Consiglio Nazionale delle Ricerche

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ISTITUTO di RICERCA sulla CRESCITA ECONOMICA SOSTENIBILE
RESEARCH INSTITUTE on SUSTAINABLE ECONOMIC GROWTH

MEASURING INVESTMENT READINESS:
A TOOL FOR THE EVALUATION OF POLICIES FOR SOCIAL FIRMS

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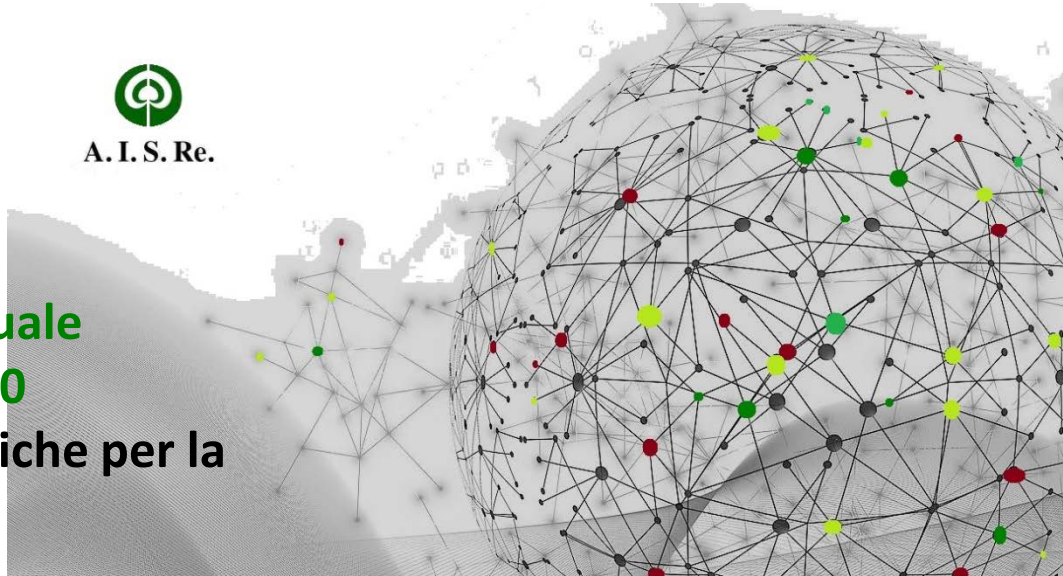


AISRe - XLI Conferenza scientifica annuale
Webconference, 2-4 Settembre 2020
SO 9 - La valutazione dell'efficacia delle politiche per la società e per le comunità locali

Social cooperatives (L 8/11/1991 n. 381)

Social cooperatives have the purpose of pursuing the general interest of the society in human promotion and social integration of citizens, unlike normal cooperatives that have mutualistic aims, that is to satisfy the needs of members (consumption, housing, work).

Social promotion occurs through:

a) Supply for social and educational services;

b) Creation of job opportunities for weak work-seekers in whatever economic activity.

Literature highlights, alongside their importance for the economy and the society, a crisis period they are undergoing, due to:

- Gaps in organizational and managerial aspects
- Problems in adapting to market evolution and changes in social needs
- Difficulty in adopting new technologies

The SEED project

The **Seed project 2018**, promoted by Compagnia di San Paolo, aims at strengthening the system of social cooperatives in Piedmont ,

It wants to remove some of the present and future obstacles to the development of social cooperatives

Through a step of organizational **check-up** and, afterwards, **projects for strategic reorganisation and innovation.** In both steps the cooperative is assisted by a consultant whose cost is covered by the project.

It includes an effectiveness evaluation, to be carried out through

- Quasi experimental evaluation on effect on profitability and financial equilibrium;
- Non experimental evaluation on the dimensions of organisational and strategic change.

The SEED project & the literature

How to measure a potential organisational and strategic change is an important issue for social cooperatives.

Main problems or limit of this business model are highlighted by the literature:

- Governance too participated that create difficulties (EC, 2015)
- Excessive grant dependency & problem of interaction with the market (Doherty et al., 2014)
- Organizational & managerial gaps (Smith et al., 2012)
  - Comunicational problems
  - Difficulties in monitoring and control prerformance
  - Decision making too dispersed
- Overlapping among customers, workers and beneficiary (Santos et al., 2015)
- Difficulties with new technologies and new financial sources (Buckingham et al., 2012)

Investment readiness: a way to read managerial change

Investment readiness, was presented in the Tiresia Social Impact Outlook and is an approach to assess the managerial maturity of the social cooperative. In the context of the SEED project, the ability to attract ethical finance risk investments, much more than a target, is the lens with which to read a possible change. In Chiodo and Gerli, (2017) IR is operationally declined through 3 macro-aspects:

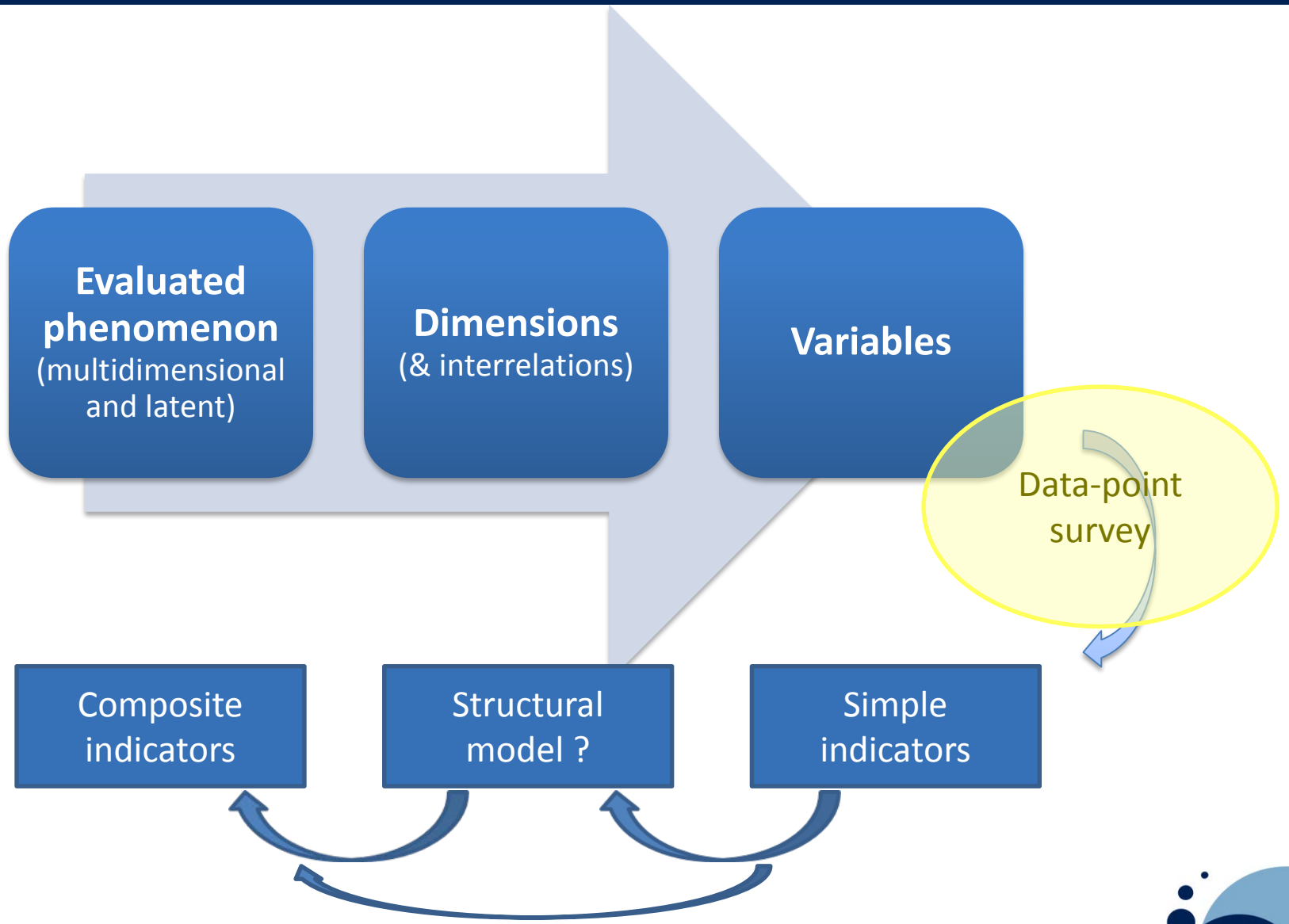
→ managerial skills (organisation and strategy)
→ technology and intangibles competences
→ market orientation

A forth dimension has been added in our evaluation:

→Monitoring and control capacities.

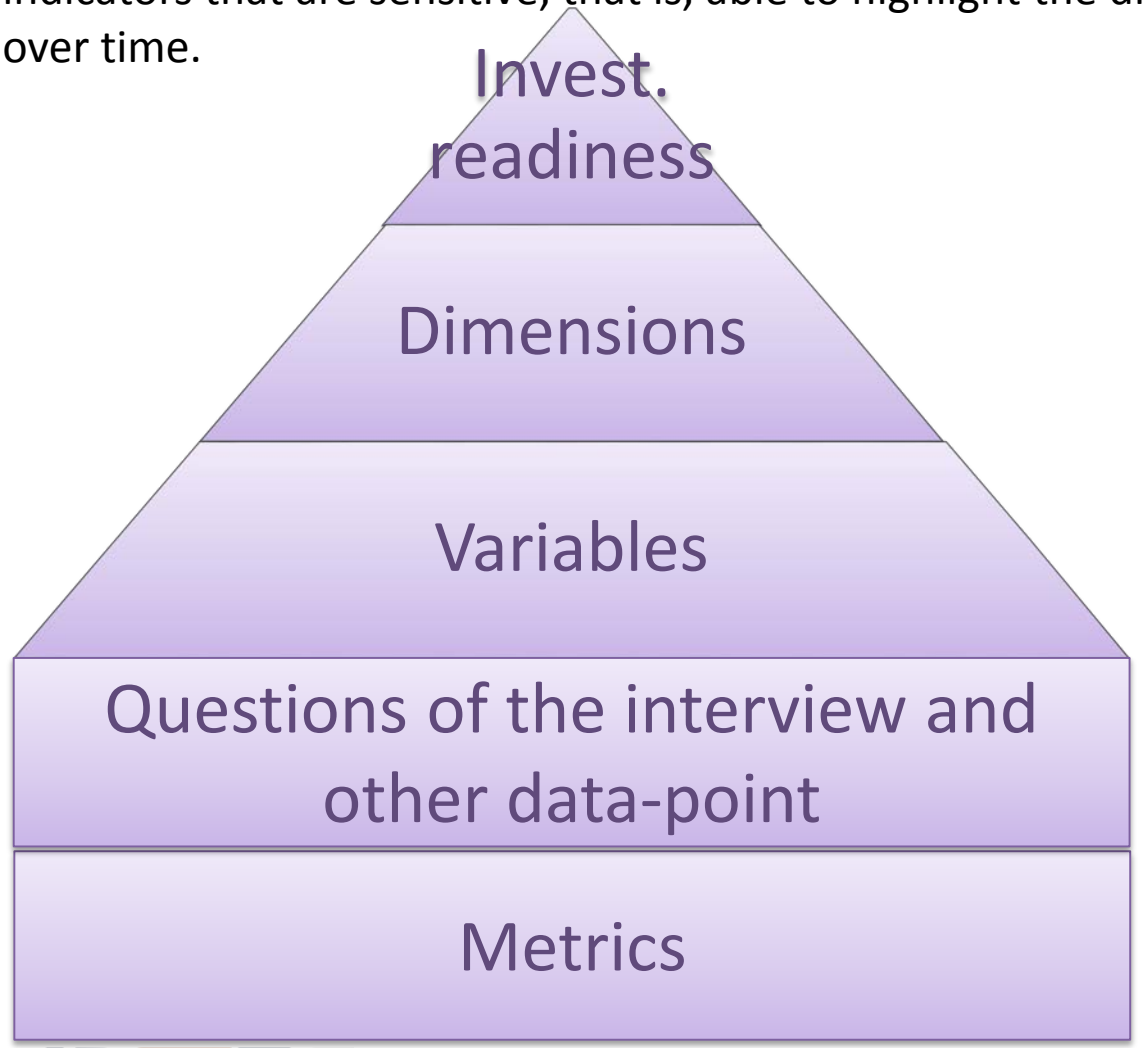
We analysed IR through a survey, carried out at the beginning, to be repeated with one year lag after the end of the project.

From multimensional phenomena to composite indicators



Our methodological purpose

Define and test 4 scores for the dimensions of investment readiness, starting from simple indicators that are sensitive, that is, able to highlight the differences between cooperatives and over time.



- Managerial skills
- Training, technology and *intangibles*
- Market orientation
- Definition and monitoring of targets

Examples:
- Organisational complexity
- Participation into strategy definition
- ….

Examples:
- D1.1
- D1.2
- Employees

Examples:
- Technological intensity score
- Weighted index of gerarchy
- …

The IR survey: pre-treatment phase

How evaluating the starting level of investment readiness ?

→survey CAWI, after the deadline for presenting the projects, and before the selection phase (final selection)

→Period: end of March – end of April 2019

→Universe: 56 cooperatives (participant with a valid demand), divided into 3 groups
- excluded (16)
- admitted Phase 1 (20)
- admitted Phase 2 (20)

→Response rate very high, near 95%
- excluded (13)
- admitted Phase 1 (20)
- admitted Phase 2 (20)

Questionnaire & specific dimensions & variables

→managerial skills (organisation and strategy)

→ technology and intangibles

→ positioning towards the market /Mkt orientation

→ Monitoring and control.

Dimensione	Variabile	Data point del questionario	Domanda questionario
Competenze organizzative e strategiche	Grado complessità e maturità organizzativa	Tipo di organizzazione applicata (**un indicatore, ordinale, 4 modalità**)	D1.1
		Formalizzazione e gerarchizzazione (**due indicatori, ordinali, 3 modalità**)	D1.2
	Grado di compartecipazione strategica	Soggetti che definiscono le strategie e relativa intensità (**6 indicatori, scala Likert**)	D1.3
	Grado di influenzabilità delle strategie	Soggetti capaci di influenzare le linee strategiche e relativa intensità (**6 indicatori, scala Likert**)	D1.6
Formazione, tecnologia e intangibles	Grado di intensità e proattività formativa	Tipologia e consapevolezza dei percorsi frequentati dallo staff (**domande dicotomiche combinabili**)	D2.12
	Tipologia degli ambiti formativi prescelti	Settori scelti in ambito formativo e ottenimento qualifiche (**domande dicotomiche combinabili**)	D2.13
	Grado di intensità/maturità tecnologica	Tecnologie adottate e loro intenistà di utilizzo effettivo (**7 indicatori, scala Likert**)	D6.1
Orientamento al mercato	Grado di conoscenza del mercato	Canali di aggiornamento sulla cooperazione e intensità di utilizzo (**6 indicatori, scala Likert**)	D3.1
	Grado di maturità finanziaria	Utilizzo forme di finanziamento standard (**domande dicotomiche combinabili**)	D4.12
		Interesse verso forme di finanziamento alternative (**domande dicotomiche combinabili**)	D4.13
	Grado di interazione con la comunità locale	Tipologia e frequenza organizzazione attività locali (**4 indicatori, ordinali, 3 modalità**)	D5.3
Definizione e monitoraggio degli obiettivi	Grado di maturità strategica	Presenza di obiettivi strategici (**un indicatore, ordinale, 4 modalità**)	D3.4
		Utilizzo di strumenti strategici (**5 indicatori, scala Likert**)	D3.5
	Grado di intensità del monitoraggio	Presenza e tipologia delle verifiche interne (**un indicatore, ordinale, 4 modalità**)	D3.6
	Grado di maturità nella misurazione d'impatto	Misurazione attuale e futura valore sociale (**un indicatore, ordinale, 3 modalità**)	D3.8
		Tipologia di misurazione adottata (**due indicatori, ordinabili, 3 modalità**)	D3.9

Emipirical strategy and methodoological issues

Main practical issue → translating qualitative aspects into measurable /ordinal/cardinal variables

Main methodoligical issue → condense / aggregate information from numerous indicators/different scales

We need 4 composite indicators, one for each dimension of investment readiness, able to integrate/aggregate properly the transformed information from the survey

We are exploring 2 different options of normalization of values relative to each variable:
- Min Max transformation
- Percentualization (distance to a reference value)

After normalising each single indicator, we aggregate them according to the 4 dimension of IR in a linear way using the arithmetic mean
→ We exlude other method like multiplicative instruments that seems less appropriate for the presence of zeros

Our preliminar approach

We are exploring 2 different options of normalization of values relative to each variable, both based on the OECD Handbook on Constructing Composite Indicators :

- **Min Max transformation**

$$I_{qc}^{t} = \frac{x_{qc}^{t} - min_{c}(x_{q}^{t})}{max_{c}(x_{q}^{t}) - min_{c}(x_{q}^{t})}$$

Where $min_c(x^t_q)$ and $max_c(x^t_q)$ are the minimum and the maximum value of x^t_{qc} across all social cooperatives at time t. In this way, the normalised indicators I_{qc} have values lying between 0 (laggard, $x^t_{qc} = min_c(x^t_q)$), and 1 (leader, if $x^t_{qc} = max_c(x^t_q)$)
→ I_{qc} values relative to all the variables in each of the 4 dimension of IR are aggregated according to the arithmethic mean

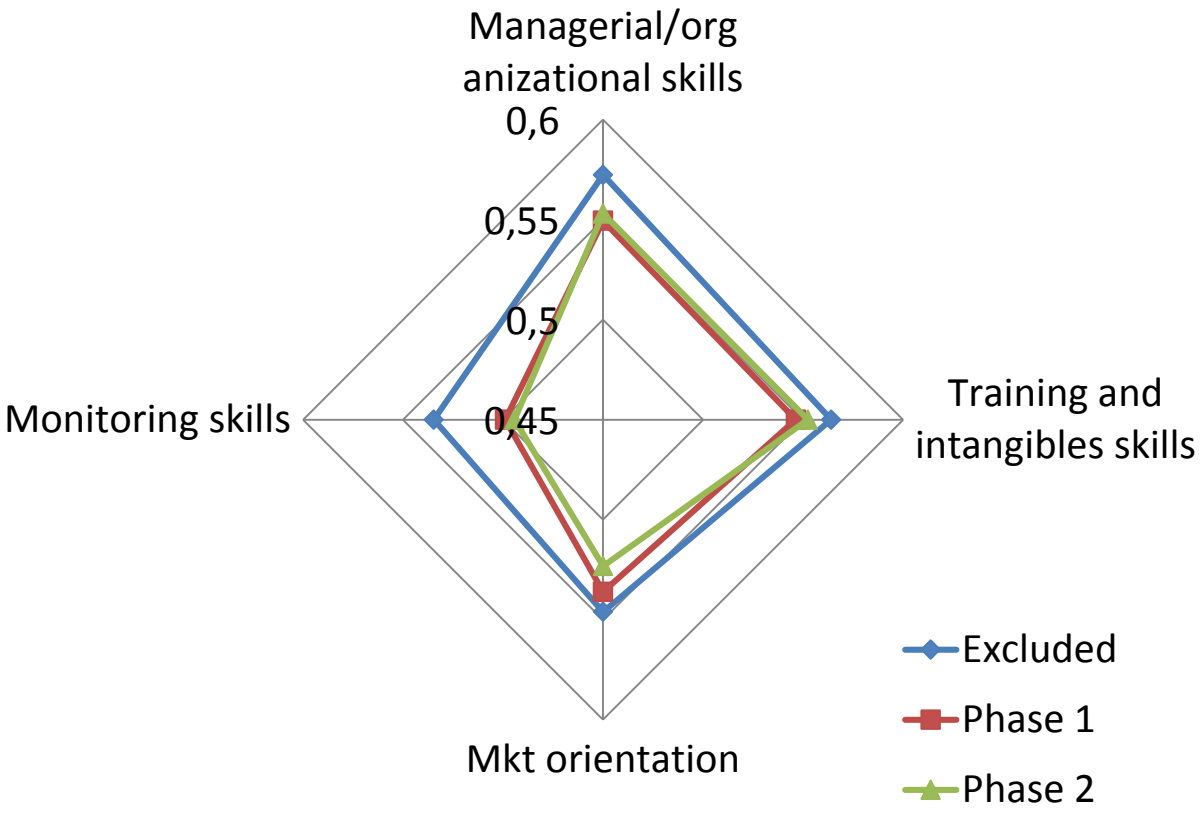
- **Percentualization** (distance to a reference value, the max of each indicators in our case):

$$I_{qc} = \frac{x_{qc}}{\max(x_{qc})}$$

Where I_{qc} have values lying between 0 and 1 and represent the percentage transformation of each variable in respect to the max of each indicator
→ I_{qc} values relative to all the variables in each of the 4 dimension of IR are aggregated according to the arithmethic mean

Preliminary results (1)

Min-max normalization & arithmetic mean



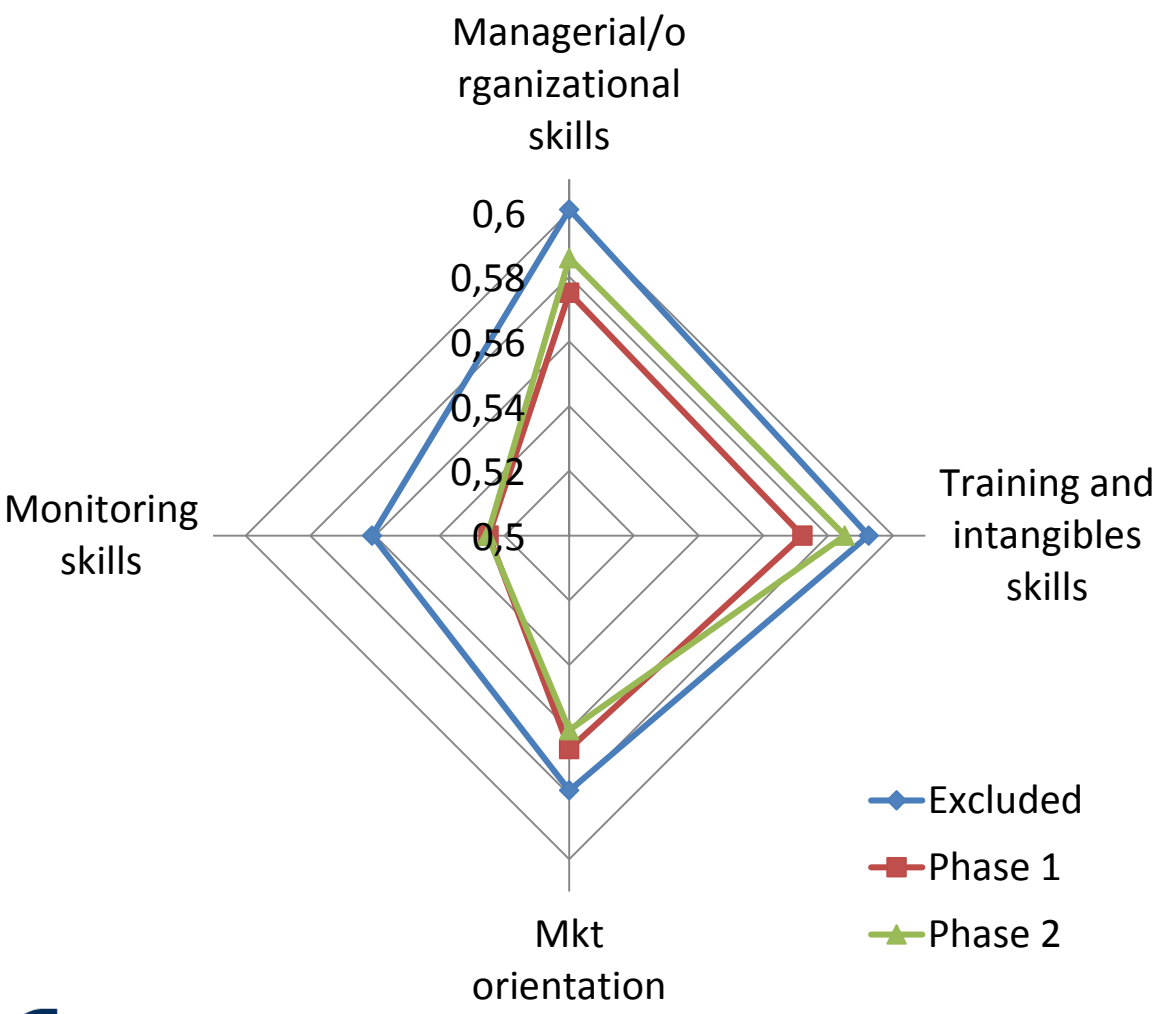
Excluded cooperatives seems stronger under all the dimension of inv. Readiness

→Coherent with the SEED project

→The result is substantially independeted from the type of normalization

Preliminary results (2)

Percentualization normalization & arithmethic mean



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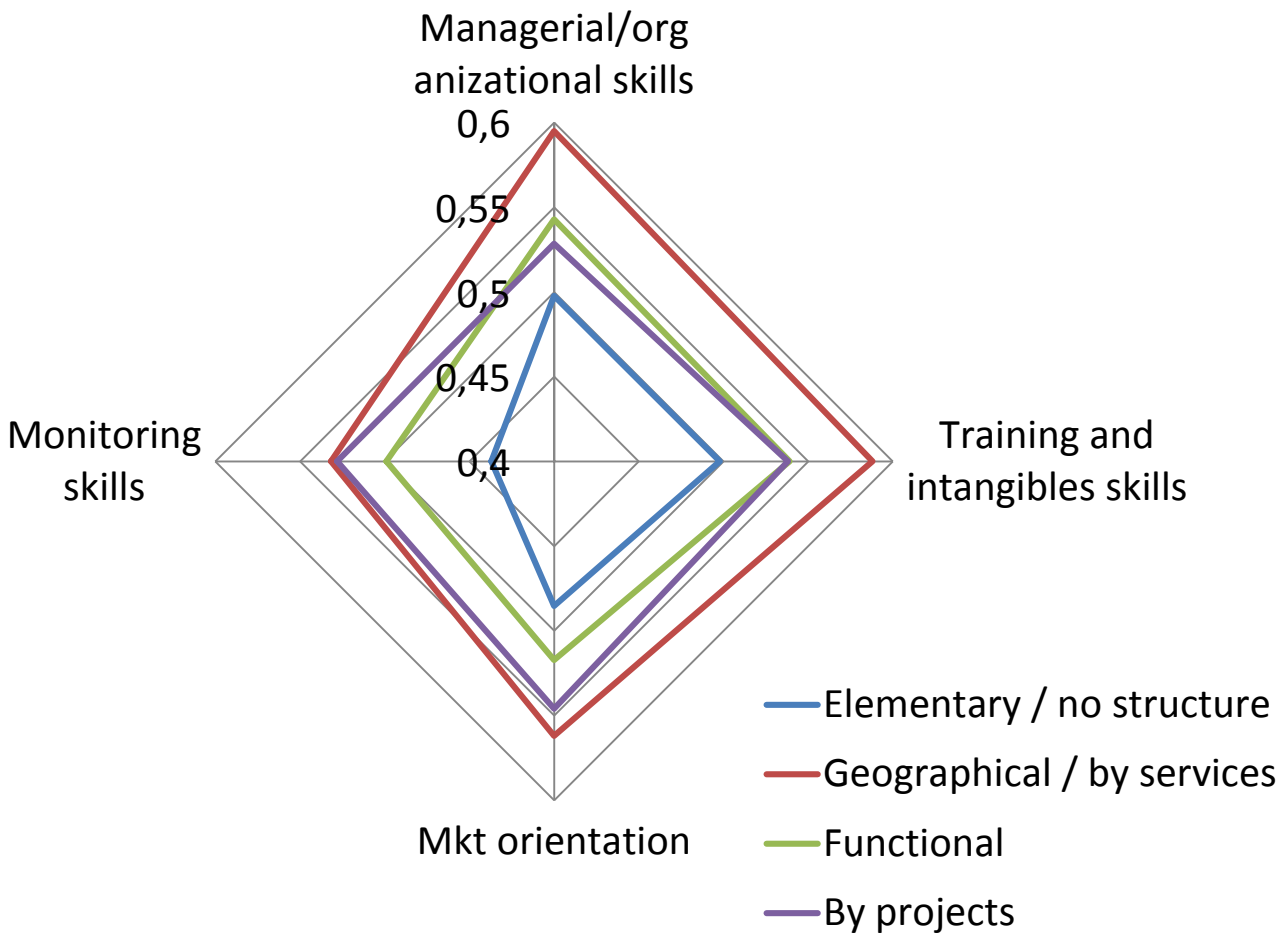
Preliminary results (3)



An important aspect is the organizazional structure of the firms

→It is impossible to assign a certain value to the different structures

→We analyse how inv. Readiness dimension change according to the org. structure

Investment readiness composite indicators

By project phase	Investment readiness composite indicator	
	Min-max Norm.	Percentualization
Excluded	0,554	0,583
Phase 1	0,533	0,559
Phase 2	0,531	0,564
Global value	**0,537**	**0,567**

→The selection process seems able to identify cooperatives with the lower INV. READINESS indicator

→Cooperatives with elementary org. Structure show lower level of inv. Read., the opposite for the geographical/services structure

By organizational structure	Investment readiness composite indicator	
	Min-max Norm.	Percentualization
Elementary / no structure	0,479	0,519
Geographical / by services	0,569	0,594
Functional	0,525	0,555
By projects	0,535	0,566
Global value	**0,537**	**0,567**

Preliminar general results

- **As general result, participants are the best among the loosers in comparison to the universe of social cooperatives in Piedmont**
- After analysing a set of variables indicating economic/occupational performance, participants are not the best performers in economic term, even if most of the participant shows good growth rate
- In economic terms selected cooperatives (Fase 1) are the stronger and those carachterised by larger growth rate (employees and revenues)
- After analysing the survey pre-treatment data collection, we find that the excluded cooperatives are the most advanced in term of all the indicators of investment readiness
- Selected coops show stronger need (lower indicators) of organizational and monitoring skills

If you are further interested

Grazie per l'attenzione

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