estimate the number of beneficiaries accurately, because there are no official statistics, CCs generally don't share membership data because of privacy concerns, and most CCs have a lot of inactive members (50-70%). As said, the research team estimates the number of active CCs in NL currently at 90. The average number of people reached by the 30 CCs in this case study is 194. Generally the interviewees estimated that 30-50% of the members is active. This means that the number of beneficiaries is currently about 7.000. However, the number of users of crypto currencies like Bitcoin in the Netherlands is unknown.

To make impact measurement of CCs with different objectives possible, the research team asked social innovators to contact (groups of) people with similar characteristics as the members of their CC. For example, social innovators of CCs aimed at improving social cohesion were asked to contact people locally who live in social isolation; and social innovators of CCs focussed on people who have difficulties in participating in the mainstream economic system were asked to contact these groups locally. During the research process it became clear that individuals who live in social isolation and/ or are economical inactive are relatively hard to approach. Moreover, many social innovators expressed privacy concerns regarding the control groups. The research team considered using the local networks of the social innovators as the best solution to find a control group.

4.1.4. Hungarian case: Kiútprogram¹⁰

Kiútprogram is a project issued by the Polgár Foundation for Oppurtunities and consists in the provision of social microcredit, aimed at fostering Roma inclusion, in the most disadvantaged regions of Hungary. Its first, EU-financed, phase run from June 2010 until September 2012 and collected data on beneficiary households and a control group.

Kiútprogram bases its action on three principal key features:

- A focus on participants' self-employment (including agricultural self-employment) rather than profitability for the lenders;
- Demonstrating the participants' commitment to break out of poverty;
- Empowering the ability of the borrower to operate a business as a profitable investment in the formal economy¹¹;

Previously different attempts with the objective of tackling unemployment and marginalization in the Roma population had been made, but most of them largely failed. In 2006 the government led by Prime Minister Gyurcsány implemented a welfare policy with the aim of reaching a minimum family income for the poorest households, but the weak political situation of his government, along with the strong critics received by other parties and media, produced a quick backdown. Subsequently the governments led by Viktor Orbán abandoned this approach in favour of public works. Since 2011 public works grew enormously reaching 366000 participants¹² but this did not turn into a more effective employability of the marginalized Roma, in fact, at the end, only 10% of the participants could find a job by the ending of public works.

¹⁰ The 'ú' of Kiútprogram is pronounced as long 'oo' in English.

¹¹ Molnár (2015: 6)

¹² http://www.parlament.hu/irom40/05233/05233-0001.pdf



The targeted areas were characterised by low levels of business activities, infrastructure and investments. More precisely the areas where Kiútprogram took off were Borsod-Abaúj-Zemplén, Szabolcs-Szatmár-Bereg and the 8th district of Budapest. Before the economic system changed, Borsod was the centre of heavy industry in Hungary and in this county the loss of jobs after the change was highest. The target villages were in the zone of influence of the industrial cities and a significant portion of the population – including the Roma – had previously worked in industry. However, mass unemployment seriously deteriorated the social structure of the affected villages. In most villages the Roma live separately in Roma settlements or in streets with mostly Roma residents. Almost no one was legally employed. Szabolcs-Szatmár-Bereg is the northeastern county of Hungary and basically has an agricultural background. The proportion of Roma is highest in these two counties. The 8th district of Budapest is mostly an ethnically mixed urban problem area. This district has the highest share of Roma residents in Budapest and is the most popular destination of Roma who move to the capital in the hope of finding employment¹³.

Within the most deprived area, Roma are the most marginalized social group due to different social and ethnic prejudices, as an example the belief that Roma are not willing to take financial risks and invest energies to start a new enterprise. Beside prejudices, Roma, as other marginalized sectors of the population, face deprivations of social opportunities as a lower rate in secondary or tertiary level of school attendance, access to social housing and healthcare assistance. The lack of education reflects itself on the employability of Roma, generating a marginalization composed by both prejudices and deficit of valuable skills.

Analysis of the Hungarian case can be found in the zooming-in section 14, as data were not collected following the research design of the other three cases, although the analysis was conducted using the CRESSI theoretical approach.

-

¹³ Gyorgy Molnár, "A social microcredit programme generating self-employment for the Roma in Hungary", CERS-HAS, p.57



PART II - Empirical evidence for the three comparable social innovation cases

In the following paragraphs, materials taken from the three main data collections of the project CRESSI will be used to provide a thick and analytical description of the three cases of social innovation (as presented in paragraph 4). In order to help the reader we will use the following acronyms in the comparative sections:

- For Italian solidarity Purchasing Groups: GAS(s)
- For Dutch complementary currencies: CC(s)
- For German autonomous water management: IKT(s)

For qualitative comparative analysis we mainly refer to the results of the pre-qualitative and qualitative data collection with social innovators as representative of their respective social innovation group. For the quantitative part, we mainly refer to data collected among beneficiaries of the social innovation and their respective control groups (see sections 3 and 4.1).

Part II.1 - Social innovation and marginalisation

5. Characteristics of the social innovation

5.1. Insights from qualitative analysis

The following paragraphs will present a brief summary of the characteristics of the contexts and the features that distinguish each particular social innovation, taken from the common theoretical framework of the project CRESSI (as presented in Nicholls and Ziegler, 2015). This is done for each of the case studies previously presented (see section 4).

The aim of this section is to identify commonalities and differences among the three case studies, with regards to the characteristics of their social innovation. In detail, few basic characteristics of case studies are presented in the following table. As shown in the following table, IKTs is the social innovation that has the longest history in the CRESSI study, while CCs and GASs are in average more recent. Since IKTs have started long time ago, some of the cases have already terminated their life-cycle with successful or non-successful actions (see par. 7.1.2). The fourth case – the Kiútprogram in Hungary – has only been studied quantitatively and it won't be taken into account in this section.

In general, the majority of groups have formalised their activities in an association, although for GASs this question is central in their internal debates as many groups refused any basic formalisation. Groups are quite small and involve about 10 to 20 participants in average.



Table 3 – Few basic facts about the case studies in CRESSI

	IKTs ¹⁴	GASs	CCs
Year of foundation (median)	1995	2008	2000
Active members (median)	5	17	5
Formal association/organisation	19	14	19
No profit	7	23	29
Currently active social innovation	6	35	30
Total interviews	30	35	30

Source: CRESSI elaborations on pre-qualitative data

5.1.1. Italian case: Solidarity Purchasing Groups

The groups that have been included in the analysis of the Italian social innovation can firstly be differentiated in terms of the dimensions of the city that hosts them, with 19 contexts in cities (above 100.000 inhabitants) and 16 contexts in small to medium towns. Founders can be differentiated among: groups of friends already sensitive to social activism (9), groups of mothers or individuals who wanted to access safe and good food (3), families from the same local area who wanted to buy directly from producers (8), groups of volunteers in fair trade movement (2) or parishes (5), groups that arrived from previous associative experiences (one from the local branch of a left party, one from a consumption cooperative, one from workers of an enterprises). Three groups have been sprout from already established bigger solidarity consumption groups.

At the beginning of the GASs movement in the '90s, the access to organic food was more difficult and thus a great importance was devoted to this issue in their preliminary phase. More recently, as the organic trend has been spreading also in the traditional food supply, such as supermarkets or via farmers' markets, ethical consumption principles have progressively become the main motivation among the interviewed groups. Groups now report that the main objective of their activity is the promotion of critical consumption. Their main aim is not to obtain better prices by avoiding intermediation or to solely purchase directly from the producers. Their main aim is to have a consumption that is in line with their ethical principles: fair prices for producers that ensure safeguard of workers and environment, preference for local products, sustainability in production (i.e. organic) and transportation of goods (i.e. preference for social cooperatives as providers of services). Groups also declare that inter-group solidarity between members is equally important.

Solidarity purchasing groups have a similar functioning: a GAS is a collective of individuals that associate to purchase basic goods together. Each member is responsible for one (or more) type of products: the person (called referent) keeps the correspondence with the producer, organises the purchase and the shipping, distributes the items to the other member. Usually each producer is in contact only with the assigned referent, not with the entire group. Groups divide between centralized groups in which core members take care of purchasing for the passive members (those who don't actively provide volunteer work, as i.e. distribution or shipping organisation); groups in which general tasks (as distribution, management or secretary) are periodically shifted among members; and fully horizontal groups where all members have an active role and take decisions all together, without a real executive committee. In case the group has opted for creating an association, the most active members are also fulfilling appointments as president, public relation coordinator or treasurer; in case the group keeps remains informal, individuals usually refuse to lay claim to a specific position in the group ("We are all referents" "I'm not the spokesperson, I'm just a member").

1.

¹⁴ The median number of active members excludes Stadtwerke or municipal water works.



Table 4 – Characteristics of the social innovation in the opinion of the interviewees, number of yes for each item of the mobile dashboard set of questions – GASs.

	Yes	No	
Promote innovation	17	18	
Create new relations	34	2	
Open to participation	34	2	
Mind-changing	30	7	
Improve life conditions	34	2	
Favour the inclusion	10	24	
Encounter difference	31	3	
Total number of interviews in Italian case $= 35$			

Source: UniPV elaborations on qualitative data

When interrogated on innovative aspects of the GASs movements, groups tend to show a closed attitude towards outsiders. They are scarcely promoting active actions to increase the inclusion of vulnerable groups, and the general openness of their participation should be questioned, as all the groups mostly recruit via cooptation (thus reducing their internal diversity). It is interesting to notice that at the prompt whether the GASs movement "promotes innovation", the majority of the respondents answered with reference to technological innovation and they feel that GASs groups are not able to constitute a facilitator in this sense. When asked directly about innovation, they think that GASs do not promote innovation in a strict sense by promoting new process, but instead re-use old-style processes that the mainstream food supply chains have made disappear, such as a closer relations with producers and a preferably small scale of production. In general, groups are conservative about their functioning and resist to any organisational or functional change.

Usually, activities occur at neighbourhood level or at small town level along the existing social networks of their participants (recruitment occurs mostly among friends). Some of the most active contexts (i.e. via website or organisers of local events) are able to go beyond friendships relations, but their activities always occur at the micro-scale level of neighbourhood in bigger cities.

GASs mostly rely on the personal resources of their members, both in cash and volunteer work provided. Only one among the social innovators interviewed declared to have received funding from local authorities in the past, financed through an URBAN-II action for deprived neighbourhoods: in this case, the group has evolved to a cooperative thanks to this money and it is now running a small emporium, that sells local, organic and fair trade products. In general, GASs don't require a big amount of money to run their activities (between 90-400 euro per month on average): the expenses are mostly linked to the management of the bank account or the association (if they are a formal group) and the rent for the delivery spaces. The highest costs are to be found in Milan, where the lack of public spaces available to GASs forced them to hire private spaces as garages to stock their goods. In the smallest towns, groups are usually able to access low-priced spaces offered by associations or public institutions more easily through their personal networks. In other cases, they collaborate with fair trade shops for delivery and goods' storing services. In general, each member is required to provide a certain amount of voluntary work in order to ensure the general functioning, although some groups are more hierarchical with a core of activists more active than the mere "buyers": the unequal volunteering contribution is perceived by most of the groups as a potential problem for the functioning of GASs.

Speaking about incremental innovation, most of GASs reported the implementation of new ICT services (as clouds services or management application) as one of their main recent improvements. However, the GASs that innovated their process were a minority among the contexts analysed, as shown by the following table.



Table 5 – Intensity and types of incremental innovations introduced in the last three years – Italian case¹⁵

Type of innovation	No change	Examples of innovations introduced in last 3 years
New methods of production	32	Collectively buy old seeds and make flour for GAS
		needs; social gardens.
New methods of logistics	28	Changed locations; management of delivery (i.e. new
		software); collaboration with cooperative for delivery.
New method of supporting	26	Online payment systems (i.e. virtual cards); online
activities		modules on clouds services; management software;
		personalized labels; website; mailing list.
New methods of business	35	-
practices		
New methods of organisation	27	Management committees; elimination of cash payments;
		distribution of responsibilities; decentralised decision
		making.
New methods for external	28	Pre-finance; registration in the municipal register of
relations		associations; new agreement for prices; social
		cooperatives for services.
New methods of financing	35	-
Total number of interviews in Itali	$ian \ case = 35$	

Source: UniPV elaborations on qualitative and pre-qualitative data

5.1.2. German case: IKT water management

A first distinction in German contexts involved in the study is between citizens in town and communities larger than 2000 inhabitants, and those of small villages and hamlets. For the latter context, our archival research suggests at least 175 contexts of such local citizens' initiatives (Bürgerinitiativen), with a large majority focus primarily on freshwater. About 20 municipal water works from larger and smaller towns are part of the network (and in addition the Alliance of public water works in Germany is a member of the network via its chair). 6 interviews were conducted with water professionals from municipal water works, 22 with members of local citizens initiatives in the rural area (including one business) and two with members of initiatives from an urban context, i.e. 24 with people from citizens' initiatives from rural and urban contexts.

The founders and participants in the local initiatives are citizens from the respective settlement. There does not appear to be any specific educational background, since – with one exception ¹⁶ - none of them can be considered a water professional; rather they became involved in the IKT network due to an issue at hand: a threat to the use of their own fountain, to the local water supply system (and with it in some case also to the environment in the area), to having a decentralized wastewater treatment (23 interviews out of 22, with one interviewee saying that they became an IKT member out of interest, to stay informed). One more widely shared background throughout the IKT network is a concern for nature conservation, i.e. in 7 out 15 interviews with such initiatives, there was this background (typically via the BN Bayern).

The local initiatives can be further differentiated by objective:

• Starting in the 1980s, there are many citizens initiatives devoted to decentralized freshwater supply (19 out of 22 interviews with people from the rural context): objectives are safe and decentralized freshwater and associated with this preventing management plans linked to centralization, for example the dam construction plans in Hafenlohrtal. A subtype are local water associations such as

¹⁵ This set of question has been adapted from the Community Innovation Survey, EUROSTAT, and included the response options: "no"; "yes" and "I don't know".

¹⁶ One of the interviews in the urban civic context was with a former water professional, who in his retirement has become active in the group.



the Wasserbeschaftungsverband Rohr, Genossenschaft Sibratshofen with foundations dating back to the first half of the 20th century, but also facing the challenge to update their supplies so as to meet the evolving and increasingly demanding water quality standards.

- Starting in the 1990s, there are also citizens' initiatives devoted to decentralized wastewater treatment (3 out of 22 interviews with people from the rural context: Oberzenn, Rabelsdorf/Pfarrweisach, and Schurbach)
- A topic that has emerged in IKT discussion but so far stayed at the margin is decentralized
 wastewater treatment in the house: use of compost-toilets/a dry toilet system. An example is the
 "Baumherberge Pöttmes", a tree hotel run by an IKT member that offers compost toilets for its
 guests.
- A political theme that occupies some space in IKT discussions but only rarely as a matter of direct practical intervention is water commercialization and water privatization, with the IKT taking a stance for public water provision. For small hamlets privatization does not appear to be a direct threat, though there are some instances of water commercialization issues (e.g. private mineral water industry taking ground water in a community). For the larger municipalities the issue of privatization is there, and one group in the IKT network was founded precisely to watchdog the public water supplier so as to prevent privatization.

The objectives of the IKT network as a whole mirror these objectives: with a foundational focus on drinking water supply and the addition of decentralized wastewater treatment in the 90s (see above). The objective of dry toilets/compost toilets has so far not made it into the constitution of the IKT network, though the formulation of objectives is as an issue for the future¹⁷.

Table 6 – Characteristics of the social innovation in the opinion of the interviewees, number of yes for each item of the mobile dashboard set of questions – IKTs

	Yes	No	
Promote innovation	16 ¹⁸	3	
Create new relations	919	4	
Open to participation	21 ²⁰	1	
Mind-changing	12 ²¹	2	
Improve life conditions	22 ²²	0	
Favour the inclusion	0	5	
Encounter difference	2^{23}	2	
Total number of interviews in G	erman case = 30	•	

Source: EMAUG elaborations on qualitative data

In describing the characteristics of the social innovation, the interview results show that the participants where most responsive to the aspects "improve life conditions" (22 yes/30) and "open to participation" (21 yes/30) and. The result suggests a strong fit with the IKT objectives of improving and securing health as well as control over one's environment (see SI definition 4.1. above). Two qualifications: a) "Improving the life conditions" was generally not understood in the sense of "ever better life" but rather of ensuring and maintaining healthy life conditions for present and future generations, and the infrastructure required for this; b) while participation was strongly endorsed across the interviews, the form differs: direct participation in

¹⁷ http://ikt-bayern.de/verein/satzung/ and http://ikt-bayern.de/verein/ziele/, last accessed 16.6.2016

¹⁸ This adds together five (out of six) municipal water works considering themselves "promoting innovation", and 11 out of 24 citizens initiatives.

¹⁹ Here one from the municipal and eight from the citizens' initiatives.

²⁰ Here four from the municipal and 17 from the citizens' initiatives.

²¹ Here two from the municipal water works and ten from the citizens initiatives.

²² Here six municipal water works and 16 citizens initiatives.

²³ Both from the citizens initiatives.



the local initiatives, against participation via the town hall/local parliament in the case of water works, which report to the town hall/local parliament²⁴.

Secondary aspects of the initiatives are the following: "Create new relations" (9 yes/30) was understood primarily in an instrumental way of establishing alliances with like-minded people, getting to know relevant others (from the water authority, health office etc.). But there was also a sense that the participation creates "friendships" and an improved "we" in the community, or to put it in capability terms: that it strengthens the affiliation in the community. "Mind changing" (12 yes/30) was partly associated in the interviews with this community affiliation aspect, but more generally with an improved understanding of the "bigger picture": how authorities and governments work, and how it is possibly to achieve change. As one interviewee (c17) put it: "All the responsibility that is in this . . . it makes you live with an improved awareness of things". This point was further interpreted by another interviewer in the sense that the experience of local water management triggers more generally a sense of care for distant others in other parts of the world as well as for future generations (c11).

The interviewees where least responsive to "favour the inclusion" (0 yes/30) and "encounter difference" (2 yes/30). In discussion, interviewees said that economic differences within the settlement were not primarily relevant for their initiatives, nor differences in ethnicity and race. Inclusion/exclusion was more perceived in terms of the local community: "us" versus the higher up authorities as "them".

"Promoting innovation" (16 yes/30) did not receive as high a priority among the interviewees as one might expect in an innovation case study. There seem to be two reasons for this: "innovation" is associated with a mainstream discourse of political-economic development that is imposed from elites or from top-down and in this sense part of the problem: partial economic and political interests rather than what is good for the community. There is a need to make sure, as one interviewee said, that not every new knowledge is turned into regulation and then into a business (c7). In addition, there was a recurring focus on focusing on problems: the new is required not for its own sake, but rather when there is a problem that needs to be dealt with (c17). There has to be a motive, another interview said (c28). For example, one interviewee judged their wastewater system to be innovative but added: "We do not need changes at the moment; the plant system is there and works" (c29). Another interviewer said that the challenge is to gather the information (so as to understand the problem properly) and then to act (c27).

A different point in relation to innovation emerges from another interviewee (c24): "We have a model character... we show that it is economically and ecologically possible to have a small freshwater supply without costs to the government... and in addition to take precaution for the future." In this sense and in the current general societal context, decentralized freshwater and wastewater management is an innovative niche, and perhaps even disruptively at odds with the mainstream tendency. But incremental innovation is only relevant if there is a problem, not as such.

The adapted community innovation survey showed innovation to be perceived by the participants primarily in the field of drinking water production and wastewater removal, and no innovation in product and service delivery. Some innovation was perceived to occur in internal process organization, business methods, work organization, external relations and finance. These perceived innovations all point to various aspects of drinking water delivery and wastewater treatment when organized by citizens' initiatives. For the latter reason presumably also no instances could be found of an initiative actively trying to "sell" or aggressively "push" their innovation so that others would use it. As one interviewee (c30) put it, the issue is more one of providing options of learning for others.

-

²⁴ The one "no" in the interview (see the table "mobile dashboard) came from a water work interview; however, it resulted from the interviewees understanding of "participation" as including private economic interests in the decision-making of his water work.



Table 7 – Intensity and types of incremental innovations introduced in the last three years – German case²⁵

No change	Examples of innovations introduced in last 3 years
19	Various filters for drinking water; less water sampling and joint organization of sampling; Change in agricultural practices (less fertilizer/Pesticide) and associated products: "Wasserschutzbrot"; various wastewater systems
30	
26	Accounting software with clients; technology for IT-control of drinking water in the community
26	Cost-comparison method for better understanding alternatives; investment controlling; long-term investment strategy
26	Bundling competencies in the association; volunteer construction schemes; new internal divisions
24	Consultancy and demonstration work for other communities; water sampling protocol; alliances with other communities
27	Water fund for new investments and subsidizing incentives; compensation payments to farmers; time banking
	19 30 26 26 26

Source: EMAUG elaborations on qualitative and pre qualitative data

The local citizens' initiatives rely on voluntary work and modest membership fees, and the same holds for the IKT as a network. In the cases where the citizens run the freshwater supply or wastewater system themselves, maintenance and restoration works are funded via the revenue from the water management.

The initiatives generally do not seek out funding from local, national or EU level. The most important point of finance is arguably at the crossroads where a community has to decide between restoration/establishment of a local system versus connection to a larger freshwater supply or wastewater system. Accordingly, much of the lobbying of the IKT is devoted to promoting directives that allow subsidies also for decentralized solutions, change the way subsidies are given:

Drinking water:

- Landesentwicklungsprogramm 1984: explicitly forbids favouring distance water over local solutions

 but in practice, this principle is not observed according to the IKT, so it seeks to create political pressure)
- 1.7. 1987 Change of "Richtlinie für Zuwendungen zu wasserwirtschaftlichen Vorhaben (RZWas)" so as to promote the purchase of areas for restoration purposes in water protection areas. The IKT views the "natural restoration" ("natürliche Sanierung") as a concept that it coined on the path towards an "area-wide water protection" ("Flächendeckender Gewässerschutz" (IKT #33, 1994, 1). The

²⁵ This set of question has been adapted from the Community Innovation Survey, EUROSTAT, and included the response options: "no"; "yes" and "I don't know".



- municipal water works can play an important lead role to demonstrate how this is possible (see the examples of Aschaffenburg, Würzburg, Augsburg and Munich, see also IKT #36, 1996).
- Less "bureaucratic ways" to identify and extend water protection areas and to manage them effectively ("Verbotskatalog", subsidies, regulation of compensation payments) (compare: "Resolution der IKT" 1986).

Wastewater:

- IKT supporting various resolutions (Beschlüsse) of the Bavarian parliament in support of allowing and financing decentralized solutions, such as the 1996 Wasterwater ordinance²⁶
- Making decentralized solutions more attractive (see IKT 48, 2003), for example by splitting tax on wastewater (separate treatment of different types of wastewater so that decentralized users do not get taxed for waste they do not produce)

5.1.3. Dutch case: complementary currencies

The Dutch research team categorizes the interviewed contexts as follows (inspired by Seyfang & Longhurst 2013, Dittmer 2014):

- <u>Local Exchange Trading Systems (LETSs)</u>: 21 contexts. The basis for LETSs is the mutual credit model. Participants join a LETS, sign up to an account, and start exchanging goods and services in an internal currency. When a member sells a good or services the person receives internal currency; when a member buys a good or services the person spends internal currency. The sum of all balances should always be equal to zero; i.e. no money is created, only interest free mutual credit exchanges hands. As said, the aim of LETSs was initially mostly economic; i.e. to increase local exchange. Today, the social aspect of LETSs is most important according to most social innovators.
- Regional Currencies: 2 contexts. Regional currencies are backed and exchangeable for legal tender (euros in the Netherlands), and can only be spent in a certain region or city. Participants exchange euros for the regional currency and/or start to accept payments in regional currency. Members can convert the regional currency into euros against an interest rate (penalty fee). Within regional currencies, money is not created in a different way, but only "regained" after issuing (Boonstra et al. 2103: 18); i.e. members exchange bank deposits created by commercial banks (euro's) for the regional currency and then manage the circulation of regional currency. The main aim is to circulate the currency among the members and to increase the velocity of money locally.
- Combination of mutual credit and regional currency: 1 context. This initiative was officially launched in September 2016 (a prototype functioned already in 2015) and is innovative, because it combines interest free mutual credit with exchangeability in euros. According to CC08, this is "the Holy Grail in complementary currencies."
- <u>Commercial barter system for entrepreneurs: 2 contexts.</u> Commercial barter systems are also based on the mutual credit model, but only accept entrepreneurs as members. The aim is to increase exchange among the members. The sum of all balance should always be equal to 0 like LETSs. Members pay a membership fee and a transaction levy to the barter organization. The barter organization organizes exchange events and connects entrepreneurs to stimulate exchange.
- <u>Social currency: 1 context.</u> The main objective of this social currency is stimulating participation in the neighbourhood. Participants receive local currency for activities contributing to a cleaner and safer quarter, and for activities improving social cohesion. Entrepreneurs accept this local currency

^{26 &}quot;Verstärkte Zulassung dezentraler Lösungen...Die Staatsregierung wird gebeten, darauf hinzuwirken, dass künftig – gerade in Ortsteilen – verstärkt kostengünstige dezentrale Einrichtungen der Abwasserentsorgung zugelassen werden soweit sie wirtschaftlich sind ..." (IKT #48, 2003)



and benefit from a cleaner, safer, more social neighbourhood. The municipality subsidizes (in euro's) the organization and the management of this social currency.

- <u>Time Bank: 1 context.</u> Members of time banks provide each other services in exchange for hours. The aim is to promote exchange based on equality: "All people have the same amount of time" and "I hour equals 1 hour" (CC11). When people work for the organization of this time bank, money is brought into circulation. Multilateral exchange is possible and the norm (like in all other CCs). Person A builds a website for Person B; Person B prepares a dinner for Person C; and Person C gives Person B a yoga course.
- <u>Crypto currencies: 2 contexts.</u> Crypto currencies like bitcoin are peer-to-peer monetary system; i.e. new forms of money and payment systems without a central authority (like a commercial bank or a central bank). Both consumers and entrepreneurs can participate in crypto currency systems.1 CC in this case study promotes the use of Bitcoin in the Netherlands and 1 CC promotes the use of Bitcoin in a specific city.

As said, there are two non-profit organizations involved in complementary currencies in the Netherlands, STRO and Qoin. STRO founded the first LETS in the Netherlands in 1993 and inspired many social innovators by providing information and assistance. Qoin has been mainly involved in the implementation of barter systems and social currencies. In general, it could be said that idealistic individuals who care about their local community, sustainability and social cohesion founded most LETSs in the Netherlands. Entrepreneurs who saw a business opportunity founded commercial barter systems. Social innovators who founded crypto currencies, regional currencies, Time Banks and other innovative systems are generally younger, have more knowledge of IT, and are more entrepreneurial.

The objectives that social innovators mentioned could be categorized into five groups:

- <u>Micro economic objectives (19 contexts)</u>: e.g. "more local exchange", "cost reduction", "increasing purchasing power", "poverty reduction", "improving living conditions", "support local economy", "increasing exchange among members", "exchanging without money", and "realizing activities and exchanges that are otherwise not possible".
- Meta economic objectives (9 contexts): e.g. "to show people that you can deal completely differently with money, money creation and the organization of money", "to bring into circulation another kind of money... money that doesn't listen to the laws of financial markets, but money that supports the objectives of the users", and "to have the possibility to pay all daily expenses with Bitcoin in our city".
- Sustainable objectives (8 contexts): e.g. "more repairing", "more recycling", "consuming local products", "consuming less", and "decrease waste".
- Social objectives (18 contexts): e.g. "more social involvement", "community spirit", "social cohesion", "meeting people", "encouraging social contacts", "social renewal", "fostering participation in the neighbourhood", "exchange based on equality", "promoting neighbourship", and "to get people out of isolation"
- Individual development objectives (5 contexts): e.g. "developing talents and skills", "development of human beings", "encouraging people to use their imagination and skills", and "making use of the skills and talents of members".

Founders of CCs in the aftermath of the financial crisis appear to aim more at developing an *alternative* for the mainstream monetary system (euro system) than to establish a *complementary* system. These social innovators want to show that an alternative monetary system is not only necessary and desirable, but also possible. Most social innovators (26) mentioned as geographical context their city or their town, and often



also surrounding villages. Four social innovators mentioned the Netherlands: these CCs focus mainly on entrepreneurs. To be attractive for entrepreneurs a larger scale appears to be needed.

Fourteen social innovators in this case study mentioned the lack of activity and stagnation as main problems of their CCs. Social innovator CC05 explained the problem of most LETSs and barter systems as follows, "The best performers often receive too much money. And what happens then? They quit. In all barters and all LETSs you will see that the best-selling actors leave the system. This is not very promising for a system. What you often see is that LETSs have over time less and less transactions, and that it is more about cosiness. That is ok. That is why we call it social systems."

All CCs use an alternative (non-euro) medium of exchange. The practical organization and functioning of CCs differ, because the members often determine the governance and rules themselves. The main (innovative) idea behind most CCs is that the members organize and manage the monetary system instead of banking institutions. In particular, the way money (or credit) is created within CCs differs from the mainstream banking system. The basis of LETS systems and barter systems is (interest free) mutual credit creation and non-exchangeability in euros. Regional money systems and crypto currencies are exchangeable for euros; they don't generally introduce a new way of money creation, but only regain money after issuing — meaning that these currencies are backed by legal tender (euro's) but after first exchange are managed by the members. Time banks and social currencies bring units centrally into circulation.

The social innovators recognized most categories of the mobile dashboard except 'promote innovation'. Some social innovators considered CCs in general as innovative, others absolutely not. For the second group CCs are just reintroductions of old systems (more details below). Interestingly, most social innovators argued that a new perspective on and organization of money is mind-changing, i.e. CCs contribute to the development of a new cognitive frame.

Table 8 – Characteristics of the social innovation in the opinion of the interviewees, number of yes for each item of the mobile dashboard set of questions – CCs

	Yes	No
Promote innovation	15	14
Create new relations	29	1
Open to participation	29	1
Mind-changing	25	4
Improve life conditions	26	4
Favour the inclusion	23	7
Encounter difference	28	1
Total interviews in the Dutch case =30		

Source: TUD elaborations on qualitative data

As said, some social innovators argued that CCs are very innovative and other social innovators argued that CCs already exist for a very long time. E.g. social innovator CC22 argued that "CC22 is innovative because people have to think broader. A lot of people don't think it is possible to organize it [money] in a different way, but this is not true. We can organize money in a different way." CC09 argued that CCs are innovative "when they challenge the status quo and offer an alternative. People look then from different perspective to the system." Some social innovators were more concrete, e.g. social innovator CC08 argued, "CC08 is innovative because of its new architecture", and CC09 argued, "This [blockchain] technology could make a whole industry [banking] unnecessary in the long term." And according to social innovator CC10, there are "endless possibilities for innovations with electronic money and tagging." Other social innovators emphasized that CCs are the reintroduction of an old idea, e.g. social innovator CC11, "Innovative compared to what? No, absolutely not. It already existed in the past. In detail you can adopt it to our time. We don't



use sticks or grain nowadays, but bits and bytes. So, this technology is innovative in my view," and social innovator CC20, "No, it already exists very long. Nowadays there is more attention. In the past people used complementary currencies out of necessity. Today, it is more a reaction to problems in the mainstream economy." The research team considers the description of CCs of social innovator CC03 as "interesting experiments" as most appropriate. 20 social interviewees mentioned in the interview the need for new economic structure, new power relationships, and the development of capacities. 10 social innovators did not mention power relationships, and/or emphasized that CCs are not new, but old ideas.

The emergence of ICT and digitalisation has changed CCs gradually in the last decades. Today, all CCs use online platforms for their administration and registration of transaction. In 2013 STRO released fully certified banking software for free (Cyclos). Some CCs introduced new payment methods in the last three years (e.g. apps and SMS). Moreover, in the last three years the number of crypto currencies has grown rapidly and the option of tagging money has been explored. Most interviewees did not recognize the innovation classification in the pre-qualitative questionnaire, as inspired by the structure of the Community Innovation Survey (EUROSTAT). The research team concludes that the classification is not very useful for social innovations as CCs, because in CCs not a product or a service is essential, but the way money is created and the way money is organized. This innovative self-creating and self-organizing aspect of CCs does not match properly the categories.

Table 9 – Intensity and types of incremental innovations introduced in the last three years – Dutch case²⁷

Type of innovation	No Change	Examples of innovations introduced in last 3 years
New methods of production/new products and services	13	Certified banking software; payment methods (e.g. apps and SMS); tagging.
New methods of logistics/methods for the delivery of products and services	18	Online market place.
Internal new/improved processes (for example software	14	Digitalization of organization and communication; introduction of a matchmaker to connect supply and demand.
New methods of organizing business	17	"No overhead costs" (CC31); i.e., the organization of the monetary system is managed by volunteers.
New methods of work organisation	19	New infrastructure to connect people and to facilitate exchange.
New methods for external relations	22	Participating actively in the debate on the future of money.
New methods of financing	20	Hours spent on the organization of CC11 are brought into circulation as currency.
Total number of interviews $= 30$		

Source: TUD elaborations on qualitative and pre-qualitative data

26 CCs have less than 5.000 euro costs per year. 4 CCs have costs between 10.000 and 70.000 euro per year. Most CCs have a membership fee in euros to cover costs in euros (e.g. hosting website, bank account, rent of meeting room, printing of flyers) and a membership fee in the complementary currency to cover the internal costs (e.g. small payments for organisational work). Two entrepreneurs founded two CCs with high costs; they invested their own money (and time) in the development and implementation of a local complementary

²⁷ This set of question has been adapted from the Community Innovation Survey, EUROSTAT, and included the response options: "no"; "yes" and "I don't know".



currency. Two CCs with high costs receive funding of the Dutch government and the EU; these two CCs have mainly social objectives. Voluntary work is important for almost all CCs. Without voluntary work most CCs would not exist. Moreover, free banking software like Cyclos is important for CCs.

5.2. Comparative qualitative analysis

The following section is aimed at comparing how social innovation is declined in the three case studies, putting in evidence similarities and difference among them. Although the three cases have different scopes and orientations, several similarities can be traced among the three, with regards to the starting point from which they generated (bottom-up) and their founders (private citizens and civil societies). First of all, although to different degrees, many of the groups included in the CRESSI data collection considered the local dimension and its sustainment as one of the engines that initially drove their actions. In fact, for GASs 10 groups cited explicitly the support to local production and agriculture as starting point for their activities, while for the remaining groups the promotion of the local economy has often been cited as one of the cognitive frames that drive their action (see section 8.1.1). The same occurs in CCs, where 3 groups have cited sustainment of local economic activities, while 15 cited the creation of a local network of bartering and exchange as first main goal. Additionally, an explicit aim of creating an alternative to the general mainstream economies is cited by 14 GASs and by 5 CCs.

The Bavarian IKTs have as their explicit starting point the local struggle against central authorities, a fight that mostly occurs at community (6) or hamlet (16) level. The claim for safeguarding local welfare is also pursued by CCs and, consequently, activities in CCs mostly occur at local (community) level, with the sole exception of one group being active in a specific neighbourhood in Amsterdam and four groups being active at country level.

Although in practice activities of social innovations are local - at neighbourhood level in bigger cities and at municipality level in towns, the GASs differ from the other two cases for their missing reference to a specific community as main beneficiary of their actions, as their goals and objectives are more oriented towards friends, families or individual social networks, more than towards the entire citizenship living in their local surrounding, as instead happens in the other two cases. In GASs, groups grow mostly via co-option²⁸ while publicly accessible information material (e.g. homepage, newsletters or public events) are frequent and functional in IKTs and CCs to recruit new members. Furthermore, one of GASs main drivers is based on the individual choice of consumption: in 6 groups, they declare the access to healthy food for themselves and their families was the primary motivation for starting the GAS activity. Such an approach might indicate an individualistic orientation behind the participation in social innovation. In other 4 groups, the same action is justified on the basis of providing solidarity to socially excluded individuals (as they intended to sustain special projects aimed at tackling marginalisation of specific vulnerable groups, mostly operated via religious associations or social cooperative).

This important difference between a community approach and an individual perspective in the social innovation can also be highlighted if we focus our attention on the founders and their connections to local powers. In the local groups of IKTs, founders are mostly citizens, hamlets or even communities so as to establish a strong relation and exchange with the local powers - in some cases considered enemies to fight or allies against external authorities – but nonetheless interlocutors. For CCs, the connection with local powers is less central in their activities – although not perceived as direct potential opponents but only eventually as external supporter (especially in case of LETS). GASs, on the contrary, in their majority refuse any contact with local authorities or powers, as they don't want to get involved in politics although they claim their actions are extremely political and aimed to subvert the mainstream food supply chain. A more

²⁸ Co-option implies that a new member enters the group only if she personally knows someone who is already part of it that can "guarantee" for her.



"individualistic" perspective therefore combines with scepticism towards established political structures and pursues empowerment in ethical choices, which however limit themselves to own consumption - of the individual or the family of belonging.

Differences and similarities are also well highlighted by the mobile dashboard tool. Comparing the three cases, it is interesting to notice how social relations are extremely important for CCs and GASs with almost all groups affirming that experiencing the social innovation creates new relations, facilitates encountering difference and is mind-changing. Strongly supported by all social innovators across countries are the items "improve life conditions" and "openness to participation" (although this is not always valid in practice for GASs, as we've seen in recruitment practices: not generally open but mostly passing through individual social networks and co-optation). Interestingly enough, the IKTs case demonstrates that social innovation can also exist in communities where differences are probably at their lowest.

Table 10 – The answers to the mobile dashboard set of questions – count of yes for each item [Which of the following keywords would you use to describe your social innovation activity?]

	IKTs	GASs	CCs
Promote innovation	16	17	15
Create new relations	9	34	29
Open to participation	21	34	29
Mind-changing	12	30	25
Improve life conditions	22	34	26
Favour the inclusion	0	10	23
Encounter difference	2	31	28
Total interviews	30	35	30

Source: CRESSI elaborations on qualitative data

However, two important issues emerge from the analysis of the mobile dashboard. First of all, the perception of "innovation" in the opinion of interviewees is mostly linked to technological improvements and only with difficulties are they able to conceive of their own experience as innovative in the specific social contexts (in average, only half of the groups perceive themselves as promoting innovation). However, when they're asked directly if they consider the general movement of which their experience is part of as innovative, then their perceptions slightly change. The recurrent element associated to innovation in all the three cases becomes cooperation among members and the rediscovering of good old practices, being them the water management, the bartering or the direct relation with farmers.

The second point is the missing perception of their actual capacity of favouring inclusion of some kind of marginalised population, which is one of the most problematic points in the perception of the interviews. Is the social innovation really able to favour an extension of the social relation? Is it able to reach people at the margins? From the words of interviewees, only CCs are aware of this potential role in favouring inclusion of marginalised groups, while GASs and especially IKTs are in general not aware of their potential role for the inclusion of single individuals. For IKTs, the matter of inclusion is more relevant at a higher level of aggregation - entire communities/hamlets are perceived as "marginalized" due to their will to pursue alternative strategies of water management in the rural area.



5.3. Comparative quantitative analysis

This section reports results collected through three surveys that have gathered information on beneficiaries of the three social innovations investigated and their respective control groups. As can be seen in Table 11, the social innovations investigated are known to more than 3/4 of the survey population. The Italian GASs are most known.

Table 11 – People ever having heard of the social innovation, absolute numbers and percentages

	IKTs	GASs	CCs	Total
No	43	270	41	354
	18.2	9.1	17.1	10.3
Yes	188	2653	193	3034
	79.7	89.5	80.4	88.2
I don't know	5	42	6	53
	2.1	1.4	2.5	1.5
Total	236	2965	240	3441
	100	100	100	100

Source: CRESSI survey data, 2016

Table 12 shows, however, that knowing the social innovation does not automatically imply an active involvement: although figures refer to very different sample sizes, a large portion of respondents never actively participated in the social innovations investigated. Figures do not significantly change when restricting to those that had heard of the social innovation. The variable investigated in Table 12 represents the identifier with which we distinguish between beneficiaries and their control groups. In the Dutch case, the control group is rather small, while about half of the German sample and about 2/3 of the Italian sample are categorized as control group. Not all beneficiaries of the social innovations are still involved: some have stopped their participation: while so-called "past beneficiaries" are less frequent in the Dutch and Italian case, about 12% of the German sample population belong to this category.

Table 12 – People that have been active in the social innovation, absolute numbers and percentages

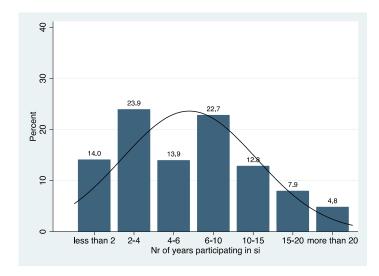
	IKTs	GASs	CCs	Total
No	135	2040	39	2214
	57.2	68.8	16.3	64.3
Yes and I'm still active	72	750	185	3034
	30.5	25.3	77.1	88.2
Yes in the past, but not	29	175	16	53
active anymore	12.3	5.9	6.7	1.5
Total	236	2965	240	3441
	100	100	100	100

Source: CRESSI survey data, 2016

Our sample population shows that there are mainly two different groups of active participants: those that are involved in the social innovation since less than 4 years and those that are involved since 6 years or longer.



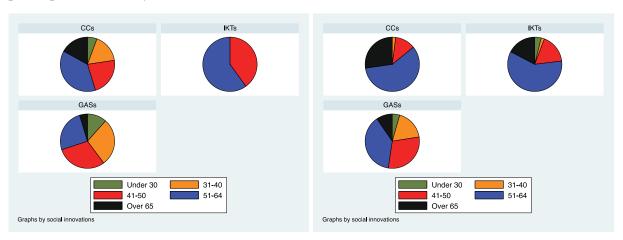
Figure 2 - Duration of participation in the social innovation, currently active members, all cases



Source: CRESSI survey data, 2016

As can be seen from the figure above, the three social innovation cases display rather different age profiles of their current participants: CCs mostly engage people between 51 and 64 years, with about one quarter of the long term participants being in retirement age. IKTs display an even "older" profile, with less than 10% being younger than 40 years old. The Italian GASs on the other hand are a "younger" phenomenon, with about 45% of short term participants and about 25% of long term participants being younger than 40.

Figure 3 - Age profile of short term (less than 4 years, left) and long-term (longer than 6 years, right) participants, currently active members, all cases



Source: CRESSI survey data, 2016

Among past beneficiaries, the average duration of involvement into the social innovation is reported in table 12. IKTs tend to report the longest duration of involvement, followed by CCs, whereas past beneficiaries of GASs tend to have "dropped out" after roughly 2 years.

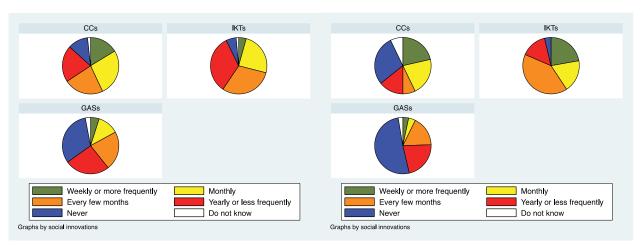
Table 13 – Nr of years of participation among past participants

	IKTs	GASs	CCs
Median duration	5.0	2.0	4.5
Average duration	7.5	2.4	7.4
Nr of observations	28	157	14

Source: CRESSI survey data, 2016

The intensity of involvement tends to differ between the three social innovations as can be seen in Figure 4: the social innovation with the most intense involvement seems to be the Dutch one on Complementary Currencies: almost half of the sample population (of current and past participants) declare to participate in discussions and decisions within the social innovation at least once a month, many even weekly. IKTs also tend to require rather frequent participation, although more among past beneficiaries than among current ones (something that can probably explained by the fact that in the IKT case most participation is required in the time of a struggle decentralization versus centralization but not so much afterwards). GASs participants on the other hand declare to be less involved: about 75% of past and 60% of those currently involved in the social innovation participate in discussions and decisions only once a year or never at all.

Figure 4 - Degree of involvement of current (left) and past (right) participants, all cases [How often do you participate in discussions and decisions?]



Source: CRESSI survey data, 2016

Table 14 – Replies to questions on involvement: absolute numbers, all participants

	IKTs	GASs	CCs
Current participants	69	628	172
Past participants	27	151	14
Total nr. of observations	96	779	186

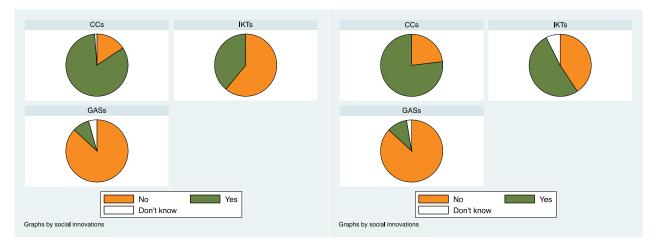
Source: CRESSI survey data, 2016

In terms of financial involvement, the replies differ starkly between the three social innovations (see Figure 5): while some sort of financial support is very common in CCs, Italian interviewees declare basically never to support the social innovation financially. In the case of IKTs, some sort of financial support seems to



having been more common in the past than currently (the same qualification as above for "participation" applies).

Figure 5 - Financial involvement of current (left) and past (right) participants, all cases [Do you contribute with any money (e.g. membership fee) to support this social innovation?]



Source: CRESSI survey data, 2016

As can be seen in Table 15, the average amounts of contributions are lowest within Complementary Currencies - where support is common - higher within IKTs, where about half of the people involved contributed and highest in the case of GASs, where only a minority in fact contributes financially to the social innovation.

Table 15 – Financial contributions to social innovation in euros per year: median and mean values and absolute numbers of those declaring to ever having contributed, all participants

	IKTs	GASs	CCs
Median contribution	30	500	10
Mean contribution	51	1918	96
Nr. of observations	32	65	147

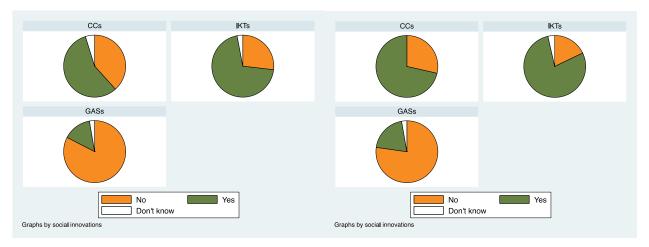
Source: CRESSI survey data, 2016

Involvement of participants through voluntary work also differs between the social innovations investigated: CCs, which already tend to require some (though reduced) financial contribution, also tend to imply the devotion of voluntary work, although current participants are less involved than in the past. IKTs also strongly involve their participants through voluntary work, while GASs typically don't.



Figure 6 - Involvement of current (left) and past (right) participants through voluntary work, all cases

[Do you devote voluntary work for this social innovation?]



Source: CRESSI survey data, 2016

The amount of hours devoted is rather similar across the cases investigated and roughly reaches about 2 hours per week (see Table 16). The fact that involvement appears to be reduced in the Italian GASs may be due to the target pursued by the CRESSI survey in which mainly suppliers to the Purchasing Groups have been interrogated: consumers, who set up the groups are likely to be more involved than the suppliers who sell their products to the groups.

Table 16 – Hours of voluntary work devoted to social innovation the social innovation per week: median and mean values and absolute numbers of those declaring to having ever contributed, all participants

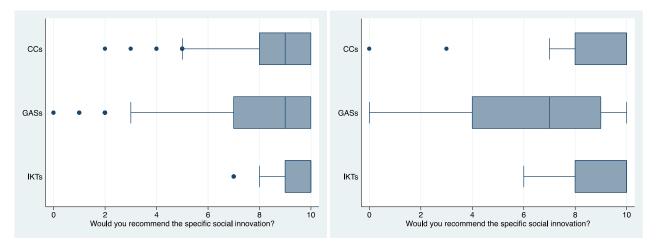
	IKTs	GASs	CCs
Median contribution	1.5	2	2
Mean contribution	2	3.5	5
Nr. of observations	60	115	101

Source: CRESSI survey data, 2016

Current and past participants tend to recommend the social innovation as can be seen in the figure below. The most enthusiastic evaluation can be found for IKTs, followed by CCs and then by GASs, who display greater dispersion, hinting that experiences can be more or less positive. Negative opinions (below 5) tend to remain outliers, but especially among past participants of GASs, evaluations tend to be less enthusiastic.



Figure 7 - Overall evaluation of the social innovation by current (left) and past (right) participants, all cases [Would you recommend this social innovation?]



Source: CRESSI survey data, 2016

6. Characteristics of the beneficiaries

6.1. Insights from qualitative analysis

The following paragraphs will briefly present who are those who benefit from the three cases of social innovation investigated within CRESSI's WP7. It is important to introduce the reader to the main distinction that has been made in the research design between beneficiaries and their respective control group (see section 3 and 4.1): each research team has in advance identified a social group that can be considered as marginal (see par. 1.2). This social group will be defined from now on as the target or beneficiary group, as far as each research team has in principle hypothesised that participating in the social innovation could reduce their potential or actual disadvantage. The control group – on the contrary – comprises members of the same broad context that have not been in contact with the social innovation. The research teams have so far identified the following target groups (see section 4):

- IKTs: citizens of the hamlet/village, surrounding communities, nature, future generations
- GASs: farmers, artisans, social cooperatives that sell their products via solidarity purchasing groups
- CCs: members, in particular; small to medium entrepreneurs and responsible consumers, society

Those are the individuals to which the quantitative questionnaires (survey, see section 3) have been directed. During the qualitative phase, we asked interviewees who were the social groups who could be considered as potentially benefitting from their activities. These results are presented in the next paragraphs and subsequently compared to our prior hypotheses.

6.1.1. Italian case: Solidarity Purchasing Groups

There seems to be a general consensus among interviews in identifying the producers supplying GASs as main beneficiaries of the activities of the groups (27 groups out of 35 recognised them as benefitting from their activities without the intervention of the interviewer); however, groups acknowledged that the consumers (and their extended network of friends and family) are equally benefitting from GASs. Only one group cited the community (notably: "the neighbourhood"): this confirms the hypothesis that groups are not interested (or aware) of the possible positive consequences that their GAS might have in the local community, focusing mostly on the personal network of the participants involved in the group. Only one



group has directly cited a member of the SI network that typically acts for the community (notably: "ARCI", a cultural association).

In general, the main concern of social innovators addresses their own members (usually these are the first to be cited, while producers are mentioned first only in some cases, or only after specific re-launches from the interviewer).

6.1.2. German case: IKT water management

The primary beneficiaries are the citizens in the respective hamlets, communities or towns (28 out of 30 interviews). Important here is the double sense of "control of the environment" (sensu Nussbaum 2006, 77f): of citizens having a say in decision-making, but also the economic control point of owners (two further interviews singled out the owners of fountains as primary beneficiaries). The seeming exception is one interviewee who singled out the customers visiting his enterprise (c30); interestingly, however, the interview context clarifies the customers as people that should be able to "learn" something here for their own domestic water management.

Secondary beneficiaries are the surrounding communities and towns (11 out of 30 interviews), not least on account of the saved costs. As one interviewee puts it (c29): since their hamlet has decentralized wastewater management, the main community "does not have to plan, no administration needed ". In the estimate of this interviewee, moreover, the decentralized construction was very cost-efficient: "550 000 Euros saved in costs, which the state now does not have to pay". Further secondary beneficiaries are nature (5 out of 30 interviews) and future generations (2 out of 30 interviews).

The primary beneficiaries singled out in the interviews correspond to the target group expected prior to the qualitative interviews. The context distinction between local community and town applies as set out in 4.1.2 and the associated marginalization risk for the rural communities. With respect to the citizens in the rural community, further characteristics can be added:

- The term "beneficiary" and "target group" is misleading, if understood as "recipient" or "consumer". Due to the involvement of citizens in the local water management, there is at least some blending of "innovator"/" producer" and "beneficiary"/" consumer". This corresponds to a trend observed also in other water social innovation cases, where the "target group becomes part of the network that can co-create the value in the respective place" (Ziegler et al. 2014, 196).
- This strategy of empowerment entails a risk. As one interviewee points out (c2), in the light of increasing and often complex standards and technical demands, will local citizens be able to have the necessary competences?
- Another interviewee noted that it is more the older people who take an interest, the young very little or none at all (c7, see also Figure 3 from section 5.3 above). In the light of the IKT history, the foundational years of the 1980s and their struggles might have been conducive to a "generational experience", i.e. of citizens then in the "work-phase" of their lives, and also with more experience and memories of local water management traditions than the current generation. This generation keeps on organizing the network taking the current composition of the IKT board as an indicator but thereby also raising a question concerning the involvement of the younger generation and with it the longer term existence of the network.

6.1.3. Dutch case: complementary currencies

Most social innovators identified "the members" of their CC as main beneficiaries. This definition of the beneficiaries is in line with the expectations of TUD's research team (27 groups out of 30 recognised it).



Interestingly, some of the social innovators added "active" to members. Indeed, being active is important for a well-functioning CC. Four social innovators argued that "the core team", i.e. the members of the board or management, benefits of the CC. These social innovators emphasized how interesting and challenging it is to develop and to experiment with a new monetary system. E.g. social innovator CC11 explained how interesting it is to manage the quantity of money, "One of the central questions within CC11 is when it is allowed and justified to create hours. If we [the core team] think it is justified, the people working for CC11 get paid. If it is not needed, they don't receive money." One social innovator emphasized that the members of the core team receive some income.

Three social innovators mentioned "the society as a whole". They argued that the monetary system has to change to solve the big world problems, in particular environmental problems, inequality and financial instability; e.g. interviewee CC29, "We also influence society as a whole. When we move towards a local market, we have an important role as example. Other people see us and experience that we are able to organize our social system in another way." Interestingly, only 2 social innovators referred to the local economy or local community when asked "who benefits from your activities?".

6.2. Comparative qualitative analysis

In general, social innovators from the three case studies agree that their activities are oriented towards the previously envisaged target groups – those groups identified by the research teams as the main beneficiaries of the social innovation (§ 6.1). It is important to underline that for IKTs and CCs the difference between social innovators and target groups is more blurred compared to GASs, as previously underlined (section 6.1.2). In the case of GASs, social innovators are consumers setting up or participating in a group, while the target group are the suppliers of products. In the case of CCs, social innovators are those who participate in the setting up/management of the complementary currency (being them volunteers or workers) and those who are merely accountholders and exchange services and goods are identified as target group. In IKTs, social innovators actively contribute to mobilising citizens and to "bring in" the social and technical knowledges developed by the network in order to promote the political fight in favour of decentralized drinking water restoration. Beneficiaries are all local citizens who benefit from higher quality water.

Other categories of potential beneficiaries are less relevant in the view of most interviewees. What can also be noted is a frequent lack of citation of categories such as local communities or non-profit organisations and of socially excluded individuals, cited indeed by few groups.



Table 16 – Who benefits from social innovation activities – count of citations

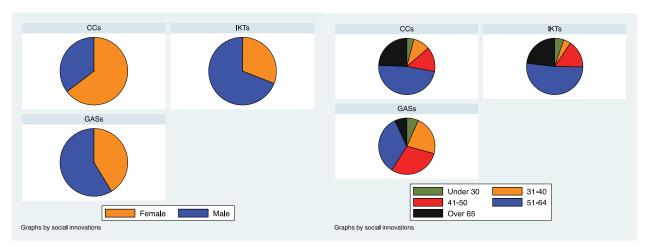
	IKTs	GASs	CCs
Social innovation target group (see § 6.1)	31	34	26
Social innovators	2	30	6
People in contact with SI	1	3	0
Networks of people involved in SI	0	6	1
Other potential innovators	3	0	1
Local political administrations	1	0	0
Local community	4	2	2
Local non-profit organisation	0	1	1
Marginalised social groups	0	2	1
Future generations	2	3	0
Society	1	1	7
Environment	4	3	0
Recipients of economic spill-overs	2	3	3
Number of cited beneficiaries	51	88	48

Source: CRESSI elaborations on qualitative data

6.3. Comparative quantitative analysis

The data collected through the three CRESSI surveys permit greater insight into the characteristics of the beneficiaries of the three social innovations investigated. When looking at past and current participants, certain features arise that further help distinguishing between the three cases. Figure 8 reports the prevalent gender of participants: while CCs are predominantly "feminine", IKTs mostly involve men. In the case of GASs, the sample is almost balanced, but in overall involving more men.

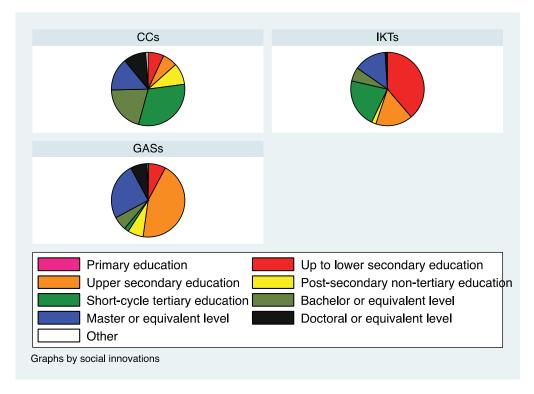
Figure 8 - Gender (left) and age (right) profile of current and past participants, all cases



Source: CRESSI survey data, 2016

As previously mentioned, CCs and IKTs tend to involve mostly people above 50 years old, whereas the participants to GASs have a slightly younger profile.

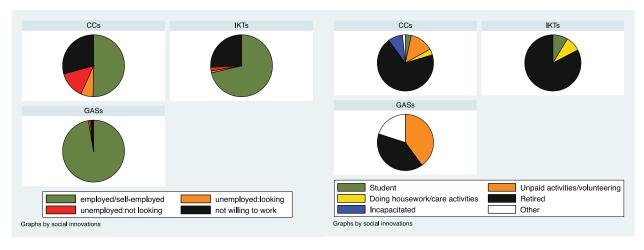
Figure 9 - Educational profile of current and past participants, all cases



Source: CRESSI survey data, 2016

The figure above shows that also the educational profile of participants differs between cases. CCs engage people with high levels of education: more than 75% of participants have at least some sort of tertiary education. Quite different is the case of IKTs and GASs, where some sort of tertiary education characterises less than half of participants, while the prevalent educational level is lower secondary (German case) or upper secondary (Italian case).

Figure 10 - Labour market participation (left) and prevalent type of activity if unemployed (right), current and past participants, all cases



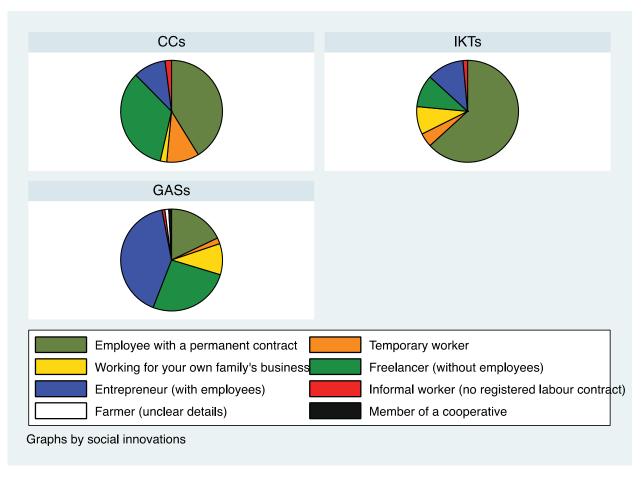
Source: CRESSI survey data, 2016

In line with different age profiles, the share of participants who are currently inactive - or precisely "not having a paid job and not willing to work" - differs between social innovation cases: about one fourth of



participants in CCs and IKTs are inactive, and as the right panel of Figure 10 shows, this segment is mainly composed of retired people. In the case of GASs, the people involved are predominantly active on the labour market either as employees or as autonomous workers. The inactive minority is in part composed of retired persons, in part of people devoting their time to voluntary (unpaid) work. Noteworthy is the larger share of unemployed persons participating in CCs: almost 25%. While some are still looking for a job, many appear to be discouraged: they are not actively looking for a job although being willing to work. Such share of unemployed is much smaller in the other two cases.

Figure 11 - Employment status of current and past participants who are active on the labour market, all cases



Source: CRESSI survey data, 2016

The employment profile of participants can be seen in Figure 11: in the IKTs case, people involved are mainly employees with a permanent contract, for CCs also this represents a large proportion of participants, while in the case of GASs less than 20% are employees with a permanent contract. Self-employment (with or without employees) is a key characteristics of the beneficiaries of GASs: more than two thirds are autonomous workers, while this share is slightly below 50% in the case of CCs and amounts to about 16% in the case of IKTs. Family businesses are more common in GASs and IKTs.

When looking at the amount of hours worked per week, there is a neat difference between beneficiaries of the Italian GASs and those of the other two social innovations: suppliers of GASs declare to be working more than 40 hours a week, on average, whereas the majority of beneficiaries in the other two cases work 20-35 hours (Netherlands) and 35-40 hours (Germany) a week.

CCs **GASs** 4 35.4 35.9 39 20 9 0 Percent 20 - 35 35 - 40 40 - 60 60 - 80 80 - 126 < 20 **IKTs** 4 33.3 30 20.0 20 13.3 13.3 9 0 20 - 35 35 - 40 40 - 60 60 - 80 80 - 126 nr. of hours worked p/week Percent normal hours_worked_p.week Percent

Figure 12 - Declared number of hours worked per week, current and past beneficiaries, all cases

Source: CRESSI survey data, 2016

Graphs by social innovations

Summing up, beneficiaries of the three social innovations investigated differ in terms of demographic and economic characteristics. When asked regarding who the prior beneficiaries of the specific social innovation are (see Table 17), the interviewees tend to be cautious in identifying particular beneficiary groups. For IKTs, the local citizens are overwhelmingly recognized to be the prior beneficiaries, followed by the environment, farmers and the local administration. Interestingly, interviewed people tend not to consider citizens of neighbouring hamlets as beneficiaries of local water improvements.

For the GASs case, the sample population is rather convinced that the prior beneficiaries of this social innovation are the consumers - more than the producers that sell their products to them. About 40% also recognize "the environment" as one of the prior beneficiaries.

In the case of CCs, the sample population identifies all participants and the organizers (the board members) of the complementary currency system as the prior beneficiaries, followed by the entire society and monetary reformers.



Table 17 – Perception regarding the main beneficiaries of the social innovations [In your view, are "see table for inserts" prior beneficiaries of the social innovation?]²⁹

	to a large extent	Total nr of			
		observations			
	IKTs				
Local citizens	92.7%	96			
Farmers	36.6%	82			
Citizens of neighbouring hamlets	4.8%	82			
The environment	74.4%	90			
The local administration	26.2%	84			
	GASs				
Consumers in GASs and their	80.8%				
families		741			
Suppliers of GASs	34.6%	681			
Small producers	46.4%	703			
Special projects of the solidary	14.6%				
economy		632			
The environment	40.3%	637			
CCs					
All participants	69.0%	171			
Organisations/companies	23.3%	150			
Core team members/directors	51.9%	156			
The whole society	45.0%	160			
Monetary reformers and	36.0%				
innovators		153			

Source: CRESSI survey data, 2016

Summing up, the target groups envisaged by the research teams coincide with the perception of the beneficiaries pretty much in the IKTs case, whereas in the CCs case and especially in the GASs case a large segment of the beneficiaries identifies principally the organizers of the social innovation groups as main beneficiaries: in the case of GASs the consumer families, in the case of CCs the core team members.

7. Marginalisation/vulnerability

7.1. Insights from qualitative analysis

In the next paragraphs, a brief account of the opinions of the interviewees about each target group is reported. The goal of this section is to put in evidence if interviewees consider the potential target group of their activities as disadvantaged and what they consider to be the reasons for this. Subsequently, a description of the activities promoted by social innovators with beneficiaries and how they attempt to tackle marginalisation is reported.

7.1.1. Italian case: Solidarity Purchasing Groups

In general, social innovators perceive the target group as disconnected from the traditional food supply chain as long as they refuse (or they are excluded from) the system of GDO (both organic or traditional

²⁹ Reply options were: "not at all"; "to a small extent"; "to some extent"; "to a large extent"; not anymore now"; "I don't know".



supermarkets' chains). More radical groups refuse to accept producers as suppliers if they have any commercial relation outside of the GASs: in certain cases, groups require the new suppliers to compile a form in which they declare through which channels they sell their products and what type of production they have.

However, not all groups perceive beneficiaries as marginalised individuals (only 16 groups out of 35 think of their suppliers as marginalised): even when they think so, not every supplier is perceived as being at risk and the perception often depends on vulnerable biographies (i.e. health problems or disabilities), as the marginalisation is not always automatically related to their position in the food supply chain. If in general the disconnection with the mainstream economy is perceived as a social problem by interviewees (§ 8), only 10 groups consider beneficiaries as a potentially vulnerable group in itself because of their disconnection from the mainstream economy. They usually affirm that their exclusion is not really concrete, as they comment with prompts like "they love to be sorry for themselves", "they are moaners" or "they have a job anyway". Even in the case in which they consider suppliers as marginalised individuals, they don't think that a single group's support is determinant in protecting producers from the descent into vulnerability: it is only the coordinated actions of several GASs that can uplift the situation of a producer and make her stably protected against economic cycles. This has happened in the past for certain producers that were big enough to mobilise the entire community of solidarity purchasing groups. However, such actions are only rarely coordinated as there isn't at the moment a national coordination of the GAS movement (see deliverable 5.1) and it occurs only in the context of a specific mobilisation of the movement for a specific project (but always relying mostly on emergency rescues or pleas from the most popular producers): for example, several interviewees reported the well-known case of Tomasoni factory, saved by a coordinated pre-financing action of the GASs of Northern Italy.

Interviewees claim to tackle the economic marginalisation of producers by offering an alternative end market that offers fair price (as it is bargained in an horizontal relation with final consumers, avoiding intermediaries) and a sustainment in case of any difficulties (i.e. a pre-financing support in case of a bad harvest or any economic downturn) – cited by 1 group. One group claims that they try not to change suppliers too much: when a small producer looses a customer such as a GAS, this fact can have a huge impact on their turn-over thus increasing their possible exposure to risks. The richest contexts (notably: northern cities) are more able to favour this process of economic stabilization as they have a wider spending power, although it has reduced in the most recent years. Plus, the reduction of turnover that has been happening in the financial crisis' period has made GASs even a less reliable end market, as they might be not only volatile in their engagement but also less profitable for producers.

The positive impact of the GASs activities has to be found in the acceptance of the price proposed by producers and the fairness that characterises the prices offered by groups: as long as this acknowledgment is accompanied by a specific request of respecting laws on labour and taxes, they also promote an impact on working conditions that unfold the initial field of activity. The negative impact is a rather paternalistic approach: they usually sustain they helped beneficiaries, but they rarely involve them in the management of the group – with the relevant exception of those GASs in which producers are also consumers at the same time. In one group, this situation occurs because former members have decided to move to the countryside to become farmers and in another group this happens because they have the specific aim of involving beneficiaries in the purchasing of products of other suppliers via their GAS.

In general, groups show a strong conformity of criteria for accepting suppliers (thus displaying no difference between contexts) – which is quite surprising considering the lack of national coordination that the movement suffers. Social innovators have several criteria for accepting beneficiaries into their group as suppliers:

• Suppliers must promote sustainable production (as organic or biodynamic agriculture), although an official certification is not always required.



- All groups are willing to support projects that have a specific social outcome as main objective, as
 for example social cooperatives that employ marginalised individuals. A less severe requirement in
 terms of production activity is required in this last case as groups give priority to social added value.
- Both types of beneficiaries must respect labour and fiscal laws, by avoiding any undeclared activity (no unregistered contracts or black market), although more radical groups are less restrictive in this last point if the social project promoted by the beneficiary under examination is particularly antisystemic (i.e. the case of an occupied factory in Milano, the RimaFlow project).

Groups have several strategies to get in contact with their producers: producers self-propose themselves by email, via website or Facebook, at special events (as farmers' markets or fairs). If a group realises that they are in need of inserting a new type of product, they search through their personal network or via other groups for suppliers producing this type of good, or contact them at fairs or farmers' markets. Contacts between groups and beneficiaries are mostly revolving around commercial activities — especially via mail or telephone. The activities with producers promoted by groups are:

- Presentation events: when a producer is invited to present products during assemblies
- Informative events: when a producer organises an informative session about a specific issue, as detergents or the oranges cultivation
- Visits: groups' members are invited to pass by farms to see how they produce foods and to meet producers in person (referents have especially this task). A special case is when visits are made to check the producers' respect for certain types of sustainable production (i.e. participated certification, in which trust substitutes the third party that should certify the organic production, see institution section)
- Annual parties: organised by producers and to which groups' members are invited

In all these activities, producers are not always the main/ target: informative or social actions involve mostly members, while producers have a mere role as presenters in assemblies or host at their farms.

The main driver of the diffusion of GASs has been Internet and in general ICT technologies. These innovations have increasingly simplified the direct contact between consumers and suppliers, even if the population of beneficiaries might not always be skilled in the use of web-based communication (some of the groups reported that there is a need of extreme patience and human support to maintain relations with some of their producers, who have no access to Internet or difficulties in accessing it). For the internal communications among members and in order to develop the informal networking at local and national levels, mailing lists and websites have also been pivotal.

7.1.2. German case: IKT water management

As noted in 4.2, marginalization is the result of a social process through which personal, social or environmental traits are transformed into actual or potential factors of disadvantage. For the German case, the social processes conducive to marginalization can be described in terms of countervailing societal trends and interests, including³⁰:

The post-WWII trend in Germany (as well as the other EU countries) has been an increased use of fertilizers (Bührer 2001). Likewise, the use of various pesticides has increased in overall by around 75% since the 1970s (Statistisches Jahrbuch 2006). The effect is an increased pressure on groundwater and surface water, and by implication an increased difficulty for local water users to obtain safe drinking water).

³⁰ This reports on trends noted in the interviews.



- An increase in road construction and in more human settlements implies a challenge to designate water protection areas and makes their protection more expensive. Germany in 2014 still had an estimated 74 hectares per day increase in land use for settlements and traffic - as opposed to the 30 hectares per day of the German sustainability strategy (Statisches Bundesamt 2014) which can serve as an indicator for the pressure on soils and water.

In addition there are ambivalent policy responses:

- The nitrate directives and the drinking directive put pressure on water managers to reduce the level of nitrate (and substances) in surface water and drinking water below the respective threshold values. While this serves to protect the quality of water, it also implies a challenge to local water managers as they imply knowledge and skill demands that local water managers are now responsible for. As a result, there is a trend to delegate the responsibility to experts.
- Politicians and administrations might prefer to delegate this responsibility to larger, professional units. For example, local health authorities might not have sufficient staff and skills to effectively control the standards. As a result, the equal consideration of larger versus decentralized water management solutions might fail in practice.
- The inclusion of local water infrastructure in larger networks (connection to distance water, connection to wastewater treatment plants) implies an economic opportunity for planners and the construction industry. Likewise, increased standards imply increased economic opportunities for water professionals. Thus there are also economic interests in favour of more centralized solutions.
- The overall effect of the last three points is a perception of local, decentralized water management as a "niche" solutions at best, perhaps a vestige of the past but not a mainstream solution.

Challenges resulting from these trends and policy responses in the domain of knowledge, information and skills:

- It is both important and challenging to obtain sufficient knowledge about water management, and especially also about water alternatives
- Policy and business preferences at the level of districts/province might imply that information is difficult to obtain or that decisions are made without citizens being fully aware or even against their will (c19, c20).
- The increase in quality standards (and the delegation of responsibility assigned to water managers rather than polluters) implies high demands on local water managers. In addition, as one interviewee pointed out (c28), if villagers increasingly have jobs in towns and cities, they might not have sufficient time to maintain/be present for the local water infrastructure.

The trends and challenges just described pertain to the citizens' initiatives *in hamlets and villages*. In towns with their water works, increased use of fertilizer and pesticides is still a challenge and driver of costs of clean water provision, but in general these organizations are able to employ water professionals that can deal with the complex knowledge and information demands. Interviewees from water works repeatedly made this point that they were worried about the situation in hamlets and villages³¹.

So as to counter this marginalization process in local communities, the IKT since its foundation pursues a participatory strategy: a) peer exchange about water management and experiences with it, b) information of other citizens and communal politicians about the possibilities of alternatives (i.e. decentralized solutions), c) political pressure so that public subsidies for water management can be used for such solutions (IKT 1986). The initiation of the process (and with it "the criterion to involve beneficiaries") is bottom-up: that is citizens

٠

³¹ One worry they face, and the citizens in the town, is the privatization of the freshwater supply (c7)



form an association in their village or contact the IKT for an information or consultation session³². Word of mouth, media coverage and the internet help citizens to find out about the IKT.

In practical terms the first goal (a) includes the provision of a newsletter with information about decentralized water management (IKT Dienst) as well as a homepage, lectures and presentations by IKT board members in the communities, seminars and regular IKT meetings for exchange and discussion of specific cases. According to one interviewee (c11), the key point "is first to get informed, and then to go public with a clear problem understanding and a rough idea of the solution". Part of this problem understanding is an improved knowledge of alternatives and their costs (c27). For this the IKT board also provides consultancy as well as references to experts for the respective field. In parallel, there is a process of group formation that strengthens the respect for those proposing alternatives, once the others notice that they are informed, are part of a larger network etc.

The second process includes the creation of flyers and homepages, writing letters (open letters to the mayor, letters to the editor), walking door-to-door ("I walked 100s of km" said one interviewee, c9) organizing meetings and festivities in the respective community. Whereas the local initiatives will target their local mayors and relevant authorities, the IKT board actively approaches politicians and ministries. While the goal is to be informed, the participation can be controversial: "If we did not get kicked out by the mayor, it was not a good discussion" (c9). Next to political controversy, there is legal controversy in numerous contexts.

The third step in many villages includes the organization of a citizens' referendum. Thus a direct democracy approach is chosen to identify the local democratic will. Citizens have the option to get involved in the definition of goals and priorities. The IKT also encourages its members to take local communal, political responsibility. For example, the founder of one initiative first became council member, then mayor and then leader of his district (Landrat) (c19). If there is a majority for a decentralized solution, citizens will also often take the initiative to create the infrastructure and management of the water themselves. While this democratic participation moment is important, it does not mean that all citizens are all the time active. One interviewee estimated that about 10 percent of the citizens are active.

Bracketing the 8 town-based interviews, out of the remaining 22 interviews, 15 reported "success" in achieving their decentralized supply goals³³, four report partial success (for example they could keep their fountains, but not use the water for drinking purposes), one failed entirely and the remaining ones are ongoing (one case) or the initiatives did not have to go through a phase of political struggle because the infrastructure was already in place, in good quality and there was no external threat so far (2 cases). The interview evidence suggests that the IKT has some success in creating/sustaining a niche for the decentralized approach.

Based on the interviews and related case research, success factors include:

- Timing and early intervention: due to the high investments made when freshwater and wastewater are connected between villages/hamlets, it is unlikely that a decentralized solution still has a chance once the investment has been made into the centralizing solution. As one interviewee put it "Once the channel is there, you cannot do anything anymore" (c29)
- Being informed: water management and water quality are very knowledge-intensive and there is a direct implication for health, a careful discussion and evaluation of alternatives is important for convincing others of alternatives, let alone pass the regulatory requirements.

³² In addition to citizens associations Interessengemeinschaften und Bürgerinitiativen, the following groups also can become full members: communities, water works/town utilities, associations, communal lists and political groups at the local and district level, associations of home fountain owners (http://ikt-bayern.de/verein/satzung/, last accessed 17.06.2016). Next to full members, there are "promoting members" (Fördermitglieder): these can be natural persona and companies. Finally, in the extended network, people receive the IKT news and there is a more loose knowledge exchange.

³³ "Success" in quotation marks as of course a more fine grained analysis in each case will portray a more nuanced pictures.



- Group action: Establishment of a local group (either an association, or dealing with the issue via an existing association). The issue turns from a "lone warrior" issue to one pursued by a group (the one failure did not manage to establish such a group, whereas in the case of partial success such groups no longer exist in three out of four cases)
- One interviewee argued that groups internally needed to collect the competencies (water knowledge, talking to politicians and authorities, technical skills etc.). Another interviewee argued that the distribute tasks in the situation (c27); in practice this group was less successful.

None of these factors are sufficient for success. For example, in one community there is an informed and active association that got involved early on (c27). Yet, they faced a very determined opposition from the mayor and in addition were the victim of "bad luck": The regulatory authorities, which according to this association where determined to stop them from having and restoring their fountains, did a series of stringent tests and discovered Atrazin, an herbicide that is banned in the EU since 2004. This provided a reason for the authorities to outlaw the use of the fountains (even though the probable cause of the pollution are not the fountains owners but a company in the area).

The further impact of successful initiatives, according to the director of the IKT, is to strengthen the local economy – the ownership of the water and associated jobs stay in the community – and to foster political emancipation as well as physical-psychological well-being. Citizens see that "we are not alone in the world with our project, with our water at risk, they see the bigger picture and all of a sudden there is a very different emotion, they wake up, mentally and say: I am well versed in this, they also have an entirely different physical and psychological strength" (c11). On a more negative note, one interviewee (c20) reported that the political process in his community, and the strong initial opposition against his association from the mayor, was very hard for him and his family. They suffered from this, he said.

While this participatory approach in principle also holds for larger communities, towns and cities – incidentally the IKT consulted the Berlin citizens' groups (see the case report in WP 2) - the practical reality of this is less in evidence. Rather, these members of the network seem to play a solidarity role: supporting the smaller communities (as in the example of the Hafenlohr Valley fight), pioneering land use change projects (as in the example of Würzburg, Aschaffenburg, Karlstadt) and thus also providing a potential knowledge base. "Potential", as in practice this base does not yet seem to be used very much by the smaller communities (c6).

7.1.3. Dutch case: complementary currencies

There are 22 social innovators who did not perceive the beneficiaries as marginalized. Some mentioned social exclusion and economic poverty, but in general the social innovators argued that individuals become a member of a CC to change the world. E.g. "people become a member out of idealistic motivation. They want to do something for each other, for nature" (CC40), "the members better fit to CC31 than to other systems" (CC31), and "the group in society [the members] is marginalized because they experience the existing system as unfair and undemocratic" (CC07). In summary, social innovators and members of CCs have an ideological motivation to build together a system based on other values — we might therefore conclude that their cognitive frame is marginalized, i.e. differs from the mainstream economic cognitive frame.

Some social innovators emphasized how hard it is to get in touch with the most marginalized in society, and, secondly, when in touch, to get them actively involved. E.g. CC26 explained that existing members of CCs

³⁴ When asked directly "who" benefits from the social innovation, interviewees might have thought about a person (or a group of persons) and therefore not made explicit reference to "nature". For this reasons results reported here slightly diverge from those presented in Table 17



have different value systems (different cognitive frames) than underprivileged people. According to some social innovators, CCs consist of like-minded people. Paradoxically, this group of like-minded people likes 'to encounter differences' (as shown in the mobile dashboard).

Many social innovators emphasized the social aspect of CCs; according to in particular social innovators in LETSs, the key reason to participate is social, and not economic. By offering a local monetary system and organizing physical meetings "the community spirit" and "social cohesion" improves. Exchanging goods and services with an internal currency and meeting physically with individuals who share the same values (cognitive frame) might be the two main ways in which CCs solve marginalisation. Indirectly some social innovators suggested that CCs enable people to participate and to develop their skills (their capabilities). E.g. interviewee CC31 argued, CCs "encourage some people to become active and stimulate them to offer things or services that are needed."

The research team thinks that to be successful, CCs should have at least 50 active members. Some CC groups are currently too small and have too many inactive members to have a well-functioning exchange system and lively social events. Some social innovators mentioned "decreasing activity" (CC30), "internal problems and quarrels" (CC19), and "we prefer less, but more involved members" (CC40).

According to the research team improved social cohesion and development of capabilities (including improved financial literacy) are the two main impacts of CCs on individuals. Moreover, some CCs improve economic conditions. On a meta-level, the search for a better monetary system is interesting. On-going macro-economic financial instability, financial scams within mainstream financial institution, and many trialand-error experiments might lead to a new, more stable, more social, and more sustainable monetary system. However, Dittmer suggests that "the degrowth movement" should not feed "the hype of local currencies", but also "engage further with the emerging fields of research and activism around government-centred monetary reform, enriching them with its growth critique and vision of a purposive socio-ecological transition (2014: 67)". In line with Dittmer, the research team thinks that one of the main risks of CCs is that members do not participate in the mainstream monetary system (economy) and the debate about the future of this system; in a way there is a risk for members of CCs to get marginalized by only being active in CCs.

Most CCs don't use real criteria outside of the geographical context. Social innovators mentioned often two preconditions: 1) new members have to accept the existing rules of a CC; and 2) access to a computer and internet. Moreover, some CCs focus on entrepreneurs and enterprises (in particular commercial barter networks and regional currencies), others focus mainly only on individuals.

Word-of-mouth marketing is the main way to attract new members. Almost all CCs have a website, use flyers and social media to promote their activities and organize physical (introduction) meetings. Some larger CCs have volunteers working in acquisition, use advertisements in local newspapers, give lectures and participate in local markets. One regional currency in this case study and crypto currencies in general became well-known in the aftermath of the financial crisis of 2007-8. In particular CC02 used free publicity in mainstream media to grow rapidly.

Most CCs encourage their members to become active and participate in the definition of goals and priorities. However, in some CCs the board or the social innovator determines the rules and the goals. LETS are generally very democratic. Regional currencies, time banks, social currencies and commercial barter networks are more centrally organized. Members of CCs generally share many other activities outside the formal organization. E.g. they go together to lectures and conference or participate together in other local initiatives with similar values (cognitive frames) like Transition Towns and Repair Café.

Computers, internet and ICT are important for CCs. After the introduction of Bitcoin (2009) and other crypto currencies technology has become more important.



7.2. Comparative qualitative analysis

When interviewers discussed marginalisation with interviewees, some problems of comprehension arise, as the perception of respondents is that a person is marginalised only in presence of extreme poverty, full-blown social exclusion or serious vulnerabilities/disabilities (as it is evident from reduced consensus towards the category "marginalised groups that participate in the social innovation", see Table 18). The CRESSI definition so far tends to capture not only this extreme marginalisation, but focuses on potential marginalisation that may arise due to alternative viewpoints and practices. Respondents in interviews are therefore sometimes reluctant to define the targets of their activities as marginalised persons. However, interesting enough, marginalisation is not the criteria used by any of CRESSI cases to include beneficiaries in their activities – although in certain groups of GASs and CCs the vulnerability of the persons involved is taken into account.

As shown in table 26, only IKTs are fully aware of the marginalisation of their target group, which is mostly defined in terms of their fight against public authorities that want to impose a change in the way water supply and wastewater treatment is implemented or managed in their localities. Resilience of the community and empowerment of citizens (see table 11) are thus the most important achievements offered by the social innovation. In the case of GASs, the most important factor that affects the marginalisation of suppliers is their difficulty in accessing the traditional food supply or the effects of possible economic downturns that might particularly affect them as they are in general very small or familial enterprises. The sole transversal category is the resistance to the mainstream socio-economic system, although declined in different perspectives among the three cases: in IKTs, it means the struggle against centralization, in GASs the promotion of alternative food production and supply chains and in CCs the sustainment of a different monetary organization and circulation which is not based on the traditional financial-monetary system.

Table 18 – Perception regarding why target groups are marginalised [Do you consider the target group to be disadvantaged within your context? In which sense?]

	IKTs	GASs	CCs
Lack of information	1		
Access to services	5		
Access to market	1	9	
Against mainstream economic system	2	3	3
Against public authorities	16		
Marginalised groups that participated to SI		2	5
Exposed to economic downturn		2	
Total number of groups that defined target			
as marginalised	25	16	8

Source: CRESSI elaborations on qualitative data

The difference in the types of marginalisation is also reflected in how the groups operate in order to reduce the marginalisation of their target group. In IKTs, two are the actions provided by the social innovation: a substantial empowerment of citizens (cited by 8 groups) and enabling the resilience of the community (cited by 10 groups), as to be able to fight against the process of centralisation and privatisation of water management. In the case of CCs, social innovation groups mostly operate by favouring the creation of relations among members (3 groups), eventually allowing the more marginalised individuals for integration into a local community (2 groups). In GASs, as already previously highlighted, the rhetoric of community is not central in the argumentation of interviewees: actions of the groups are mostly oriented at offering an alternative distribution channel to suppliers (17 groups), characterised by solidarity, fair prices and eventually a direct support in case of necessity (5 groups). All these actions occur via individual communications between single referents and the producers, with no intermediate bodies or community that



serve as a collective space of dialogue. Interestingly, several groups affirm that their individual actions are not enough to protect their suppliers from the risk of marginalisation, considering the limited income they are able to get from this channel and the scarce reliability that sometimes characterises groups.

Table 18 – How social innovations address marginalisation in the opinion of social innovators³⁵

	IKTs	GASs	CCs
Change the way people think		1	
Create relations among individuals			3
Direct financial and/or emotional support		5	
Sustainment of alternative economic practices		7	1
Provide a good example	4		
Pressure on political institutions	3		
Empowerment of community	8		1
Favour community resilience	10		
Favour the integration of marginalised people			2
Give visibility and access to market		10	1

Source: CRESSI elaborations on qualitative data

In general, the participation of target groups in the social innovation is problematic. In the IKTs, meetings and councils are organised at community level (in some cases they overlap with the local government meetings), but active involvement in the activities of the social innovation is usually limited to a minority of activated citizens. As the boundaries between those who participate to the social innovation and the target group are blurred, the issue of participation is not as critical as in the other two cases. Especially for GASs, a problem of transparency towards the target group must be seriously taken in account, as almost no supplier is involved in the definition of priorities and goals of the social innovation. In CCs, although full horizontality characterises only a minority of groups, the issue is at stake and problems arise in favouring the participation of the most passive members (which on the contrary are passive on their own choice).

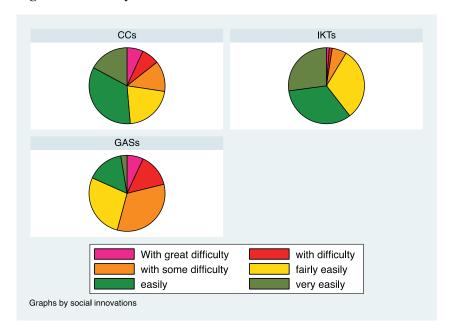
7.3. Comparative quantitative analysis

The data collected through the CRESSI survey allow investigating the subjective opinions and perceptions of beneficiaries regarding their own material conditions. In what follows we report the results collected in the three surveys that comprise beneficiaries of the social innovations and their respective control groups.

³⁵ The categories derive from section 4 of the qualitative template in which social innovators were asked how they tackle the possible marginalisation of target groups and which were the activities carried out by the social innovation as to this regard. The categorisation is made in course of the qualitative analysis by the Italian research team.



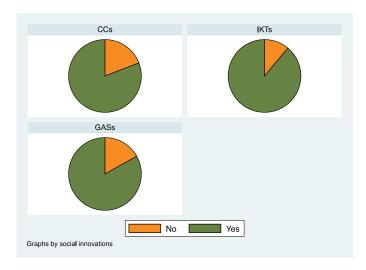
Figure 13 - Ability of beneficiaries to make ends meet with household total income, all cases



Source: CRESSI survey data, 2016

Regarding the potential material deprivation of beneficiaries, the figure above shows how the suppliers of GASs tend to be those most exposed to material deprivation, as more than 50% report having difficulties to different degree with making ends meet with the household total income. This share is half as big in the Dutch sample and below 10% in the German one. On prompting whether the household is able to afford an unexpected expense of 800 euros (Italy)/ 950 euros (Netherlands)/ 952 (Germany), however, the profile of beneficiaries appears as being very similar in terms of vulnerability: between 16% and 21% of respondents declare not to be able to afford such unexpected expense (see Figure 14).

Figure 14 - Ability to afford an unexpected expense, current and past beneficiaries, all cases



Source: CRESSI survey data, 2016

In terms of personal income, differences across the three cases reflect country differentials, but also show pockets of relative poverty among the reference population of CCs: 28.5% declare to have a personal net



monthly income between 900 and 1300 euros. Within the Italian sample population, more than 30% earn a monthly income below 900 euros and 64% earn less than 1700 euros a month. Within the German sample population such proportions are inverted: only 29% earn less than 1700 euros a month, whereas the median income is about 2000 euros monthly (see Figure 15).

CCs GASs 20 20 9 49 30 30 Percent 20 20 18.5 9 9 Personal net monthly income Personal net monthly income Graphs by social innovations Graphs by social innovations IKTs 20 40 30 20 9.8 9 5.3 Personal net monthly income Graphs by social innovations

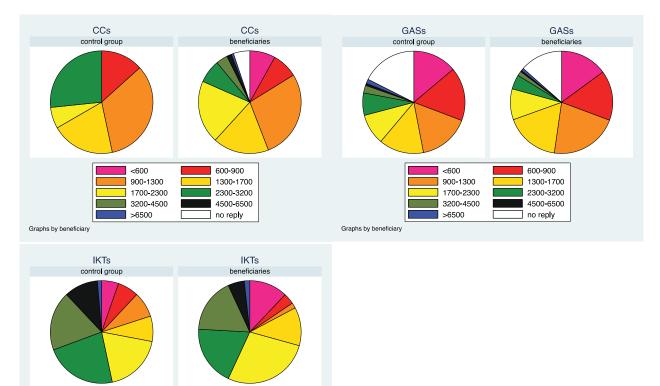
Figure 15 - Declared personal net monthly income, entire sample populations, all cases

Source: CRESSI survey data, 2016

When comparing declared income of beneficiaries with that of their respective control groups, it becomes evident that beneficiaries of social innovations tend to have slightly lower income, but differences are reduced, in overall.



Figure 16 - Differences in declared personal net monthly income, beneficiaries vs. control groups, all cases



Source: CRESSI survey data, 2016

Graphs by beneficiary

<600

900-1300

1700-2300

3200-4500

>6500

600-900

1300-1700

2300-3200

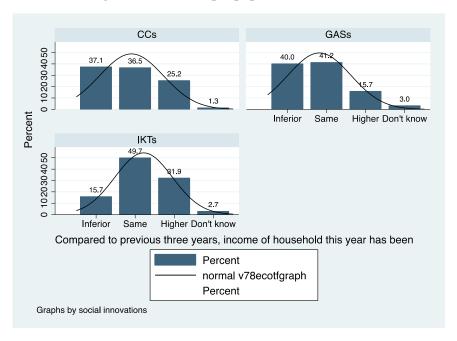
4500-6500

Beneficiaries of GASs tend to have the lowest income profile followed closely by the beneficiaries of CCs. IKTs reference population confirms itself at higher income levels in average, although an important segment of the beneficiaries has monthly income below 600 euros.

In the next figure, it is possible to see how the income situation of the sample populations has changed compared to the previous three years. For CCs and GASs, a large share of respondents declares to be earning less, and a similar amount of interviewees report earning the same. Only for the IKTs case, the replies tend more towards an improvement of income.



Figure 17 - Compared to previous three years, income of the household this year has been "inferior", "same" or "higher", entire sample populations, all cases



Source: CRESSI survey data, 2016

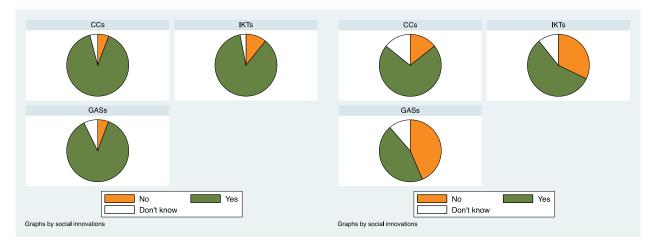
In the next figures, it is possible to see how current beneficiaries think to be personally benefitting from the specific social innovation. Such conviction is much more attenuated for past beneficiaries, on the other hand. Again, people who exited a GAS seem to be particularly negative about the social innovation.

It becomes evident that the social innovations investigated bear some benefit in terms of money to their beneficiaries. Among current GASs beneficiaries it is about 80% that declares to be benefitting to some or to a large extent in terms of money and income. For IKTs, the share of beneficiaries to be benefitting in this sense reaches almost 58%, while it is among CCs that the perceived income benefit is lowest: only 38% declare to be benefitting to some extent and less than 7% to a large extent. However, a larger share declares to be benefitting to a small extent (31%).

Differences in terms of monetary benefits between current and past beneficiaries are not too reliable for CCs and IKTs due to the reduced number of observations, but it seems to be evident that for CCs no big difference can be detected, whereas for IKTs the monetary benefits might have been greater in the past than now. For GASs, differences are not too stark with still about 70% of past beneficiaries declaring to having benefitted to some or to a large extent from selling to the groups.



Figure 18 - Personally benefitting from the social innovation, current (left) and past (right) beneficiaries, all cases



Source: CRESSI survey data, 2016

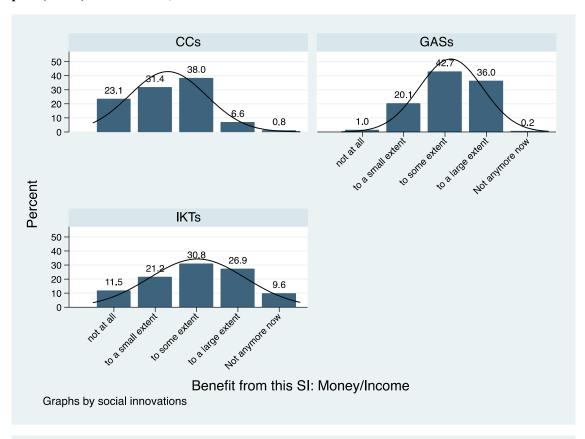
The following figures show which kind of benefits current and past beneficiaries perceive to be gaining or to having gained from participation in the social innovation.

New or stronger friendship seems to be a common benefit that participants in the social innovation experience. As can be seen in Figure 20, a large portion of beneficiaries of each of the three social innovations confirms to having benefitted in terms of friendship at least to some extent. More convinced declarations ("to a large extent") are common among GASs beneficiaries (43%), then among CCs beneficiaries (32%) and least among the beneficiaries of IKTs (24%).

In terms of business relationships, it seems obvious that such benefit is least common among IKTs, while more than 2/3 of GASs beneficiaries report such kind of benefit. For the CCs case, business relationships deriving from the participation in the social innovation also seem to matter, but in a more tenuous way.



Figure 19 - Benefitting from the social innovation in terms of money or income, current (upper) and past (lower) beneficiaries, all cases



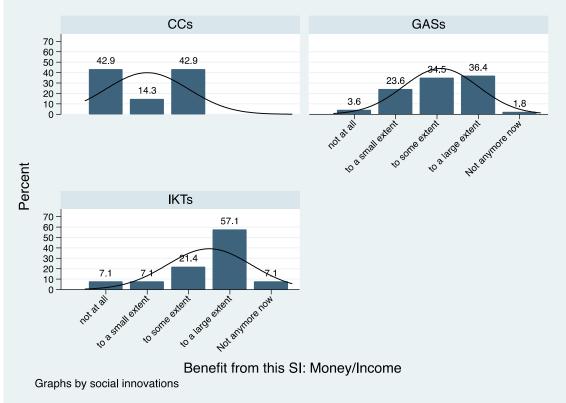


Figure 20 - Benefitting from the social innovation in terms of friendship, current and past beneficiaries, all cases

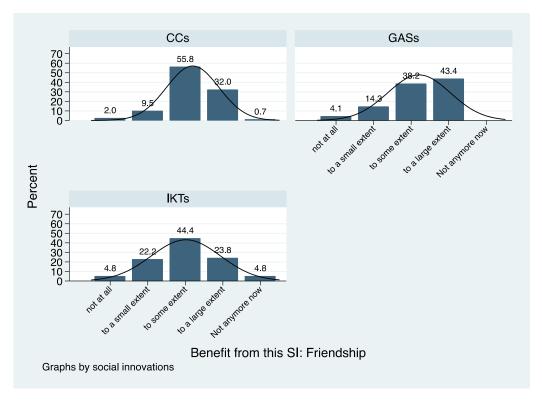
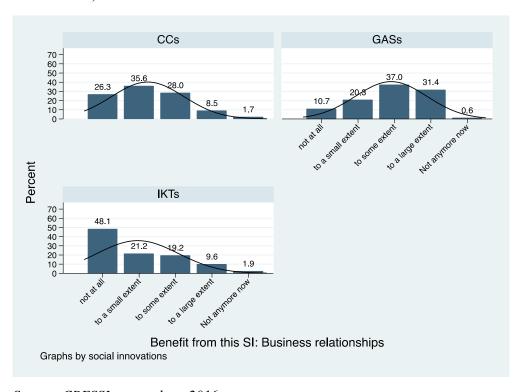


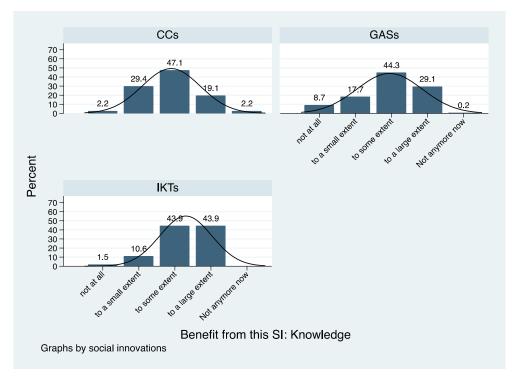
Figure 21 - Benefitting from the social innovation in terms of business relationships, current and past beneficiaries, all cases





Creating Economic Space for Social Innovation

Figure 22 - Benefitting from the social innovation in terms of knowledge, current and past beneficiaries, all cases



Knowledge seems to be a common benefit of participating in a social innovation, too. There is a stark difference however, between the IKTs case and the other two: in the former, knowledge is perceived as a benefit that has been gained "to a large extent" by 44% of beneficiaries. In the other two cases, the distribution of replies centres on the median (implicitly more neutral) value.

Table 19 – Benefitting from the social innovation in other terms: case-specific domains, all cases³⁶

	to a large extent	Total nr of		
		observations		
IKTs				
Local way of managing water	61.5%	52		
Improved empowerment	61.1%	54		
GASs				
Fair prices	47.6%	424		
Possibility to stay on the market	32.7%	413		
CCs				
Social inclusion	12.5%	112		
More employment	8.5%	106		

Source: CRESSI survey data, 2016

Regarding other typologies of benefits (Table 19), responses are least enthusiastic among CCs beneficiaries, to whom the participation in the social innovation does not seem to bring much social inclusion or

³⁶ Reply options were: "not at all"; "to a small extent"; "to some extent"; "to a large extent"; "not anymore now".



employment. For a significant share of GASs beneficiaries, on the other hand, the social innovation represents a key mechanism with which to guarantee the survival of the entrepreneurial activity. Among IKTs beneficiaries, the conviction to be benefitting in terms of the local political goals is rather widespread.

When asked which kind of impact they expect from the social innovation they are participating in, beneficiaries tend to converge on the opinion that social innovations are mainly expected to "change people's mentality". Another rather common perception is that social innovations should redistribute existing resources. Other kinds of impact (see **Table 20**) tend to be case-specific: for the beneficiaries of GASs a major expected impact is the establishment of new business relations and the creation of new or better jobs, while for CCs the establishment of social relationships seems to be much more important, together with the empowerment of individuals. Among beneficiaries of IKTs, it is mainly the pressure on existing institutions that matters, together with group empowerment and the delivery of better public goods.

Table 20 – Expected impacts of the social innovation among beneficiaries, absolute numbers of replies and *column percentages*, all cases

	CCs	GASs	IKTs	Total
Pressure on existing institutions	34	110	64	208
	6.3%	5.6%	31.2%	7.7%
D. List iledian Conidian	83	156	39	278
Redistribution of existing resources	15.5%	7.9%	19.0%	10.2%
Changing people's mentality	131	564	52	747
Changing people's mentanty	24.4%	28.6%	25.4%	27.5%
Establishing new social relationships	101	177	6	284
Establishing new social relationships	18.8%	9.0%	2.9%	10.5%
Establishing new business relationships	23	396	0	419
Establishing new business relationships	4.3%	20.1%	0.0%	15.4%
Availability of navy/battar public goods	13	151	19	183
Availability of new/better public goods	2.4%	7.7%	9.3%	6.7%
Availability of new products/services	22	66	3	91
	4.1%	3.3%	1.5%	3.4%
Empowerment of individuals	85	109	3	197
	15.9%	5.5%	1.5%	7.3%
Empowerment of certain groups	32	66	18	116
	6.0%	3.3%	8.8%	4.3%
More/new jobs	12	177	1	190
More/new jous	2.2%	9.0%	0.5%	7.0%
Total	536	1972	205	2713



Part II.2 - Social forces

As described in detail in other deliverables of the CRESSI project (e.g. D.1.1; D.1.3; D.3.5), social forces are institutions, networks and cognitive frames, which exist in the contexts in which social innovation processes take place (see also section 3). Social forces are potential facilitators - or obstacles - to social innovations. Their complex interdependence is difficult to disentangle, yet thanks to a dedicated focus to them during the data collection we hope to identify particularly relevant factors and their respective role for the investigated cases.

8. Cognitive frames

8.1. Insights from qualitative analysis

In the following paragraphs, a detailed account of the cognitive frames (Beckert, 2010) proposed by the interviewees is reported. Cognitive frames (see section 1.2.4) here are considered with respect to those beliefs, values and ways of thinking that drive social innovations, influencing their activities and orienting their development, sometimes representing facilitators, sometimes representing obstacles to them.

Interviewees were asked about the influence of their cognitive frames on the activities of their groups, if they think they were diffuse in the context in which they operate and to what extent the same ideas are shared with beneficiaries and with the actors belonging to the social innovation's network.

8.1.1. Italian case: Solidarity Purchasing Groups

The GASs movement has developed a strong and coherent discourse, which is persistent across different groups. Two main discourses can be identified: one promotes the practical goal of accessing more healthy food and to have a healthier nutrition, and the other represents a more ideological position that criticises the current economic system of food production. The two strands are interconnected: the access to food, which was the first that sustained the birth of the movement, was progressively substituted by the second, since the access to organic and locally produced food was made easier by the emergence of similar initiatives such as organic departments in supermarkets, organic stores or farmers' markets.

The more practical aim of accessing food is composed of two discourses being (i) the preference for organic and healthy food and (ii) the preservation of local productions, which are often at odds: some interviewees reported this contradiction especially in the area of bigger cities, as the closer belt of agricultural production has been in the past contaminated by industrial production and in the present by pollution. Groups divide themselves on the basis of this preference: in general, a priority on local production has to be found in groups from the southern areas of the country, while certified organic food is preferred in the most affluent areas. That is also due to the spending capacity of GASs members that changes in relation with the economic disparities within the country: certified organic food is more expensive as the farms have to sustain the costs of certification.

The criticism on the traditional economic system has in origin mostly revolved around the opposition towards the GDO, in general identified by supermarkets. Groups accused the system of unfair treatment of their suppliers, of an indirect promotion of unsustainable production such as industrial agriculture and intensive farming, of favouring the lowest price instead of local products. Some groups also affirm that supermarkets favour an unleashed consumerism, as sales and special offers induce people in buying more



food than they need for their sustainment thus being responsible of the increasing diffusion of squandering that affects western societies. A second critical element of the GDO is the price, which is seen as the main discriminant to identify a member of the social innovation: those who belong to a GAS don't look at the price when they buy a product, while the "normal" GDO consumer is attracted mostly by special offers or sales – this is in the opinion of interviewees of course. This is of course quite a barrier for the low income and lowest education strata of the population, who are not always able to access the costly food supplied via GASs. Seeing it positively, the critical consumption favours the dimension of solidarity, which is mostly expressed in sustaining specific suppliers that meet specific ethical principles, as environmental- and workers-friendly productions. So, at the end cognitive frames impacted on the activities mostly in the selection criteria of producers, that have to fulfil the requests of consumers in terms of environmental friendly methods of production, respect for tax and labour legislation, short production chain.

In general, cognitive frames are shared with beneficiaries and members of the SI network although it is something that is usually taken for granted (the usual argumentation is "if they collaborate with us they must share the principles of the solidarity economy"). However, it is the impression of the interviewer that deviant mentalities are not encouraged. An interesting episode in this regard concerns a very old GASs supplier. This farmer has been one of the most popular producers of apples and juices among the groups until he decided to candidate in its local community for Lega Nord (an extreme right wing and populist party, quite strong at local level in certain areas of Northern Italy). This has created a wide debate among groups and a part of them has decided to freeze any commercial contact with him – a form of boycott, as this producer has not anymore been perceived in line with the principles of solidarity economy promoted by groups, given the anti-immigrants ideology claimed at national level by the Lega Nord party (although this might not be the individual case regarding environmental issues, as the farmer still respects the principles of organic production and none reported of migrants/workers' exploitation in his production).

Some of the most active groups do organise informative meetings with the general public through seminars or public events (as country fairs/festivals or farmers' markets), however the interest towards the general community's audience is limited. These activities remain sporadic and rely mostly on the volunteering of active members.

8.1.2. German case: IKT water management

The shared meanings and narratives within the IKT network can be clustered in three major, interrelated themes. "Cluster" means that, according to this interpretation, there is an apparent similarity of views around these themes, even if they differ in the details, particular features and expressions. They are not explicit theories nor fully spelled out ideologies. They are most widely disseminated in the network via the *IKT Dienst* and the numerous presentations of the IKT board locally; the interviews suggest a relatively good fit of this "dominating voice" with the views of the interviewees locally.

A first cognitive frame that is widely shared across the interviews concerns the sustainable management of water as an ecological-cultural task. The aspects that are linked to this are expressed clearly by one interviewee (c23): the local water is in principle of good quality and sufficiently available, letting it locally flow to us is therefore the most "natural" solution that should not be changed without a strong reason. Other interviewees stress that good quality water means that water is not treated – chlorine in the example (c21) – another one that the goal is to provide water as naturally as possible, and therefore with as little additions or pollutants as possible (c2). "Natural", however here includes the cultural: the same interviewee emphasized the achievement of the ancestors to have built the local infrastructure to have a communal water supply, and that this should be preserved. "We really appreciate what people achieved then [referring to the last big local infrastructure effort in 1911]; and this was one motivation for us to continue".



A practical upshot of this frame is the need to ensure that there are water protection areas and that in the watershed more generally water is not polluted by agriculture, industry or domestic uses. The IKT has found a slogan in line with this frame: "Water protection starts at the doorstep". It has also formulated a policy demand in accordance with it: "flächendeckender Grundwasserschutz", that is "area-covering groundwater protection", which made it into official Bavarian politics in the late 1980s. Where this is not sufficient, it demands "environmentally friendly technology for drinking water treatment".

A second cognitive frame frequently expressed in interviews asserts independence/self-responsibility in local water management. In relation to institutional rules and its actors, interviewees say that you need to use your own mind to use the law and to challenge politicians, lawyers and judges if need be (c21). Another interviewee (c27) said that "rules are there for people, not the other way round . . . There are rules that are made to benefit people, and there are rules that are there to cudgel the people, and here I am of the opinion that we do not necessarily have to follow such rules". It is the communal-self responsibility of citizens to claim their independence. Several interviewees also invoked the principle of subsidiarity. For some interviewees, this cognitive frame comes along with an affirmation and a certain enjoyment of dispute (c9 and c14), others stress a more technical, pragmatist approach of finding solutions within the community (c17).

An important practical aspect of this is a commitment to volunteering in self-organization and civic action (organizing public meetings, petitions, referenda etc.). For IKT director, the main maxim is: Take care! The slogan is asserted against a spirit of delegating issues to others. A related political slogan used by IKT members is "Election day is payday" and with it a commitment to assume political responsibility in the community. A technical implication of this frame is a preference for decentralized technologies that can be locally owned and locally controlled. As far as its policy goals are concerned, the IKT demands the preservation of communal drinking water supply, decentralized wastewater treatment in the rural area, an end to the priority given to "distance water" and centralized connection by authorities and planners and "practical and effective laws for the protection of water".

A third cognitive frame concerns frugality/thriftiness and strengthening of the local economy. Interviewees from local initiatives emphasize that their local solutions are cheaper than those involving connection to centralized systems. They argue that they save the government money, and therefore ultimately the taxpayers (not surprisingly one initiative was therefore recommended by the German tax payer association). But it is not just saving the money, it is also investing the money and working locally: wealth, jobs and competencies stay within the community.

The IKT network has captured this frame via the slogan "Don't sell the family jewels" – water and its management is framed as a local treasure that should be locally owned and managed. Accordingly, the IKT lobbies for equal treatment (and equal subsidies) for decentralized solutions, and consults communities to better understand water management plans. Further aspects of this frugality theme are the recognition that farmers should be fairly compensated, if they make special efforts to protect drinking water, and that domestic water use should also be frugal.

For some interviewees, and especially in the IKT leadership, the three frames just introduced are linked to an opposition to economic growth policy (c15 and c11) that on this view only increases public debt, benefits a few but is neither long-term sustainable nor beneficial for local citizens. Another interviewee refers to "predatory capitalism that dominates much of the world, including how people interact (c10). A practical instantiation of this is the difficulty of having volunteer work recognized as volunteer work by other citizens and the authorities (c22 and c28). Side themes of this opposition to the current political economy is a security argument advanced by one interviewee (local freshwater supply is safer in the face of a collapse or a terrorist attack on the central systems, c26) as well as the emphasis that there is a need to detect risks and dangers early on and name them as such (c11).



A political discourse that is partly related to the critique of current capitalism is the frame of "us" against "them", where "us" is the local citizen, the "ordinary man on the street" and "they" the political-economic elite. This opposition to an unjust and non-transparent "system" is somewhat ambivalent: it can articulate a sense of village or town democracy (c9), but at least in one interview there was also a sense that the opposition to established politics also overlaps with more populist, nationalist political views (c14).

Noteworthy, there is finally a possibly self-enforcing cognitive frame of "we can do it" and pragmatic pioneering. One interviewee presented his communities with pride as "pioneers" (c29), another interviewee used the same language (c30) and quoted the proverb: "Somebody has to start... even the longest way starts with a first step". A third one asserted the model character and said: "There is nothing, where we would not find a solution" (c24). In short, at least in some communities there is a frame of "pragmatic solutionism", for technical matters and political obstacles, coupled with a sense of humour: "Even a small pin can move a big butt" (c9).

The first three themes are shared widely across citizens' initiatives in the rural context but also resonant with municipal water suppliers, which all emphasize sustainable, communal water supply under the ownership and control of the municipality. In the light of the political controversies in the rural area and the relative ease of the municipalities, an analytical distinction could be made between "exposed" and "buried" cognitive frames: in the local contexts, the cognitive frames are frequently a "burning issue" whereas in the municipal water works they have to be uncovered.

The first three frames are (in their internal variation) widely shared across citizens' initiatives, whether they are also shared among the village beneficiaries more generally is difficult to tell on the basis of interviews with active initiative participants only. One interviewee (c8) argued that independence, subsidiarity and decentralization are not widely shared due to an insufficient insight that everyone has to contribute, even if this might mean some personal disadvantage. Drawing on the energy transition as an analogy, the interviewee argued that everyone wants the energy transition but no one a windmill in their own backyard. Consistent with this, another interviewee stressed process (c11): first the other citizens have to learn about the alternative and come to take it seriously (i.e. not as the view of some ridiculous outsiders), then they can come to appreciate or even share the frame. Empirical evidence for this point could be drawn from the numerous local referenda won by the citizens' initiatives.

8.1.3. Dutch case: complementary currencies

The shared cognitive frames within CCs can be clustered in three major, interrelated themes. Like in the German case "Cluster" means that, according to this interpretation, there is an apparent similarity of views around these themes, even if they differ in the details, particular features and expressions. They are not explicit theories nor fully spelled out ideologies.

A first cognitive frame that is widely shared across the interviewees (20 references in 30 interviews) concerns (the lack of) social cohesion. According to the social innovators, in our society social cohesion, social interaction, social contact and solidarity are at risk and CCs oppose this process by bringing people in contact with each other locally. This leads to involvement and mutual assistance. E.g. social innovator CC26 argued that improving social contacts "is the most important motivation for a lot of participants." Social innovator CC05, one of the initiators of the first LETS in the Netherlands, explained that CCs want to make the economy more social. E.g. "Our aim is to bring into circulation another kind of money. We want to introduce money that doesn't listen to the laws of financial markets, but money that supports the objectives of the users," and, "The deeper background is that we think the economy is about specialisation and a form of a collaboration. We want to solve the competition for scarce money." Over time most LETSs moved gradually from focusing on local economic exchange towards focusing on social aspects. Social innovators



in LETSs currently attempt "to foster participation in the neighbourhood" (CC01), "to get people out of isolation" (CC19) and "to encourage social contact" (CC25).

A second cognitive frame that is widely shared across the interviewees (16 references in 30 interviews) concerns 'an alternative economic system'. Many social innovators called the currently dominating system unfair. E.g. social innovator CC07 argued that most members "experience the existing system as unfair an undemocratic", and social innovator CC09 stated, "Maybe it isn't a good idea to put money in the hands of commercial parties, maybe it is also unfair." According to social innovator CC08, "The big disease of our time and the core value of capitalism is making money with money," and "The current monetary system is the a-social factor in society." In the view of social innovator CC02 the current focus is mainly on "making more money as quick as possible". CC02 has therefor two aims: 1) to support small entrepreneurs by offering "a second wallet"; and 2) "to show people at a meta level that we can deal completely different with money, money creation and the organization of money". Interviewee CC11 emphasized that "Time banks are not capitalism," because Time banks "have a fixed price." Social innovator CC02, "In my view our city is a starting point, because we have a problem on the scale of north-west Europe, e.g. our monetary system can't deal with a stationary economy. This is not only a problem of my city but of northwest Europe." In the aftermath of the financial crisis of 2007-8 crypto currencies emerged. The social innovators in these CCs are generally looking for more radical change. Social innovator CC07 emphasizes, "Originally, CC07 was very anti euro. The students wanted to offer an alternative for the debt based euro system." According to social innovator CC09, "Bitcoin can bring power over money and payments back to people."

A third cognitive frame that is widely shared across the interviewees (16 references in 30 interviews) concerns sustainability. According to the social innovators the current economic system contributes to environmental degradation, waste and climate change. In their view, we have to decrease our ecological footprint and CCs help to reach this aim by stimulating reusing, repairing and consuming locally. They consider another monetary system as a solution for these environmental (and other societal) problems. E.g. social innovator CC02 clearly explained that the aim of CC02 is to connect money to the large transitions in society like the transition towards sustainable energy, the transition to less inequality, and the transition of vacant real estate; e.g. "We are practicing and attempting to connect money to the larger transitions in society". Also other social innovators connected CCs to larger economic, societal and environmental problems. E.g. social innovator CC10, "An increasing number of people understand the added value of CC10. It is a process, a shift. It is about thinking differently. . . . it must change. We face many huge problems like climate change. At one moment a majority will see that we have to change. This is exactly the same with money."

There appears to be a difference between older LETS systems, and relatively new CCs, in particular regional currencies (also called transition currencies) and crypto currencies. The social innovators involved in the first are mostly older and present their CC as complementary and emphasize the social aspects. The members are idealistic, interested in (solving) environmental issues, quite often female and 'alternative'. E.g. according to social innovator CC22 the members are "idealistic minded and relatively highly educated people who do not want to consume too much or even want to consume less (consuminderen in Dutch)". Many of the social innovators in the first group mentioned similar local grass-root initiatives as Transition Towns, repair cafés, local markets, biological agriculture, biological restaurants, second hand shops, alternative healthcare, yoga, and sharing. These initiatives also strive for a more sustainable, social and local economic system. The social innovators involved in the second group presented their CC more often as a serious alternative for the mainstream (euro) monetary system. E.g. social innovator CC08 argued that members participate because they have a lack of money, want more turnover, and dislike commercial banks, and social innovator CC09 argued, "Our long-term objective is to have the possibility to pay all daily expenses with Bitcoin in our city. At the moment this is already the case. I even paid my rent with Bitcoins." Social innovator CC02 decided to stop studying the functioning of the existing monetary system and to start acting: "we need diversity in the



monetary system 'till we have a better system. Let's start here". The Time Bank in this case study attracts younger people. Social innovator CC11 describes time banks' members as "often member of the international community", "relatively highly educated", "the average age is around 30; we would like to have more older members", and "a lot of creative persons, students and people who like to try new things".

Most CCs actively use their cognitive frames in their communication (e.g. flyers, website, and talks). Social innovators and members generally share the same cognitive frames. Shared values foster social cohesion and community spirit, but inhibit individuals with other cognitive frames like the most-marginalized to participate. There are 12 social innovators that emphasized that their CC is a very independent organization. Non-profit organization STRO and Qoin, but also other (local) NGOs have played a role in the foundation of most CCs. These organizations generally share the same cognitive frames.

8.2. Comparative qualitative analysis

Cognitive frames are difficult to categorize and to compare, in general, as they often comprise different areas of life requiring different types of consequent behaviour in a range of life domains. During the Focus Groups it clearly emerged that concepts such as "sustainability" or "frugality" or "alternative systems" imply economic, political and cultural actions and often also implicitly refer to the environment, technology and the environment. In a rather tentative way, however, Table 21 tries to group the mentioned cognitive frames according to the domains of the NACEMP model, which is part of the CRESSI conceptual framework. Such tentative analysis suggests that the three case studies differ in the prominence they give to different domains in their activities. In IKTs, the cognitive frames mentioned in interviews prevalently refer to the political domain, followed by the protection and promotion of alternative cultural views. GASs and CCs interviewees on the other hand show a different attitude by mainly referring to the creation of new social relations, but also to the promotion of a change in the economic system, which is not as relevant for IKTs groups.

Table 21 – Main domains of cognitive frames mentioned in qualitative interviews, all cases

	IKTs	GASs	CCs
Natural	9	31	6
Artefactual / Technological	6	0	11
Cultural	18	5	7
Economic	7	24	15
Security-related	3	7	0
Political	24	2	5
Empowerment of individuals	6	7	5
Empowerment of social relations	5	28	30
Sustainability for the future	4	7	10

Source: CRESSI elaborations on qualitative data

Both for CCs and GASs, the interviewees mention diffuse sharing of ideas with their target groups, in respectively 23 and 24 contexts. Such explicit mentioning is not as frequent among IKTs, but in their case the sharing of ideas within the overall network is easier as groups are all members of one network, which transmits ideas, beliefs and political positioning via its network meetings, newsletter and homepage. In the other two cases, the situation is fragmented as their overall network is extremely dispersed at the local level, comprising very different types of actors. Especially for GASs, some of the actors participating in their network are there for logistic and instrumental reasons; it is not always required to share and discuss beliefs and values with them.

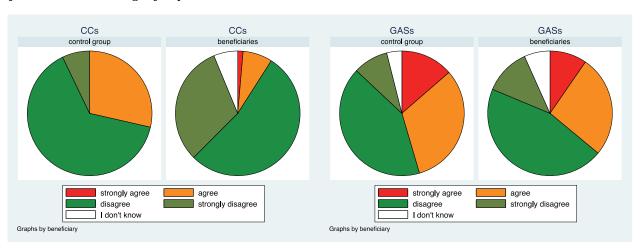


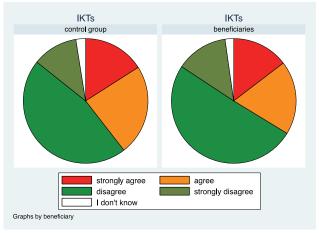
8.3. Comparative quantitative analysis

The CRESSI survey data allow to partially check which cognitive frames are prevalent among the beneficiaries of the social innovations and in which way they differ from their respective control groups. In what follows the findings on selected cognitive frames - most of them extrapolated from the qualitative research phase - are reported.

Figure 23 compares replies of beneficiaries and their respective control groups to a standard question used to verify risk aversion: "One should not start a business if there is a risk it might fail". As can be seen from the pie charts, beneficiaries of social innovations tend to consistently be slightly more prone to take on risks. In the Dutch case (CCs) the difference between beneficiaries and the control group is stark, while it is less in the other two cases. When comparing across the three case studies, we may notice the greatest risk aversion in the Italian sample, followed suit by the German sample and then the Dutch one.

Figure 23 - Risk aversion of beneficiaries and control groups, all cases [One should not start a business if there is a risk it might fail]





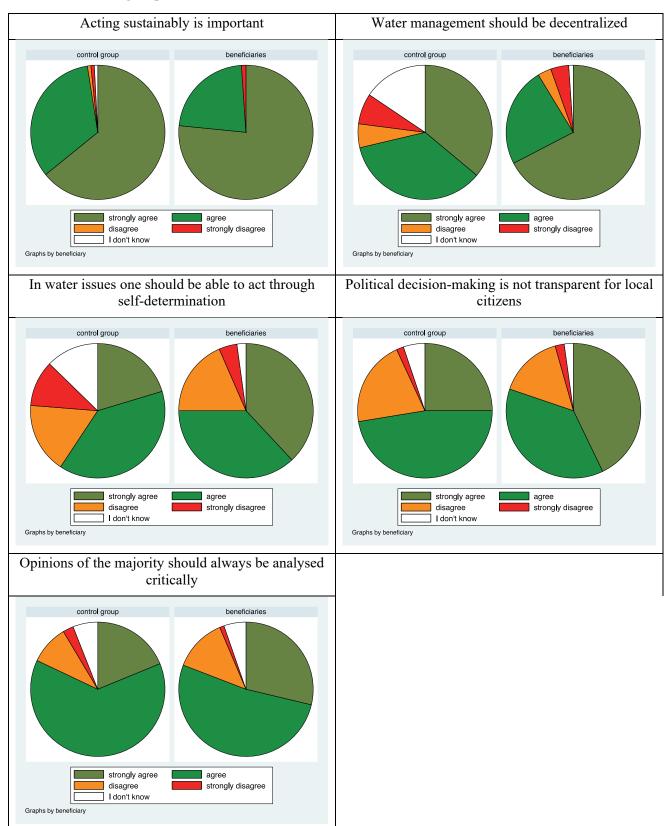
Source: CRESSI survey data, 2016

To guarantee relevance of the investigated cognitive frames for the specific social innovations analysed, the remaining mind-frames have been derived from the qualitative research phase. The following figures group case-specific cognitive frames and compare the response patterns of beneficiaries with the ones of their respective control group. As can be seen in Figure 24, the beneficiaries of the IKTs case tend to feel more strongly for the political ideals that the social innovation defends: sustainability, decentralization, self-determination and transparency of political decision-making are all more vehemently agreed to by



beneficiaries. Yet, it also appears evident that such values are also rather widespread among the control group, where the degree of adherence is often just slightly inferior.

Figure 24 - Adherence to specific cognitive frames, comparison between social innovation beneficiaries and their control group, IKTs case





For the Italian GASs case, the beneficiaries of GASs tend to be more convinced of the ideals defended by the Solidarity Purchasing Groups, but in some cases the response pattern between beneficiaries and their control group is identical. For example, it is obvious that throughout the sample population there is widespread agreement that "buying at the supermarket" affects consumption patterns in a negative way and that the consumption of locally produced food should be preferred. In a similar fashion, both groups agree on the need to reduce wastage and the pressure on finite sources of the planet. The biggest differentials in opinions can be found in the particular values defended by GASs groups, indeed: that organic food is more healthy and respectful of the environment and that products coming from social cooperatives enshrine a solidarity-based value-added which justifies higher costs of such products. Regarding these two opinions the control group is more cautious and adheres with less enthusiasm, although its majority still agrees to some extent.

In the Dutch case of Complementary Currencies, the major difference that can be noted between beneficiaries and the control group is a sort of "agnosticism" or indifference for the values defended by the social innovation. Most likely, the formulation of the cognitive frames - referring directly to the social innovation - facilitated an indifferent attitude by those not directly being involved. Due to a limited number of observations of the control group, comparisons should be made with caution.

In Figure 26, it is possible to see that equality and sustainability are highly diffused values among the sample population, whereas the attention to the resilience of the monetary system is much more specific to the group of social innovation beneficiaries.

To go beyond the mere statement-nature of cognitive frames as analysed so far, the following paragraphs investigate specific behaviours that are connected to the values previously investigated. Given the previously stated risk aversion (see Figure 23), do people act accordingly? Figure 27 reports the replies of beneficiaries and their control groups regarding the extent to which they "don't worry that their enterprise might fail".



Figure 25 - Adherence to specific cognitive frames, comparison between social innovation beneficiaries and their control group, GASs case

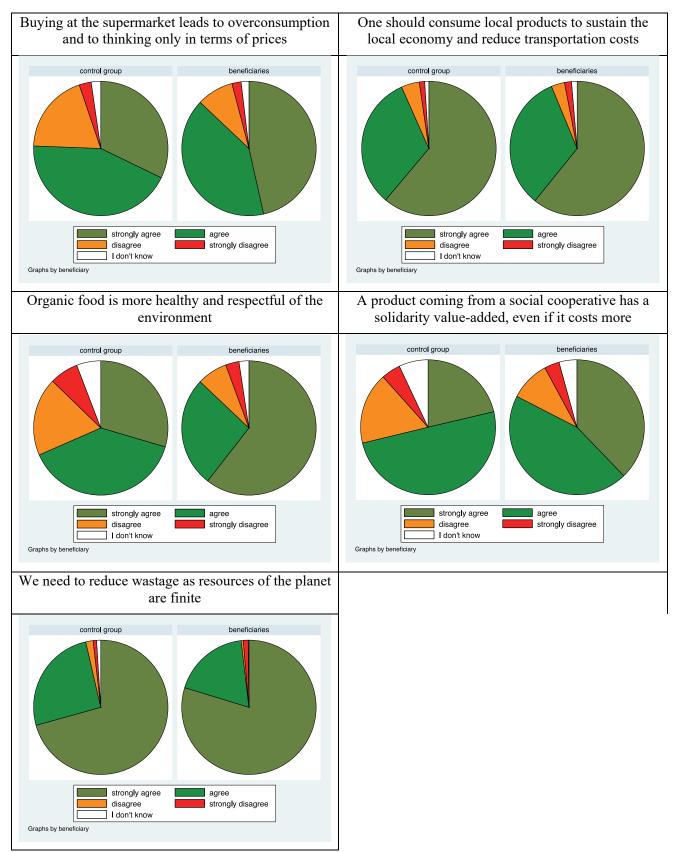




Figure 26 - Adherence to specific cognitive frames, comparison between social innovation beneficiaries and their control group, CCs case

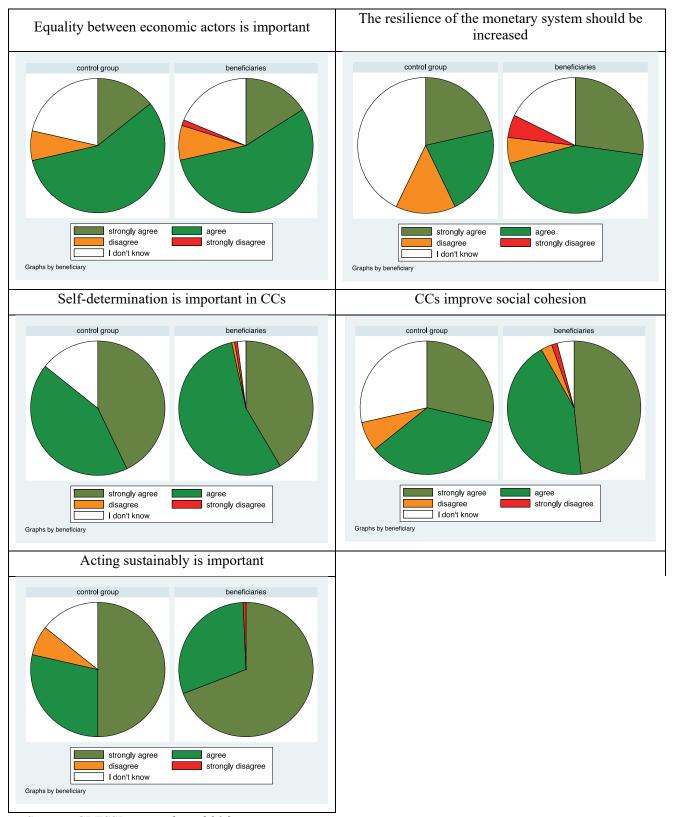
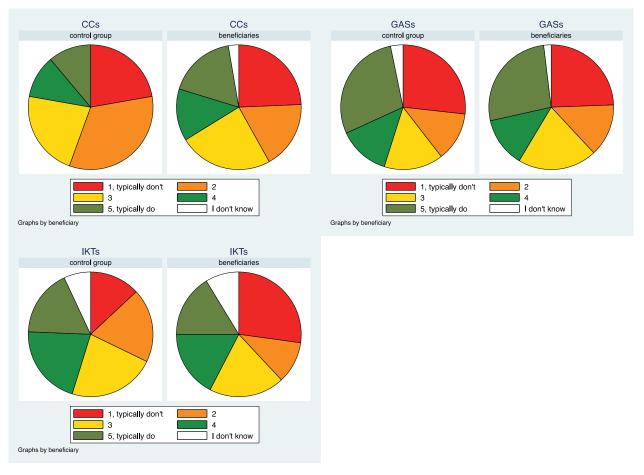


Figure 27 - Extent to which beneficiaries and their control groups do not worry about enterprise failure, all cases [I don't worry that my enterprise might fail]



Source: CRESSI survey data, 2016

Figure 27 depicts in red and orange those segments of the sample that do worry about enterprise failure. As can be seen, there is no difference in terms of this behaviour between beneficiaries and the control groups of GASs, and the difference is minor for the IKTs case. In the Dutch case, the control group worries more. Interestingly, the replying pattern of social innovation beneficiaries is rather similar across the three case studies.

As can be seen from the next figure, there are some differences between IKT beneficiaries and their control group for what concerns their behaviours: both tend to "save water" to similar extents, but beneficiaries are more likely to apprehend technical aspects of water management and to make decisions within IKTs - as could be expected. The most interesting difference however can be seen in their inclination to "raise their voice in meetings" and to "reflect critically": Beneficiaries seem particularly more inclined to actively participate in meetings and to request information, they also are more convinced to be thinking in a critical way.



Figure 28 - Extent to which certain behaviours are assumed, comparison between social innovation beneficiaries and their control group, IKTs case

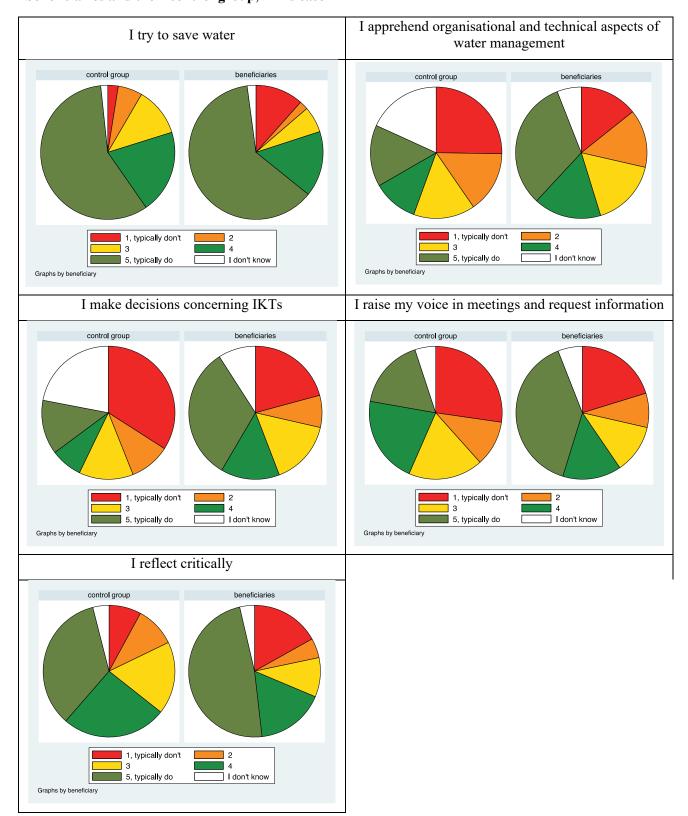




Figure 29 - Extent to which certain behaviours are assumed, comparison between social innovation beneficiaries and their control group, GASs case

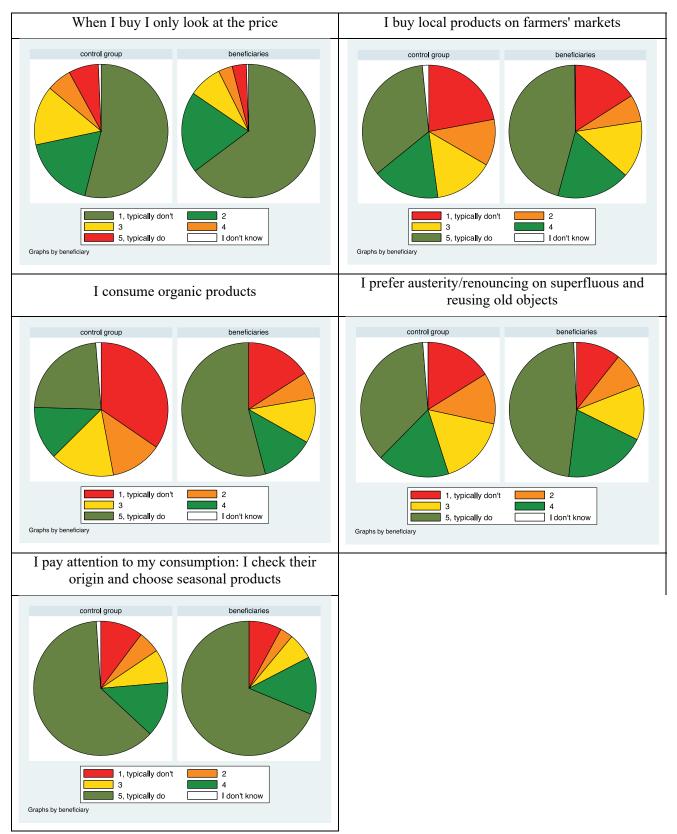




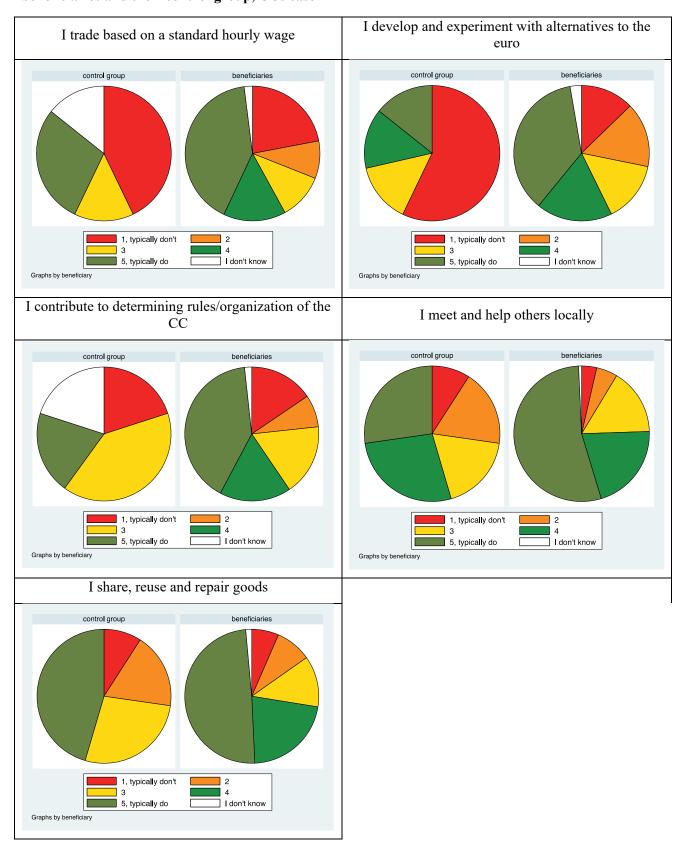
Figure 29 shows segments in green when the behaviour tends to correspond to GASs values, in red when they distance from such ideals. GASs beneficiaries tend to look less at the price when they consume a food item, they go more to farmers markets, more often renounce on the superfluous and reuse old objects and pay slightly more attention to consuming seasonal products. While all of these behaviours are rather widespread among both, beneficiaries and their control group a clear difference can be noted regarding the tendency to consume organic products, which is much more common among GASs beneficiaries.

In Figure 30 the same exercise is applied to the beneficiaries of CCs and their control group. Rather obviously, the control group reports a reduced tendency to engage into the activities typical of CCs: trading with a standard hourly wage - which implies that one work hour of a lawyer "costs" as much as one work hour of a physiotherapist, etc.; they develop and experiment more with alternatives to the euro - as can be seen from the green segments of the pie charts which represent behaviours more in line with typical CC values. Beneficiaries of CCs tend to be also more inclined to help others within their close environment and to fee into its social life. Furthermore, beneficiaries tend also to recycle and to reuse old objects more, therefore enshrining a more sustainable and less consumption-oriented attitude in general.

Summing up, control groups and beneficiaries tend to be comparable in terms of cognitive frames and attached behaviours, but there seems to be a positive correlation between the idiosyncratic values defended by the social innovation and the attitudes and mind-frames of their beneficiaries. In general the data gathered seem to confirm that social innovation beneficiaries are slightly more responsible or caring for niche-issues than their respective control groups.



Figure 30 - Extent to which certain behaviours are assumed, comparison between social innovation beneficiaries and their control group, CCs case





9. Networks

9.1. Insights from qualitative analysis

In the following sections, our focus shifts on the networks within which the social innovations take place. Networks are the second pillar of the Beckert's "social grid" in which the social forces interact with each other (Beckert, 2010). What are the actors that allow the activities of the social innovation to take place? How do the networks of social innovations look like?

Such kind of information on typologies of involved actors, the frequencies of contacts and their relative role in the life-cycle of the social innovation have been gathered via both, the pre-qualitative questionnaire and the qualitative interview (see section 3). We also focused on the types of activities shared among the network's actors and the role of public institutions within them.

9.1.1. Italian case: Solidarity Purchasing Groups

One of the main strong points of the GASs movement is to be found in the capacity to build up a network of local groups, which is geographically dispersed and extremely adaptable to each context. The main collaboration networks of GASs are to be found in the lively bottom-up associative environment that characterises Italian society at the local level. The partners coming from civil society associations are extremely various and they do in fact mirror the great variability within the GASs environment: environmental movements, catholic organisations (local parishes, missionary groups, groups for the promotion of families and vulnerable youth) and local approaches to cultural promotion or social integration.

Another factor that favours the dimension of the national network is connected to the fact that GASs tend to prefer to multiply the numbers of their groups instead of promoting groups of larger dimensions. One of the reasons is connected to the minimum thresholds by which a GAS can have difficulties in operating only with volunteer activities: this is usually considered to be more than 10 families to sustain the cost of periodic shipping, while over 50 families represent an increasingly complicated size for volunteers to manage the volumes of products. The process of *gemmation* – as they call it – has favoured the creation of bottom-up networks as offspring groups, which however usually maintain closer relations with their "mother" GAS. Yet, it is interesting to note how groups report that they have few relations with (i) other GASs, which are active in the same localities and only partially with (ii) intermediate level organisms such as DES (District of Solidarity Economy).

Although the main aim of GASs is to create a direct relationship with producers, which should result in their empowerment, only a couple of GASs in our sample have succeeded in having strong and systematic partnerships with producers or associations of producers, while the rest is mostly limited to the usual one-to-one commercial exchange that characterises the relation between GASs and their suppliers (mediated by the referent of GASs groups, see section 5.1.1). Some of the biggest groups rely on supporting companies such as social cooperatives for the service of shipping, receiving and distributing goods. In some cases, the same function is provided by the fair trade shops' network: especially in the smallest towns, volunteers from fair trade shops and GASs activists overlap.

In general, they share informative activities with their network partners in the case of cultural associations or logistic activities in the case of other groups, as shared shipping for durable products. No political societies are to be found in GASs networks and the single groups only rarely establish a systematic collaboration with public bodies (with the exclusion of political organs): mostly, they are supported by local cultural entities such as public libraries, associations' council or single politicians (as for example, assessors or council members who are particularly sensitive to these themes). GASs however don't want to get involved in politics although they recognise that their activities are intrinsically political, because they don't believe in



the traditional system of parties: the only real request to local bodies is to provide a space at affordable prices where to meet and distribute their purchasing, which is not always easy especially in the biggest cities or if a group has not decided to constitute a formal association.

While GASs entered their crisis – not accidentally in the same period while Italy was facing a strong economic downturn in 2013 – a multiplication of adapters started to establish, although with special vibrancy in the most affluent areas of the country. Firstly, a series of private shops that sell the products of GASs suppliers have been inaugurating in the last years, as for example organic or short production chain shops. Some of the shops have emerged directly from GASs experiences. In one case, the managers of the shop are previous GAS members that institutionalised their role by taking up an emporium. In some others cases, social cooperatives are selling the products directly to consumers, in parallel with logistic and distribution services to groups and relying on the informal "branding" that being suppliers of a GASs group can ensure to a single producers (as a signal of good quality and respect for environment). Secondly, partly promoted by the associations, partly promoted by trade unions (as Coldiretti) and partly by public bodies, farmers' markets have multiplied all around the biggest and smallest cities smoothing the access to end markets for local producers: one of the biggest GAS we interviewed is promoting one of this farmers' market in Milano. Thirdly, some of the biggest experience in the alternative solidarity economy – as Aequos in the area of Como, RiMaflow and Buonmercato in the area of Milano - have implemented experiences of GASs with easy access, mostly comparable to on-line shops that allow responsible consumers to access the GAS purchasing without having to provide volunteer work for their functioning, with just the minimum mark-up for repaying the running costs.

9.1.2. German case: IKT water management

The IKT is a network that includes full membership for a) interest communities /citizens' initiatives, b) communities, c) water works and public services, d) alliances and associations, e) communal lists and factions, f) political parties at the level of the community and the district, g) assemblies of domestic well owners. Promoting members (*fördernde Mitglieder*) can be natural persons, companies, and entities as listed under full membership³⁷. In addition, there are "extended" members: that is organizations and individuals that receive the IKT newsletter, that might share the goals of the IKT, are presented therefore as giving practical examples in the IKT news etc.

The temporal aspect of the IKT network as a "living network" is important to note: the network is especially important for local initiatives currently going through a struggle for/against decentralized water management. If the struggle is successful, they might remain members of the network (or opt out); if the struggle fails, they might leave the network, due to the high path-dependency of water infrastructure decisions, or remain members. At any rate, in each year there will be "hotspots" in the network. The temporal aspect also means that communities will learn from each other: learn from prior experiences (via the IKT news and the consultancy work) and in this way act as "civic adapters".

The network is coordinated by a board of directors (one director and two deputy directors), a managing director, a treasurer, a keeper of the protocol and committee members (*Beisitzer*, currently 8). This coordination team is recruited from members that are all themselves active at the local level in their communities. This team coordinates the network via regular meetings, communication via a homepage and the IKT newsletter (with updates from local groups, general information and opinion pieces on water management, book recommendations etc), and is involved in consultancy work for local groups, i.e.

_

³⁷ In the tradition of German associations, full members are "active" members that typically identify with the mission and goals of the association, actively support those goals and in so doing have all rights and duties as stated in the constitution of the association. Promoting members are "passive members" that pay a membership fee but do not actively participate in the life of the association (for example they can attend meeting, but cannot vote during meetings).



especially the current "hotspots". For municipal water works, the IKT work has done marketing/image consultancy (c11), accompanied pioneer projects in watershed protection areas and jointly worked on political advocacy issues. The team works on a voluntary basis with only some compensation paid for travel costs etc.

At the local level, the "heart" of the IKT are the initiatives working for or managing decentralized water management. In some cases, these initiatives successfully cooperate with the local community and/or have achieved institutionalization in the community so that the main member is the community itself (for example the citizens' initiative in Niedersteinbach works via the community, which also keeps the accounts for the water management). According to the interviews (22 with initiatives in the rural area), the most important network members of these initiatives are on the one hand the local communities (12 cases) as well as the district council (2 cases), one the other hand the IKT network (13 cases, several interviewees also mentioned cooperation with geographically close IKT initiatives specifically, or even built unions and associations with them). Following this, the regional water authorities (Wasserwirtschaftsamt, 8 cases) and health authority (Gesundheitsamt 5 cases) are important but ambivalent partners: they have to approve and monitor the management plans, and enforce the respective quality standards. The relation to these authorities, which is often at least initially a contested one, is therefore very important for the initiatives. Finally, due to the high expertise required in water management, many initiatives partner with private laboratories for water expertise issues (quality, groundwater monitoring etc., 6 cases, in addition one interviewee mentioned cooperation with a nearby public service/Stadtwerk) for consultancy (3 cases) or construction (3 cases)³⁸. For the political advocacy, work partners from nature conservation associations (3 cases), from local political parties (2 cases) and also the media are important (2 cases). The relation with the latter is again ambivalent: some see it as a way to communicate their message; others feel that the local media are dominated by the mayor/city council (c18 and c20). It is also noteworthy that in many cases agriculture is important for achieving the goals of the local initiatives, but no interviewee mentioned actors in agriculture as partners³⁹.

For the water works at the municipal level (6 interviews), the main partners are the town council (5) private partners with expertise in construction or specific aspects of water management (4/5), memberships in water associations (Zweckverbände, 3/5) and related professional associations (2/5). Two interviewees also highlight cooperation with farmers in the watershed protection area (2/5) as well as co-operations with nature conservations associations (2/5).

The remaining two interviews were a) with a municipal politician, who partnered with other political parties in a successful struggle to prevent privatization and b) with a member of citizens' alliances in a large city (c7), which partners with trade unions and social and environmental NGOs as a "watchdog" of the municipal water works and possible privatization tendencies. These two are testimony to the internal variety of the extended IKT network.

Dutch case: complementary currencies

Qoin and in particular STRO played a major role in the foundation of many CCs in the Netherlands. These two non-profit organizations participated directly in the foundation of a couple of CCs, and other CCs use(d) information and use software designed and developed by STRO (Cyclos). Moreover in some cases (local) NGOs and local entrepreneurs' organizations supported the foundation of CCs. These groups generally share cognitive frames.

Interestingly, 5 CCs collaborated in the past with the municipality, 4 CCs currently collaborate with the municipality, 5 CCs currently have informal contact and/or receive informal support of the municipality (e.g.

³⁸ Note that an interviewee listed twice actors of the same type – for example companies offering services – these were counted twice towards the overall count listed in the text.

³⁹ Which is not to say that there are not instances of cooperation and compensation payments (for example Rohr).



use of a room), 4 CCs attempt to collaborate with the municipality but failed (social innovator CC02 argued, "the risk of reputational damage is too large for public actors" to become active in CCs), and 12 social innovators argued that their CC absolutely doesn't want to collaborate with the municipality (anymore), because they want to stay independent. E.g. social innovator CC15 emphasizes that CC15 is a commercial organization and therefore doesn't want public support. Social innovator CC11, "No, we never tried to get in touch with the municipality. We want to do it ourselves. We want to be independent." According to social innovator CC16, "Some members don't want that the municipality knows us." Social innovator CC22 answered, "Never. We want to stay independent to maintain our own norms and values. Our members support this."

CCs collaborating with municipalities sometimes receive a (small) grant, have access to free meeting rooms, use printing facilities, and use the network of the municipality to get in touch with potential new members. E.g. CC01 agreed with municipality that the local currency will be accepted in the local public swimming pool and the local public ice skating centre. In general, the research team thinks it might be useful for most CCs to collaborate with the municipality, because participation of municipalities expands the network, and municipalities could both, receive and spend local currency, i.e. stimulate the circulation of a complementary currency.

There are 8 social innovators that mentioned STRO as the most important player in their network. STRO founded the first CC in the Netherlands, published many articles and books on CCs, developed free online and mobile banking software (Cyclos used by 1800 communities globally), and two of its previous employees founded the other Dutch complementary organization Qoin.

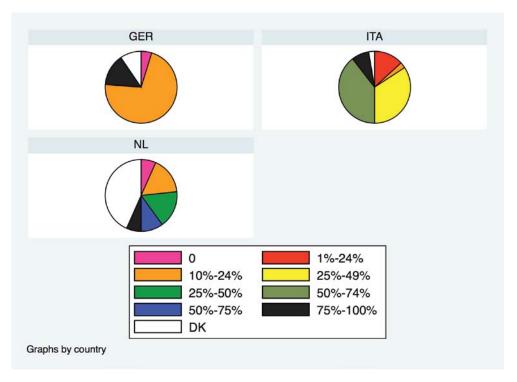
9.2. Comparative qualitative analysis

The networks of our social innovation case studies differ a lot; first, they are heterogeneous in the type of overarching organisation that the single social innovation contexts assume collectively. In fact, the IKTis an organized network with a board at the *Länder*-level (Bavaria) that coordinates and supports activities at the local level. In the other two cases, networks at the national level are more informal and erratic (Italy) or merely service-based (the Netherlands), thus giving space for each local branch to self-organise and to carry out individual initiatives.

Second, the "internal" actors of the social innovations investigated also differ: Figure 31 represents an estimate of the educational background of members. Social innovators were asked to indicate the percentage of members who are in possession of a tertiary degree. As can be seen, tertiary degrees are more rare among participants in IKTs, while they represent the majority within GASs. CCs display the most balanced profile with a rather transversal use among groups with greater or lesser prevalence of tertiary degrees. Interesting is also the share of groups that do declare not to know about the educational background of their members: CCs - a social innovation that takes place mostly within virtual space - are less aware of their participants' education, while IKTs and GASs which rely more on direct and close contacts tend to be more able to estimate their members' educational background.



Figure 31 - % of participants in the social innovation with a tertiary degree - estimates of the social innovators in three countries.



Source: CRESSI elaboration on pre-qualitative data

Third, the cases display differences and commonalities when comparing their reach among beneficiaries and the investment of human resources within the social innovation: IKTs report the vastest reach as their social impact affects all citizens of an area indistinctively. GASs and CCs have a more reduced multiplier effect: being more selective in their target groups, we can also observe a more timid "ratio" between beneficiaries and unpaid human resources that are investing into the social innovation. All social innovations confirm the reduced relevance of paid work, the median value always being zero and the share of social innovation contexts in which any paid work is present being always rather low. In the case of the IKTs the partial institutionalization process on the other hand comes along with more frequent paid work, hinting that social innovation - once institutionalized - does create employment.

Table 22 – Internal networks of social innovations

	IKTs	GASs	CCs
Median number of beneficiaries	1350	16	82.5
Median number of unpaid workers	5	45	5
Median number of paid workers	0	0	0
% of contexts with paid workers	26	5.4	13.3
Ratio human beneficiaries/human resources	75	2.8	16.5

Source: CRESSI elaborations on pre-qualitative data

Our social innovation cases therefore confirm the importance of volunteering within their internal networks. Apart from a general lack of paid work, external funding also tends to be a rarity as displayed in Table 22. Among the three, it seems to be CCs who are most able to mobilize external funding, mainly private and by local authorities.

Table 23 – External funding of social innovations, % of yes

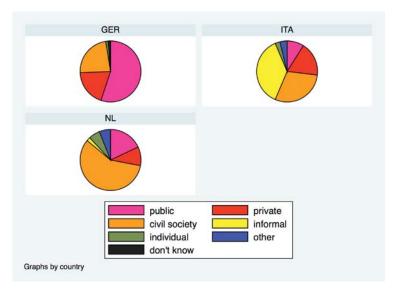
	IKTs	GASs	CCs
received funding from local authorities	0.0	0.0	10.0
received funding from national government	3.6	0.0	3.3
received funding from the EU	3.6	0.0	6.7
received private funding	NA	2.6	13.3
Total number of cases	30	38	30

Source: CRESSI elaborations on pre-qualitative data

Which are the scopes pursued within the external networks of the social innovations, given that they are not generally providers of funding? The informative purpose is the most important activity within the members' and stakeholders' network of CCs: forums, websites, events and collaborations with other LETS groups however are the most important to underline. Although the promotion of local projects of development could be one of their main activities, only in two cases CCs report any engagement in that sense (CC10 and CC22). For GASs, the most important exchange with external actors regards the logistic issues of organising shipping of goods or to find a place where to meet periodically. Relations with other members of GASs network are erratic and they change with context (some are more connected, while in others there is no coordination between groups), but mostly it regards informative meetings/events and logistic issues. GASs groups report some non-systematic support to local projects of solidarity – mostly dependent on the activation of single individuals across groups, although again it should be integrative part of their core mission. Apart from communicating with the IKT board for consultancy purposes, IKTs groups tend to collaborate at local level with other associations mostly for informative purpose (i.e. organising meetings), for strategic reasons (i.e. collaborating with nature conservation groups) or for practical reasons, as to deal with the practicalities of water management.

Within their external network, we can again observe important differences between the three cases: the German IKT case, which deals with a public good, is necessarily more in touch with public actors (55% of cited contacts), whereas the more informal GASs groups also tend to collaborate more with other informal organisations (37%). For the Dutch CCs, organisations belonging to the civil society, notable non-for-profit organisations constitute the backbone of their external network.

Figure 32 - types of actors within the social innovations' external networks



Source: CRESSI elaboration on pre-qualitative data



With regards to the relations with public actors, the difference between the three case studies is particularly evident. The IKTs network, whose interest is focused on the restoration of decentralized water management has its main attention directed towards the community, shows the strongest relationship with several local groups directly promoted and led by public actors. CCs have a lower rate of collaboration and public entities are only directly involved in two groups, but there is a lot of interest in getting public actors involved – even (local) political parties. CCs in general try to establish relations with public authorities at the local level;only few groups do not want to get in dialogue and want to stay 'independent'. . GASs tend to show diffidence and/or indifference towards the local authorities and bodies, with just 8 groups that have established any collaboration (mostly participating at advisory's bodies or the organisation of local events). The remaining part of the GASs landscape is in general not interested even in establishing a dialogue with public authorities; unless for the scope of arranging logistic and practical needs of the groups (i.e. space for meetings and shipping).

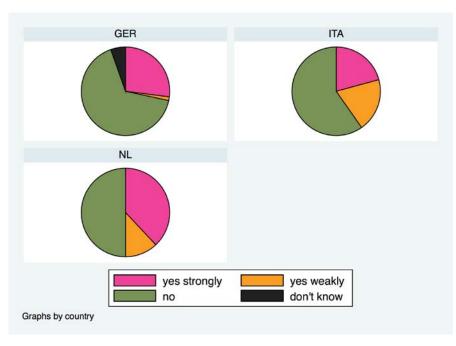
Table 24 – Collaboration with public actors

	IKTs	GASs	CCs
Public actor is one of the promoters	12	0	2
Collaboration (informal and formal) ⁴⁰	12	8	7
Currently no relations	3	26	19
Total number of interviews	30	35	30

Source: CRESSI elaborations on qualitative data

In the attempt to further qualify the intensity of the external network, we asked our interviewees to report whether actors had been involved at the moment of set up of the social innovation, how frequent social innovation groups are in touch with them and whether their relationship has changed because of the on-going initiative.

Figure 33 - Did your organization collaborate with the external actor when setting up the initiative?



Source: CRESSI elaboration on pre-qualitative data

⁴⁰ A formal collaboration occurs when the role of social innovation groups is acknowledged formally by the public institutions (as for example being part of a consultancy body. Informal collaborations occur when relations mostly rely via personal contacts with individual council members or politicians.

For most social innovation contexts, external partners have not been involved at the moment of set up of the initiative, but for the Dutch case study, external collaborations have been most relevant. Current contacts between CCs and their external partners, however, are more scarce, hinting that once set up, CC experiences tend to isolate. For German IKTs, contacts with external partners are more frequent, even in those contexts in which the social innovation experiences have already been concluded. For GASs, the external network represents a rather lively terrain of exchange.

NL

NL

never average about 5x a year often every month don't know

Graphs by country

Figure 34 - How often does your organization communicate with this actor now?

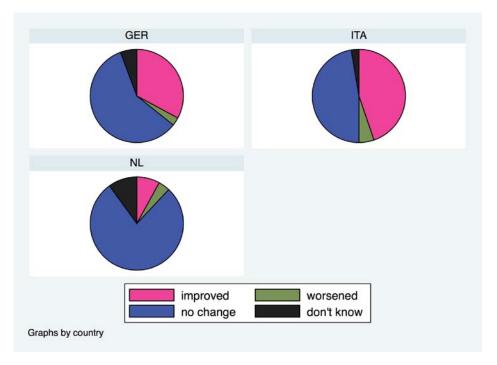
Source: CRESSI elaboration on pre-qualitative data

Last, the quality of exchange within the external network of social innovation experiences can also be observed from the next figure, in which it appears clear that in most cases, the on-going activity does not significantly alter relationships. However, important differences can be noted: the Dutch case confirms a relatively "autistic" working mechanism, showing that not only are contacts rare but also that where they exist they tend not to change. This connects to a self-declared "image problem" according to which CC social innovators declare that the CC experience tends to be perceived as an attempt that is (and stays) at the margins of society, therefore systematically failing in their attempts of scaling up. Insights on their external networks seem to confirm that such isolation is likely to continue.

In the German and Italian case, on the other hand, an important portion of contexts reports an improvement of the relationships with actors in their external network: for IKTs this mainly implies a strengthening of the IKT network, but also an improved dialogue across different governmental levels. For Italy, this implies that the GASs movement is in fact succeeding in intensifying the connectivity of the civil society.



Figure 35 - Did the relation between your organization and the actor change because of the on-going activity?



Source: CRESSI elaboration on pre-qualitative data

9.3. Comparative quantitative analysis

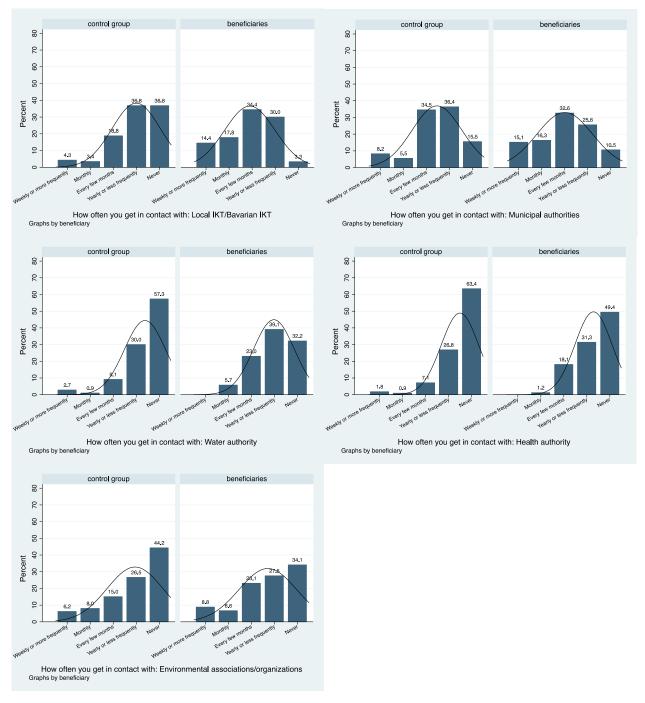
Given the networks that social innovation groups singularly maintain with certain actors and entities, the CRESSI surveys have further investigated whether the contact to such actors is also shared by beneficiaries, and to which extent the networks of beneficiaries of the social innovations are different with respect to those of their control groups. The analysis that follows mainly focuses on the frequency with which the interviewed person is in contact with certain types of actors or entities as derived from the qualitative research phase.

In Figure 36, the differentials in terms of contact to certain actors and entities between IKTs beneficiaries and their control group are depicted: the overarching IKT organization itself is well connected to both groups, but while contacts are sparse with the control group, more than 30% of the beneficiaries are in touch at least once a month. Beneficiaries are also more in touch with Municipal authorities, the water authority and the health authority and with environmental associations. In overall, they tend to be more connected to those entities that play a role for water management, but not only.

In the case of GASs (Figure 37), results are similar: beneficiaries tend to be more connected to GAS coordinating bodies, to associations of the civil society, to other GAS groups, public entities and to other producers. However, weekly contact with associations of the civil society and with public entities is less frequent among beneficiaries than among the control group.



Figure 36 - Frequency of contact with different actors and entities, comparison between social innovation beneficiaries and their control group, IKTs case



Source: CRESSI survey data, 2016

In the case of CCs, the beneficiaries appear to be more isolated than their control group: they have less contact with the Municipality, non-for-profit complementary monetary organizations, other non-for-profit organizations and with private financiers. They tend to have more contact with software developers, on the other hand. However, the limited number of observations of the Dutch control group invites for caution in the interpretation of these results.



Figure 37 - Frequency of contact with different actors and entities, comparison between social innovation beneficiaries and their control group, GASs case

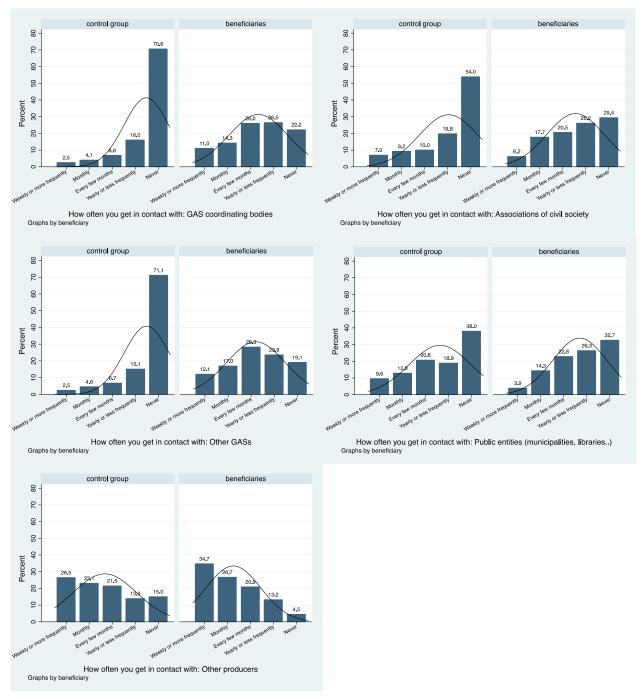
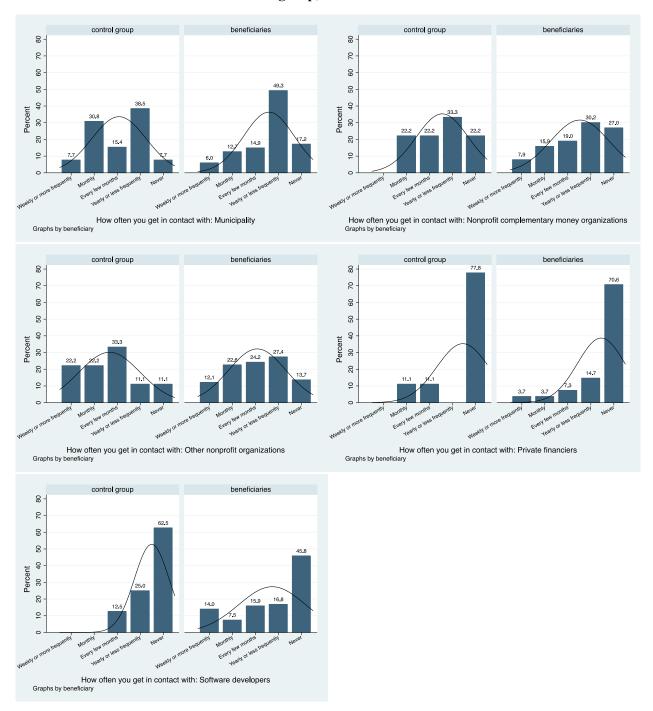




Figure 38 - Frequency of contact with different actors and entities, comparison between social innovation beneficiaries and their control group, CCs case



Source: CRESSI survey data, 2016

Summing up, beneficiaries tend to share the networks set up by the social innovation and therefore appear to be more connected to a variety of actors and entities, at least in the German and Italian case. In the Dutch case, the virtual nature of the social innovation tends to affect the social innovation's capacity to practically improve the contact of its beneficiaries with others.



10. Institutions

10.1. Insights from qualitative analysis

In the next sections, the last of the three social forces (Beckert, 2010), namely institutions, is taken into account. Interviewees were asked if they felt any norms, laws or informal practices were influencing positively or negatively the activities they carried out as social innovators. Institutions have roughly been divided into two groups: facilitators and barriers to the activities of social innovation. We asked interviewees to assess what were the influences of the norm on their activities and how diffusely it is supported within their context of action.

From a reverse point of view, we also asked for an assessment of potential influences that social innovation activities may have on the local decision-making process.

10.1.1. Italian case: Solidarity Purchasing Groups

In general, GASs are not fully aware of the institutional environment in which they are active. There are 14 groups that stated they felt no influence from any norm – neither positively nor negatively, apart from those that the groups gave themselves internally, regarding GASs procedures and matters. As underlined, groups are quite disconnected from the context and they often act as closed clubs in which members don't care about the external communities and their eventual regulation. Consequently, the most debated issues about norms regard the institutionalisation of their own activities and the internal regulation of the groups.

The problem of informal organisational practices within GASs is strongly debated in the groups and it pertains especially to the issue of distributing tasks among members. Tension between core active members and passive free-riders is one of the biggest internal problems reported by interviewees and it constitutes a barrier towards the evolution of groups into more institutionalised forms. The clear preference for informality affects the capacity of groups in tackling marginalisation, as informal groups are invisible to institutions, and can promote interventions within the social context only on individual basis. It also inhibits their capacity of acting as a lobby at the local level; however, institutional invisibility is only rarely experienced as a problematic point. Most of the groups prefer preserving their total independence from any actor instead of acquiring power and influence over public policies, probably because of their limited interest in community support or their slightly elitarian background.

An interesting example of norms produced by the GASs' internal bottom-up process can be found in the participated organic certification that GASs have promoted in the last years. In fact, one of the biggest obstacles to the diffusion of organic production has been identified in the costs of accessing the organic certification, which is provided by private entities in Italy. Even if some regions do subsidize farmers, especially for the smallest companies it is quite difficult to become sustainable in costs. That is, some GASs supported what they called participated certification, which is a control mechanism that is operated directly by members on the production site in order to check if producers comply with the rules of sustainability and respect for the environment that characterise the philosophy of GASs movement. This system has also favoured and accompanied the conversion of producers towards organic farming. For what concerns the relation with beneficiaries, some of the GASs have institutionalised a template of assessment for the new producers, in order to evaluate how far the newcomers are in line with the principle of consumerism promoted by the group. The template usually revolves around the methods of production, the type of contractual integration offered to dependent workers and collaborators, the transparency in the supply of raw material (when it is the case). It is also usually completed by periodical visits to the producers, which are promoted by groups not only to increase and to promote the trusted relation with the suppliers, but also to control for the respect of the environment and of law regulation among their suppliers. It is the author's impression that a paternalistic inspiration is behind these two last activities: only in few cases is the system



managed by peers (in Bologna) or by paid experts (in Brianza), while in most of the cases the controls are operated directly by consumers who might not be skilled in the farming activities they're assessing, nor experts in the process of biological productions.

In terms of external influence of institutions on the social innovation activity, a series of laws have been promoted at the regional level that actually departed from the GASs experience to launch a series of public funding for private collective consumption. The perception of the interviewees, however, is not that such policy initiatives represent a facilitating mechanism, but rather the opposite: the funding attempts required the definition of some sort of criteria by which a GAS could be identified, but standard criteria badly collided with the GASs reality that is characterised by diversity and heterogeneity among the different groups' functioning. Especially criticised by the groups is also the fact that laws of this type offer fiscal exemption or additional funds to sustain the purchasing powers of people, who are not considered to act in a way pertinent to the movement: in the view of GASs members, their consumption choices are not influenced by prices, but by the interest in social projects or the type of productions promoted by the beneficiaries. This is another hint of a possible paternalistic approach as it implies that consumers' consumption is not affected by prices (hence, they belong to affluent classes), but is instead moved (solely) by charities orientation. Moreover, most of the laws or public calls for funds, public spaces or merely recognition require a formalisation as an association, which many groups still resist, thus affecting their capacity to be formally accepted as an interlocutor by public entities and their ability to being entitled to funds or spaces.

Finally, groups reported their incapacity to have an active impact on the decision-making process: firstly, because a single group is too small for being interesting (except for the smallest localities, where local bodies usually involve groups in the discussions about the community) – especially if it has not formalised as an association; secondly, because they don't want to get involved in politics or in any relation with public bodies.

10.1.2. German case: IKT water management

The most relevant system of rules, according to the interviewees, are the drinking water directive (19/30, with 4 mentions by municipal water works and 15 by citizens' initiatives), and the nitrate directive (12/30, with no mentions by municipal water works and 12 by citizens' initiatives). For those contexts also dealing with wastewater (the "Abwasserverordnung" regulating the minimum requirements for releasing wastewater into the surface water, first version 1997), and the urban wastewater directive (Kommunale Abwasserrichtlinie), first issued by the EU in 1991 and applying to settlements with 2000+ inhabitants, are important.

These norms all have a multi-level character: whereas in all cases, there is a European Directive that sets the overall standard, implementation is a matter of national legislation as well as of district level enforcement and monitoring by the water economy authority (Wasserwirtschaftsämter, of which Bavaria has 17 under the authority of the Bavarian environmental authority) and the health authority (Gesundheitsamt). At the level of national and provincial implementation, there is much space for politics that is directly relevant for the IKT network. For example, the nitrate directive of 1991 was only put into national legislation in 1996 (Düngeverordnung), but this delayed implementation included so many exceptions according to one interviewee (c11) that the directive was not effective to reduce the levels of nitrate effectively. In this conundrum, the IKT puts forward its own norm of a "flächendeckender Gewässerschutz"/area covering groundwater protection.

This multi-level institutional context is highly ambivalent for the IKT network. Contentious issues include:

• **Permissible value problem**: The threshold approach in the directives implies on the one hand the setting of a "good" or "reasonable" standard, but as one interviewee points out: you can aim at the maximum



permissible value (Grenzwert) from above and from below (c7). From a nature conservation perspective, the implication therefore can be that rather than minimizing harm, the effort is to minimize the effort to reach the standard.

- Regulation and centralization: Maximum nitrate levels and other permissible values set a good standard, but if the material environment is such that these standards cannot be met without a significant change in agricultural or industrial practice, then the political implication of the standard is the eradication of local water supplies, home fountains etc. in favour of centralized approaches that can meet the standard via technological purification, mixing of water etc. Thus, the directives can become a driver for the *marginalization* of the decentralized water management.
- Norm and actor collision: if the interplay with other EU policies, one interviewee named especially the common agricultural policy, is such that relevant polluters (such as farmers) are incentivized to use more fertilizer and pesticides to have higher productivity yields, a norm collision and actor collision in many contexts is likely (as here between decentralized water supply and agriculture). Likewise, road construction and human settlement development are in tension with local water management (c25). Thus in addition, conflicting other policy and directive and their respective priority (c3), can be a driver of marginalization even if the relevant standards (drinking water, nitrate) as such as judged as positive by the network.
- Judgment in the application of the standard: In practice, the directive has to be "applied" at the local level in a double sense: a) water and health authorities have to decide, if local management approaches can meet the standards, if they make a good restoration effort (i.e. the IKT goal), or if centralized approaches should be invested in according to the perception of the interviewees, the pre-judgment in most cases is in favour of the centralized approach; b) standards have to be monitored, which leaves application space as to which parameters have to be monitored how often, how to interpret the results etc. This is the site of many struggles between authorities and local initiatives. According to the latter (c20), monitoring can be a "weapon" of the authorities to delay local initiatives; make it costly, foster fear-mongering and explode costs. The drinking water standards were a weapon to force distance connection, said one interviewee (c21). In addition, local initiatives point out that health authorities might lack staff and competence to properly apply the monitoring (c24) and importantly also not the staff to consult local users on decentralized options, so that the central solution and delegation is for them a more practical "fix" (c25). A further driver of marginalization is thus the judgement zone in the implementation of standards.
- General standards and particular contexts: One interviewee gave the example of the sulfate standard in the drinking water directive: "That is a very stupid issue... they have lowered the boundary value to 250, which creates problems for us [water is rich in sulfate in the area]... but mineral water is sold with over 1000... that is bitter, the scientific foundation is very, very limited as far as the consequences of sulfate are concerned... I think that we have just been forgotten in the EU; their maxim is: with 250, 99% of all water suppliers are covered, and the 1%... but this unsettles the consumers without any need (c5)". Thus, a further driver of marginalization can be the interplay of local environmental trait and general standard.

At the provincial, district and communal level the regulation of subsidies and taxes is a further important cluster for the IKT network.

According to Bavarian law (Richtlinie für Zuwendungen zu wasserwirtschaftlichen Vorhaben)
decentralized approaches should be equally considered with centralized, bigger approaches.
However, as one interviewee points out (c15), the "small" investment of a local approach might be
deemed insignificant by authorities. In addition, the compensation of planning bureaus usually is a
percentage of the final project costs, which again suggests a tendency for larger rather than small



projects. One interviewee claimed that planners are "married" to mayors and local authorities (c29). A bone of contention in many IKT communities are therefore these planning processes: were they publicly initiated (or commitments made behind doors)? Were costs and alternatives transparently communicated? (c18 and c20)

• According to the Kommunalabgabengesetz, communities can levy taxes on public services such as waste removal. As a result, "expensive" solutions can be paid via the taxpayer.

In the light of these issues, IKT members put emphasis on regulation that fosters access to information and democratic empowerment (c7 and c8):

- Of foundational importance is the community law (Gemeindeordnung), including §18 which defines the right to call for a citizens' assembly (c18).
- In one case, an initiative invoked the environmental information law to request access to planning and cost information that the community administration did not want to disclose.

These regulations provide space for the information and political will formation that the IKT seeks to foster at the local level, and that interviewees also observe as such in the case of successful initiatives. In addition, there is a sense expressed by two interviewees that the regulatory level is now "high" enough, that more and ever higher standards now rather deflect from more serious issues and possibly disguise private economic interests (c8, 14, c19).

A regulatory issue pertains specifically to municipal water works is privatization. As one interviewee points out, "in relation to the privatization issue the most important rule is the law regulating companies of the GmbH-type: this organizational structure leaves it open that the city can sell some of its water assets. But the key issue is really the political will, not the regulation as such (c7)".

Last but not least there are compost toilets/dry sanitation, marginalized even within the IKT network. "Whereas farmers can throw thousands of litres of manure on the field, even tiny amounts of human waste cannot be used for gardening (c30)". There is a need for further thought and examination here, he says. There is a niche of some engineers and other people who try it out, but there is also quite some resistance due to health concerns (faecal matter as a health risk), economic interests (if faecal matter would not get into the water, the business of wastewater treatment plants would be reduced) and memory: especially older people associate with compost toilets the old "plumsklo": outhouse with a pit latrine that stinks.

10.1.3. Dutch case: complementary currencies

For social innovators in CCs the questions about institutions, norms, facilitators and barriers were not always easy to answer. However, on a meta-level two facilitators could be distinguished:

- 1) On-going banking scandals and financial crises, ecological problems, and increasing social inequality make CCs and similar grassroots initiatives more attractive. According to social innovator CC37, the rapid growth of sharing systems in the Netherlands "shows that sharing has a value and that sharing is becoming mainstream... alternatives are just under mainstream"
- 2) Technological innovations and digitalisation make CCs easier to implement and make it more likely that CCs are able to reach their aims. Social innovator CC09 argued, "Ten years ago this was impossible," and "Young people perceive digital and virtual as real as physical."

In particular social innovators and CCs that make use of these two meta-developments might be successful in the future.

Social innovators mentioned two barriers often:



- 1) The number of tax, social benefit and banking rules and the unclearness of these rules inhibit the practical implementation and use of CCs. Social innovators mentioned confusion within their CCs, gave different explanations of the existing rules, and argued that some members are afraid to participate actively in CCs because they fear levies and penalties of tax authorities, social benefit institutions, and banking supervisors. E.g. according to CC39 "It is unclear if activities within CC39 have influence on social benefits. These institutions have very rigorous norms." CC08 argued, "ECB and DNB protect the euro monopoly" and CC05 "there is an urge to control."
- 2) The dominance of one way of thinking (one cognitive frame). E.g. social innovator CC02 explained that the municipality has always had a euro account at a mainstream bank and therefore does not even consider the possibility of (also) opening a CC02-account. The civil servants don't have the cognitive frame (yet) that money can be organized in another way; social innovator CC02 concluded, "This is almost an emotional barrier."

The first barrier is relatively easy to solve. Boonstra et al. (2013) and Kampers (2015) published accessible information about legal and fiscal rules for CCs in the Netherlands. When the tax authorities consider activities as 'performances in the economy' ('prestaties in het economisch verkeer' in Dutch) tax laws always apply. The activities within CCs are generally considered as social activities, and therefor tax laws do not apply. Moreover, the Dutch tax authorities determined that CC organizations don't have to report activities below the equivalent of 3.000 euro per year per participant. If a participant has earned more than the equivalent of 3.000 euro per year, the CC organization has to report this to the tax authorities. The tax authorities then decide if the activities are considered as 'performances in the economy'; if this is the case, the participant has to pay taxes in euros (for more detailed information see Kampers 2015: 29 and Boonstra et al. 2013: 22). Entrepreneurs in CCs always have to pay taxes, because their activities are considered as 'performances in the economy'.

The second barrier is difficult to solve, because a renewed understanding of money among a large group of Dutchmen is required. Social innovators generally don't consider money as a neutral medium of exchange; their aim is to implement social money, green money, and local money. This moral or symbolic meaning of money is interesting and future research has to pay attention to it. The technological option of tagging money might make it easier to implement moral money in the future.

10.2. Comparative qualitative analysis

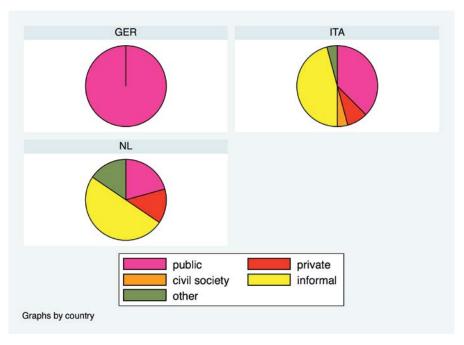
The data so far presented is not a picture of the possible realm of relevant norms and practices for the three case studies of social innovation investigated. Much more, it reflects the *perception* of the interviewed social innovators, and as may be noticed, such perception tends to be focussed on rather different typologies of institutions in the three case studies. This is mostly in line with the fact that the three social innovations investigated have different objectives and domains of activities. The lack of mentioning of the EU Common Agricultural Policy in the case of GASs, for example, is rather striking, but compatible with the general tendency of these groups to discredit any sort of rule (see upcoming section).

As can be seen in Figure 39, the typologies of institutions mentioned in the three case-studies tend to differ: the perception of German IKT social innovators mostly deals with public institutions, mainly laws enforced at different governmental levels (see Table 25). The interviewees of Italian GASs and Dutch CCs reserve less attention to public institutions but instead mention informal norms and practices as being particularly relevant for their activities. Among the rules belonging to the formal or public domain, it is mostly those that are mainly enforced within the private sector that are of relevance for CCs and for GASs; such as those regulating market exchange, enterprise management and the banking system. Digitalisation, which is here



codified as "other" plays a very significant role for complementary currencies, as expected, and to less extent for consumption purchasing groups.

Figure 39 - Type of institution: who promotes/enforces the rule or practice



Source: CRESSI elaboration on pre-qualitative data

GASs groups are basically equally concerned with internal rules and with national or regional legislation. In addition, local informal rules and practices tend to be relevant for their activities. National laws mainly influence IKTs' activities, although most of these are implementation laws of European Directives. Regional and local legislation also plays a role for their decentralization struggle, of course. For CCs, the institutions that tend to matter tend to be mainly defined at the national level (e.g. taxes, social benefits), but global (digitalisation) and European (legal tender monopoly of the Euro) matter of course. Again, the rather virtual and transversal nature of CCs emerges, with there being little reference to regional or local rule systems in relation to their activities.

Table 25 – Geographical level of reference of mentioned institutions

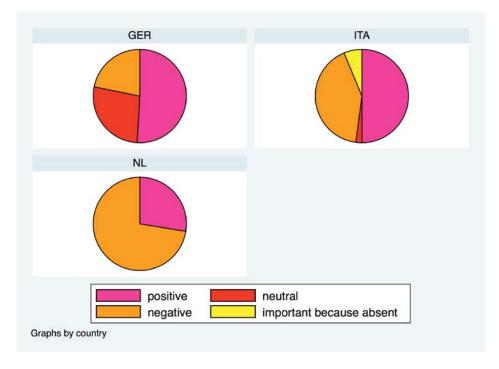
	IKTs	GASs	CCs
Global/International	3	1	11
EU	13	0	7
National	33	14	35
Regional	7	5	0
Local	5	10	2
Other (more than one of the previous categories)	1	0	3
Internal (within social innovation group)	0	18	0
Total nr. of institutions mentioned	62	48	58

Source: CRESSI elaborations on pre-qualitative data

Interviewees tend to have a balanced perception of institutions: in overall 42% of the mentioned institutions are viewed as "facilitators" while 45% as barriers. In about 10% of the mentioned cases the impact on social innovation activities is thought to be neutral, while only sporadically a system of rule is mentioned as important because still absent (see Figure 40).



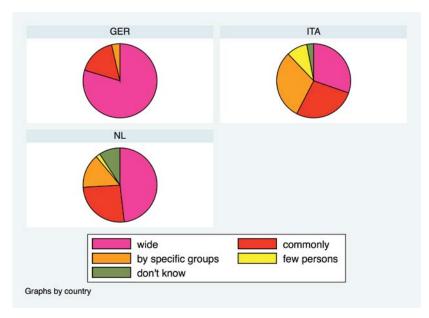
Figure 40 - Perceived impact of institutions on social innovation activities



Source: CRESSI elaborations on pre-qualitative data

So, while CCs mainly struggle against mainstream institutions and legislation, IKTs seek to complement national and regional legislation with own proposals and to promote a balance implementation of existing law. GASs on the other hand are mostly engaged in setting up new rules and practices themselves, but encounter positive and negative forces of the existing systems of rules at various levels.

Figure 41 - Relative diffusion of the institution within context of reference [How widely is this rule or practice accepted/respected in your context?]



Source: CRESSI elaborations on pre-qualitative data



In line with the prevalent type of institutions, the relative diffusion within the context is different: the laws that matter to IKTs have wide application, similarly as the mainstream logic or systemic functioning that matters for the activities of CCs. It is in the case of GASs where the mentioned systems of rules are not only respected/accepted by the majority, but more often only by specific groups or single persons. This is in line with the crucial distinction between the prevalently autonomous production of rules (Italy) and the opposition or collaboration with existing - external - norms or practices (Germany and the Netherlands).

Finally, coming to the issue of influence on local decision-making, or norms production happening outside of the social innovation organisation, groups are pessimistic in general. The large majority in the three case studies thinks their activity had no influence on norms production especially for GASs and CCS, even at local level. IKTs groups – on the contrary – are more aware of their role, but this is natural as their activities have as primary goal to obtain a change in decision-making about local water management.

Table 26 – Influence on local decision-making process

	IKTs	GASs	CCs
Yes	7	3	2
Partially	1	5	8
No	7	24	17
No answer	15	3	3
Total interviews	30	35	30

Source: CRESSI elaborations on qualitative data

10.3. Comparative quantitative analysis

Given the typologies of institutions that emerged within the qualitative phase of research, the CRESSI surveys have tried to investigate to which extent beneficiaries and their control groups share such institutions in fact; sharing a norm implies respecting it and acting in accordance with its content. In the following figures, the responses are grouped by the social innovation case and compare beneficiaries and their control group. The range of replies goes from 1 - "I typically refuse" the mentioned norm or practice to 5 - "I typically respect" it.

As can be seen in the following figure, the German sample population tends to be respectful of all norms proposed by the survey. What can be noticed is that beneficiaries of IKTs tend to systematically respect the norms less: while such empirical evidence seems to be logic and coherent with the main cause of IKTs - namely to overcome centralized regulation of water provision, it is noteworthy that the tendency of beneficiaries is not to refuse such norms in overall, but simply to respect them less.

Such tendency is rather opposite in the GASs case, in which a systematic dislike for rules is starkly evident: Figure 43 shows how beneficiaries of GASs typically refuse norms and practice, no matter whether these are imposed from external entities or internally defined, such as the Participated Organic Certification. Disrespect for rules is common among both, the beneficiaries and their control group, yet the share of people totally refusing the norm is higher among the beneficiaries, especially concerning rules they are typically exposed to, such as tax exemptions for GASs or regional laws on the solidary economy. For a critical analysis of this phenomenon, see the previous sections. Rather sad evidence shows that both, Italian beneficiaries and their control group starkly refuse labour and tax regulations in general, again confirming a high degree of fundamental institutional distrust that is widespread in the country.



Figure 42 - Degree of respect/acting in accordance with different institutions, comparison between beneficiaries and their control group, IKTs case

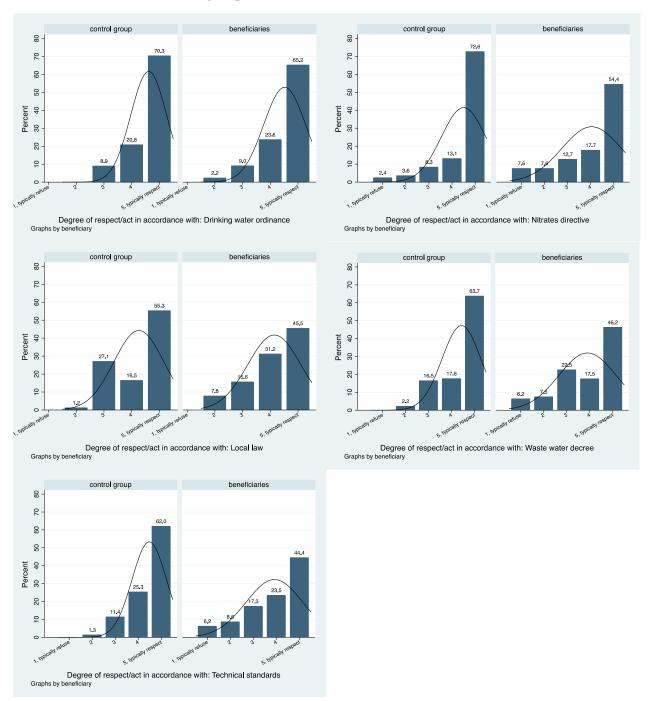
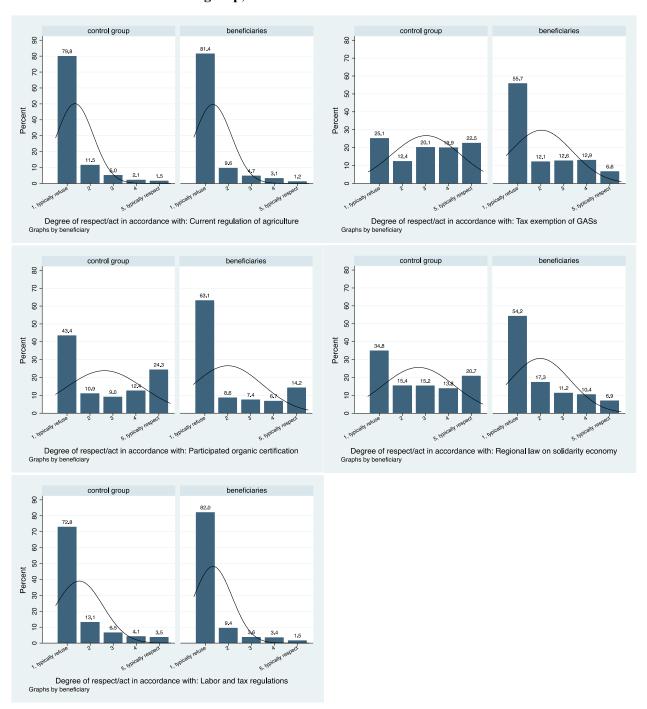




Figure 43 - Degree of respect/acting in accordance with different institutions, comparison between beneficiaries and their control group, GASs case



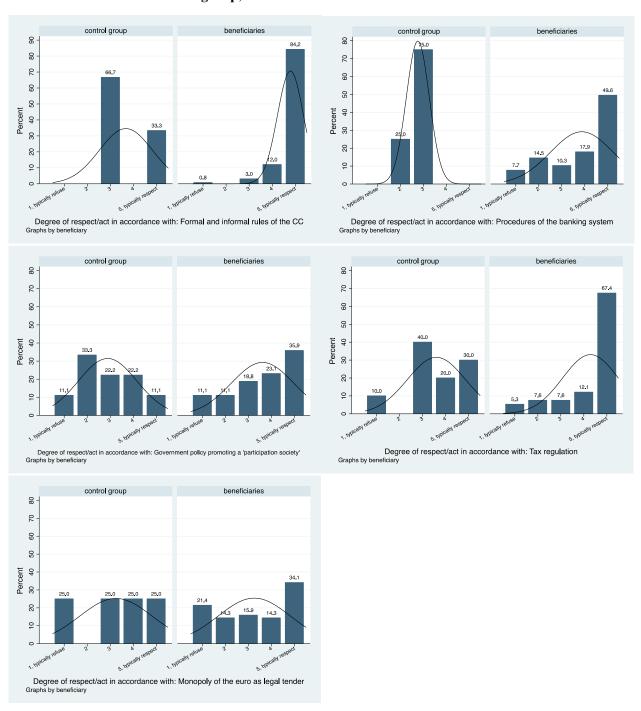
Source: CRESSI survey data, 2016

In the case of CCs, Figure 44 shows a pattern that is much more similar to the German case than the Italian: in overall, the Dutch sample population tends to respect norms and practices rather than refusing them. Again, comparative results should be made with caution due to the limited number of observations in the Dutch control group, yet it might tentatively be said that the control group maintains a more neutral opinion regarding rules that are specific to the social innovation, while it tends to be more respectful of other, wider-ranging institutions, such as the "participation society" and tax regulation in general. Regarding tax regulation, the Dutch beneficiaries are similarly "anarchic" as the Italian sample population, which most likely is linked to the difficulties encountered with taxation of CC activities as explained in the previous



sections. Interestingly, the monopoly of the euro is not as widely respected among the control group as might be thought, but might even be less embraced there than among the CC beneficiaries.

Figure 44 - Degree of respect/acting in accordance with different institutions, comparison between beneficiaries and their control group, CCs case



Source: CRESSI survey data, 2016

Summing up, there is a clear difference in attitude towards institutions between the Italian sample and the other two country samples: Italians - no matter whether beneficiaries or belonging to the control group - confirm a more "anarchic" attitude of systematic disrespect for rules. This attitude is not even overcome by institutional proposals borne within the social innovation itself, such as with the *Participated Organic Certification*. Tax regulations are furthermore a big issue for social innovation beneficiaries in Italy and the



Netherlands, probably due to their role of *obstacles* to the implementation of social innovation activities as previously analysed. In the German case it is noteworthy that respect for rules is very widespread even when the norms are object of political battle.

Part II.3 – Towards a measurement of social impact

To assess the impact that social innovation may have on marginalisation, we concentrate on autonomy, which serves as proxy for agency and empowerment (see von Jacobi *et al.*, 2015). This section presents the methodological path chosen to evaluate subjective evaluations of autonomy changes.

11. Autonomy

Within the CRESSI framework, the impact of the social innovation on marginalization is measured in terms of increasing individual opportunity, thus an increase of agency. Social innovation can in fact be defined as something that helps individuals to pursue whatever goals they consider as important, thus increasing individual opportunity. The measurement of agency has generally been embedded in the measurement of empowerment. We focus on 'autonomy' as a measure of agency and refer to Heiskala's and Mann's NACEMP (Heiskala, 2015) model to identify the potential dimensions within which marginalization can occur:

Natural: including the environment.

Artefactural: including current technological achievements and manufacts.

Cultural: comprising ideologies, beliefs, education and norms.

Economic: including production and specialization.

Military/Security-related: comprising defence and protection.

Political: comprising territorial centralized regulation.

In the common part of the three CRESSI questionnaires, we evaluated the level of autonomy using two self-assessment questions: the respondents rate their level of autonomy from 0 to 10. The first question is necessary in order to evaluate the level of autonomy 'today'. The second one asks to evaluate the level of autonomy with respect to 'three years ago' if the respondent belongs to either the control group or the beneficiaries; in addition, the level of autonomy is also evaluated with respect to the beginning of the social innovation ('before getting in touch with the social innovation'), if the respondent belongs to the group of 'beneficiaries'. The comparison between the levels of autonomy at the moment of the survey ('current') and 'before the social innovation', represents a first step for evaluating the impact of the three social innovations studied on the beneficiaries. To estimate the overall impact of the social innovation processes, we compare differences in autonomy at the two time moments between beneficiaries and their respective control group. While the exposure to the social innovation may date back in different ways, the comparison with the control group keeps a constant time frame of three years.

Moreover, in order to evaluate the levels of autonomy in all the dimensions of the NACEMP model, we used two additional subjective questions. Through these two questions, we ask the respondents if and how their level of autonomy has changed in each dimension with respect to the 'beginning of the social innovation' (if the respondent belongs to the 'beneficiaries') and with respect to 'three years ago' (if the respondents belong to the control group. We again make use of self-assessment questions, which imply a subjective evaluation of autonomy change.

11.1. Focus group analysis: comparison between the dimensions

Due to the issue-specific dissimilarity of our three cases studies (Consumer Purchasing Group, IKT water management, and Complementary Currencies) each dimension of the NACEMP model might present different features. For example, the intrinsic ideologies of the Consumer Purchasing Group reasonably differ from those of the Complementary Currencies. In order to be able to properly measure the level of marginalization in each dimension, it is necessary to take into account these differences. We used a bottom up technique, namely 'focus groups' (see section 3.1.3) to define the specific content of the single dimensions, thus embedding the particularities of the different social innovations,. In each country (Italy, Germany, and the Netherland) a focus group has been organized in which several beneficiaries have participated. The first step of this technique implies collecting the widest possible meanings associated to how the social innovation is able to improve the autonomy of the beneficiaries. The second step consists in defining to which dimension these meanings belong. In Germany six beneficiaries have participated in the focus group, in the Netherlands five persons, and in Italy seven persons.

The meanings collected refine the characteristics of each dimension. The elements collected for the six dimensions are reported in the following table.

Table 27 – Aspects through which participation in the social innovation contributes to empowerment, six life-dimensions in three countries

	Italy	Germany	The Netherlands
Natural	being able to contribute to the care and the quality of the environment	being able to contribute to the protection of the quality of water, also as a resource for next generation	being able to contribute to the care of the environment, through sharing, exchanging with local producers and/or reutilization of goods
Artefacual	being able to choose on the methods of production	having technological means over water supply	having improved knowledge and capabilities about the financial system
Cultural	being able to choose with regards to the relationship between producers and consumers	influencing the relationship with authorities and water association	having the opportunity to meet people that share some of your interests and/or values
Economy	being able to influence which goods are produced and their quality	having access to alternative financial approaches to water management	being able to improve one's financial situation (e.g. propensity to save and/or access to good and service)
Security-related	being able to influence aspects of occupational safety, for example safe productions with respect to the workers' health	having the opportunity to ensure water supply	improving the level of effective protection in case of (financial) emergencies and the size of one's social network
Politics	being able to choose the production model, such as sustainability, transparency, ethics, and solidarity	being able to participate in the decisions regarding the privatization and the expropriation of the water supply	having the opportunity to put into practice a new way of thinking (a new financial system, local economy).

CRESSI elaboration of the Focus Groups



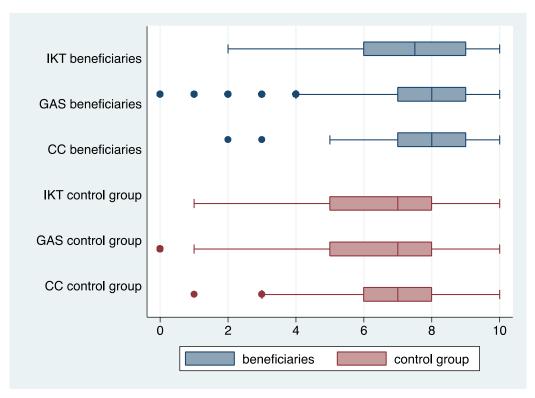
Each dimension takes a different connotation with respect to the social innovation involved. The common aspect of natural dimension is the care for the environment. However, in the German case it involves the water protection, while the Netherlands case it involves the reutilization and the sharing of goods. In the Italian case, the artefactual dimension implies the methods of production since this social innovation is based on the production of goods. In the German case, it focuses on the mechanical and technological aspects of the water management. In the Netherlands, the beneficiaries defined the artefactual dimension as the knowledge and the ability to manage the financial system. The cultural dimension, in all three cases, is associated to the relationship sphere. In the Italian case, the relationship is between the producers and consumers; in the German case, it is between the beneficiaries or the authorities and the water association; in the Dutch case, the relationship is between the beneficiaries or people that share the same values. Since in the Italian case the social innovation relates to the production of good, the economic dimension involves the choice of the goods to be produced and their quality. In the German case it is related to the management and infrastructural aspects of the water management. In the Netherlands, due to the highly financial nature of the social innovation, this dimension involves its core. In fact, it embeds the overall financial situation. The military/ security-related dimension embeds the opportunity to be safe. Therefore, in the Italian case, it is related to occupational safety; in the German case, to the capacity to ensure water supply; and in the Netherland case, the safety in case of financial emergencies. The last dimension embeds the political sphere. In the Italian case, the beneficiaries translated it into the choice of the production model and its characteristics. In the German case, it concerns the decision making process and who has a say in water management decisions. In the Netherland case, this dimension involves the ability to create new ways of thinking.



11.2. Comparative quantitative analysis

What is the perceived change in autonomy of beneficiaries? In the CRESSI surveys, we asked both, beneficiaries and control groups to evaluate their autonomy in the six dimensions comprised by the NACEMP model. The questionnaire requested the same information twice, once for their current situation and once referring to the time *before* they started participating in the social innovation. For the control group, the previous time frame is set at three years instead. The following figures depict differences in perceived autonomy levels and their change between the two time frames.

Figure 45 - Differences in current perceived autonomy, comparison between beneficiaries and their control groups, all case [Self-assessment question: Considering your life in general, on which step are you today?]⁴¹



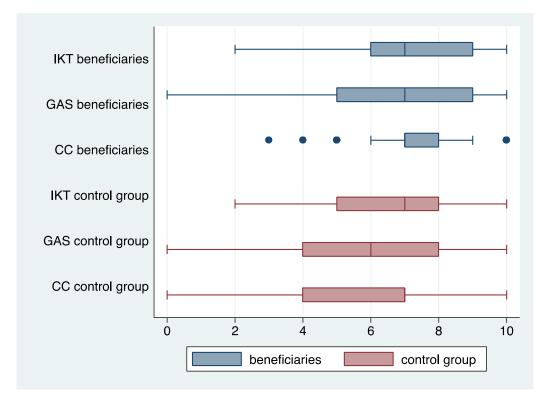
Source: CRESSI survey data, 2016

Figure 45 seems to hint that beneficiaries of social innovations tend to consistently self-assess their current levels of autonomy higher than their respective control groups. The box-plot graph shows the distribution of replies: boxes are interquartile ranges (p25 to p75) and the thick internal line displays the median value. Whiskers show minimum and maximum values - which are not too dissimilar between the groups and dots are outliers.

⁴¹ The question is introduced in the following way: Let us still consider a 10-step ladder where the bottom, the first step, represents the lowest level of autonomy in taking a decision, and 10 represents the highest level of autonomy.



Figure 46 - Differences in past-perceived autonomy, comparison between beneficiaries and their control groups, all case [Self-assessment question: Considering your life in general, on which step were you before getting in contact with the social innovation/three years ago?]42



Source: CRESSI survey data, 2016

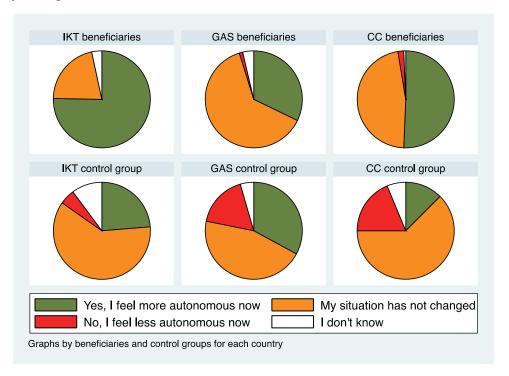
Figure 46 depicts the same type of self-assessment questions for the past reference period. Median values of the perceived autonomy in the past seem to be inferior to those of today, apart from those of the IKT control group. In general, the distribution of responses tends to confirm a picture in which the control group selfevaluates their autonomy at worse levels than the groups of beneficiaries.

In a further question, the survey investigates the perception of autonomy change between the two time periods. Results are reported for each dimension of the NACEMP model, namely nature, artefacts (technology), culture, economy, military (security-related), politics. Again, while the time reference period for beneficiaries is the moment before getting in contact with the social innovation, for the control group such reference period is set at the last three years.

⁴² The question is introduced in the following way: Let us still consider a 10-step ladder where the bottom, the first step, represents the lowest level of autonomy in taking a decision, and 10 represents the highest level of autonomy.



Figure 47 - Differences in perceived autonomy change in the natural dimension, comparison between beneficiaries and their control groups, all case [Considering the natural dimension, has your participation in the social innovation contributed to your autonomy/ how do you feel compared to three years ago?]



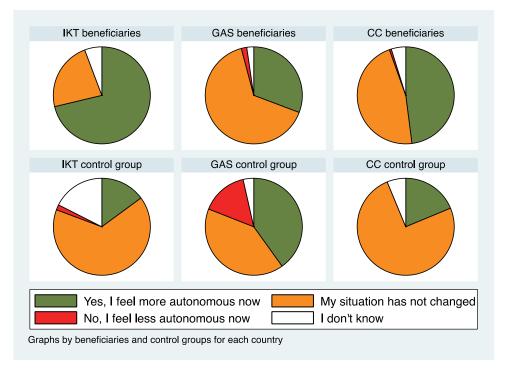
Source: CRESSI survey data, 2016

As can be seen in Figure 47, the segment of people perceiving that their autonomy in the natural dimension has improved is bigger among beneficiaries than among the control group. Among the control groups, the most frequent reply is that their "situation has not changed", although some also report that it worsened. A worsening of the situation is almost not reported at all among the beneficiary groups, hinting that social innovations in some way manage to buffer factors that can affect autonomy in the natural dimension - which basically enshrines some sort of control over one's environment.

Within the technological dimension, the contrast between control group and beneficiaries is rather stark for the IKTS and the CCs case, hinting that these social innovations somehow contribute to the beneficiaries control over technologies. For the GASs case, improved autonomy is actually more often perceived among the control group, but again, deterioration of autonomy experienced by the control group is not present to the same extent among beneficiaries.

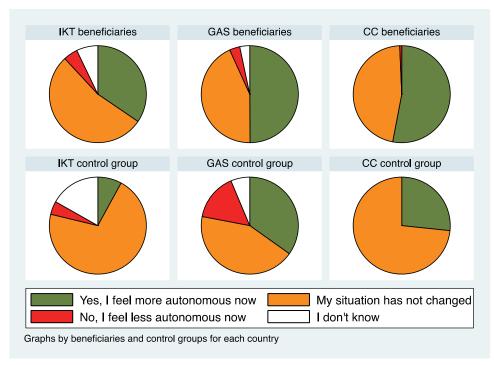


Figure 48 - Differences in perceived autonomy change in the artefacts (technological) dimension, comparison between beneficiaries and their control groups, all case [Considering the technological dimension, has your participation in the social innovation contributed to your autonomy/ how do you feel compared to three years ago?]



Source: CRESSI survey data, 2016

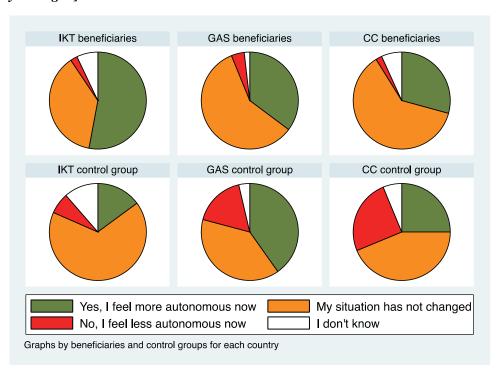
Figure 49 - Differences in perceived autonomy change in the cultural dimension, comparison between beneficiaries and their control groups, all case [Considering the cultural dimension, has your participation in the social innovation contributed to your autonomy/ how do you feel compared to three years ago?]





Within the cultural dimension (Figure 49), results are similar: an evident, beneficiaries perceive more positive autonomy change, in particular within the GASs and the CCs case.

Figure 50 - Differences in perceived autonomy change in the economic dimension, comparison between beneficiaries and their control groups, all case [Considering the economic dimension, has your participation in the social innovation contributed to your autonomy/ how do you feel compared to three years ago?]



Source: CRESSI survey data, 2016

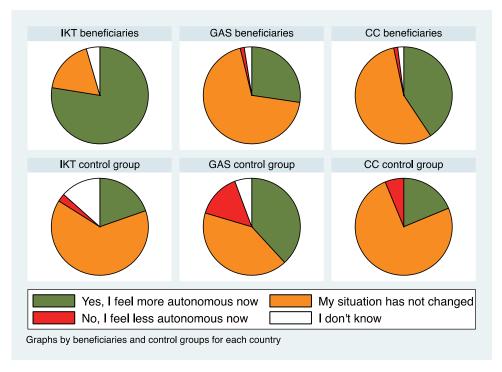
Figure 50 shows that autonomy within the economic dimension does not seem to be particularly influenced by the participation in the social innovation, at least for the beneficiaries of the GASs and the CCs case. Among beneficiaries of IKTs, a clear improvement of autonomy in this dimension is perceived.

Similarly to the economic dimension, it is again in the IKTs case in which the biggest segment of beneficiaries perceives an improvement in their security-related autonomy. Somehow, GASs groups are not really able to transmit their goal of providing a more stable and secure economic environment to their suppliers to the perception of this target group: while beneficiaries of GASs again tend not to report deteriorations in their autonomy, but in overall a smaller percentage than in the control group reports an improvement.

Beneficiaries of CCs and of IKTs report improvements in political autonomy, while the beneficiaries of GASs reply similarly to their control group, in which however also a larger group reports deterioration of autonomy, which is almost absent among the beneficiaries.

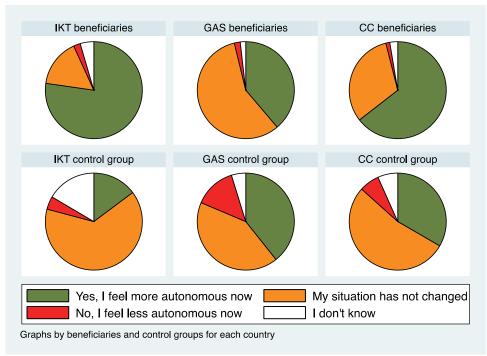


Figure 51 - Differences in perceived autonomy change in the security-related dimension, comparison between beneficiaries and their control groups, all case [Considering the security-related dimension, has your participation in the social innovation contributed to your autonomy/ how do you feel compared to three years ago?]



Source: CRESSI survey data, 2016

Figure 52 - Differences in perceived autonomy change in the political dimension, comparison between beneficiaries and their control groups, all case [Considering the political dimension, has your participation in the social innovation contributed to your autonomy/ how do you feel compared to three years ago?]





In synthesis, the self-assessed autonomy of beneficiaries and their control group tend to differ: with perceived autonomy of beneficiaries tending to being higher than that of their control groups. However, when prompted on the influence that the participation in the social innovation might have had on their autonomy levels, evidence becomes more blurred: for the GASs case, the beneficiaries - mainly small enterprises of the agricultural sector - no significant difference with respect to their control group can be seen - apart from two factors: within the cultural dimension, GASs beneficiaries tend to experience an improvement in autonomy more often; with respect to their control group, GASs beneficiaries tend to experience a deterioration in autonomy less often.

For the CCs case, improvements in autonomy are much more prevalent among beneficiaries within the natural, technological, cultural and political dimension. Yet, the limited amount of observations of the Dutch control group calls for caution in the interpretation of these results.

For the IKTs case, there is a neat difference in perceived autonomy improvements in all dimensions: beneficiaries tend to report improvements between 50% and 75%.



PART III – Zooming in⁴³

12. A focus on gender

The aim of the present focus is to explore social innovation in terms of its consequences for gender inequality. Studying gender inequality is particularly relevant for EU strategies for economic and societal improvement, as a more equal society can foster economic growth in a longer period and achieve better social cohesion (Hubert and Helfferich, 2016). Can we suppose that social innovation could be one of the tools that allow EU to reduce gaps in the social and economic participation of women in society? This research question is investigated across the three case studies being part of the CRESSI fieldwork: solidarity purchasing groups in Italy (GASs), autonomous water management in Germany (IKTs) and complementary currencies in the Netherlands (CCs). The three main domains in which the gender inequality is examined are the following: labour market activation, personal autonomy and economic insecurity.

In the following sections, differences in gender equality are presented between those who participate in the social innovation (beneficiaries - S.I.) and those who are not participating to it (control group - C.G.), despite having similar social and economic characteristics and living in the same geographical area. The analysis also runs separately for the three case studies, as they show an extreme variance in gender composition. Supposedly, IKTs activities are mostly related to housing infrastructures which is more considered a men's job (Kornrich et al, 2013), thus succeeding in including more men than women in their activities compared to the control group. For GASs and CCs – on the contrary – there is a clear effect in gender participation compared to the control group that allows for being positive in their potential effect for reducing gender inequality.

Table 28 – Participating in the social innovation, by gender – percentages and absolute values, all cases

	IK	Ts	GA	Ss	C	Cs	San	ıple
	S.I.	C.G.	S.I.	C.G.	S.I.	C.G.	S.I.	C.G.
Male	68,4	60,2	58,7	66,1	35,3	41,0	55,6	65,3
Female	31,6	39,9	41,3	33,9	64,7	59,0	44,4	34,7
total in absolute values	98	133	925	2041	201	39	1224	2213

Source: CRESSI survey data, 2016

Furthermore, the three cases are also very different in terms of age. GASs constitute the social innovation most able in mobilising younger participants, while in IKTs (74,5%) and in CCs (72,6%) participants are in majority over 50 years old. The younger age of GASs' participant is confirmed as long as control group tends to be older than those who participate in the social innovation. This is not valid for IKTs and CCs who seem to attract older people as participant.

⁴³ Please consider for authoring that the section 12 has been written by Lara Maestripieri. Section 13 is authored by Toa Giroletti. Section 14 is authored by Marco Gavazzoni.



Table 29 - Participating in the social innovation, by age - percentages and absolute values, all cases

	IK	Ts	GA	Ss	C	Cs	San	ıple
	S.I.	C.G.	S.I.	C.G.	S.I.	C.G.	S.I.	C.G.
Under 30	6,1	8,2	6,7	6,8	4,0	-	6,2	6,7
31-40	4,1	16,3	22,5	18,4	9,5	18,0	18,8	18,3
41-50	15,3	26,7	29,7	27,2	13,9	18,0	25,9	27,0
51-64	50,0	32,6	34,1	36,7	46,8	43,6	37,3	36,5
Older than 65	24,5	16,3	7,0	10,9	25,9	20,5	11,8	11,4
total in absolute values	98	135	925	2041	201	39	1224	2213

Source: CRESSI survey data, 2016

To sum up, the three cases show different populations with regards to the main divides of age and gender among their beneficiaries: if a median representative had to be chosen, IKTs would probably be represented by an over-50 year old man; CCs by an over-50 year old woman, while GASs' beneficiaries are typically men in their middle age.

Gender equality in employment

One of the most important issues that regards gender inequality is referred to the participation of women in active life. IKTs' women show in general a lower labour market activation⁴⁴ compared to the control group, which might be explained in the general difference structure by age between beneficiaries and control group. On the contrary, for GASs the participation to social innovation gives the impression to be beneficial in terms of women's activation, as it is associated with lower unemployment and inactivity rates among women. For CCs, participation to S.I. seems inconsequential between groups of women, but rather influential in difference between men and women. Regarding gender gaps in employment, being a beneficiary seems to have a positive effect in GASs and in IKTs, as it is associated with slightly more equality in employment between men and women.

Table 30 – Labour market participation and gender, comparison between social innovation beneficiaries and their control group, *percentages* and absolute values, IKTs case

	Male S.I.	Male C.G.	Female S.I.	Female C.G.
Employed	73,1	82,5	71,0	79,3
Permanent employee	46,7	66,0	42,6	49,5
Temporary employee	1,6	2,5	10,7	13,9
Working on one's own	12,5	2,5	17,7	11,9
Entrepreneur	12,5	11,4	-	4,0
Unemployed	4,5	0	3,2	1,9
actively looking	1,5	-	-	1,9
discouraged	3,0	-	3,2	-
Inactive	22,4	17,5	25,8	18,9
retired	20,9	17,5	12,9	13,2
total in absolute values	67	80	31	53

⁴⁴ Labour market activation refers to the active participation to labour market and measures all those individuals who are currently employed or actively looking for a job.



Table 31 – Labour market participation and gender, comparison between social innovation beneficiaries and their control group, *percentages* and absolute values, GASs case

	Male S.I.	Male C.G.	Female S.I.	Female C.G.
Employed	97,6	95,6	96,9	94,4
Permanent employee	17,2	17,6	19,9	17,3
Temporary employee	2,6	2,1	2,9	2,7
Working on one's own	32,3	37,3	39,2	41,4
Entrepreneur	45,5	38,7	34,9	33,0
Unemployed	1,1	1,2	1,8	2,5
actively looking	0,7	0,5	0,8	1,5
discouraged	0,4	0,7	1,1	1,0
Inactive	1,3	3,2	1,3	3,2
retired	0,7	3,1	-	1,9
total in absolute values	543	1.349	382	692

Source: CRESSI survey data, 2016

Table 32 – Labour market participation and gender, comparison between social innovation beneficiaries and their control group, *percentages* and absolute values, CCs

	Male S.I.	Male C.G.	Female S.I.	Female C.G.
Employed	63,4	75,0	43,1	43,5
Permanent employee	29,5	13,6	16,0	24,2
Temporary employee	7,4	27,8	5,6	4,8
Working on one's own	14,7	20,5	20,0	14,5
Entrepreneur	11,8	13,6	1,6	-
Unemployed	18,3	12,5	21,5	21,7
actively looking	7,0	6,3	6,2	17,4
discouraged	11,3	6,3	15,4	4,4
Inactive	18,3	12,5	35,4	34,8
retired	0,7	3,1	-	1,9
total in absolute values	71	16	130	23



Table 33 – Gender gap (male – female) for beneficiaries and control group in labour market activation, *percentages* and absolute values, all cases

	Gender gap S.I.	Gender gap C.G.
IKTs (n° respondents: male + female)	98	133
Employed	-2,16	-3,25
Unemployed	-1,25	+1,89
Inactive	+3,42	+1,37
GASs (n° respondents: male + female)	925	2041
Employed	-0,75	-1,27
Unemployed	+0,73	+1,27
Inactive	+1,9	+0,01
CCs (n° respondents: male + female)	201	39
Employed	-20,3	-31,52
Unemployed	+3,22	+9,24
Inactive	+17,07	+22,28

Source: CRESSI survey data, 2016

In general, the participation in social innovation seems to be a favourable contest for self-employment, as more women entitled with their own business are present among the numbers of beneficiaries. This trend is especially evident in Italy where not only women are more active on the labour market compared to women belonging to the control group, but they are also more present in entrepreneurial activities (+1,96pp.). For IKTs and CCs, as well, the collaboration with social innovation seems more often connected with a condition of self-employment. In fact, analysing the cognitive frame which at best predicts the positive attitude towards entrepreneurship (see table 7), the results show a stronger agreement towards risk aversion among control group compared to beneficiaries for GASs and CCs, while the opposite occurs for IKTs' women. For men, all those who participate to the social innovation are less risk adverse compared to the population of control group, but a gendered effect can be interacting in gender gaps (Borghans et al, 2009).

Table 34 – Agreement to "One should not start a business if there is a risk it might fail", by gender, percentages and absolute values, all cases

	Male S.I.	Male C.G.	Female S.I.	Female C.G.
IKTs (n° respondents)	58	67	26	47
Agree	31,03	43,28	38,46	34,04
Disagree	68,97	56,72	61,54	65,96
GASs (n° respondents)	333	836	211	413
Agree	38,44	47,73	38,86	46,49
Disagree	61,56	52,27	61,14	53,51
CCs (n° respondents)	51	5	84	9
Agree	13,73	40	7,14	22,22
Disagree	86,27	60	92,86	77,78

Gender equality in autonomy

Another important issue in assessing gender inequality regards the capacity of women to choose freely in different dimensions of life, which is the definition of personal autonomy assumed by the CRESSI research team. CRESSI respondents considered a 10-step ladder where the bottom, the first step, represents the lowest level of autonomy in taking a decision, and 10 represents the highest level of autonomy.

Table 35 – Scores in the self-perceived autonomy ladder (1=low autonomy, 10=high autonomy), by gender, percentages and absolute values.

	Male S.I.	Male C.G.	Female S.I.	Female C.G.
IKTs (n° respondents)	58	66	21	44
Self-perceived autonomy	7,59	7,03	7,43	6,93
GASs (n° respondents)	376	973	244	496
Self-perceived autonomy	7,58	6,60	7,57	6,48
CCs (n° respondents)	52	8	97	14
Self-perceived autonomy	7,77	7,5	8,04	6,57

Source: CRESSI survey data, 2016

In general, participating to a social innovation enhances the empowerment of the people involved, being them male or female. An improvement which is stronger for women in CCs (+1,47 compared to control group) and GASs (+1,09) case, while for IKTs, men feel the highest benefits in terms of autonomy (+0,56 compared to control group). However, the level of women's agreement is stronger for IKTs compared to GASs and CCs, having the German beneficiaries a rate of agreement, which arrives to 70-80% in natural, artefactual, security-related and political dimension. For CCs, agreement occurs in about/more than half of the cases only in 3 out of 6 dimensions; for GASs, the highest score doesn't even arrive at half of the cases (46,38% in culture). As to regard the dimension of the autonomy in which beneficiaries declare that participating to the social innovation have improved their lives, IKTs women feel extremely empowered in the natural, political and security dimension; CCs in politics, culture and nature. On the contrary, the participation to social innovation has empowered the GASs women only in a minority of cases, with low impact especially on security, artefacts and nature in which only 1 woman out of 4 has declared that the participation to the social innovation has been fundamental in her increased empowerment.

Compared to their female counterparts, IKTs and CCs men give more relevance to security-related and economic dimension, GASs men to cultural and natural dimension. Looking more into details the gender gap in the specific social innovation, IKTs women felt empowered mostly in the political dimension (with men having 16pp of agreement less than women) and to a lesser extent in the natural dimension (3,1pp more than men). IKTs men gave stronger emphasis on economy (+26,3pp), culture (+12,5pp) and security (+6,6pp) compared to women. GASs men and women don't show a clear differentiation in terms of gender in the different dimension of autonomy: in general, GASs men tend to be more likely to feel empowered in each dimension. The sole relevant exception is the political dimension in which the difference between GASs men and women in terms of autonomy's improvement is sensitive (+9,2pp) and the security dimension (+0,9pp) in which it is almost equal. For CCs, women feel more empowered than men in the economic dimension (+11,0pp.) and to a lesser extent in the security-related dimension (+4,5%). Men attribute a stronger impact of the social innovation in the natural dimension (+7,7pp) and in the artefacts dimension (+9,2pp).



Table 36 – Percentage of agreement to the prompt "the participation in the social innovation has improved my autonomy" in the given dimension, absolute values for n° of respondents, all cases

	Male S.I.	Female S.I.	gap
IKTs (n° respondents)	62	26	
Nature	76,9	80,0	-3,1
Artefacts	72,9	70,8	2,1
Culture	38,6	26,1	12,5
Economy	59,7	33,3	26,3
Security	79,7	73,1	6,6
Politics	72,4	88,5	-16,1
GASs (n° respondents)	371	238	
Nature	34,5	28,6	5,9
Artefacts	33,0	27,2	5,7
Culture	52,2	46,4	5,8
Economy	36,6	33,1	3,6
Security	27,7	26,8	0,9
Politics	42,4	33,2	9,2
CCs (n° respondents)	54	102	
Nature	55,8	48,0	7,7
Artefacts	54,0	44,8	9,2
Culture	53,7	52,6	1,1
Economy	22,0	33,0	-11,0
Security	37,7	42,3	-4,5
Politics	66,0	63,6	2,4

Source: CRESSI survey data, 2016

Furthermore, respondents who have been in contact with the social innovation tend to be more confident in their agency and they are consistently more positive compared to the control group⁴⁵. This is valid especially for women's in the GASs movement, which at large majority think they can do something to improve their lives. It is also interesting to notice how the gap between men and women is reduced for the Italian case, while it remains consistent both in the IKTs and CCs cases, as if women – although feeling more empowered compared to the control group – could not feel as empowered as men do.

Table 37 – Self-perceived agency, by gender, percentages and absolute values, all cases

Do you think you can do something to improve your life?	Male S.I.	Male C.G.	Female S.I.	Female C.G.
IKTs (n° respondents)	52	60	23	44
Yes	86,5	86,7	78,3	75,0
GASs (n° respondents)	275	624	168	301
Yes	94,6	90,1	97,0	93,4
CCs (n° respondents)	41	4	70	3
Yes	97,6	100,0	90,0	100,0

⁴⁵ The reduced number of respondents in the case of CCs puts in question the reliability of answers for the control group.



Gender equality in economic insecurity

The last aspect that this focus will face regards the perceived economic insecurity of the households, hypothesizing that participating to a social innovation can promote economic security in respondents. The research team has applied an already assessed measure of economic insecurity (Western et al, 2012; Whelan and Maitre, 2013; Kaseauru et al, 2016; Maestripieri, 2015 and 2016), which is composed by two items: 'make ends meet' – which measures the subjective perception of the respondent in terms of economic insecurity and 'face an unexpected expense' – which is its correspondent objective evaluation. The index shows the percentages of the sample, which include individuals that answer at least once to one of the two questions involved in "low vulnerability" and to both questions in "high vulnerability" (Alkire and Foster, 2011). Those who don't report any of the economic-related dimensions of insecurity are defined as "secure".

Table 38 – Percentage of individuals by their level of economic security⁴⁶, by gender, absolute values for n° of respondents, all cases

	Male S.I.	Male C.G.	Female S.I.	Female C.G.
IKTs (n° respondents)	61	62	21	43
Secure	91,8	87,1	80,8	69,8
Low vulnerability	6,6	12,9	19,2	25,6
High vulnerability	1,6	-	-	4,6
GASs (n° respondents)	301	725	200	365
Secure	75,8	77,0	71,0	69,3
Low vulnerability	16,9	14,2	14,5	17,8
High vulnerability	7,3	8,8	14,5	12,9
CCs (n° respondents)	53	5	93	9
Secure	81,1	60,0	75,3	55,6
Low vulnerability	9,4	20,0	14,0	22,2
High vulnerability	9,4	20,0	10,8	22,2

Source: CRESSI survey data, 2016

In general, women feel more insecure compared to men and this is a result, which is consistent across all the cases, despite of the different attitudes toward security that the cases show. Participating to social innovation improves the security of women in all countries, but the magnitude of the advantage is extremely dependent on the case: highest in CCs (about 20pp.) and lowest in GASs (about 2 pp.). Women are also concentrated more frequently than men in the category "high vulnerability" that comprehends those respondents that are not able to face an unexpected expense nor to make their ends meet.

Although the gender difference between perception in economic security can also depend on different psychological attitudes between men and women (Borghans et al, 2009), it is the opinion of the author that a role plays the more frequent women's economic dependency from their partner. In fact, the strongest gender differences emerged when the respondent are asked to define who is the primary earner in their couples. In IKTs and in CCs, there is a strong gender gap, which is not mitigated by the participation to the social innovation; GASs' beneficiaries, on the contrary, show a lower gap that seems though not influenced by the participation to the social innovation.

CRESSI Working Paper no. 34/2017

⁴⁶ Secure= 2 No; low vulnerability= 1 Yes out of dimensions; high vulnerability= 2 Yes



Table 39 – Self-perceived economic dependency, by gender, *percentages* and absolute numbers, all cases

Would you define yourself as				
the primary earner of your				
household?	Male S.I.	Male C.G.	Female S.I.	Female C.G.
IKTs (n° respondents)	58	61	21	38
No	19,0	16,4	66,7	65,8
GASs (n° respondents)	279	683	186	343
No	41,6	37,3	66,1	66,8
CCs (n° respondents)	50	5	87	6
No	12,0	0,0	32,2	33,3

Source: CRESSI survey data, 2016

Furthermore, only a minority of respondents declare that the participation in the social innovation has influenced their economic situation – although in general they think that when this occurs its influence was positive. Women are more inclined to declare that being a beneficiary has been positive for their situation, with a magnitude of difference compared to men which is strongest for IKTs (3,9pp) and GASs (3,01pp.), while just slight in the case of CCs (1,34pp.).

Table 40 – Participation in the social innovation and economic situation, by gender, *percentages* and absolute numbers, all cases

Participation in the social innovation influenced your		
financial situation?	Male S.I.	Female S.I.
IKTs (n° respondents)	47	18
Improved	12,8	16,7
Remained the same	85,1	77,8
Worsened	2,1	5,6
GASs (n° respondents)	262	164
Improved	24,4	27,4
Remained the same	73,3	70,7
Worsened	2,3	1,8
CCs (n° respondents)	44	78
Improved	20,5	21,8
Remained the same	79,6	76,9
Worsened	-	1,3

Source: CRESSI survey data, 2016

Conclusion

The aim of this focus was to explore the assumption by which social innovation can be a tool for improving gender equality in society, looking at the three domains in which this inequality may occur: labour market participation, personal autonomy and economic insecurity. The results of this enquiry are somehow controversial and strongly depend on the different characteristics assumed by the three case studies under investigation.

As to regard *labour market activation*, being part of a social innovation seems to increase the likelihood of women to being employed – although it mostly occurs via self-employment thus putting in question the



effective economic independence that might derive from these activities. Correlated to that, those who participate in the social innovation seem less risk adverse compared to the control group.

As to regard *personal autonomy*, social innovation shows a clear empowerment of the individuals involved in it, which is especially evident for women in CCs. The dimension in which the person feels empowered depends on the type of the social innovation.

As to regard *economic security*, being part of a social innovation seems to show an influential impact for IKTs and CCs, while for GASs the positive impact is reduced. Despite that, only a minority of respondents declare that being in contact with the social innovation has entailed an improvement in their economic situation.

In conclusion, it is not possible to draw any final conjecture about the relation between gender and social innovation. Women look empowered by the participation in the social innovation and more willing to participate to active life, but if this participation can have a real impact in reducing economic inequalities between genders seems unclear from the collected data. However, what is a result that might be interesting to put in evidence is that individuals participating to a social innovation are more satisfied compared to those of the control group, being them men or women. A result that allows for being positive about favouring the participation of persons in such initiatives is that at least such participation allows for an improved inclusion of the individuals who participate in them.

Table 41 – Mean scores in perceived life satisfaction (1=totally dissatisfied, 10=totally satisfied), by gender, percentages and absolute numbers

	Male S.I.	Male C.G.	Female S.I.	Female C.G.
IKTs (n° respondents)	58	66	21	44
Life satisfaction	7,49	7,65	7,88	7,59
GASs (n° respondents)	376	973	244	496
Life satisfaction	7,08	6,33	6,98	6,29
CCs (n° respondents)	52	8	97	14
Life satisfaction	7,16	7	7,60	7,14

Source: CRESSI survey data, 2016

Finally, the analysis presented in this focus is mainly occurring at descriptive level, thus not allowing for a robust assessment of the role of social innovation in being effective in reducing gender inequality. More research is required in the future in this regards, and an advanced statistical analysis is foreseen to better investigate the intertwining roles of gender and social innovation in favouring the empowerment of women.



13. A focus on measuring autonomy

The measure of agency we choose within the CRESSI framework is autonomy, as mentioned in Section 11 (Part II.3). Autonomy is evaluated through an index, the 'Relative Autonomy Index' (henceforth RAI). The purpose of the RAI is to evaluate in which position of a continuum the individual's Extrinsic Motivation is situated. The Extrinsic Motivation is composed of four possible categories: External Regulation, Introjected Regulation, Identified Regulation, and Integrated Regulation (Ryan and Deci, 2000). These represent four levels of autonomy, ranging from non-self-determined (External Regulation, Introjected Regulation) to self-determined (Identified Regulation, and Integrated Regulation) forms of behaviors. As described in the Methodological Toolkit D3.5 (von Jacobi, et al., 2015), this index presents several strenghts, as well as drawbacks. The main problem of the RAI is related to the 'adaptive preference' dilemma. Since the RAI captures the respondents' perception of his/her situation, the results can be biased by individuals' background. Since individuals are subject to past experiences and conditions, it is difficult to compare their perceptions, even when interrogated regarding their situation in a 'before and after' comparison (Giroletti, 2016) like in this project. In order to develop a measure less biased by the problem of adaptive preferences, we applied the 'Anchoring Vignettes Methodology' to the RAI.

13.1. Using 'Anchoring Vignettes Methodology'

The method of 'anchoring vignette' has been mainly developed by King et al. (2004). In brief, with this methodology it is possible to link individual answers, usually coming from some sort of self-assessment questions, to a shared and a comparable scale, captured through the use of vignettes. The 'anchoring' consists of re-ranking the responses given in the self-assessment questions in line with the responses given to the vignettes, which enables us to comprehend in which position the respondent positions herself with respect to the peers described in the vignettes. The word 'vignette' can be misleading since it seems to refer to a sort of illustration. However, the vignette simply represents a brief description of a specific item or situation that can be experienced by a possible peer of the interviewee. The procedure consists in two steps. In the first one, the respondent allocates each vignette on the basis of a ladder. In the second one, he/she answers to a self-assessment question using the same ladder.

In line with this technique, we use the RAI in order to measure the level of agency (also capturing aspirations and preferences), and apply the Anchoring Vignette methodology in order to have a measure of the RAI that is comparable across different individuals and contexts. Therefore, the wider distribution of reference that represents the perception of several forms of autonomy is captured using the vignettes. In the specific case of the RAI, the vignettes describe the four constructs of autonomy, from the lowest to the highest degree. The respondent has to allocate these vignettes according to a scale, which is coincident with the scale in which he/she has to allocate his/her own situation. In this way, it is possible to evaluate the respondent's perception of the general level of autonomy in the society, and then to anchor his/her subjectively evaluated condition to this distribution. This should allow us to have a DIF-free measure of autonomy. 47

In order to test this methodology, before including it in the CRESSI questionnaire, we proceeded with a pilot study. For the pilot study, we submit our questionnaire to 276 students of two Universities (both in February). We interviewed 180 students in Pollenzo at the University of Gastronomic Science, while 96 students have been interviewed at the Catholic University of Sacred Heart in Piacenza. The following paragraphs describe how we proceed for the implementation of the pilot study.

⁴⁷ All methodologies based on subjective evaluation have to deal with the problem of 'interpersonal incomparability'. This kind of bias has been acknowledged in the education testing literature and been defined as 'Differential Item Functioning' (DIF) (King, et al., 2004).



The fulfilment of the 'anchoring vignette' methodology requires the implementation of few preliminary steps: selecting the number of the vignettes, the content of each vignette, the formulation of the self-

assessment question, and the scale (i.e., type of representation and the length).

The number and the content of the vignettes are functional to the definition of the RAI within the CRESSI framework. In the common methodology, each vignette is a description of a situation of a possible peer in which a different level of the subject under analysis is revealed (King et al., 2004). In this particular framework, the subject under analysis is autonomy, and the different levels are the four constructs of the continuum (External Regulation, Introjected Regulation, Identified Regulation, and Integrated Regulation). In addition to these four, we include a fifth construct called No Control. We introduce this amendment since there could be few situations in which individuals act without a specific intent or motivation, or in which they do not act at all (Ryan and Deci, 2000); thus, in order to offer a complete range of possible response options. Therefore, since the vignettes are functional to the definition of the RAI, the number of the vignettes will correspond to the number of constructs (5).

Since the general distribution of each dimension should be evaluated using the five vignettes, in this case, we would have to use 30 vignettes (6 dimensions times 5 vignettes) plus twelve self-assessment questions (6 dimensions times 2 time periods). It is quite straightforward how highly time-consuming this practice can be. In order to have a simpler questionnaire, we decided to apply a more parsimonious approach. Instead of using the vignettes to evaluate the general distribution of each dimension, we will evaluate a single distribution, which comprehends all the dimensions. Therefore, we will use five vignettes for the five constructs, but the 'situation of a possible peer' will be described in each vignette using each time a different dimension. The first five vignettes represent the five levels of autonomy just described, the sixth vignette replicates one the five levels in order to control if using different dimensions to represent the same level of autonomy produces a bias. Moreover, the sixth vignette represents the sixth dimension of the NACEMP model. At this point, the question is how to choose which dimensions to use for the description of the constructs. In order to have a robust solution to this problem, we employ a random selection of the possible combinations of dimensions and constructs. For the pilot study, we tested all 30 vignettes. In order to do this, we constructed six different questionnaires and each student answered to one of them (randomly distributed among the respondents). Each questionnaire contains a randomized selection of 6 vignettes and of six selfassessment questions. The next table shows the final randomized selection of all vignettes and therefore the representation of the dimension in each questionnaire, implemented for the pilot study.



Table 42 – Randomized compositions of questionnaires used for the pilot study: random selection of RAI construct in specific NACEMP dimension

	1°	2°	3°	4 °	5°	6°
	questionnaire	questionnaire	questionnaire	questionnaire	questionnaire	questionnaire
No Control (1° vignette)	Economic	Natural	Security- Related	Political	Technological	Cultural
External Regulation (2° vignette)	Technological	Economic	Natural	Cultural	Security- Related	Political
Introjected Regulation (3° vignette)	Natural	Security- Related	Cultural	Technological	Political	Economic
Identified Regulation (4° vignette)	Political	Cultural	Technological	Natural	Economic	Security- Related
Integrated Regulation (5° vignette)	Cultural	Political	Economic	Security- Related	Natural	Technological
Control (6° vignette)	Security- Related / Integrated Regulation	Technological/ No Control	Political/ External Regulation	Economic/ Identified Regulation	Cultural/ Introjected Regulation	Natural/ External Regulation

Source: CRESSI elaborations

A second aspect related to the content is how to define the vignette. As previously said, the content of the vignettes generally represents several situations potentially experienced by the respondent (in this case examples of agency in the different dimensions). The choice of the question wording is critical not only for the overall understanding of autonomy itself, but also for the subsequent comparison between the opinions of individuals (OECD, 2013). For example, individuals belonging to different age groups might understand the same question in dissimilar ways. A section of each sentence represents the constructs as defined in the literature, therefore it must be the same for each interview within the same construct. The other segment of the sentence provides details on the situation of a possible peer.

The self-assessment question is used in order to assess an individual's opinion about his/her own situation. Within the six dimensions considered. For the pilot study we limit the collection of subjective evaluations to one time period ('current situation'). We use a Cantril scale with eleven steps (from 0 to 10). This scale has proven to be reliable and valid with respect to several emotional and perceived measures (Levin, Currie, 2014). The level (0) represents the lowest level of autonomy and here it is paraphrased as "the lowest level of autonomy in taking some decisions". On the opposite end, the level (10) represents the highest level of autonomy and is paraphrased as "the highest level of autonomy". Since it is problematic to fully know if the word 'autonomy' has the same meaning for all the respondents we included a brief definition of it in the questionnaires. We decide to start from 0 because we also included the No Control form of autonomy, which

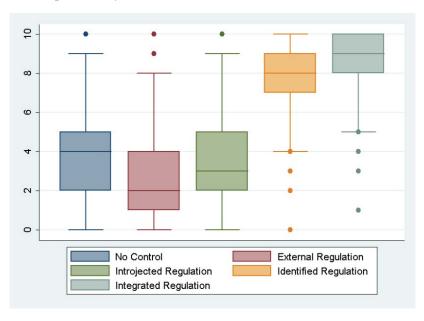


represents a situation without any form of autonomy. Moreover, we decide to use a scale with an odd number of steps (with the neutral category), although it might allow dubious or undecided respondents to 'seek refuge' in the neutral category.

13.2. Analysis of the Italian pilot and constructions of the Italian vignettes for the CRESSI survey

Among the respondents in the pilot study, 90% were born in Italy while 10% of them were born in a foreign country. The next graph and table show preliminary results of the vignette's positions.

Figure 53 - Distribution of vignette evaluations of different levels of autonomy as defined in RAI, Italian pilot study 48



Source: CRESSI elaborations

Figure 53 contains the box plot for vignette 1, 2, 3, 4, and 5. Vignette 6 will be investigated separately because it is used as a control for the other vignettes.

This Graph shows that the lower quartile (25%), the median (50%), and the upper quartile (75%) increase from vignette 2 to vignette 5. This suggests that the order assumed in the theoretical model is respected from vignette 2 to vignette 5, but not for vignette 1 (see table 21).

CRESSI Working Paper no. 34/2017

ODECCI W. 1:

⁴⁸ The number attached to vignettes identifies their order of appearance in the questionnaire. and the level of autonomy we are referring to, as shown in Table 20. Given the randomized selection of content, the dimension described may be different questionnaires.



Table 43 – Distribution of evaluations of vignettes, all questionnaires of the Italian pilot study

Vignette Nr.	Level of RAI	Number of observations	Mean	Standard Deviation	Median	Min	Max
1	No Control	275	3.847	2.104	4	0	10
2	External Regulation	276	2.565	1.961	2	0	10
3	Introjected Regulation	276	3.319	1.967	3	0	10
4	Identified Regulation	276	7.681	1.725	8	0	10
5	Integrated Regulation	276	8.366	1.572	9	1	10

Source: CRESSI elaborations

Concerning vignette 1, we hypothesized that not all respondents would have acknowledged this vignette in the same way since it is not a condition usually experienced by our respondent population but more typical of highly deprived contexts.

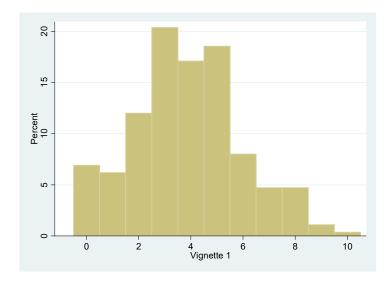
In the next sections, we consider each vignette separately in order to investigate how respondents allocated the vignettes and how evaluations may differ across different dimensions.

a) The first vignette (level of autonomy: No Control)

The first vignette is particularly complicated because it represents a level of autonomy in which the subject (Susan) does not have control over the situation. This level of autonomy is in general experienced by individuals living in highly deprived areas or conditions (Alkire, et al., 2008). Our respondents, being students in a private university in a developed country, probably have never experienced this condition. Therefore, this might be the reason why they do not allocate this vignette in the right order. Figure 54 presents the distribution of the answers with respect to the first vignette among all respondents.



Figure 54 - Distribution of the first vignette, Italian pilot study⁴⁹



Source: CRESSI elaborations

Figure 54 shows that vignette 1 is mainly distributed between values 2 (25th percentile) and value 5 (75th percentile). The median value is 4, while the minimum and the maximum values are respectively 0 and 10 (see table 22). It confirms that respondents have not perceived this vignette as the lowest one. In order to comprehend if the position of the first vignette varies depending on the dimension considered, we report the summary statistics of this vignette for each dimension.

Table 44 – Summary statistics of the first vignette (No Control) for each dimension

Dimensions	Number of observations	Mean	Standard Deviation	Min	Max
Economic	47	3.702	2.293	0	9
Natural	47	3.702	2.283	0	8
Security	45	3.733	2.104	0	10
Political	46	3.652	1.566	0	7
Technological	45	4.578	2.169	0	9
Cultural	45	3.733	2.082	0	8

Source: CRESSI elaborations

The means of previous table show that there is not a systematic variation depending on the dimension represented in the vignette. Even if there are differences in the maximum values, almost all means are distributed around value 3.7. The only dimension leading to a different evaluation of the level of autonomy No Control is the technological one.

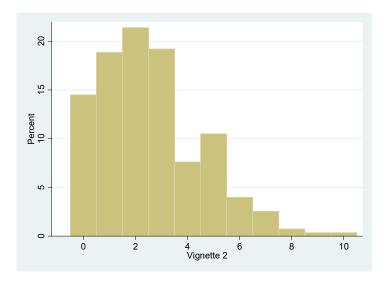
⁴⁹ The number attached to vignettes identifies their order of appearance in the questionnaire. and the level of autonomy we are referring to, as shown in Table 20. Given the randomized selection of content, the dimension described may be different in different questionnaires.



b) The second vignette (level of autonomy: External Regulation)

The second vignette represents the second lowest level of autonomy namely External Regulation, in which the subject (Susan) is pushed to act by an external obligation.

Figure 55 - Distribution of the second vignette, Italian pilot study



Source: CRESSI elaborations

The previous figure shows that the second vignette is positively skewed, in fact it is mainly distributed between values 1 (25th percentile) to 4 (75th percentile). This is consistent with the low level of autonomy represented by this vignette. For further descriptive statistics, see the following table.

Table 45 – Summary statistics of the second vignette (External Regulation) for each dimension

Dimensions	Number of observations	Mean	Standard Deviation	Min	Max
Technological	47	3.340	1.868	0	7
Economic	47	2.766	2.056	0	10
Natural	46	3.152	1.763	0	9
Cultural	46	1.435	1.614	0	7
Security	45	2.578	0.250	0	8
Political	45	2.089	1.819	0	7

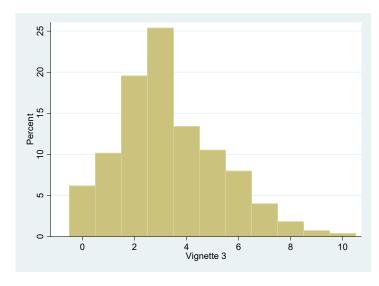
Source: CRESSI elaborations

As we can see from this table, vignette 2 is not apparently distributed around a specific value. The dimensions with greater values are technological and natural, followed by economic and security. The dimensions with the lower values are political and cultural. A possible explanation for these differences is based on how the respondents attribute degrees of relevance to these dimensions. Since the technological and the natural dimensions are nearest to the students' life, as well as the economic and the security ones, the respondents may have given more importance to these dimensions with respect to the political and cultural ones. Even if the respondents should rate the vignettes considering only the level of autonomy represented, it is probable that they have associated with them also an element of relevance.

c) The third vignette (level of autonomy: Introjected Regulation)

The third vignette still represents a negative level of autonomy, although it is a slight improvement respect to the second one. In the situation described in this vignette Susan is doing something because otherwise she would feel ashamed or judged by others. This level of autonomy is defined as Introjected Regulation.

Figure 56 - Distribution of the third vignette, Italian pilot study



Source: CRESSI elaborations

Figure 56 shows that also the distribution of this vignette is positively asymmetric. The 25th percentile is 2, the median value is 3, and the 75th percentile is 5. However, since this vignette represents a higher level of autonomy respect to the second one, it is less positively asymmetric respect to it. In the next table are showed the summary statistics of vignette three for each dimension.

Table 46 - Summary statistics of the third vignette (Introjected Regulation) for each dimension

Dimensions	Number of observations	Mean	Standard Deviation	Min	Max
Natural	47	3.404	2.113	0	10
Security	47	3.745	2.016	0	8
Cultural	46	3.369	1.981	0	7
Technological	46	3.043	1.763	0	8
Political	45	3.000	1.871	0	9
Economic	45	3.333	2.045	0	9

Source: CRESSI elaborations

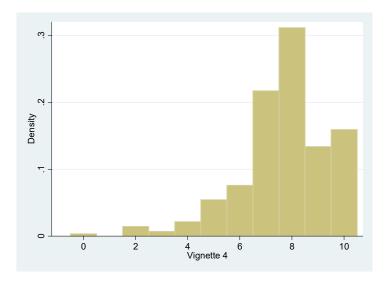
Table 46 shows that the distribution of the third vignette does not present noticeable differences depending on the dimension represented in the vignettes. The dimensions with the lowest and the highest mean are respectively the political (3.000) and the security-related (3.745) ones.



d) The fourth vignette (level of autonomy: Identified Regulation)

The fourth vignette represents a positive level of autonomy, the Identified Regulation. In this vignette, Susan decides to do something because she thinks it is important.

Figure 57 - Distribution of the fourth vignette, Italian pilot study



Source: CRESSI elaborations

The figure above shows that the distribution of the fourth vignette is negatively asymmetric, it is due to the positive level of autonomy represented in the vignette. The 25th percentile is 7, the median value is 8, and 75th percentile of the distribution is 9.

Table 47 – Summary statistics of the fourth vignette (Identified Regulation) for each dimension

Dimensions	Number of observations	Mean	Standard Deviation	Min	Max
Political	47	7.766	1.697	3	10
Cultural	47	7.915	1.586	4	10
Technological	46	7.522	1.441	3	10
Natural	46	8.391	1.406	5	10
Economic	45	8.133	1.140	6	10
Security	45	6.333	2.195	0	10

Source: CRESSI elaborations

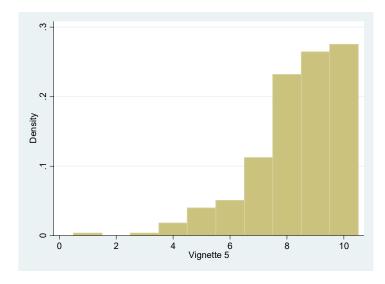
The distribution of the fourth vignette presents few differences depending on the dimension represented. The most evident difference is about the vignette that represents the security-related dimension. First of all, this vignette has a lower mean respect to the other ones. Moreover, around 11% of the 45 respondents placed this vignette on a value lower than 2 (including 0) even if it supposes to represent a high level of autonomy. In this vignette, the security-related dimension is described as follow: "Susan feels unsafe when walking alone in her neighbourhood. She is afraid to go out at night, however she does it anyway because she thinks it is important and valuable not to restrict her lifestyle." Thus, while answering the respondents did not just consider the level of autonomy but also the importance to be safe.



e) The fifth vignette (level of autonomy: Integrated Regulation)

The fifth vignette represents the higher level of autonomy, namely Integrated Regulation. This level of autonomy represents a situation in which Susan considers several options and decides to choose one because she thinks it is most valuable.

Figure 58 - Distribution of the fifth vignette, Italian pilot study



Source: CRESSI elaborations

The distribution of the fifth vignette is highly negatively asymmetric; this is consistent with the high level of autonomy represented. The majority of respondents allocated this vignette among values 8 and 10, in fact 25th percentile, the 50th percentile, and 75th percentile of the distribution are respectively 8, 9, and 10.

Table 48 – Summary statistics of the fifth vignette (Integrated Regulation) for each dimension

Dimensions	Number observations	Mean	Standard Deviation	Min	Max
Cultural	47	8.469	1.412	5	10
Political	47	8.723	1.410	4	10
Economic	46	9.022	1.105	5	10
Security	46	7.034	2.064	1	10
Natural	45	8.667	1.348	5	10
Technological	45	8.000	1.365	5	10

Source: CRESSI elaborations

As in the previous vignette also in this case, the vignette that shows differences respect to the other ones is the security-related vignette. In fact, this vignette has a lower mean (7.034) and around 13% of the 46 respondents allocated it on a value equal or less than 4. The vignette with the higher value is the economic one.

f) The sixth vignette (different levels of autonomy)

As previously mentioned the sixth vignette does not represent a further level on the autonomy scale, on the contrary, it is a randomized reproduction of one of the five levels of autonomy using a sixth dimension. It



enables us to understand if respondents evaluate a particular level of autonomy differently, if represented in two different dimensions. For example, in questionnaire 1, the level of autonomy Integrated Regulation is represented twice: in the first case using the cultural dimension and in the second case (the sixth vignette) using the security-related dimension.

Table 49: Summary statistics of the sixth vignette and the one repeated for each questionnaire⁵⁰

Number questionnaire	of	Dimension	Number observations	Mean	Standard Deviation	Min	Max
questionnaire (Integrated	1	Cultural	47	8.468	1.412	5	10
Regulation)		Security-related	47	7.191	2.143	2	10
questionnaire	2	Natural	47	3.702	2.283	0	8
(No Control)		Technological	47	4.255	1.961	0	10
questionnaire	3	Natural	46	3.152	1.763	0	9
(External Regulation)		Political	46	2.891	1.663	0	7
questionnaire	4	Natural	46	8.391	1.406	5	10
(Identified Regulation)		Economic	46	8.587	1.392	4	10
questionnaire	5	Political	45	3.000	1.871	0	9
(Introjected Regulation)		Cultural	45	2.800	2.040	0	9
questionnaire	6	Political	45	2.089	1.819	0	7
(External Regulation)		Natural	45	2.578	1.671	0	6

Source: CRESSI elaborations

Looking at **Table 49**, we can see that there are some weak inconsistencies. The vignette representing the No Control level of autonomy through the natural dimension has a lower mean respects to the technological one. However, as previously discussed, this level of autonomy presents general inconsistency due to the sophisticated understanding of the situation (usually, students do not experience situations with such low level of autonomy). Among the other levels of autonomy, we find differences in questionnaire 1, in which we investigated the Integrated Regulation through a comparison between the cultural dimension and the security-related dimension. In this case, the security-related dimension has a lower mean respect to the cultural one. As already mentioned, it might be due to the importance assigned to these dimensions. In our vignette, the security-related dimension is represented as a condition in which the individual "...feels unsafe when walking alone in her neighbourhood. She is afraid to go out at night. However, after having considered various options she does it anyway because she thinks it is important and valuable not to restrict her lifestyle, and not leave the neighbourhood in deterioration." This situation, even if symbolizes the higher level of autonomy (the Integrated Regulation), is perceived by the respondent as lower respects to the cultural one because it involves that Susan might put in risk her safety in exerting her autonomy.

⁵⁰ In parenthesis the level of autonomy represented by the vignette in each questionnaire.



Using the results of the pilot study, we structured the vignettes included in the CRESSI questionnaire as follows:

- 1) as in the pilot study we used six vignettes, the first five vignettes represent the five levels of autonomy, whilst the last vignette replicates one of the constructs. Again, in order to control if using different dimensions to represent the continuum produces a bias we use the sixth dimension to replicate one of the constructs. If the respondent answers to the two questions in the same way, this will signify that there is no problem in assuming that it is possible to evaluate a single distribution that comprehends all dimensions.
- 2) we included the No Control level of autonomy even if the pilot study suggested that the respondents did not allocated this vignette in the right order. We decided to move forward with this vignette because it is not ensured that also the farmers will incorrectly order this vignette. The two groups of respondents, the students and the farmers, are quite different from several points of view (i.e. age, educational level, and geographical origin). Moreover, we decided to include this level of autonomy also due to project-constraints. If we exclude this level of autonomy, we will not be able to include in the research all six dimensions. This because we will have six dimensions for four levels of autonomy plus the one replicated, so we will have six dimensions for five levels of autonomy.⁵¹
- 2) with respect the order of the dimensions we followed the results of the pilot study. Therefore, we allocate the security dimension at a low level of autonomy (External regulation) instead we allocated the economic dimensions on a high level of autonomy (Integrated regulation).

Moreover, as already mentioned, we used the results of the focus group to define the content of the vignette in order to try to make the situation as plausible as possible. The final vignettes used for the Italian survey are presented in the next table.

Table 50: Italian vignettes corresponding to the levels of autonomy and the dimensions of the NACEMP model

Level of autonomy	Dimension	Vignette
No Control	Natural	Marco wants to take care of the territory in which he has its company (how to clean the ditches or prevent landslides) and improves environmental sustainability but does not have the resources or the ability to do so.
External Regulation	Security- related	Marco uses certain chemical compounds for its production, even if not fully meet its security principles at work. He chooses to use these compounds in the fear that its products otherwise do not reach the standards required by the market.
Introjected Regulation	Artefactual	Marco produces using production techniques that he does not fully share. However, he continues to use them for fear of losing his buyers.
Identified Regulation	Political	Marco markets its products using transparent and equitable methods and channels. It decided to go this route because it believes is important.
Integrated Regulation	Economic	Marco, after considering several options, chose to produce some products that allow him to ensure high quality and meet consumer demands. He believes that it is important to ensure these aspects.
Introjected Regulation	Cultural	Marco uses the most widespread communication tools to keep in touch with its customers. He does not share them in full, but continues, however, to use them for fear of losing his buyers.

Source: CRESSI elaborations

⁵¹ Double replication is not advisable as it may influence responses to vignettes.

13.3. The levels of autonomy of Italian farmers

Beneficiaries and their respective control group have evaluated the final vignettes presented in the previous section using a scale that ranges from 0 to 10. The following table resumes the final matching between the levels of autonomy of the RAI and the dimensions of the NACEMP model attributed in the final questionnaire.

Table 51: the matching between the vignettes and the dimensions

Vignette Number	Levels of autonomy of the RAI	Dimensions
1	No control	Natural
2	External Regulation	Security-related
3	Introjected Regulation	Technological
4	Identified Regulation	Political
5	Integrated Regulation	Economic
6	Introjected Regulation	Cultural

Source: CRESSI elaborations

As we can see from **Table 52**, there are no significant differences between the results of the two groups. The vignettes are generally allocated in the same way. The next figure confirms that both groups rated the five vignettes approximately using the same distribution. The respondents of both groups evaluated the first vignette as the lowest. The minimum and the maximum values coincide (respectively 0 and 10). As highlighted also in **Table 52**, for both groups, the 25th percentile is 1, and the 75th percentile is 6.

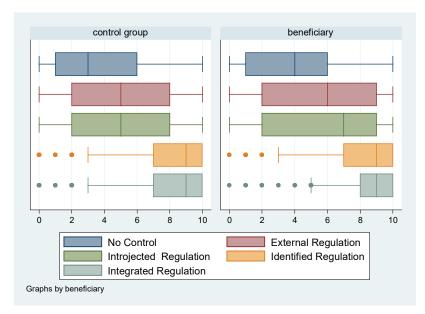
Table 52: Summary statistics of all vignettes for each group of respondents

Group	Variable	Number observations	Mean	Gap	Min	Max
Control group	Vignette 1	780	3.763	0.270	0	10
Beneficiaries	(No control)	363	4.033	0.270	0	10
Control group	Vignette 2	780	4.995	0.581	0	10
Beneficiaries	(External Regulation)	363	5.576	0.381	0	10
Control group	Vignette 3	780	4.932	0.702	0	10
Beneficiaries	(Introjected Regulation)	363	5.634	0.702	0	10
Control group	Vignette 4 (Identified	780	8.065	0.356	0	10
Beneficiaries	Regulation)	363	8.421	0.330	0	10
Control group	Vignette 5	780	8.205	0.227	0	10
Beneficiaries	(Integrated Regulation)	363	8.532	0.327	0	10

Source: CRESSI survey data, 2016



Figure 59 - The vignettes' distribution, beneficiaries and control group



Source: CRESSI survey data, 2016

Both groups allocated vignettes 2 and 3 in the same position, showing just minor differences. These vignettes perfectively overlap, in fact, for the control group data are gathered between values 2, 25th percentile, and value 8, 75th percentile; while, for the beneficiaries, these vignettes are allocated between values 2 and 9, respectively the 25th percentile and the 75th percentile. It is possible to say that both groups allocated the External and the Introjected levels of autonomy in the same position in the scale.

Vignette 4 is allocated in the same position by the two groups, the 25th percentile is 7 and the 75th percentile is 10. While vignettes 5 is allocated by the beneficiaries on higher levels with respect to the control group. In fact, for both vignettes the 75th percentile is 10, but the 25th percentile is 7 for the control group and 8 for beneficiaries. Even if we encounter this small difference, we can deduce that both groups allocated vignette 4 and 5 in the same position. Thus, the respondents evaluated the Identified and the Integrated levels of autonomy at the same position in our scale.

The sixth vignette does not represent a further level on the autonomy scale. On the contrary, it is a randomized reproduction of one of the five levels of autonomy using a sixth dimension. It enables us to understand whether a certain level of autonomy, even if represented by two different dimensions, is evaluated in the same way by the respondents. In this questionnaire, the sixth vignette reproduces the Introjected level of autonomy.

Table 53: The summary statistics of the third and the sixth vignettes

Vignette Number	Level of autonomy	Dimension	Number observations	Mean	Gap (V.6 - V.3)	Min	Max
Vignette 3	Introjected Regulation	Technological	1143	5.154	1.464	0	10
Vignette 6	Introjected Regulation	Cultural	1143	6.618	1.404	0	10

Source: CRESSI survey data, 2016

The results in the table above show that there is a minor difference between the means of the two dimensions. The mean of vignette 3, representing the technological dimension, is lower with respect the



mean of vignette 6, representing the cultural dimension. In the next table, we investigate how this difference changes depending on the group that answers.

Table 54: The summary statistics of the sixth vignette and the one repeated (into parenthesis is written the level of autonomy represented by the vignette)

Group	Vignettes Number	Level of autonomy	Dimension	Number obs.	Mean	Gap (V.6 - V.3)	Min	Max
Control group	3	Introjected Regulation	Technological	780	4.932	1,565	0	10
Control group	6	Introjected Cultural		780	6.497	1,303	0	10
Beneficiaries	3		Technological	307	5.634	1,246	0	10
Beneficiaries	6	Introjected Regulation)	Cultural	307	6.880	1,240	0	10

Source: CRESSI survey data, 2016

Table 54 shows the same results of the previous table, thus we can see that there are some week inconsistencies between the evaluations of the two vignettes. The bigger difference is with respect to the answers of the control group, which is 1.5.

The best procedure would consist in including all vignettes submitted to respondents for the anchoring process, yet, considering the results of the descriptive statistics and the analysis of the vignettes' ordering, we prefer opting for three levels of autonomy, which reflect the polarization between levels of the RAI that we encountered in our analysis: (1) the lowest level is the No Control level of autonomy and represents a condition in which the individual does not have control over the situation; (2) the non-self-determined (or controlled) forms of behavioural regulation which represents a situation in which the respondent is constrained by external factors or judgements; (3) the self-determined (or autonomous) forms of behavioural regulation, a situation in which the individual acts because he/she thinks it is important and it is the best option considered. This is consistent with previous findings of Alkire and Chiappero (2008) which show polarization between External and the Introjected levels of autonomy on one hand and the Identified and the Integrated levels of autonomy on the other.

The nonparametric models

In this section we develop the nonparametric model anchoring the self-assessments answers to the vignettes ranking. The purpose of this model is to evaluate the DIF-free levels of autonomy. The nonparametric model embeds only the answers that do not present tie or inconsistent order of the vignettes near to the self-assessment answer. For the respondents that belong to this group we can calculate a DIF-free self-assessment C_i , as follows:

$$C_{i} = \begin{cases} 1 & if y_{i} < z_{i1} \\ 2 & if y_{i} = z_{i1} \\ 3if z_{i1} < y_{is} < z_{i2} \\ & \vdots \\ 2J + 1 & if y_{i} < z_{ij} \end{cases}$$
(1)



Where y_i is the categorical self-assessment for respondent i while z_{ij} is the categorical response for respondent i on vignette j(j=1,...,J), and C_i is the categorization defined through the anchoring process. This will lead a new DIF-free self-assessment question, which is defined as a scalar. In the next table are showed the new categories (as scalars) for the nonparametric model. For example, the first category is the one in which the respondent has allocated the self-assessment answer on a lower level with respect the first vignette⁵², as well as in which the respondent has allocated the self-assessment answer on a lower level with respect the No Control level of autonomy.

Table 55: Categories of Ci defined anchoring the self-assessment question.

New values (C _i)	Order	Anchoring with respect to the vignettes numbers	Anchoring with respect to the levels of autonomy
1	$y_i < z_{i1}$	Self-assessment < vignette1	Self-assessment < No Control
2	$y_i=z_{i1}$	Self-assessment = vignette1	Self-assessment = No Control
3	$z_{i1} \le y_i \le z_{i2}$	vignette1 < Self-assessment <	No Control < Self-assessment < Non-self-
3	$z_{i1} y_i z_{i2}$	vignette2	determined
4	$y_i = z_{i2}$	Self-assessment = $vignette2$	Self-assessment = Non-self-determined
5	$z_{i2} < y_i <$	vignette2 < Self-assessment <	Non-self-determined < Self-assessment < Self-
3	Zi3	vignette3	determined
6	$y_i = z_{i3}$	Self-assessment = vignette3	Self-assessment = Self-determined
7	$z_{i3} < y_i$	vignette3 < Self-assessment	Self-determined < Self-assessment

Author's elaboration.

In the next graphs, we present the frequencies of the DIF-free self-assessment questions for both groups of respondents. Moreover, in order to investigate the impact of the social innovation, we ask to the respondent to rate their level of autonomy with respect the current time 'today', 'three years ago', and 'before getting in contact with the social innovation'. Therefore, for the beneficiaries we are going to develop three nonparametric models for the three time frames of the self-assessment questions ('today', 'three years ago', and 'before the SPG'). Whilst for the control group we are going to investigate two nonparametric models for the two time frames of the self-assessment questions ('today' and 'three years ago').

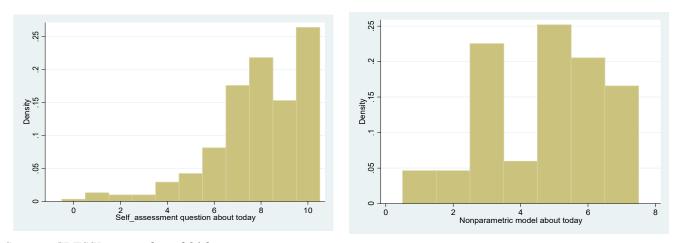
a) The beneficiaries

We first consider the nonparametric model for the beneficiaries. As illustrated in the previous paragraph, the nonparametric model can be evaluated only for the respondents that did not give tied or inconsistently ordered vignette responses. Therefore, out of our sample of 307 beneficiaries, for the current level of autonomy 151 (almost 50%) respondents allocated the vignette accordingly to the ordered ranking, for the 'before the SPG' 159 (almost 52%) respondents allocated the vignette accordingly, and for the 'three years ago' 155 (almost 51%).

⁵² Since we excluded vignettes 3 and 4 from the analysis, henceforth vignette 5 of our model will correspond to vignette 3 in tables and analysis.

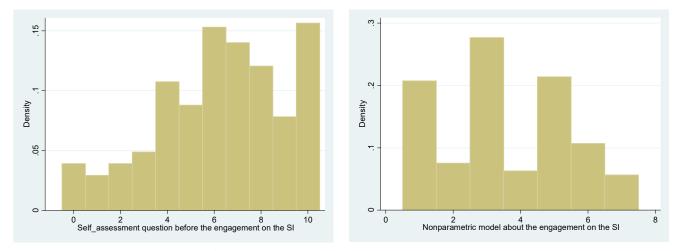


Figure 60 - Distribution of the self-assessment (left) and the DIF-free self-assessment (right) of current autonomy of beneficiaries, in %.



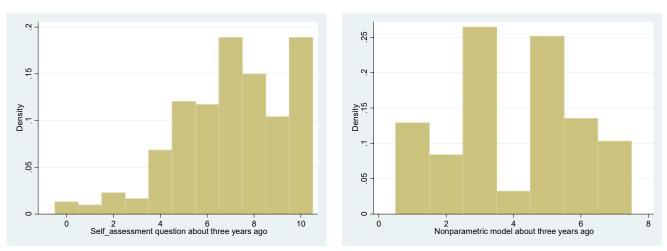
Source: CRESSI survey data, 2016

Figure 61 - Distribution of the self-assessment (left) and the DIF-free self-assessment (right) of past autonomy of beneficiaries, in %.



Source: CRESSI survey data, 2016

Figure 62 - Distribution of the self-assessment (left) and the DIF-free self-assessment (right) of autonomy of beneficiaries "three years ago", in %.



Source: CRESSI survey data, 2016



The left panes of the previous figures show that the distribution of the 'current' level of autonomy is evaluated by the beneficiaries on higher values with respect to the distributions that refer to 'three years ago' and the 'before the SPG'. Through the anchoring process we develop three DIF-free self-assessments. For the beneficiaries the new DIF-free self-assessment distributions present either higher or lower levels of autonomy with respect to the original self-assessments. In fact, the DIF-free self-assessment is shifted towards values on the right-hand side (i.e. higher levels of autonomy) for the 'current' level of autonomy. The DIF-free self-assessment is shifted to values on the left-hand side (i.e. lower levels of autonomy) if we consider the level of autonomy 'before the SPG'. While, the two distributions of the autonomy related to the situation of 'three years ago' do not present significant differences. Almost all three distributions show a hint of three modalities. In the DIF-free 'current' levels of autonomy the most frequent categories are the fifth (25%), the third (23%), and the sixth (20%). Thus, the majority of the respondents allocated themselves between the non-self-determined (or controlled) and the self-determined (or autonomous) forms of behavioural regulation, between the "No Control" level of autonomy and the non-self-determined (or controlled) forms of behavioural regulation, or equal to the self-determined form of behavioural regulation. The three most frequent categories of the DIF-free distribution 'before the SPG' are the third (28%), the fifth (21%), and the first (21%). Thus, as already mentioned, the distribution of the DIF-fee levels of autonomy before engaging in the social innovation is distributed on lower levels with respect to the 'current' autonomy: between the "No control" level of autonomy and the non-self-determined forms of behavioural regulation, between the non-self-determined and the higher level of autonomy, and at lower levels than the "No Control" level of autonomy. The last time frame considered is with respect to 'three years ago'. In this case, the three most frequent levels of autonomy are: the third (almost 26% of the beneficiaries is between the "No control" level of autonomy and the non-self-determined forms), the fifth (almost 25% of the beneficiaries is between the non-self-determined and the higher level of autonomy), the sixth as well as the first (almost 14% of the respondents consider themselves at the same level of the higher vignette).

The three-modality distributions⁵³ probably depend on the number of vignettes we used to anchor the self-assessment answers. In fact, in all three DIF-free distributions, the majority of the respondents are allocated between the first and the second vignette, or between the second and the third. The third most frequent categories are either the first, in which the respondents allocate themselves before the first vignette (i.e. 'before the SPG'), or the sixth in which the respondents allocate themselves at the same level of the higher vignette (i.e. 'current' or the 'three years ago').

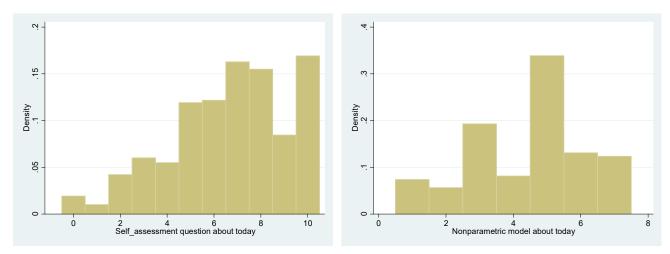
b) The control group

In this section, we estimate the two nonparametric models for the control group, with respect to 'today' and with respect to the 'three years ago' time frames. The respondents that in this case allocated the vignettes accordingly to the ordered ranking are respectively 404 (almost 51%) and 411 (almost 53%).

⁵³ Meaning that the majority of responses within these distributions assume three values.

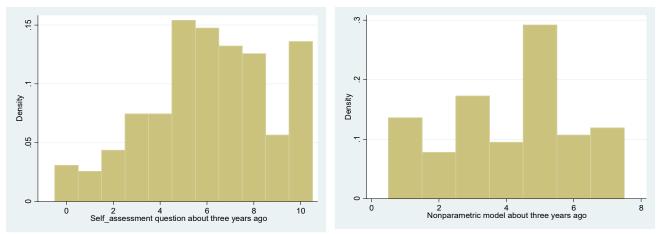


Figure 63 - Distribution of the self-assessment (left) and the DIF-free self-assessment (right) of current autonomy of the control group, in %.



Source: CRESSI survey data, 2016

Figure 64 - Distribution of the self-assessment (left) and the DIF-free self-assessment (right) of autonomy of the control group "three years ago", in %.



Source: CRESSI survey data, 2016

Source: CRESSI survey data, 2016

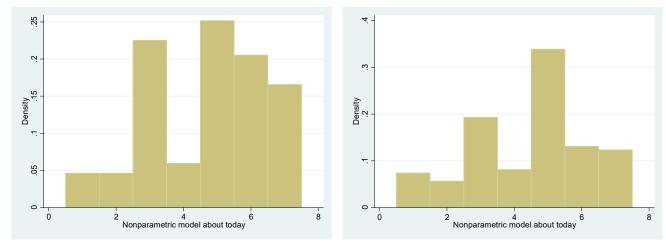
Comparing the self-assessment responses we can deduce that the control group allocated itself on higher levels of autonomy when answering with respect to 'today' than with respect to 'three years ago'. For the control group, the anchoring process of the 'current' self-assessment produced lower levels of autonomy. Both DIF-free distributions of autonomy present a category that can be interpreted as the most frequent: the fifth. This category is the one between the non-self-determined (or controlled) and the self-determined (or autonomous) forms of behavioural regulation. In fact, in the nonparametric models, almost 34% of the respondents with respect to the 'current' time frame and 29% of the respondents with respect to 'three years ago' allocated themselves in the fifth categories. The second most frequent category for both time frames is the third: this means that almost 19% ('current') and 17% ('three years ago') of the control group is between the "No Control" level of autonomy and the non-self-determined form of behavioural regulation. This is consistent with the findings on the nonparametric model of the beneficiaries: the majority of the respondents are respectively allocated between the second and the third, or between the first and the second vignette. Again, in line with findings on the nonparametric models for the beneficiaries, the third most frequent



categories are either the first (as in the 'three years ago' DIF-free levels of autonomy) or the sixth (as the 'current' DIF-free levels of autonomy).

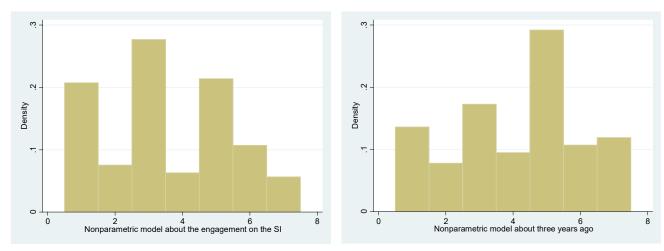
In order to graphically show the variation of the level of autonomy of both groups with respect to the past reference period ('three years ago' for the control group and 'before the social innovation' for the beneficiaries), we place side by side the graphs representing the current levels and the past level of autonomy.

Figure 65 - Distribution of the DIF-free self-assessment of current autonomy of beneficiaries (left) and the control group (right), in %.



Source: CRESSI survey data, 2016

Figure 66 - Distribution of the DIF-free self-assessment of past autonomy of beneficiaries (left) and the control group (right), in %.



Source: CRESSI survey data, 2016

The previous graphs show an increase of the current level of autonomy for the beneficiaries with respect to before collaborating with the social innovation (compare left panes of Figure 65 and of Figure 66). Comparing the right panes of these same figures, it seems that the control group has been experiencing a relatively minor increase or even a lack of variation with respect of the level of autonomy of 'three years ago'. Such timid evidence of a potential beneficial impact of the participation in a GAS becomes more evident when the anchoring methodology is used than if we simply look at the non-anchored self-assessment questions (see Part II.3 – Towards a measurement of social impact).

The role of the social innovation for the improvement of the level of autonomy

In this section, we investigate if, and in which sense, the SPG have changed the level of autonomy of the beneficiaries, using the nonparametric models developed in the previous section. We compute the variation on the level of autonomy before and after engaging with the social innovation. This variation allows the partition of the respondents in three groups: those that experienced an improvement in the level of autonomy, those that did not perceived any change, and those that experienced a deterioration of their level of autonomy. We then investigate the distribution of this variation, trying to understand in which sense the social innovation changed the producers' situation.

The involvement in the social innovation has decreased the level of autonomy for just the 2% of the respondents. For almost 60% of them the level of autonomy remained the same, whilst for the 38% the level of autonomy has actually increased. The next graph shows the variation of the level of autonomy between male and female.

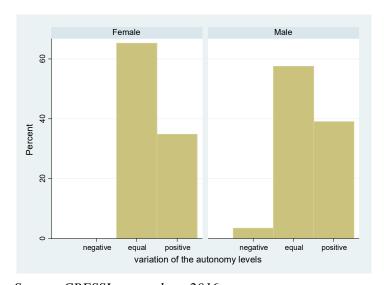
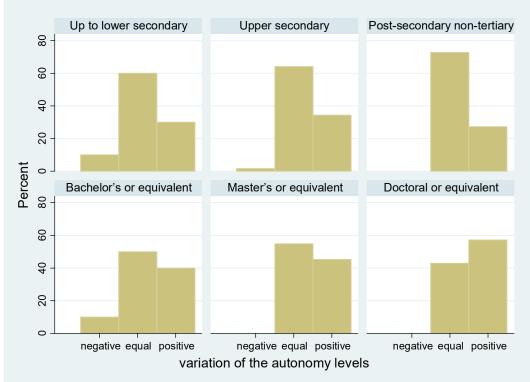


Figure 67 - The variation of the level of autonomy, by gender, beneficiaries

Source: CRESSI survey data, 2016

For the 65% of the female respondents the level of autonomy did not change, whilst it has increased for the remaining part. Considering the male respondents, we can see that just 3% of them experienced a reduction of the level of autonomy, while 60% did not experienced a variation. Almost the 37% of males experienced an improvement.

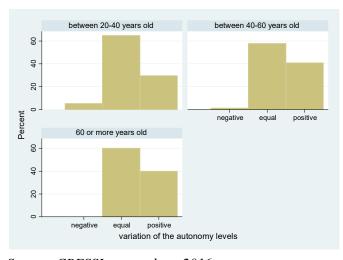
Creating Economic Space for Social Innovation Figure 68 - The variation of the level of autonomy, by levels of education, beneficiaries



Source: CRESSI survey data, 2016

In the previous figure, we present the variation of the level of autonomy considering the educational levels. Among all beneficiaries, those that experienced the major increase of the level of autonomy are those with a doctoral or equivalent level of education (57%), followed by the respondents with a master's or equivalent level of education (45%), and with a bachelor's or equivalent level of education (40%). This last group of beneficiaries, as well as those with the lowest levels of education, are the only ones that present individuals with a reduced level of autonomy. However, due to the reduced size of the sample the number of individuals in this category is very low.

Figure 69 - The variation of the level of autonomy, by age, beneficiaries



Source: CRESSI survey data, 2016



Considering the ages' cohorts, we can observe that the increase in the level of autonomy is roughly equally distributed. Both the beneficiaries between 40 and 60 years old and those with more than 60 years old present the same percentage: 40% of them experienced an increase in the social innovation. Among the younger beneficiaries, almost 30% perceived an increase in the level of autonomy.

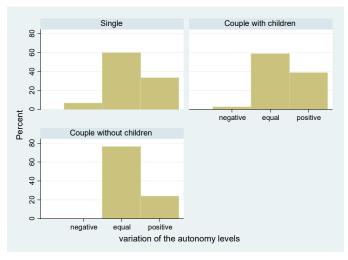
Figure 70 - The variation of the level of autonomy, by employment status, beneficiaries



Source: CRESSI survey data, 2016

Considering the employment status, we can deduce that the employers that experienced the major impact are those that own the family's business. In fact, almost 60% experienced an increase in the level of autonomy. With respect to the other types of workers, almost 45% that have a permanent contract experienced an increase in autonomy, as well as almost 21% of the self-employed without employees, and 30% of the selfemployed with employees.

Figure 71 - The variation of the level of autonomy, by household status, beneficiaries



Source: CRESSI survey data, 2016

Considering the level of autonomy and the household status of our beneficiaries, we can observe that the major impact have been experienced by the couple with children. In fact, almost 40% of them experienced an increase of the level of autonomy and 60% did not experienced any change. With respect to the couple without children, only 24% experienced an increase whilst the level of autonomy of 76% did not experience



any change. The variation of the autonomy of the last group, the single ones, is positive for almost 35% and neutral for 60%.

Northwest Northest Center 80 9 4 20 0 Percent negative equal positive South Islands 8 9 4 20 negative equal positive negative equal positive variation of the autonomy levels

Figure 72 - The variation of the level of autonomy, by geographical origin, beneficiaries

Source: CRESSI survey data, 2016

Among the beneficiaries, those that experienced the major positive variation are those living in the South of Italy. In fact, 76% of the respondents living in the south perceived an improvement of their level of autonomy. The group of respondents that perceived the second highest positive variation are the beneficiaries that live in the islands (62%). To the third group with a positive impact belong the respondents that live in the centre. Finally, the beneficiaries that live in the northwest and in the northeast are those that perceived the smaller impact, respectively almost 30% and 25%.

Within this section, we investigated whether and in which way, the level of autonomy of the beneficiaries has changed with respect to the engagement with the SPG. In particular, we computed the variation on the level of autonomy before and after engaging with the social innovation, and we investigated how this variation changes depending on the respondents' characteristics (e.g. age, gender, and educational level, etc.). However, while interpreting these results we have to keep in mind that the sample consists of 150 respondents.

We can conclude that the involvement in the social innovation might have decreased the level of autonomy of just the 2% of the respondents. For almost the 60% of the sample the level of autonomy remained the same, whilst for the 38% of them the level of autonomy has increased. With respect to gender, those that experienced the major impact are the male respondents.

Considering the level of education, we can conclude that there is a clear tendency. The respondents that experienced the major impact are those with a higher level of education (with doctoral or equivalent level of education), then those with a maser's or equivalent level of education, and those with a bachelor's or equivalent level of education.

Considering the age categories, we can observe that the increase of the level of autonomy is roughly equally distributed for the respondents in between 40 and 60 years old and for those more than 60 years old. We can



find a path also when considering the employment status. In fact, the employers that experienced the major positive impact are those that own the family's business, then those that have a permanent contract, then the self-employed with employees and, the last group, are the self-employed without employees. With respect to the household status, those that experienced the major increase are the couple with children, followed by the single, and the couple without children. The last characteristic we investigated is the geographical repartition. This showed that the major impact has been experienced by the individuals living in the South of Italy and by those living on the islands.



14. A focus on Hungary

14.1. Characteristics of the social innovation case

Kiútprogram took its landmark from Grameen bank model launched by Muhammad Yunus, the essential social innovation that made micro lending well known all over the world. By the way, some adaptions had to be made due to the differences existing between developing countries and former members of the Soviet block and also to the different aim of Kiútprogram with respect to Grameen Bank's one. In fact, even from the first beginning, the Kiútprogram was not supposed to be self-sustainable and net resources were constantly demanded to cover primary costs as salaries, and field works activities. This insight led to the more general consideration that "without significant capital injections underdeveloped areas and severely disadvantaged people cannot improve their situation" (Molnár, 2015:21). Beside that, Kiútprogram was characterized by a much larger importance given to the role of field workers than in the Grameen Bank scheme. Actually beside giving financial literacy and supporting the preliminary phase of the business plan, as an example, field workers were supposed to deal with authority in order to minimize discriminations towards Roma people.

Moreover with respect to Yunus' micro lending model, Kiútprogram loans were on average larger, but not larger than 3000 Euros. This aspect was due to the stronger need of capital that is requested in a country as Hungary than in a developing country.

Finally, loans were not formally issued by Polgár Foundation or Kiútprogram, but by Raiffeisen Bank, which mainly financed the loan portfolio and Kiútprogram administered lending operation as the bank's agent (World Bank, 2013: 7). Financing Kiútprogram and its workforce took approximately EUR 1,4 Mln that were provided principally by the European Union, within its project Pan-European Coordination of Roma Integration Methods-Roma inclusion: Self-employment and microcredit. Also government (although discontinuously) and individuals participated in funding.

Table 56 – Kiútprogram finances between 2010 and 2012 (%)

Kiútprogram financiers	%
EU Roma Pilot (incl. dissemination and impact assessment)	69
Hungarian government	18
Raiffeisen Bank CSR	4
Other private resources (Polgár Foundation, private persons)	9
Total	100

Source: Molnár (2015:58)

Between 2010 and 2012 202 settlements were visited and lending groups were formed in 38 settlements.⁵⁴ More than 900 interested candidates were contacted personally and 44 actual groups were formed out of 60 pre-groups⁵⁵. As previously said, the number of households that received a loan was 124; more precisely 35 households received a loan in the first batch, 73 during the second batch and 16 in the third batch⁵⁶. When a

⁵⁴ The data always refer to the first phase of the Kiútprogram between 2010 and 2012.

⁵⁵ World Bank (2013:13)

⁵⁶ The third batch contains also the first part of the "Cucumber project". Within the framework different loans were given to Roma cucumber producers located within a group of a village in Szabolcs-Szatmár-Bereg, that could not manage to receive loans due to prejudices to Roma. Within the framework of the Kiútprogram the cooperation with the Roma became possible by means of a trilateral contract between integrator (the integrators distribute seeds, nutrients, and pesticides, instruct participants if necessary and finally ship the cucumbers to the processing factory), the producers, and the Kiútprogram. For more information about this: World Bank (2013).



beneficiary repaid the loan on time, there was the chance to have another, bigger. loan. Actually 12 households received a second loan and 3 received a third loan.

Table 57 – Number and share of respondent to baseline and follow-up questionnaires, beneficiaries and control group

Did this household obtain a loan?	Frequencies	Percentages
Control Group	319	72,0 %
Beneficiaries	124	28,0 %

Source: CRESSI elaboration on Kiútprogram dataset

Table 58 – Average gross value of the first loan by batches⁵⁷, beneficiaries

	1st Batch	2nd Batch	3rd Batch
Average gross value of the first loan	2312 EUR ⁵⁸	1657 EUR	568 EUR

Source: CRESSI elaboration on Kiútprogram dataset

Table 59 – Average gross value of the loan and average net value of the loan, beneficiaries

	1st Loan	2nd Loan	3rd Loan
Average gross value of	1702 EUR	2550 EUR	2580 EUR
the loan			
	2nd Loan	3rd Loan	
Average net value of	1531 EUR	1163 EUR	
the loan ⁵⁹			

Table 60 - Average duration of the first loan by batches, beneficiaries

	1st Batch	2nd Batch	3rd Batch
Duration of the first loan (in weeks)	51	43	26

Source: CRESSI elaboration on Kiútprogram dataset

Table 61 – Average duration of the loan, beneficiaries

	1st Loan	2nd Loan	3rd Loan
Duration of the loan (in weeks)	43	50	52

Source: CRESSI elaboration on Kiútprogram dataset

The average repaid amount of the loan increased during the Kiútprogram and, along with that, the arrears per payments decreased. This can be partially explained with the improvements made between first and second batch by Kiútprogram's management⁶⁰. In fact different changes were conducted, such as more flexibility in the loan products or group formation rules and also better trained field workers were employed (and some of first field workers were also replaced).

CRESSI Working Paper no. 34/2017

⁵⁷ The first batch goes from 2010 to 2011, at this time some corrections were made. The second batch goes to 2011 to 2012. The third batch is the phase when Cucumber project was launched.

⁵⁸ This value refers to the average exchange rate of 2001 between Euro and Hungarian Forint, 1 Eur=279.373 Forint, Source: Banca D'Italia

⁵⁹ When beneficiaries have got the second (third) loan, the first loan was usually not yet fully paid back. In this case the remainder of the non-repaid first loan was added to the net amount of the second loan. Net value then is the gross amount minus what they still had to pay back.

⁶⁰ Molnár (2013:28).



Table 62 – Average amount paid back and percentage on the gross value of the first loan, beneficiaries

	1st Batch	2nd Batch	3rd Batch
Average paid amount of 1st loan	1010 EUR	891 EUR	317 EUR
Percentage on the gross value of the first loan	43,7 %	53,8 %	55,8%

Source: CRESSI elaboration on Kiútprogram dataset

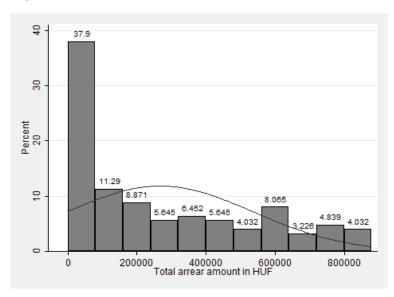
Table 63 - Average amount of arrears and percentage on the gross value of the first loan, beneficiaries

Average arrears amount of the 1st loan	1484 EUR	537 EUR	85 EUR
Percentage on the gross value of the first loan	64,2 %	32,4 %	15 %

Source: CRESSI elaboration on Kiútprogram dataset

The average value of total arrears was 266.758 HUF (955 EUR), with 16,1 % of the beneficiaries that declared to have no arrears in that moment.

Figure 73 - Total arrears amount, beneficiaries, HUF



Source: CRESSI elaboration on Kiútprogram dataset

14.2. Characteristics of the beneficiaries

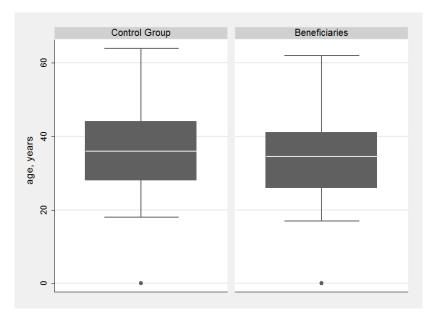
The majority of the beneficiaries are male, however gender does not seem to be a decisive factor of discrimination between beneficiaries, in fact male percentage is 55% and the female one is 45%. The population of beneficiaries is in average quite young, 34 years old, while control group members are slightly older, 36 years old. As a matter of fact Roma represents a young share of total population with an average age of 26 years that is much lower than that of the total population, 42 years⁶¹.

_

⁶¹ Calculation presented in Molnár (2015: 8)



Figure 74 - Age, beneficiaries and control group



Source: CRESSI elaboration on Kiútprogram dataset

The educational level is quite bad and this is not a surprising fact in a such marginalized population. According to the census conducted in 2011⁶², 23% of the Roma population in Hungary did not finish elementary school, and more than the 90% of Roma did not get a secondary school certificate, these percentages are starkly higher with respect to the total population, as it can be observed in the table. Poor education and social prejudices, linked together, drove Roma toward an even stronger marginalization. In fact without a secondary school certificate, it is difficult to find long-term, legal employment on the Hungarian labour market; the income of people without secondary school education is much lower – and the disparities keep growing.⁶³

Table 64 – Distribution of the Roma and non-Roma population of 15 years of age and older, by highest educational level attained. Values in percentage

	Total population	Roma population
Unfinished elementary school	5 %	23 %
Elementary school	27 %	58 %
Vocational school (without secondary school certificate)	21 %	13 %
Secondary school certificate	30 %	5 %
Diploma	17 %	1 %
Total	100	100

Source: Molnár (2015), based on the 2011 census. http://www.ksh.hu/nepszamlalas/

Beneficiaries of Kiútprogram reflect only partially this situation. More specifically, in fact only 53% of the beneficiaries have as highest educational level the elementary one or less, much better than general Roma people. Between Beneficiaries and Control Group there are sharp differences about elementary or inferior educational level (within control group is 4pp lower) and secondary vocational (3.3% against 7.6%). Both beneficiaries and control group however reach almost a 100% of literacy within the considered sample.

D7.2 Comparison of four cases of social innovation in Europe: a statistical report

⁶² Hungarian 2011 Census official website: www.ksh.hu/nepszamlalas/?lang=en

⁶³ Bernát (2014).

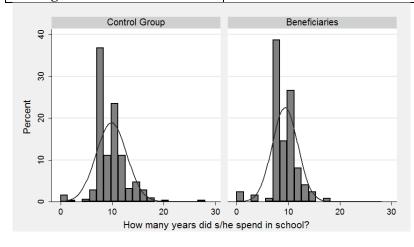


Table 65 – Educational level, beneficiaries and control group. Values in percentage

	Beneficiaries	Control group	
Less than 8 years elementary	4.9%	10%	
Elementary	48.8%	39%	
Training	15.5%	13%	
Normal vocational	20.3%	23.3	
Secondary Vocational	3.3%	7.6%	
Gymnasium	5.7%	3.1%	
Professional after gymnasium	0.8%	2.2%	
Incomplete tertiary	0%	0.3%	
Tertiary	0%	1.6%	
Other	0.8%	0%	
Total	100%	100%	

Table 66 - Years in school, beneficiaries and control group

Years spent In school	Beneficiaries	Control group
Average value	9.3	9.8



Source: CRESSI elaboration on Kiútprogram dataset

Beneficiaries spent also less time in school with respect to the control group. On the family situation, 54 % of beneficiaries are married with a companion, but there is also a strong unmarried component with a companion (30 %). Almost 70 % live in a familiar (or similar) cluster.

Table 67 – Marital status, beneficiaries and control group. Values in percentage

Marital status	Control Group (%)	Beneficiaries (%)
Unmarried, no companion	15.1 %	15.3 %
Unmarried, with companion	21.6 %	16.1 %
Married, living with spouse	43 %	47.6 %
Married living with companion	7.5 %	6.5 %
Married and separated	0.6 %	1.6 %
Divorced, no companion	6.6 %	6.5 %
Divorced, living with companion	3.1 %	4 %
Widow/er	2.4 %	2.4 %
Total	100 %	100 %

Source: CRESSI elaboration on Kiútprogram dataset

Most of the beneficiaries are the head of the household or partner of it, the share of son/daughter within beneficiaries is slightly higher than in the control group (13.7% versus 6.9%).

Table 68 – Relationship to head, beneficiaries and control group. Values in percentage

Relationship to head	Beneficiaries	Control group
Head of the household	58.9	68.0
Wife/Husband/Partner	25.8	19.7
Son/Daughter	13.7	6.9
Grandchild	0	0.3
Niece/Nephew	0	0.3
Father/Mother	0.8	1.6
Sister/brother	0	0.9
Other relative	0	0.6
Other non relative	0	1.6
Total	100 %	100 %

Source: CRESSI elaboration on Kiútprogram dataset

The employment status of the beneficiaries is mainly splitted between two situations, unemployment (63.7%) and self-employment in the agricultural sector (12.1%).

Table 69 – Percentage of unemployed in the sample and months of unemployment, beneficiaries and control group

	Beneficiaries	Control Group
Percentage of unemployed	63.7%	59.9%
Months of unemployment (Formal sector)	145	164
Months of unemployment (Informal sector)	45	15

Source: CRESSI elaboration on Kiútprogram dataset

Table 70 – Settlement location, beneficiaries and control group. Values in percentage

Settlement location	Beneficiaries	Control group
Budapest or another City	8.1 %	13.8 %
Town	15.4 %	29.2 %
Village	74.8 %	57.0 %
Total	100 %	100 %

Source: CRESSI elaboration on Kiútprogram datasett

Beneficiaries are located mainly in villages (75%) and less in towns with respect to control group, as can be seen in the above table. Within the settlements where beneficiaries live, 81.3% are composed of by mixed population, 11.4% populated mainly by non-Roma and 7.3% mainly by Roma. Settlements' composition varies between beneficiaries and control group, in fact control group members' settlements are less mixed, even if mixed settlements still are the majority (76.2%),in fact the share of settlements populated mainly by Roma is (9.4%) along with the share of settlement populated mainly by non Roma (14.4%). The high percentage of mixed settlement however does not surprise given the fact that one of the purposes of Kiútprogram was operating in strongly disadvantaged area, populated by Roma of course, but the targeted group was supposed to be mixed. Indeed as stated by Molnár "since an important objective of the programme is to facilitate social integration, there is no ethnic selection of the participants in the programme, even in the form of positive discrimination" of the participants in the

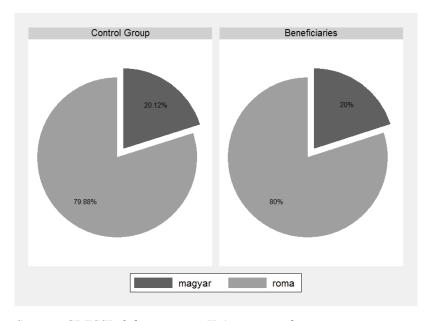
On the ethnicity side, there are not strong differences between beneficiaries and control group. Moreover more than 80% declared themselves to have as first or second nationality Roma.

Table 71 – Ethnicity, beneficiaries and control group. Values in percentage

Respondent's Ethnicity	Beneficiaries	Control Group
Roma	85.2 %	82.4 %
Magyar (Hungarian)	14.8 %	17.6 %
Total	100 %	100 %

Source: CRESSI elaboration on Kiútprogram dataset

Figure 75 - Respondents' Ethnicity, beneficiaries and control group



Source: CRESSI elaboration on Kiútprogram dataset

- 1

⁶⁴ Molnár (2015:6).



Table 72 – Roma as first or second nationality, beneficiaries and control group

	Beneficiaries	Control group
First or second nationality Roma (% of Yes)	81.3 %	78.6 %

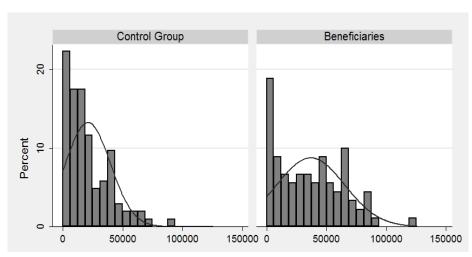
Source: CRESSI elaboration on Kiútprogram dataset

14.3. Marginalisation of the beneficiaries

Before analysing marginalization in its different perspective (economic, geographic, etc), it has to be reminded that an already poor region such as Borsod-Abaúj-Zemplén, Szabolcs-Szatmár-Bereg and the 8th district of Budapest, during the time of Kiútprogram suffered of the crisis that hit the whole of Europe during 2011-2012. This factor plays a crucial role in the economic wealth of strongly marginalized people such as the Roma and the evaluation of the impact of the social innovation must take that into consideration.

Average income per capita in the follow-up questionnaire for the beneficiaries is 36763 HUF (132 EUR), while the control group one is 21006 HUF (75 EUR). There seems to be a crucial difference between the two groups.

Figure 76 - Income per capita in follow-up questionnaire, beneficiaries and control group, HUF

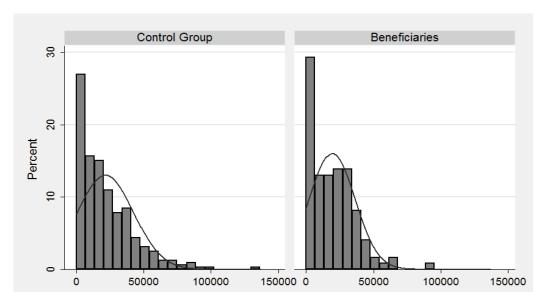


Source: CRESSI elaboration on Kiútprogram dataset

However income delta within beneficiaries seems to be quite stark while income level within the control group remained stable. In fact, according to the values extracted from baseline interviews, before Kiútprogram the average income per capita was 19304 HUF (69 EUR) for beneficiaries and 21611 HUF (77 EUR) for control group members.



Figure 77 - Income per capita in baseline questionnaire, beneficiaries and control group. Values in HUF



Source: CRESSI elaboration on Kiútprogram dataset

At the time when baseline questionnaires were compiled there was not a strong difference in the perception of income delta between beneficiaries and control group members. The former claims that income remained the same or increased with a share of 57.5% while the latter stated that income reduced with respect to the previous year with a share of 55.7%.

Table 73 – Income delta, beneficiaries and control group. Values in percentage

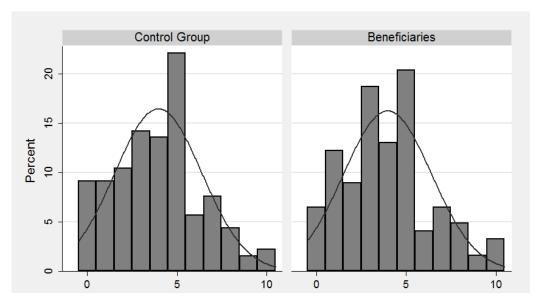
How is your income, compared to the previous year?	Beneficiaries	Control Group
Lower	55.7 %	57.5 %
Same	35.3 %	34.9 %
Higher	9.0 %	7.6 %
Total	100 %	100 %

Source: CRESSI elaboration on Kiútprogram dataset

Nevertheless similar perception of income deltas comes along with more satisfaction for what concerns life, in fact the average value of life satisfaction between beneficiaries and control group is similar in the baseline interviews, 4 and 4 (on a scale that goes from 0 to 10).



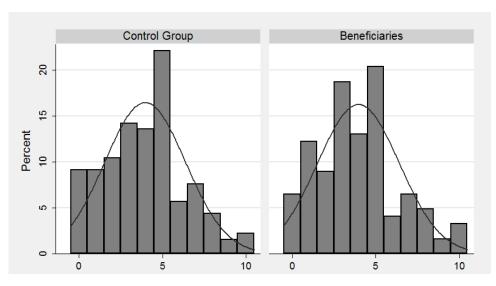
Figure 78 - Life Satisfaction, beneficiaries and control group, average value in a range from 0 to 10, baseline interview



Source: CRESSI elaboration on Kiútprogram dataset

Moreover beneficiaries are as satisfied with the financial position of their family as control group members with a similar average value of 2.8. Both the values are quite low, but this is not surprising in such a marginalized area. As a result of the slowly improving economic conditions, the follow up interviews contain somewhat higher financial satisfaction values. However, the difference between the beneficiaries and the control group significantly increased: 3.94 versus 3.21. This difference confirms the results of the project.

Figure 79 - Financial satisfaction, beneficiaries and control group, average value in a range from 0 to 10, baseline interview



Source: CRESSI elaboration on Kiútprogram dataset

Moreover beneficiaries are more pessimistic about the future of their financial situation, in fact the share of them that expect their financial situation to improve or improve significantly is 76% versus 87% within the control group, and about their health condition, in fact they judge it bad or very bad with a percentage of 5% instead of 1% of the control group.



Finally, beneficiaries were less likely to think that they can do something to improve their life.

Table 74 – Chance to do something to improve life, beneficiaries and control group. Values in percentage, baseline interview

Do you think you can do something to improve your life?	Beneficiaries	Control group
Yes	89.4 %	94 %
No	10.6 %	6 %
Total	100 %	100 %

Source: CRESSI elaboration on Kiútprogram dataset

What seems to emerge from this data is that beneficiaries were part of a deeply disadvantaged part of the population and in this sense Kiútprogram managed to hit the target of a marginalized segment of the roma population. This situation is also reflected by the lack of some really basic assets as a single bed for each person in the household (13% of the beneficiaries' family miss it) and a functioning fridge (basic assets that at least contribute to satisfying some very primary needs of people), we can observe that 23.4% of the beneficiaries does not have these assets, while just 14.7% of the control group does.

Table 75 – Dwelling material, beneficiaries and control group

	Beneficiaries	Control Group
Brick	43.1%	54.6%
Concrete	2.4%	3.8%
Clay and straw mortar	19.5%	21.0%
Dross or silicate block	33.4%	15.7%
Stone	0.0%	2.8%
Other	1.6%	2.2%
Total	100%	100%

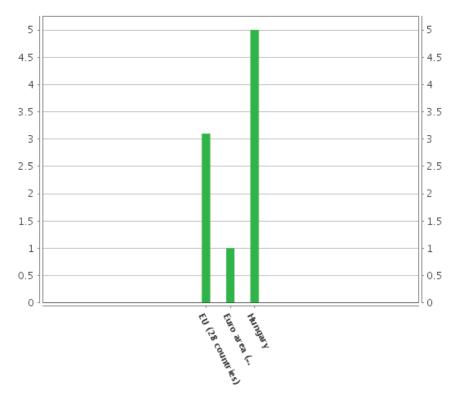
Source: CRESSI elaboration on Kiútprogram dataset

Beneficiaries and control group suffer a lack (in at least one third of the sample) of hygienic assets as latrine an sewerage for disposal of waste. This is indeed a serious deprivation, but quite common also in the rest of Hungary. In fact the share of population without a toilet with flush in Hungary is 5% ⁶⁵ and for the beneficiaries is 5.4%, while it is 6.8% for the control group. The same can be said for what concerns the lack of showers and bathrooms. As a matter of fact the national percentage (5%) ⁶⁶ is somehow reflected in beneficiaries (4%).

⁶⁵ Eurostat, Silc Data, 2011

⁶⁶ Eurostat, Silc Data, 2011

Figure 80 - Share of total population not having a toilet with flush in the dwelling.



Source: Eurostat, Silc Data

Table 76 – House assets, beneficiaries and control group, % of positive answers

	Beneficiaries (% of Yes)	Control Group (% of Yes)
Kitchen	100.0 %	99.7 %
Toilet with flush	83.7 %	85.8 %
Latrine	61 %	43.9 %
Sewerage inside for disposal of waste	64.5 %	63.5 %
Shower or bathroom inside	86.2 %	88.6 %
Electricity supply	98.7 %	98.4 %

Source: CRESSI elaboration on Kiútprogram dataset

Beneficiaries seem to be geographically marginalized, in fact 60.5% of them live thirty minutes or more away from a bank office, cash machine, doctor and primary or secondary school. However this feature could be related to the rural activity that most of the beneficiaries engage in (79 % of the employed work in a rural settlement), all the way the difference with the control group appears to be quite stark, in fact only 33.5% live in a rural settlement and more than thirty minutes away from the services previously considered.

Beneficiaries appear to be the most marginalized from the financial sector, in fact the chance of getting a loan of 1000 HUF would be real just for 21.1% of them, according to themselves (while the members of the control group go for a 27.5%) and only 23.1% of the possible loan receivers think they would be able to get it from a bank. The percentage goes nearly to zero if the loan is 500000 HUF. Along with that, their financial saving situation is strongly unstable, just 5.7% has some kind of saving (cash deposit, commodities or bank account) and 88,8% of the beneficiaries would not be able to live on savings for more than one month.



Table 77 – Debiting situation, beneficiaries and control group, Average value in EUR, baseline interview

	Beneficiaries	Control Group
Debts because of rent arrears	70 ⁶⁷ EUR	10 EUR
Debts because of unpaid taxes	117 EUR	159 EUR
Debts because of unpaid fines	29 EUR	30 EUR
Debts because of housing ownership	9 EUR	16 EUR
Debts because of unpaid public utility bills	28 EUR	9 EUR
Debts to housing owner association	205 EUR	157 EUR
Have you paid back this debt? (% of Yes)	23.3%	36.4%

Source: CRESSI elaboration on Kiútprogram dataset

Debiting situation for the beneficiaries is strongly worse for what concerns rent arrears (however this aspect could be due to the fact that the beneficiaries only own the dwelling for the 31% instead of the 57% of the control group members). Along with that beneficiaries have less debts because of housing ownership, but more unpaid public utility bills. Beneficiaries however seem to be more dependent on welfare benefits, the average monthly social benefit per person is in fact 91 EUR, while the control group's one is 69 EUR.

14.4. Cognitive frames

The following table shows the average values on a scale that goes from 0 to 10 of some attitudes that in our analysis will be considered as cognitive frame because of their importance in influencing and shaping the self-employability of the beneficiaries. More specifically, risk attitude and carefulness in planning tasks influence strongly the willingness of the beneficiaries to starting a business, while the ability of making up their mind quickly and taking several activities at the same time condition the probability of keeping their business profitable. In the end, the satisfaction in having influence on the others steer the ability of creating networks and connections that could be used during the duration of the business.

Table 78 – Attitudes, beneficiaries and control group, average value on a scale from 0 to 10.

	Beneficiaries	Control group
Risk attitude	6.7	6.8
I plan tasks carefully	4.4	4.2
I make up my mind quickly	4.2	3.9
I can take several activities at the same time	4.1	3.8
I prefer direct an activity rather than just help put and have someone else to organize it	3.4	3.3

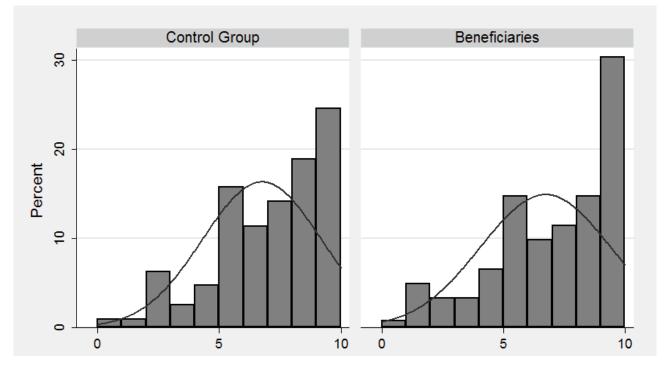
Source: CRESSI elaborations on Kiútprogram dataset

CRESSI Working Paper no. 34/2017

⁶⁷ This observation includes an outlier value of 2000000 HUF that pushes forward the mean value. Without that value the mean would be 3279 HUF, still larger than control group one.

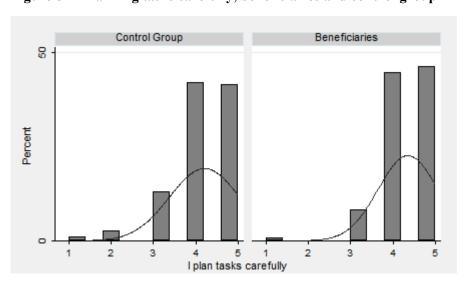
Creating Economic Space for Social Innovation

Figure 81 - Attitude towards risk, beneficiaries and control group



Source: CRESSI elaboration on Kiútprogram dataset

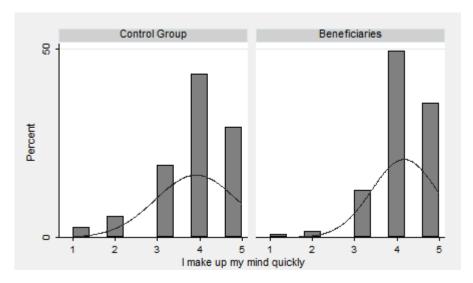
Figure 82 - Planning tasks carefully, beneficiaries and control group



Source: CRESSI elaboration on Kiútprogram dataset

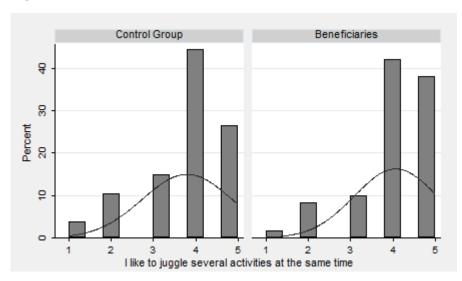


Figure 83 - Make up my mind quickly, beneficiaries and control group



Source: Own elaboration on Kiútprogram dataset

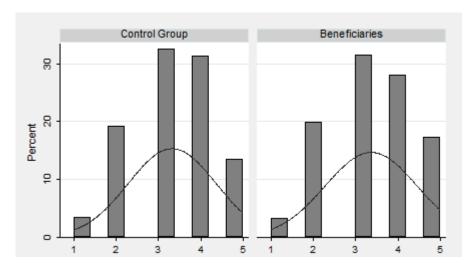
Figure 84 - Take several activities at the same time, beneficiaries and control group



Source: Own elaboration on Kiútprogram dataset



Figure 85 - Direct an activity rather than helping out, beneficiaries and control group



Source: CRESSI elaboration on Kiútprogram dataset

As can be seen, the differences between the beneficiaries and the control group are hardly recognizable. Beneficiaries tend to be risk loving but not more than the control group.

14.5. Networks

As already stated, the main object of Kiútprogram was enabling marginalized people (mainly Roma, but not only) from different parts of Hungary to get self-employed via the provision of a microcredit. From this point of view, the ability and the possibility of getting a loan trough banking or different channel represent some good evaluation elements of the network structure that relates to the beneficiaries. Networking in this case is not supposed to operate between different beneficiaries, but between beneficiaries and social institutions (as banks or moneylenders as an example). In fact, Roma people across Hungary suffer from numerous discrimination that are caused, within different factors, even by strong prejudices which, along with illiteracy and lack of education, undermine the quality of relations that exist between Roma communities and other institutions.

The following table as an example shows the percentage of people that agree with prejudicial statements toward Roma community. The extent of these prejudices does not only prevent the integration of Roma people with non-Roma, but drive the victim prejudices toward an exclusion that is also financial. It is deeply unlikely that commercial banks or other financial institutions give a loan to people that, beside generally poorer, suffer of such a prearranged discrimination.

Table 79 – Attitudes towards the Roma in Hungary, 2011. Agreement with the statements, in %

The problems of the gypsies would be solved if they finally started working	82%
The inclination to criminality is in the blood of gypsies	60%
It is only right that there are still pubs, clubs and discos where gypsies are not let in.	42%

Source: Bernát et al. (2013:2)

For such a marginalized people then, getting a loan from a commercial bank is really difficult, but among the beneficiaries almost half could get a loan from a bank in the last 12 months, in fact the share of loan receivers was 49.2%, while 94.2% of the control group members could not have it. In this sense Kiútprogram largely hit the target of putting in contact beneficiaries with financial institutions and the stark difference



between beneficiaries and control group testifies the fact that for marginalized groups of people in Hungary getting a loan is almost impossible. Kiútprogram in this sense worked really well.

The share of beneficiaries that borrowed money from family or siblings was 17.7%, while the percentage of beneficiaries that borrowed money from moneylender or shopkeeper was much lower (4%). Finally the beneficiaries that borrowed money from other sources were just one (0,8%)

Table 80 - Source of borrowing and its average value, in euro equivalent

	Beneficiaries	Control Group
Borrow money from family in the last 12 months (%)	30.4 %	25 %
Average value of the borrowing	28 EUR	46 EUR
Borrow money from Commercial Bank in the last 12	5.7 %	4.75%
months (%)		
Average value of the borrowing	958 EUR	27 EUR
Borrow money from Money lender or shopkeeper in the	4.8 %	5.4%
last 12 months (%)		
Average value of the borrowing	33 EUR	5 EUR

Source: CRESSI elaboration on Kiútprogram dataset

For which concerns the participation in affairs there is a large share of loan receivers that participates in discussions regarding affairs of their community weekly or monthly, but at the same time a share of almost 20% claims to never participate in discussions or similar activities.

Table 81 – Participation in affairs, beneficiaries. Values in percentage

	Weekly	Monthly	Every few Months	Yearly	Never	Total
How often do you participate in debates regarding affairs?	24.6%	10.7%	15.6%	29.5%	19.7%	100%

Source: CRESSI elaboration on Kiútprogram dataset

14.6. Institutions

The structure of the Kiútprogram generally helped the beneficiaries acquiring skills and improving their financial situation.

Table 82 – Institutions, selected responses, values in percentage

	Answered "Helped my activity" (%) ⁶⁸
Functioning of the group	69.6 %
	Answered "Very adequate" or "Adequate"
	$(\%)^{69}$
Quality of the information provided	97.1 %
Support in running my business	94.2 %
Support in book keeping	98.5 %

Source: CRESSI elaboration on Kiútprogram dataset

CRESSI Working Paper no. 34/2017

⁶⁸ Other possible answers were "Neutral" or "Counterworked"

⁶⁹ Other possible answer was "Inadequate'



As already mentioned, supporting activity was part of field workers' tasks. More specifically, field workers supported beneficiaries with the preliminary checked paper, a simple bur realistic business draft where they estimated rough income, costs and potential customers. After the filtering and the approbation by the CC (Credit Committee), field workers assisted beneficiaries with the drafting of the final business plan, which was supposed to be much more detailed than the preliminary one. Because of this, field workers meet beneficiaries at least once a week and also worked with the clients individually. Business included a cash flow plan for 13 months and detailed descriptions of the intended loan use, market connections of the planned business, potential partners, risk analysis, analysis of future outlook, and finally the assessment by the field worker. ⁷⁰ Additionally, bookkeepers were employed that helped beneficiaries with a 'loan recipient's booklet' that was supposed to assist them with tracking repayments, income, and expenses on a daily basis. As can be seen from the previous table, the majority of beneficiaries considered positive both the functioning of the group, the supporting activity and the quality of information provided.

The structure of the Kiútprogram also generally increased the interest of the beneficiaries to join the social microcredit program, especially the interest payment scheme.

Table 83 – Institutions (2), selected responses, values in percentage

	Answered "Increased the interest to join" ⁷¹ (%)
Kiútprogram group based lending model	33.3 %
Loan sizes	34.7 %
Lenght of loan period	20.8 %
Interest payment	53.5 %
	Answered "Very important" (%)
State support for start-up business	82.6 %
In general, support obtained for business plan	81.9 %
development	
Actual Support with obtaining licenses	78.9 %

Source: CRESSI elaboration on Kiútprogram dataset

Interest payment scheme comes from Grameen Bank and is described by Molnár as follow: "Repayment starts in the first week and the programme field worker meets the groups every week. If the first two loan recipients make the payments on time, after six weeks loans will be granted to another two group members as well; then, after another six weeks the group leader is granted a loan. If in the first six weeks a member fails to make a payment as agreed, he or she is excluded from the group and the others have to find someone else to replace this group member. Further loans are not granted until the excluded member is re-placed." This successful kind of interest payment scheme however suffered of adaptation risk caused by the distrust towards some financial institutions in Hungary. In fact, during the years prior the crisis, a new kind of financial institution, which used to grant loans at very high interest rates, although below the usury limit, began to exist in Hungary. During the crisis most of these institutions collapsed and this provoked a widespread distrust among clients⁷⁴. By the way for more than 50% of the beneficiaries, interest payment scheme increased the interest to join, instead group based lending model, size and length scheme did not increased as much as interest scheme did.

What was also considered very important by the beneficiaries was state support for start-up business, along with the support operated by field workers that was previously mentioned. Molnár describes state support as follow: "This support is granted for 6 months and its maximal amount per month is equivalent to the

⁷⁰ Molnár (2015:26)

⁷¹ Other possible answers were "Reduced my interest to join", "Did not affect my interest to join" or "Retained from joining

⁷² Other possible answers were "Important" or "Not important"

⁷³ Molnár (2015:26)

⁷⁴ Molnár (2015:21)



minimum wage. If the business closes within a year, the support has to be paid back. When planning the Kiútprogram, this support served as a fundamental basis; it was obvious that the majority of new businesses could not be viable without it. However, this support must be applied for and a detailed business plan has to be submitted. The application is evaluated by the local unemployment office, whereby the agency is not obliged to justify its decision." However, although fundamental, state support and welfare can be counterproductive when related to self-employability. One of the risk factors individuated was that income support received by Hungarian government reduced the willingness to take financial risks and at the same time it could not enable the reproduction of labour force at an adequate level. ⁷⁶

⁷⁵ Molnár (2015:20-21)

⁷⁶ Molnár (2015:19)

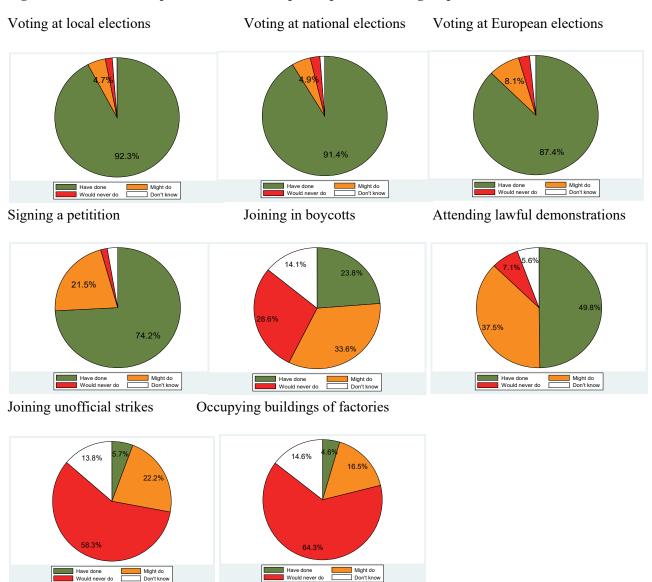
15. A focus on Solidarity Purchasing Groups

As for the Italian case study - the Solidarity Purchasing Groups (GASs) a longer questionnaire has been used, this zooming in briefly reports results collected with those additional questions.

15.1. Political Participation

For what concerns political attitudes, our respondents appear to be characterized by an active participation in elections both at the national and local level (91.4% and 92.3% respectively), with only a small reduction looking at the European ones (87.4%).

Figure 86 - Overview of political attitudes of participants to GAS groups



Source: CRESSI Survey data, 2016

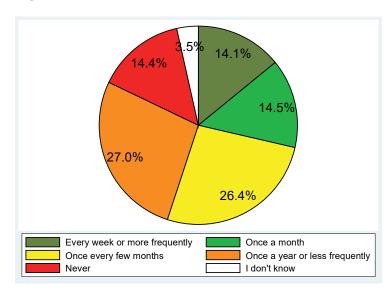


At the same time, they make use of other "soft" instruments of political participation as signing petitions (74.2%) or attending lawful demonstrations (49.8% have done and 37.5% might do), but they seem milder with respect to more radical forms of political action: around 30% of them would never join a boycott and a large majority would never join an unofficial strike or occupy a building or a factory (58.3% and 64.3% respectively).

15.2. Community Involvement

Turning the attention to the involvement at the local level, our sample appears to be characterized by a low rate of participation. Only about 30% of the respondents take part in discussions or decisions regarding their community every week or once a month, the majority of them display a much lower frequency, with 15% of the interviewees who never take part in such forms of participation.

Figure 87 - How often do you take part in discussions or decisions regarding your community or neighbourhood?



Source: CRESSI Survey data, 2016

15.3. Trust in Institutions

Even if we have observed a high participation in elections, the trust in the Italian and European parliaments among our respondents is rather low: 30% have absolutely no trust in the first institution and around 70% report a degree of confidence lower than 5 (the mean value in the score ranking). Accordingly, the mistrust in politicians and political parties is remarkably high, with almost 50% of the interviewees having assigned a value of 0 to them. At the same time, around 50% of the individuals report a score lower than 5 for the legal system, but 57% of them have trust in the police force (score equals to 6 or higher).

On the other hand, biological certifications display a rather even distribution, with values ranging between 6.5% and 12.3% across the score ranking, whereas around 57% of the respondents assign a score of 6 or greater to Solidarity Purchasing Groups (even if this category presents also the highest number of abstentions). However, what appears to emerge from these different patterns is that none of the institutions considered conveys a great amount of trust. This consideration is further supported by the comparison with the distributions of answers from the 7th round of the European Social Survey (2014), which reported a

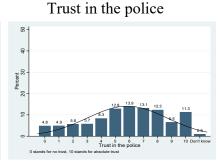


similar set of questions, showed in Graphs 3.m-s. It is evident that the individuals in our sample have on average a lower degree of trust in institutions, especially with respect to the political system.

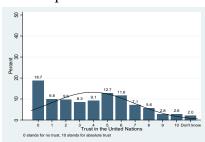
Figure 88 - Trust in institutions, sample population

Trust in country's parliament

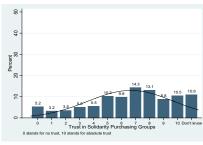
Trust in the legal system



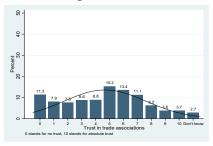
Trust in politicians



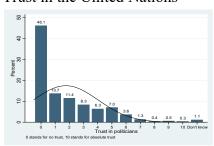
Trust in political parties



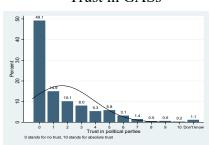
Trust in European Parliament



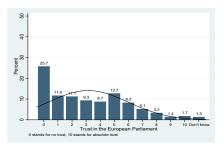
Trust in the United Nations



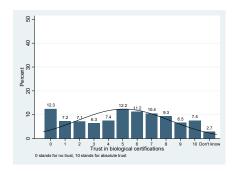
Trust in GASs



Trust in trade associations



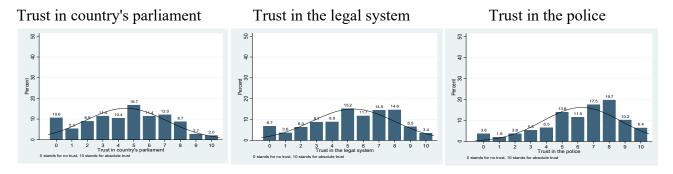
Trust in biological certifications



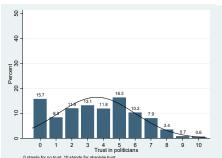
Source: CRESSI Survey data, 2016



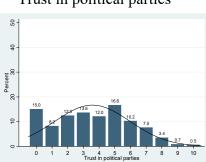
Figure 89 - Trust in institutions, Italian reference population



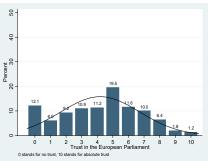
Trust in politicians



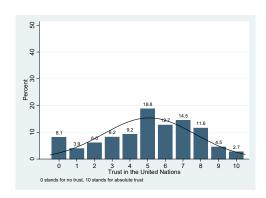
Trust in political parties



Trust in European Parliament



Trust in the United Nations



Source: CRESSI Survey data, 2016

15.4. Voluntary Activities

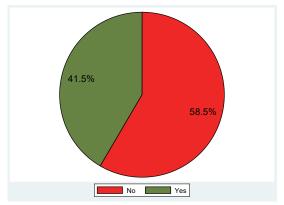
In our sample, the majority of individuals are not committed to voluntary work, and among the 665 respondents engaged, roughly 55% of them spend between 1 and 5 hours per week in this kind of activities.

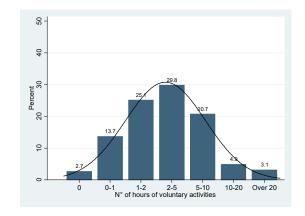


Figure 90 - Extent (left) and intensity (right) of engagement in voluntary activities, sample population

Do you belong to any voluntary organization or activity?

How many hours per week do you dedicate to these activities?



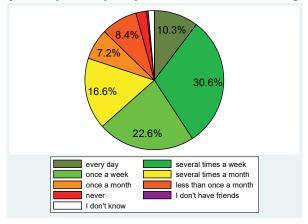


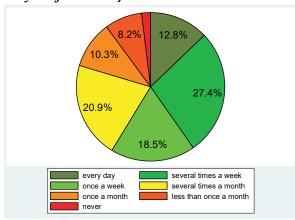
Source: CRESSI Survey data, 2016

15.5. Friendship and Relations

With regards to friendship and relationships, more than 60% of the interviewees meet their friends and colleagues at least once a week or more often, and only about 15% see them just once a month or less. Interestingly, even this variable can be compared to the results from the 7th round of the European Social Survey (2014), where, for the same ranges, the average percentages are slightly lower (around 59%) and slightly higher (18.5%) respectively. However, it does not seem that the distribution of the answers in our sample differs from the average one of the ESS significantly.

Figure 91 - Sociability of the Italian sample (left) and of the Italian reference population (right) [How often do you see your friends, relatives or colleagues in your free time?]⁷⁷





Source: CRESSI Survey data, 2016

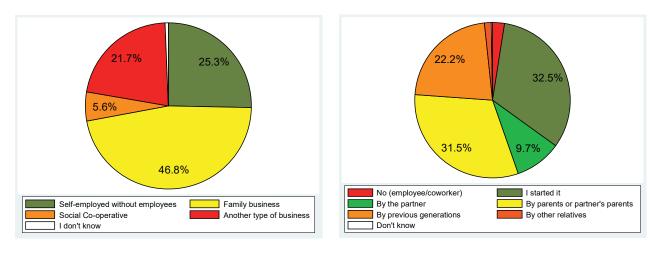
⁷⁷ In the European Social Survey the question is formulated as follows: "How often do you meet socially with friends, relatives or work colleagues?"



15.6. Characteristics of the enterprise

Looking at the characteristics of the enterprises where the respondents work in, we observe that almost 47% of them (730 individuals) work in a family businesses, whereas around one fourth are entrepreneurs without employees. Among those who work in a family activity, a third of them have started this business, but more than a half work in a company started by their parents, partner's parents or by previous generations, underlining the relevance of the family network in providing a secure channel to find a job in this particular context.

Figure 92 - Type (left) and origin (right) of the beneficiary enterprises 78



Source: CRESSI Survey data, 2016

The following figures display the distribution of the total number of workers employed in the own enterprise for different categories, whereas Table 84 reports corresponding summary statistics.

As we can see, for both dependent and seasonal/casual workers, the majority of the interviewees (around 60%) work in activities with less than four of such kind of employees, but we also observe higher densities in the upper tail of the distribution for dependent workers (i.e. there is a higher number of people with jobs in enterprises employing large amounts of dependent workers).

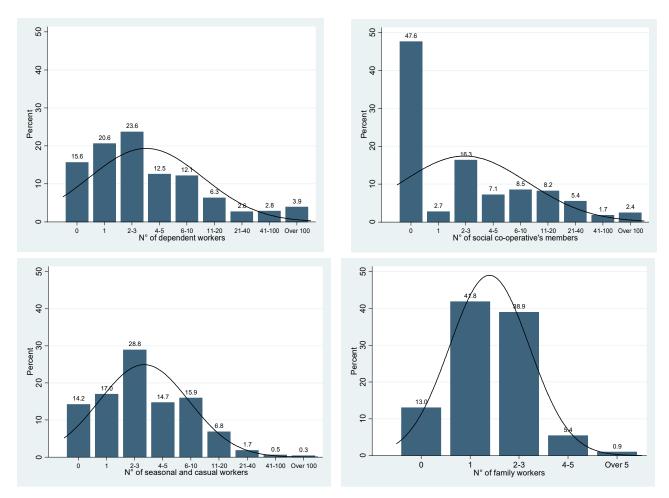
With regard to the number of social co-operative's members, among the 294 individuals who replied, around 48% of them reported no worker for such category in their enterprise. The distribution of family workers has been plotted with a different range, as numbers tend to be reduced for this typology of worker. However, it appears that almost 42% of the respondents work in a business, which employs just one family worker. The main insight that we can get from these different patterns is that our interviewees generally belong to rather small enterprises, independently of the type of workers that are employed within it.

CRESSI Working Paper no. 34/2017

185

⁷⁸ The questions are, respectively: "What kind of company are you working in?" and "If you work in a family business, has it been started by a member of your family?"

Figure 93 - Number and type of employees in the enterprise: dependent workers (upper left); members of a social co-operative (upper right); seasonal or casual workers (lower left) and family workers (lower right)



Source: CRESSI Survey data, 2016

 $Table\ 84-Typologies\ of\ worker\ in\ the\ enterprise,\ mean\ and\ median\ values\ and\ number\ of\ respondents$

Categories of workers employed in the enterprise	N [●] of respondents	Mean	Median
N° of dependent workers	719	3.52	3.00
N° of social co- operative's members	294	2.95	2.00
N° of seasonal or casual workers	648	2.40	2.00
N° of family workers	572	3.33	3.00

Source: CRESSI Survey data, 2016



The following table shows different categories of items or services that might be produced by the enterprise, the number of respondents who mentioned that particular type of production and the percent values. However, it is clear that a same respondent can work in a company with different kinds of production. It appears that the individuals in our sample are mainly employed in enterprises working in the food sector, with food items for direct consumption and food items to be processed being the categories reported most often (46.7% and 29.7% respectively).

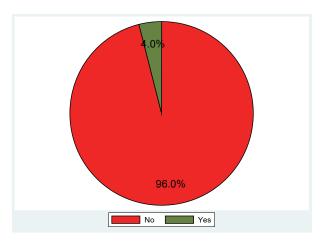
Table 85 – Type of production of the enterprise (selected options - multiple choice possible)

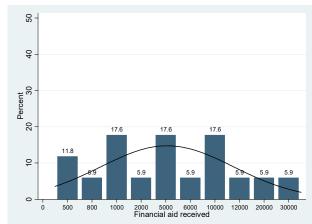
Type of production	N [•] of respondents	Percent
Food items for direct consumption	893	46.7%
Food items to be processed	568	29.7%
Non food items to be processed	30	1.6%
Non food items for direct consumption	98	5.1%
Services	179	9.4%
Other kinds of production	144	7.5%

Source: CRESSI Survey data, 2016

From our sample, it seems that the Solidarity Purchasing Groups are not used as (or thought to be) a channel for financial assistance. Only 4% of the respondents have ever received some kind of financial aid from these groups, and, among them the large majority (82%) have received 10.000 euros or less (this consideration has to be carefully taken, since it relies only on 17 observations).

Figure 94 - Financial help received through solidarity purchasing groups: incidence (left) and amount received (right) 79





Source: CRESSI Survey data, 2016

⁷⁹ The questions are, respectively: "Have you ever received financial aid from the Solidarity Purchasing Groups?" and "How much money have you received?"

References

- Alkire, S., & Foster, J. (2011). Counting and multidimensional poverty measurement. *Journal of Public Economics*, 95(7–8), 476–487.
- Bernát, A. (2014). Leszakadóban: a romák társadalmi helyzete a mai Magyarországon [Falling behind: the social status of the Roma in Hungary today]. In: Kolosi, T. and Tóth, I. G. (eds): Társadalmi Riport [Social Report] 2014. Budapest: TÁRKI.
- Bernát, A., Juhász A., Krekó P., and Molnár, Cs. (2013). The roots of radicalism and anti-Roma attitudes on the far right. TÁRKI 2013.
- Bezzi, C. and Baldini, I. (2006). Il brainstorming. Pratica e teoria. Franco Angeli
- Blanc, J. (2011) Classifying "CCs": community, complementary and local currencies' types and generations. *International Journal of Community Currency Research* 15 (2011) D 4-10.
- Boonstra, L., Arjo Klamer, Eleftheria Karioti, J. Aldo Do Carmo and Sander Geenen (2013). Complementary currency systems. *Erasmus University Rotterdam Report*, published online 3 June 2013.
- Bührer, W. (2001). 50 Jahre Düngemittelstatistik in Deutschland. Statistisches Bundesamt, Wiesbaden.
- Bundesministerium für Ernährung, Landwirtschaft und Verbraucherschutz. (2006). Statistisches Jahrbuch über Ernährung, Landwirtschaft und Forsten der Bundesrepublik Deutschland 2006, Wiesbaden.
- Dittmer, K. (2014) Alternatives to money-as-usual in ecological economics: a study of local currencies and 100 percent reserve banking. *Doctoral dissertation* ICTA, UAB. Available online: https://www.researchgate.net/publication/270451319 Alternatives to Money-As-Usual in Ecological Economics A Study of Local Currencies and 100 Percent Reserve B anking (Accessed June 30, 2016)
- Giroletti. T. (2016). How to tackle the subjective measurement of agency: an application of the 'anchoring vignette' methodology to the Relative Autonomy Index. University of Pavia, mimeo.
- Groppa, O. (2013). Complementary currency and its impact on the economy. *International Journal of Community Currency Research 17 (A) 45-57*.
- Heiskala, R. (2015). Relating Mann's Conception to CrESSI. CRESSI Working Paper 9/2015.
- Hubert A. and Helfferich B. (2016). Integrating Gender into EU Economic Governance: Oxymoron or Opportunity? Paper presented at FES roundtable "Gender equality and EU economic governance: new opportunities?", 29 November 2016.
- IKT (Interessengemeinschaft zur Erhaltung der kommunalen Trinkwasserversorgung). (1986). *Gründungsaufruf*, Kopinghaus, Würzburg.
- ——1986, Resolution der Interessengemeinschaft zur Erhaltung der kommunalen Trinkwasserversorgung (IKT): An das Bayrische Innenministerium, z.H. Staatsminister Dr. Hillermeier, Sebastian Schönauer.
- ——1989, Pressemitteilung: Flächendeckender Grundwasserschutz statt Schadtstoffverdünnung durch Fernwasser, Peter Etthöfer.
- Jacobi, N. von, Chiappero-Martinetti, E., Giroletti, T., Maestripieri, L. and Ceravolo, F. (2015). D3.5 Toolkit (Methodology), CRESSI Working Paper 16/2015.
- Jacobi, N. von, Edmiston, D. & Ziegler, R. (2017). Tackling marginalisation through social innovation? Examining the EU social innovation policy agenda from a capabilities perspective, *Journal of Human Development and Capabilities*, forthcoming.
- Kampers, E. (2015). Gemeenschapsmunten in kaart. *Qoin Report*, published online 22 September 2015.



- Kaseauru K., Maestripieri L. and Ranci C. (2016) The impact of labour-market participation, family structure and local welfare systems on the economic insecurity of women, *European Societies* (forthcoming).
- King, G., Murray, J. L. M., Salomon, A. S., and Ajay, T. (2004). Enhancing the validity and cross-cultural comparability of measurement in survey research. *American Political Science Review*, vol 98(1):191-207.
- Kornrich S., Brines J. and Leupp K. (2013). Egalitarianism, Housework, and Sexual Frequency in Marriage, *American Sociological Review*, 78(1): 26-50.
- Levin, K.A., Currie, C., (2014). Reliability and validity of an adapted version of the Cantril ladder for use with adolescent samples. *Social Indicators Research*, vol. 119, pages 1047–1063.
- Lex Borghans & Bart H. H. Golsteyn & James J. Heckman & Huub Meijers, 2009. "Gender Differences in Risk Aversion and Ambiguity Aversion," *Journal of the European Economic Association*, MIT Press, vol. 7(2-3): 649-658.
- Maestripieri, L. (2015). 'Gendering Social Vulnerability. The Role of Labour Market Destandardisation and Local Welfare', D. Kutsar and M. Kuronen (eds) Local welfare policy making in European Cities, Berlin: Springer, 51-71.
- Maestripieri, L. (2016). 'A job on one's own. Economic insecurity and women's labour market activation in six European Countries.' Unpublished paper.
- Molnár, Gy. (2015). A way out of poverty? A social microcredit programme generating selfemployment for the Roma in Hungary, in: Schimpf, G., Scheuerle, T. & Mildenberger, G. (eds.) (2015). Four individual case studies following a common template. A deliverable of the project: "Creating Economic Space for Social Innovation" (CRESSI), European Commission 7th Framework Programme, Brussels: European Commission, DG Research and Innovation. pp. 5-76.
- Nakazato, H. and Hiramoto, T. (2012). An empirical study of the social effects of community currencies. *International Journal of Community Currency Research* 16 (D) 124-135.
- Naqvi, Mona and James Southgate. (2013). Banknotes, local currencies and central bank objectives. *Bank of England Quarterly Bulletin* 2013 Q4 317-325.
- NEF (New Economics Foundation). (2014). No small change. Evaluating the success of your community currency project'. *Report*. Available online: http://b.3cdn.net/nefoundation/6e006679e8a6d649fd_3num6frei.pdf (Accessed June 17, 2016)
- Nicholls, A. & Ziegler, R. (2015). An extended social grid model for the study of marginalization processes and social innovation. CRESSI Working Papers no. 2, Oxford.
- OECD (2013). How's Life? 2013: Measuring Well-being, OECD Publishing.
- Ryan, R. M., and Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, vol. 55 (1), pp. 68-78.
- Place, C. and Bindewald, L. (2015). Validating and improving the Impact of Complementary Currency Systems through impact assessment frameworks. *International Journal of Community Currency Research* 19 (D) 152-164
- Schimpf, G. & Ziegler, R. (2016). Freshwater Supply. Report on relevant actors in historic examples and an empirically driven typology on types of social innovation. Deliverable 5.1 of the project: "Creating Economic Space for Social Innovation" (CRESSI), T Scheuerle, G Schimpf, G Glänzel & G Mildenberger, Oxford.
- Seyfang, G. and Noel Longhurst. (2013). Growing green money? Mapping community currencies for sustainable development. *Ecological Economics* 86 (2013) 65-77.
- Statistisches Bundesamt. (2014). Nachhaltige Entwicklung in Deutschland Indikatorenbericht 2014. Wiesbaden.
 - https://www.destatis.de/DE/Publikationen/Thematisch/UmweltoekonomischeGesamtrechnungen/Umweltindikatoren/IndikatorenPDF 0230001.pdf? blob=publicationFile>.
- Western, B., Bloome, D., Sosnaud, B., & Tach, L. (2012). Economic Insecurity and Social Stratification. *Annual Review of Sociology*, 38(1), 341–359.



- Whelan and Maitre (2013). Whelan and Maitre (2014) Material Deprivation, Economic Stress, and Reference Groups in Europe: An Analysis of EU-SILC 2009. European Sociological Review, 29(6).
- World Bank. (2013). Kiútprogram social microcredit program: case study. Washington, DC; The World Bank. Prepared by: Audy, R., Karacsony, S., Kits, B., Laat, J. de, Molnar, G., and Tan, L
- Ziegler, R., Partzsch, L., Gebauer, J., Henkel, M., Lodemann, J. & Mohaupt, F. (2014). Social entrepreneurship in the water sector: Getting things done sustainably. Edward Elgar, Cheltenham.



PART IV – Appendix

- 16.1. Questionnaires
- 16.2. Prequalitative template
- 16.3. Qualitative template
- 16.3. Focus Groups template





Creating Economic Space for Social Innovation A survey about beneficiaries

[Template questionnaire: Orange text represents formulations that need to be adapted to the specificities of the social innovation case under study]

This questionnaire is part of a European research project CrESSI. It explores the economic underpinnings of social innovation with a particular focus on how policy and practice can enhance the lives of the most marginalized and disempowered people in society. Social innovation's organisations are bottom-up experiences, oriented to the improvement of citizen's life at local level. If you want to have more information on the project, you can find more information here: http://www.sbs.ox.ac.uk/faculty-research/research-projects/cressi.

This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no 613261.

We are interested in your life conditions and in how you perceive your environment. It will be helpful if you can help us to identify what is or potentially can be the role of social innovation in your life. Your opinion is valuable to us, even if you have no direct experience with social innovation.

Thanks for collaborating to our survey!

2. Year of birth:

_ Female	_ _	
Male	Pleas	se insert the year when you are born.
3. Municipality in wh	ich you reside:	
Context 1	Context 11	Context 21
Context 2	Context 12	Context 22
Context 3	Context 13	Context 23
Context 4	Context 14	Context 24
Context 5	Context 15	Context 25

_ | Context 16

_ | Context 17

Context 18

Context 19

Context 20

|_| Other (please specify:

1. Personal details

1. You are:

Context 6

Context 7

| Context 8

Context 10

Context 9

Context 26

__ | Context 27

Context 28

__ | Context 29

Context 30





4. Which is your level of education? Plea	ase tick the highest level of education
achieved. Up to lower secondary Post-secondary non-tertiary Bachelor or equivalent Doctoral or equivalent Other (specify:	_ Upper secondary _ Short-cycle tertiary _ Master or equivalent)
5. Which of these descriptions applies to 7 days? _ Employed or self-employed _ Unemployed (looking actively for a job _ Unemployed (not looking for a job, but _ Not having a paid job and not willing to	y) willing to work)
If you're employed or self employed	If you have no paid job
6. you are: _ Employee with a permanent contract _ Temporary worker _ Working for your own family's business _ Freelancer (self-employed worker without employees) _ Entrepreneur (self-employed worker with employees) _ Informal worker (no registered labour contract) _ Other (please specify:) 7. On average, in the last three	8. you are: _ Full-time (or mainly) student _ Full-time (or mainly) involved in unpaid activities as a volunteer job _ Full-time (or mainly) doing housework, looking after dependants, as children or dependant adults _ Retired _ Other (please specify:)
months how many hours have	
you worked per week?	
_ _ Please indicate the number of hours worked per week.	





9. Which of these descriptions applies to	your household most?
Single	_ Single Mother
Couple with children	_ Single Father
_ Couple without children	_ I live with my parents
_ Other (please specify):	
2. Social innovation	
10.Have you ever heard of the social inn	ovation?
_ Yes	_ I don't know
(to be inserted here) Definition of country-	specific social innovation
11. Have you been active in the social inr _ Yes, I'm still active today	
_ No (please go to section 3, page 7)	
	4
<u>I'm still active in the social</u> innovation	I was active in the social innovation
12. Since when have you been actively involved in the social innovation?	13. How long have you been actively involved in the specific social innovation? Please indicate an estimation in years:
Please indicate a year: _ _ _	_ _
	14. Since when have you not been involved in the specific social innovation?
	Please indicate a year: _ _ _





I was active in the social innovation

<u>I'm still active in the social innovation</u>

	17. How often ala you participate in
15.How often do you participate in	discussions and decisions
discussions and decisions	concerning the affairs of the
concerning the affairs of the	social innovation?
social innovation in the last	_ Weekly or more frequently
year?	_ Weekly of more requently _ Monthly
_ Weekly or more frequently	_ Every few months
_ Weekly of more frequently _ Monthly	_ Yearly or less frequently
_ Monthly _ Every few months	_ Never
_ Yearly or less frequently	_ I don't know
_ Never	1_1 - 40 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 -
_ I don't know	18. Which activities did you
	participate in the social
16.Which activities do you	innovation?
1 1	Category 1 derived from
innovation in the last year?	qualitative interview
Category 1 derived from	Category 2 derived from
qualitative interview	qualitative interview
Category 2 derived from	Category 3 derived from
qualitative interview	qualitative interview
Category 3 derived from	Category 4 derived from
qualitative interview	qualitative interview
Category 4 derived from	Category 5 derived from
qualitative interview	qualitative interview
Category 5 derived from	_ Other (please specify:)
qualitative interview	
Other (please specify:)	





19. In your view, who are the prior beneficiaries of the social innovation?

	not all	at	to small extent	а	to some extent	to a large extent	Not anymore now	I don't know
Category 1 derived from qualitative interview			extent			extent	now	
Category 2 derived from qualitative interview								
Category 3 derived from qualitative interview								
Category 4 derived from qualitative interview								
Category 5 derived from qualitative interview								

Please reply for each category separately

I'm still active	e in the <mark>social</mark>	I was active in	n the social innovation
		21.Were you	personally benefitting
20.Are you	personally benefitting	from this s	social innovation?
from this s	social innovation?	Yes	No
Yes	No	_ I don't kno	W
_ I don't kno	W		

22. If you said yes, in which way you benefitted from this social innovation?

	not at all	to a small	to some	to a large	I don't
		extent	extent	extent	know
money/income					
friendships					
business relationships					
knowledge					
additional category derived from qualitative interviews					
additional category derived from qualitative interviews					

Please reply for each category separately





I was active in the social innovation





I'm still active	in 🗧	the	social
innovation			

23.Do you allocate any money (eg. membership fee) in order to support this social innovation? _ Yes	27. Did you allocate any money (eg. membership fee) in order to support this social innovation? _ Yes
24.If you said yes, on average, how much money per year? EURO: _ _ _ _ 25.Do you devote voluntary work in order to support this social innovation?	28.If you said yes, on average, how much money per year? EURO: _ _ _ _ 29.Did you devote voluntary work in order to support this social innovation? _ Yes
_ Yes _ No _ I don't know 26.If you said yes, on average, how	30.If you said yes, on average, how many hours every week?
many hours every week?	
31.Could you specify what kind of in innovation?	mpact you expect from this social
_ Pressure on existing institutions _ Redistribution of existing resources _ Changing people's mentality _ Establishing new social relationship _ Establishing new business relationship	 _ Availability of new/better public goods _ Availability of new products and services _ Empowerment of individuals _ Empowerment of certain groups _ More/new jobs
_ Other (please specify: _ I don't know)
Please select the 3 most relevant to you	





32. Would you recommend the specific social innovation?

No, I don't										Yes, I fully	I don't
recommend										recommend	know
it at all										it	
0	1	2	3	4	5	6	7	8	9	10	

Using this scale, how likely are you to recommend it, where 0 means not at all and 10 means definitely yes.

3. Autonomy

We are interested to know the ability of people to choose freely in different dimensions of life. People are more autonomous when they act according to their authentic interests or values and desires. On the contrary, people are not autonomous when they act due to external pressures, or other people's judgements.

33.Let us consider a 10-step ladder where 0 represents the lowest level of autonomy in taking a decision, and 10 represents the highest level of autonomy. Considering you life in general, and taking into account the dimensions that affect one's life, on which step are you?

Nov	W												
0,	lower	1	2	3	4	5	6	7	8	9		I don't know	I don't
aut	onomy										autonomy		want
													to
													answer
Th	ree year	rs ag	go										
0,	lower	1	2	3	4	5	6	7	8	9	10, higher	I don't know	I don't
aut	onomy										autonomy		want
													to
													answer

For those who have not participated to the social innovation, jump to question 34, page 8.

Only if you have ever participated in the social innovation, now or in the past:

Bef	Before getting in contact with the social innovation?												
0,	lower	1	2	3	4	5	6	7	8	9	10, higher	I don't know	I don't
aut	onomy										autonomy		want
													to
	answer												

Now jump to question 35, page 9.





If you have never participated in the social innovation, now or in the past, please answer to the following question:

34. Considering the following dimensions, how do you feel compared to three years ago?

	Yes, I feel more autonomous now	No, my situation has not changed	No, I feel less autonomous now	I don't know
(specification of the natural dimension informed by				
focus group)				
(specification of the artefactual dimension informed by				
focus group)				
(specification of the cultural dimension informed by				
focus group)				
(specification of the economic dimension informed by				
focus group)				
(specification of the security-related dimension				
informed by focus group)				
(specification of the political dimension informed by				
focus group)				





If you have ever participated in the social innovation, now or in the past, please answer to the following question:

35. Considering the following dimensions, has the participation in the social innovation contributed to your autonomy?

	Yes, I feel more autonomous now	No, my situation has not changed	No, I feel less autonomous now	I don't know
(specification of the natural dimension informed by				
focus group)				
(specification of the artefactual dimension informed by				
focus group)				
(specification of the cultural dimension informed by				
focus group)				
(specification of the economic dimension informed by				
focus group)				
(specification of the security-related dimension				
informed by focus group)				
(specification of the political dimension informed by				
focus group)				





4. Your opinions

36. To which extent do you agree with the following statements?

	Strongly agree	agree	disagree	Strongly disagree	Don't know
One should not start a					
business if there is a risk it					
might fail.					
CF 1 from qualitative					
interview					
CF 2 from qualitative					
interview					
CF 3 from qualitative					
interview					
CF 4 from qualitative					
interview					
CF 5 from qualitative					
interview					

37. For each of the following behaviours, please express to which extent you act this way.

	1, typically don't	2	3	4	5, typicall y do	I don't know
I don't worry that my enterprise might fail						
What about three years ago?						
BV 1 from qualitative int						
What about three years ago?						
BV 2 from qualitative int						
What about three years ago?						
BV 3 from qualitative int						
What about three years ago?						
BV 4 from qualitative int						
What about three years ago?						
BV 5 from qualitative int						
What about three years ago?						

Please indicate 5 if you typically do or 1 if you typically don't.





38. Thinking about your experience, how often do you get in contact with the following organisations?

	Wee kly or more frequ ently	Month ly	Every few month s	Yearly or less freque ntly	Never	I don't know
Network 1 from quali int						
What about three years ago?						
Network 2 from quali int						
What about three years ago?						
Network 3 from quali int						
What about three years ago?						
Network 4 from quali int						
What about three years ago?						
Network 5 from quali int						
What about three years ago?						

39. For each of the following rules, norms or practices, please express the degree to which you respect and act in accordance with them:

	1,				5,	I
	typically refuse	2	3	4	typically respect	don't know
INS 1 from qualitative int						
What about three years ago?						
INS 2 from qualitative int						
What about three years ago?						
INS 3 from qualitative int						
What about three years ago?						
INS 4 from qualitative int						
What about three years ago?						
INS 5 from qualitative int						
What about three years ago?						

Please indicate 5 if you typically respect or 1 if you typically refuse.





5	Vour	Fcon	omic	status
Э.	TOUI'	CCOII	OHIIC.	Status

40.A household may have different sou household member may contribute total monthly or weekly income, is y meet, that is pay your usual expense	to it. Thinking of your household's our household able to make ends
_ with great difficulty _ with difficulty	_ fairly easily
_ with difficulty _ with some difficulty	_ easily _ very easily
I don't know	
<u> </u>	
41.Can your household afford an unexp (XXX/country dependent)?	ected, but necessary, expense of
_ Yes _ No	_ I don't know
42.Compared to the average of previou revenue of the household this year h	
_ Lower	ther _ I don't know
43.Would you define yourself as the pri	imary earner of your household?
_ Yes	_ I don't know
44.What is your personal net monthly i	ncome? (Net means net of taxes, report
value of last month). Please only sel	ect <u>one</u> of the possible categories:
_ less than 600 euros	_ between 2600 and less than
_ between 600 and less than 700 €	2900€
_ between 700 and less than 900 €	_ between 2900 and less than
_ between 900 and less than 1100 €	3200€
_ between 1100 and less than 1300€	_ between 3200 and less than 3600€
1500€ _ between 1300 and less than 1500€	_ between 3600 and less than 4000€
_ between 1500 and less than 1700€	_ between 4000 and less than 4500€
_ between 1700 and less than 2000€	_ between 4500 and less than 5500€
_ between 2000 and less than 2300€	_ between 5500 and less than 6500€
_ between 2300 and less than 2600€	_ between 6500 and less than 10000€
	more than 10000 €





I don't know I don't want		ıswe	r								
45. How was yo	ur iı	ncom	e th	ree v	zears	sago	?				
_ More than d				100)	Cur	ugo	•				
More than 8		_									
_ More than 6	0%										
_ More than 4	0%										
_ More than 2	0%										
_ Equal											
20% less											
_ 40% less											
_ 60% less											
_ 80% less		:									
_ I did not ear _ I don't know		y inco	ome								
For those who hav		nart	icinat	ted to	the s	ocial	innos	ation	ium	n to auestion 4'	7 naae 13
Tor those who hav	c not	part	стрис	cu to	circ s	ociai	minov	acton	i, juiii	p to question 1	r, page 13
If you have ne	ver	part	icipa	ated	in tl	he s	ocial	inn	ovat	ion, now or	in the past,
please answer		_	-							·	•
46.Did the part situation? _ Yes, my finant _ No, my finant _ Yes, my finant _ I don't know	ncial icial ncial	situa situa	ntion tion	has i	impr iot cł	oved nange	ed	ion i	nflue	ence your fina	ancial
6. Goodbye											
47.All things considered, to what extent are you satisfied or dissatisfied with your life in general at the present time? Look at the following scale where 0 means totally dissatisfied and 10 means totally satisfied. Where do you stand on the scale now?											
Totally										Totally	don't know
dissatisfied										satisfied	
0	1	2	3	4	5	6	7	8	9	10	
	_					_	_				
48.Do you thin	k yo			som	ethir	ng to	imp		-		
Yes		_ 1	No					 _]	I don	't know	







This is a short questionnaire on the activities promoted by your organisation. It is schematic and will be followed-up to by an in-depth qualitative interview with one of our researchers. Please note that all questions refer to the activities of the organisation you are part of, not to you personally. You can fill in this questionnaire jointly with other colleagues and team members as long as the replies best reflect the reality of your organisation. All questions further refer to your local context: please consider your immediate surrounding and the local reach of your activities when replying.

INFORMATION ON THE ORGANIZATION

Name of the organization:	
(eventually) website:	
Place:	
Name of person compiling this questionnaire:	
Role within the organisation:	
Since when you're active in the association: year _ _ _ _	
1. When was your initiative founded? Please indicate the year in which it w	vas founded:
2. Is your <mark>initiative</mark> registered as a formal organisation? (A formal organisation? (A formal organisation) Yes No	tion requires a constituting act)
3. <i>Is your <mark>initiative</mark> a non-profit organisation?</i> Yes No I don't know	
4. How many people do collaborate in your activity (unpaid participants Please indicate the actual unpaid participants I don Please indicate the actual number of paid workers _ I don	n't know
5. How many hours per week do unpaid participants contribute to your	initiative?
Please indicate the average value: _ _	I don't know
6. How many hours per week do paid workers work in your initiative?	
Please indicate the average value: _ _	I don't know
7. Approximately what per cent of your initiative's employees tertiary/university degree? (if you wish, you can separate this question for en Nobody Up to 25% 25% to 50% 50% to 75% Everybody I don't know	
8. How many beneficiaries are you currently able to reach? Please indicate the actual number of beneficiaries _ _ don	n't know



9. How much money does your initiative move power would be the amount of money spent by a consumer marginalised farmers, probably in the Netherlands this amount of money invested in technology, know-how as	purchasing grou may be the am	up on products of credit p	acquired from small and
Please indicate the value for 2014:	,		I don't know
10. Which are the costs that your initiative needs the costs of renting a room where people meet or to pool Please indicate the value you estimate based on your of I don't know	ay employees th	at take care of a	dministrative tasks)
11. During the three years 2013 to 2015, did your the following levels of government? (Include financial loans, and loan guarantees. Exclude research and other sector ¹ under contract.)	support via tax	credits or deduc	ctions, grants, subsidized
a. Local or regional authorities	Yes	No	I don't know
b. Central government (including central government agencies or ministries)	Yes	No	I don't know
c. The European Union (EU)	Yes	No	I don't know
12. During the three years 2013 to 2015, did your o	organization rec Yes	eive any private No	financial support? I don't know
Now I would like to capture your attention on what w of a new or significantly improved product, process organisation. An innovation must have characteristic significant improvement over what was previously used only be new or significantly improved for the specific used by other enterprises/organisations. During the introduce:	, organisationa cs or intended d/sold/provided organisation: It	I method, or muses that are related by the organisa could have been	arketing method by an new or which provide a tion. An innovation need n originally developed or
13. During the three years 2013 to 2015, did your of a. New or significantly improved methods of manufacture example, in Italy this would for example be electricity be	acturing or prod	ducing goods o o owned solar pan	
b. New or significantly improved logistics , delivery or (case-specific example, in Italy this would for example the consumers without relying on intermediaries in retain	be the distributail)	tion of consump	
c. New or significantly improved supporting activitie operations for purchasing, accounting, or computing			
	Yes	No	I don't know
d. New business practices for organising procedures (i knowledge management, lean production, quality man		management, k	ousiness re- engineering,

¹The public sector includes government owned organisations such as local, regional and national administrations and agencies, schools, hospitals, and government providers of services such as security, transport, housing, energy, etc.

²This definition has been taken from the Community Innovation Survey.



	Yes	No	I don't know
e. New methods of organising work responsib employee responsibilities, team work, decer education/training systems, etc.)			-
	Yes	No	I don't know
f. New methods of organising external relati calliances, partnerships, outsourcing or sub-contr		ns or public in	stitutions (i.e. first use of
	Yes	No	I don't know
g. New methods of funding			
	Yes	No	I don't know



NETWORKS

We'd like to know more about the external actors with which your initiative interacts in order to implement your activities. Actors can be single persons or organisations/groups. Please fill in the grid below (please indicate in increasing order of importance, up to 5):

Name and/or role of actor	1)	2)	3)	4)	5)
Which type of actor is it?	_ Public _ Private _ No profit organisation _ Not-legally constituted group of people _ Single person _ Other _ I don't know	_ Public _ Private _ No profit organisation _ Not-legally constituted group of people _ Single person _ Other _ I don't know	_ Public _ Private _ No profit organisation _ Not-legally constituted group of people _ Single person _ Other _ I don't know	_ Public _ Private _ No profit organisation _ Not-legally constituted group of people _ Single person _ Other _ I don't know	_ Public _ Private _ No profit organisation _ Not-legally constituted group of people _ Single person _ Other _ I don't know
Did your organization collaborate with this actor when setting up this initiative?	_ yes strongly, the actor was involved in the definition of goals and priorities _ yes, weakly _ No _ I don't know	_ yes strongly, the actor was involved in the definition of goals and priorities _ yes, weakly _ No _ I don't know	_ yes strongly, the actor was involved in the definition of goals and priorities _ yes, weakly _ No _ I don't know	_ yes strongly, the actor was involved in the definition of goals and priorities _ yes, weakly _ No _ I don't know	_ yes strongly, the actor was involved in the definition of goals and priorities _ yes, weakly _ No _ I don't know
How often does your organization communicate with this actor now?	_ Never _ Rarely, less than twice a year _ Average, about five times a year _ Often, every month _ Every week	_ Never _ Rarely, less than twice a year _ Average, about five times a year _ Often, every month _ Every week	_ Never _ Rarely, less than twice a year _ Average, about five times a year _ Often, every month _ Every week	_ Never _ Rarely, less than twice a year _ Average, about five times a year _ Often, every month _ Every week	_ Never _ Rarely, less than twice a year _ Average, about five times a year _ Often, every month



					_ Every week
Did the relation	_ Improved, e.g. more				
between your	and more relevant				
organization and the	contacts	contacts	contacts	contacts	contacts
actor change because of	_ Worsened, e.g.				
the on-going initiative?	conflicts with the				
	actor	actor	actor	actor	actor
	_ Did not change				
	_ I don't know				



Qualitative template for Semi-structured interviews to social innovators

In green, you will find instructions for the interviewer. Please remember that this type of interview is supposed to be managed by an experienced researcher, in order to ensure the quality of information we need. The general scope of this research action is to get a thick and grounded description of the social innovation, which is different for each case study (GAS, Open Access Credit, Water movement) and to have information on the second level of analysis for the subsequent multilevel investigation (mainly trough the pre-qualitative questionnaire for social innovators). The information collected in these interviews will be used by UNIPV in order to integrate the beneficiaries' questionnaire. Please note that the text in orange will be adapted to the peculiarity of each case study during the translation in the local languages.

In general, the **text in black bold italic** is what you should read to the interviewee. As the technique proposed for this interview is a semi-structured interview, we'd like to recall some good-sense tips for effective interview conduction. We're not obliged to follow the order of the questions proposed: if the interviewee in your opinion has already answered to a question, simply skip it. A second rule is to let them talk enough to give you the information you need (don't over talk them or super-impose your point of view), but please constantly check that they stick to the question you posed in the beginning. If the interviewee has run out of time, try to fix a subsequent appointment; if it is not possible, try to get as much information as you can for each of the sections. Remember: it is not important to pose all the questions in the same order (as it is normally done in the questionnaire), but the goal is to get all the relevant information for each section of the interview. **Please remind the interviewee** at the beginning (and from time to time) that we are asking her/him to provide information about the social innovation/organization, not about herself/himself.

Before the interview is started please **collect the pre-qualitative questionnaire**, you will need it during the interview in phases Q.3c and 5. In particular, we would like to draw your attention on the direct link with the quantitative questionnaire in the following questions:

- Q2.a Cognitive frames for Quantitative Template Section 5, Q28 and Q29
- Q3.a Mobile dashboard for advanced statistical analysis
- Q3.d Prior beneficiaries for Quantitative Template Section 4, Q16
- Q4.b Type of benefit taken from social innovation for Quantitative Template Section 4, Q18

1. Self-introduction

In this section, we start to collect information about the social innovation, the context in which it operates and some general information about who social innovators consider to be their main beneficiaries.

- a. Would you please present your organisation (GAS, Open Access Credit, Water movement)?
 - 1. How did the initiative come to the founders' mind?
 - 2. Who were the founders? Are they still active today?
 - 3. What are the initiative's aims and have they changed in its history?

The sub-questions (1-3) can be used as suggestions for possible re-launches in case the interviewee did not automatically provide this kind of information.

2. Cognitive frames

Cognitive frames are mental structures that shape the perception of reality of people. In this section, the aim is to analyze which are the relevant cognitive frames with which the social innovation has to deal with and what are their roles and functioning. In the questions a and b, the interviewer will use a 2-step approach. First, he/she will ask for a list (up to five) of cognitive frames (leaving the interviewee as free as possible in answering). He/she should then focus on 3-5 cognitive frames to collect more specific information about them. Please prompt the interviewee to reply freely first, and only suggest examples of cognitive frames if there is a complete lack of ideas/replies (e.g. sustainability, equality, machismo, racism, market liberalism, etc.). Please preferably use examples that you have heard in previous interviews.

a. Is there any specific values/opinions/visions/beliefs that are relevant for your initiative? Or any that you try to contrast with your action?

Collect at least 3 cognitive frames to focus upon in the next questions. This table is compiled by the interviewer, without showing it to the interviewee.

	Cognitive Frames	Notes
1		
2		
3		

- **b.** For <u>each of them</u>, please then ask the following questions: <u>for the first question</u>, please try to identify the stage of the social innovation life-cycle that has been or is being affected by the specific CF: prompts proposals prototypes sustaining scaling systemic change
 - Speaking about CF_, how did it influence the activities you promote?
 - Is there any specific behavior that you associate with this way of thinking?

 How widely is this mind-set spread in the surrounding context? [if it is not spread] Which types of actors/people tend to share and to enforce this way of thinking? Who are the people that remain untouched by it and why?

3. Social Innovation

- a. Thinking about your activity, which keywords/adjectives would you use to describe it? Here follows a list of relevant adjectives/keywords. Do you recognize the scope of your initiative in the following concepts?
 - Promote innovation
 - Create new relations
 - Open to participation
 - Mind-changing
 - Favor the inclusion of a group of people that you consider particularly at risk (independently by who they are)
 - Encounter of different people (by age, sex, educational level, migrant background, etc...)
 - (...)

Is there any keyword/adjective we forgot to mention about your activity that is important for you and/or useful in order to understand your experience?

In question b, it is important to adopt a 2-step approach in proposing the question to the interviewee. First, the interviewer stimulates the respondent through the pre-set list of keywords/adjectives, which have been selected on the basis of existing literature. Stimulate the interviewee item by item and collect his/her reactions. Afterwards, the interviewer re-launches by asking if there is anything we can add to the list in order to collect more grounded ideas.

b. What is the geographical context of your activity?

Please be particularly attentive on the interviewee's definition of the <u>context</u>; eventually the interviewer should re-launch/check against the minimal territorial unit identified by the research team. You might slightly adapt the question when the context of reference is obvious: "do you have the impression that the impact of your initiative goes beyond the boundaries of (e.g.) your municipality?"

c. Would you define the social innovation (GAS, Open Access Credit, Water movement) as innovative?

Please make sure the interviewee refers to the social innovation in general, not to her/his specific implementation of the social innovation. In case needed, you can relaunch to make this clear.

After recording this reply, please <u>refer to question 13</u> in the pre-qualitative questionnaire and briefly write down the concrete examples they have in mind only for the options <u>for which they replied "YES"</u>. This intends to check for incremental innovation promoted by the implementers.

	"YES" in question 10	Example(s) mentioned
a	goods or services	
b	logistics, delivery,	
	distribution methods	
С	supporting activities	
d	business practices	
e	organising work	
	responsibilities and decision	
	making	
f	organising external	
	relations	
g	methods of funding	

d. Who benefits from your activities? (Only if it is not autonomously recalled) what about ... (target groups of GAS, Open Access Credit, IKT as envisaged by the research team)?

Question c to f have the scope to let the social innovators define their activity as innovative, delineate the geographical context of it and check if they are aware of the social impact of their social innovation. Question f stimulate innovators in reflecting about the <u>potential beneficiaries</u> (there might be more than one type); if not autonomously recalled by the interviewee, the interviewer introduces the target groups supposed by the research team, which are different for each case study. Let the interviewee answer freely focusing on who they consider their potential beneficiaries. The next section of the interview will focus more in detail on the target groups supposed by the research team

4. Beneficiaries - specific target group predefined by research team

In this section, the aim is to collect specific information on beneficiaries presupposed by the research team, which is different for each of the case studies. Although the target group changes, the structure of the interview remains identical for the three case studies. Questions a-d collect general information on marginalisation of beneficiaries and how social innovators intervene on their social needs.

- a. Do you consider target group to be disadvantaged within your context? In which sense?
- b. (only if yes) Does your activity reduce the marginalization of target group? How?
- c. Would you mind describing the process by which you involve the target group in the social innovation (GAS, Open Access Credit, Water movement)?
 - 1. How did you get in **contact** with target group?

- 2. Do you have any specific **criteria** with which you select target group? Which ones?
- *3.* how often a month do you **interact** with target group?
- 4. are target group involved in the definition of goals and of priorities?
- 5. which other **activities** do you do with target group?

Use prompts if necessary.

d. Do you have shared values/opinions/visions/beliefs with target group?

5. Networks

Networks refer to structured relational patterns between actors in society. In this section, the aim is to analyze which are the relevant networks in which the social innovation is embedded and what roles and functions different actors assume within them. During this part you will discuss the pre-qualitative questionnaire directly with the interviewee and integrate some parts of it. You might want to go trough the pre-qualitative questionnaire briefly with them, checking especially if their answers comply with the geographical context of reference identified by each case study. Apart from the following questions, get into details if parts of the pre-qualitative questionnaire have not been filled in.

- a. With whom of these actors do you share other activities? Which ones in particular?
- b. With whom of these actors do you share values/opinions/visions and beliefs? Which ones in particular?
- c. (If no public actor is mentioned within the network) Do you collaborate with any public actor? How and for what?

This is a control question to avoid misunderstanding of the exercise in the prequalitative questionnaire.

5. Institutions

Institutions are broadly understood as 'systems of rules' that shape the behavior of people. In this section, the aim is to analyze which are the relevant institutions with which the social innovation is confronted and to identify their role and functioning. We will ask the interviewee to list the norms by their positive or negative impact on the social innovation, then we will proceed with questions aimed at exploring each norm cited by him/her. Please tick if the norms are legally enforced or not.

We'd like to know if there are particular norms/rules/practices that act as barriers or facilitators for your initiative. They may for example influence the feasibility of your activities, the implementation process, or the ability of your organization to expand/scale-up (in positive or negative ways).

a. Thinking about those norms, would you mind listing which are acting as barriers for your initiative?

-		
	Barriers	Tradition vs. Legally Enforced
1		
2		
3		
	ninking about those no your initiative?	orms, would you mind listing which are acting as facilitators
	Facilitators	Tradition vs. Legally Enforced
1		
2		
3		
prod		e that remain untouched by it and why? Pression your activities are modifying decision-making et?
Nam Cont Age:	_ _ Geno	der:
_] _ l	upational status: Employed Unemployed Inactive	

Please collect a brief description of the type of activity and sector.



Role in the organisation:			
Since when are you active in the initiative: year	 _ _ 	_ _	





Template for focused discussion groups with beneficiaries

Black: Question for the group

Green: Instruction for the interviewer Red: Objective of the group discussion

to be discussed jointly

Short presentation of the project CRESSI; make explicit the objectives of the discussion; reassurance on privacy of the final content and the use of the audio recorder.

(opening – roundtable, every participant presents him/herself)

1. Who are you, since how much time are you involved in the social innovation and what is your activity as producer/citizen/beneficiary within it?

10-15 minutes (1 moderator)

It is important to be extremely effective in asking information, by trying to go directly to their point of view about the relation between the social innovation and their own life experience.

For the research group, the aim of the analysis is to investigate the concept and the concrete experiences of autonomy (defined as the capacity to make own choices in line with own life-projects), from a multidimensional perspective. The continuum goes from:

DISEMPOWERMENT

(low autonomy)

EMPOWERMENT

(high autonomy)

2. Discussing about your activities/collective projects as producers/citizen/beneficiaries, what are the choices that you think are important for achieving your goals?

Open discussion within the group – about one hour (1/2 collaborator(s) + 1 moderator)

During the open discussion it is important to constantly refer to their personal experience with the social innovation, asking for relevant anecdotes/stories. It is also important to re-launch in order to direct the discussion towards the dimensions which are left uncovered by the first round of reasons (ref. NACEMP). During the conversation between moderator and the group, 1 or 2 collaborators write tags with relevant answer strings to be used in the following section.

Use the following prompts to deepen the investigation:

- 3. What have your learnt from your 'encounter' with the social innovation?
- 4. What are the choices that you wouldn't do/wouldn't have done if you had not got in contact with the social innovation?

After this discussion phase, we start the game. The moderator explains what is going to happen in the following minutes, while a collaborator prepares the board by dividing it in six columns (one for each of the NACEMP dimensions). We ask the group to classify the grounded strings into the NACEMP dimensions, presenting them to them one by one. It is a game and it must be presented like this to the participants.



- 5. Now we will try to understand how the answers that you previously reported can be referred to different dimensions that people consider relevant when speaking about autonomy. In particular, we have identified the following six dimensions:
 - a. Nature: as capacity to contribute to the maintenance or changing of the environment that surrounds you (i.e. territorial quality, environmental sustainability)
 - b. Technology: as capacity to use/access to artificial means that help people in doing activities that you would not be able to do on your own
 - c. Culture: as capacity to influence/contribute to the way by which people interpret reality or act in everyday life
 - d. Economy: as capacity to accumulate resources or to guarantee stability
 - e. Security: as capacity to protect oneself from risks or negative outcomes that are not dependent on own actions
 - f. Politics: as capacity to participate in the decisions that govern collective life

Open discussion within the group – about one hour (1 collaborator + 1 moderator) For each of the tags prepared in the previous section, the group is asked to put it in the relevant column. The moderator guides the discussion, while the collaborator attaches the tags to the board. This phase lasts until each tag has been placed.

(closing)

6. We're now heading to the end of our discussion. Before we go, I would like again to look at the result of the group work. Is there anything that you would like to modify? (*The collaborator reads aloud each tag, dimension by dimension*)