4th Learning Pillar: Evaluation of Policy-mixes

FinPiemonte

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PART 1 – THE PATHS TO DATA GATHERING

DATA GATHERING AND EVALUATION

Given the availability of monitoring information is a pre-condition for conducting any meaningful evaluation, Regione Piemonte programmed AM evaluations activities – as the ones presented in the past meeting - need systematic data gathering and information processing.

"When we monitor we collect data on policy implementation (output indicators) and changes in the result variables (result indicators) that best capture the expected changes we want to bring about. "

The regional administration in the past two years, with the involvement of FinPiemonte, Ires Piemonte (regional research center) and CSI Piemonte (regional ICT consortium) set up a structured path from the definition of the S3 policy indicators to the planning of ad hoc surveys and panels.

FROM THE POLICIES TO THE DATA

In the Piemonte S3 document it is presented a monitoring and evaluation logical framework, with:

- Strategic objectives (expected results)

- Result indicators with baselines and targets

- Foregone evaluations (to be completed)

- Measures (policy mix)

- Output indicators and targets

This logical framework is only the first step of the path that Regione Piemonte started in 2016 (*following JRC recommendations for building monitoring mechanism*) with the aim to provide a complete set of data to the evaluators.

CHECKLIST FOR BUILDING MONITORING MECHANISMS 1/4

A. Assess whether the administration has the internal capabilities necessary to implement the monitoring mechanism and define the stakeholder involvement.

- Often the stakeholders are the ones the knows better the variables to monitor, so it is important to involve them as much (and as soon) as possible.

  Regione Piemonte, with the help of Finpiemonte and of the Innovation Clusters in the past two years tried to involve enterprises and research infrastructures in the definition of monitoring and evaluation activities.

B. Identify the building blocks constituting the logic of intervention of the policy mix(es).

• Needs and challenges has been identified with the help of Ires Piemonte, and has been chosen the strategic objectives and the solutions to achieve these objectives on the different intervention areas.

C. For each priority, has been defined the expected change(s) and the underlying operational objectives Regione Piemonte want to achieve.

• In the S3 document are defined the choices and the underlying assumptions of the regional innovation strategy

• With the involvement of Ires Piemonte and of the stakeholders has verified if the selected objectives are a significative improvement but, at the same time, realistic enough.

D. Review the S3 set of result indicators

- Using official statistics if they can capture the expected changes, Ires Piemonte is considering also the use of more appropriate proxy indicators and survey. of end-users or focus groups.

- With the help of Istat (national statistics institute) and of other national offices in charge of monitoring and evaluation duties (Agenzia di Coesione, Nuvap) Regione Piemonte and other regional administration are defining the needs for new information to be collected.

E. Define a set of output indicators which can quantify the contribution of the Policy mix to the different objectives.

- In the S3 has been explained how the choice of indicators reflects cause-effect relations of policy instruments and results.

CHECKLIST FOR BUILDING MONITORING MECHANISMS 4/4

F. Create a dashboard for the visualization of the indicators.

- In the S3 it is presented a Logical framework, and the regional administration is defining with CSI and FinPiemonte the opportunity to build a monitoring dashboard with visibility through the internet ROP website and other means that can reach stakeholders, enterprises, media and citizens.
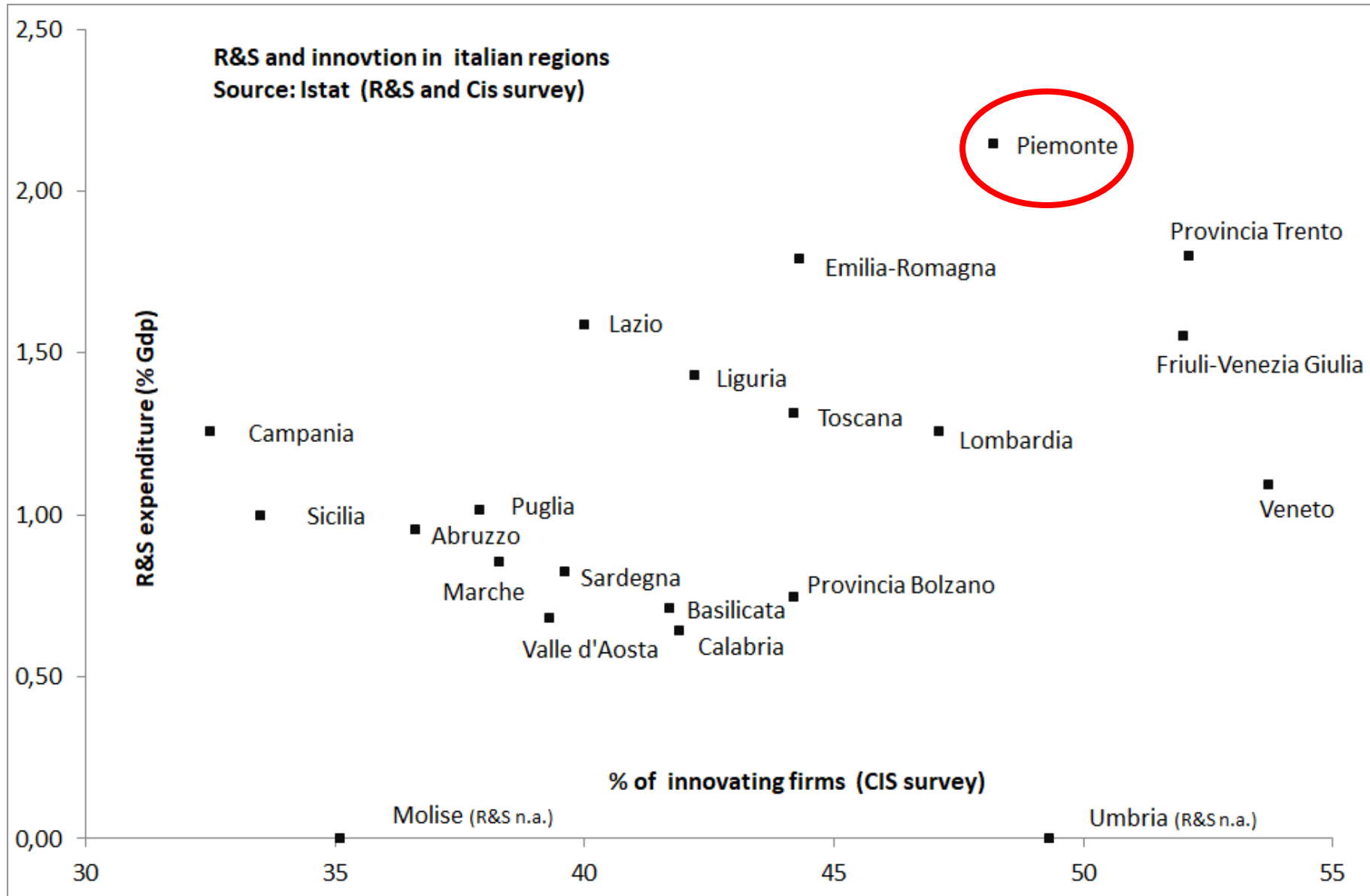
G. Define the follow-up mechanism of monitoring.

- This is a critical issue, since it is fundamental that the monitoring data and evaluations will be linked to regional innovation governance system.

- In the past Nuval (regional evaluation unit) tried to support the use of evidence based information in the 2014-2020 ROP but In the next future it will be necessary define how this activities and data can actually supports a continuous entrepreneurial discovery process.

PART 2 – PIEMONTE AM - FROM OBJECTIVES TO EVALUATIONS

1. PIEMONTE REGIONAL SITUATION

MANUMIX
Interreg Europe

- Strong manufacturing capabilities, but high rate of SMEs not innovating; traditional industrial sectors combined with emerging trends and sectors (27.260 SMEs in the manufacturing sectors (98,85%; nearly 80% are micro enterprises)
- Above EU average: private R&D expenditure, SMEs innovating in-house, employment and export in medium/high tech technology-intensive manufacturing
- Below EU average: public R&D expenditure, tertiary education, lifelong learning, innovative SMEs collaborating
- Global industries and innovative SMEs (but high percentage of SMEs lagging behind)
- High quality research system but with lower resources than other Italian regions
- Start-up Incubators, Scientific and technology parks, 7 Innovation Clusters.

R&D engagement and Innovation diffusion

R&S and innovtion in italian regions
Source: Istat (R&S and Cis survey)

REGIONAL INNOVATION SYSTEM CHALLENGES

- Covering different Technology Readiness Levels with different measures
- Technology Transfer, Collaborative R&D and use of art. 70.3
- Support to SMEs innovation capacities
- Fostering broad partnerships (large enterprises, SMEs, research organizations)
- Support the development of key industrial and social areas (e.g. initiatives on Smart Factory/Industry 4.0, Life sciences, Bio-/circular economy)
- Increasing SMEs innovation capacity and collaboration rates
- Supporting not only research but also investments and industrialization of research results
- Increasing collaboration with research organizations and use of research infrastructures
- Change in innovation policy paradigm: moving from sectors to transversal drivers, interregional dimension.

2. DEFINITION OF RESULT INDICATORS

After the recognition of the strength and weaknesses of the regional innovation system, the second fundamental step in order to construct a monitoring system has been identification of the expected changes and setting of specific objectives for the policy.

An expected change can be defined by three features:

- *A **variable** that can capture in qualitative or quantitative terms the direction and the dimension of the change and that can be observed and measured;*

- ***Baseline** and **target** values for the variable;*

- *A **timeframe** for observing the actual evolution of the variable.*

*The variable capturing the expected change is the **result indicator** linked to it.*

2. DEFINITION OF RESULT INDICATORS

In the S3 document the most relevant result indicators for advanced manufacturing policy mix are:

• Enterprises developing R&D activities in cooperation with other entities (*source: Istat*)

• Total expenditure for R&D activities (% of GDP) (*source: Istat*)

• 3 years surviving rate of new enterprises in high knowledge intensity (*source: ASIA*)

• Enterprises developing R&D activities in cooperation with public and private research centers (*source: Istat*)

It is possible that the evaluation activities carried on by Ires Piemonte will need the gathering of additional result indicators

3. SELECTION OF SOLUTIONS AND INSTRUMENTS

The choice of the instruments that will be used to try to move in the expected direction will allow identifying the **output** of the policy, the 'product' the measures delivers. The products can be described using some **output indicators** defined as an "*exactly measurable variable that quantifies the extent to which the actions provided for by the instrument actually reach the target population*".

PIEMONTE AM POLICY INSTRUMENTS

- **Innovation Clusters** (TRL 4-7): 50m€ committed, 50m€ allocated to next call

- **Technology Platforms** (TRL 4-6) (Industry 4.0, Life Sciences, Bioeconomy): 60m€ committed, 40m€ allocated to next call, 15m€ to be allocated

- **IR2 - Industrialization of R&D results** (TRL 5-8): 20m€ committed, 20m€ allocated, 40m€ available for investment projects

- **Research Infrastructures** (TRL 3-5): 20m€ committed, 20m€ to be allocated

- **SMEs Innovation**: 30m€ committed out of 40m€ allocated

PIEMONTE AM OUTPUT INDICATORS

For the different measures of the policy mix it is present a set of output indicators:

- Enterprises receiving a support (CO01)

- Enterprises receiving a support to introduce new product for the market (CO28)

- Beneficiaries receiving a support to introduce new product for the enterprise (CO29)

- Beneficiaries cooperating with research centers (CO26)

- Private investments linked to public support for R&I projects (CO27)

- Employment growth in the enterprises receiving a support (CO08)

MONITORING SYSTEM AND ADVANCED MANUFACTURING STRATEGY

MANUMIX
Interreg Europe

Strategic priorities

Growth of Advanced Manufaturing sector

Strenghten the R&D regional systems and improve knowledge

Expected changes

- ● Increasing innovation activities of AM enteprises
- ● Reducing the gap between research an indistrialization of the results of R&D

Developing «Excellence» in regional R&I system

Result indicators

- R&D activities in cooperation with other entities
- Total expenditture for R&D activities

● Enterprises that carried out R&D activities in cooperation with public and private research centers

Policy Mix

- ● Innovation Cluster
- ● Technology Platforms
- ● IR2
- ● Tecnologic *National Cluster*
- ● *Negotiating procedures*

- ● Research Infrastructures
- ● Innovation Cluster

Output indicators

CO01
CO08
CO26
CO27

"SMART_Watch" PROJECT

Piemonte Regional administration (via the local developing agency "LAMORO") is involved also in the Interreg project "SMART_Watch".

The SMART_watch project will develop a common methodology and benchmarking tools to reduce the gap between the real needs of end users for smart specialisation that often are not well aligned. More concretely, the project is developing a model for **regional observatories** *equipped with a* **set of monitoring and benchmarking tools***, available to all stakeholders and innovation system actors.*

Partners will elaborate policy recommendations for regional and EU institutions, based on international pilot projects and research results.

PIEMONTE ADVANCED MANUFACTURING MONITORING SYSTEM CHALLENGE

There are some issues on which Piemonte Regional administration needs further specialist methodological support:

- availability of territorial indicators by area of specialization and in-depth analysis of methodologies for the disaggregation of information collected by areas of specialization;

- launch of surveys that could provide comparable data between different territories with reference to areas of specialization;

- availability of territorial indicators by area of specialization with a shorter time lag, so as to be able to more effectively monitor the progress towards medium-term targets and to have available information on which to base the processes for updating and revising the strategy.

PIEMONTE ADVANCED MANUFACTURING MONITORING SYSTEM CHALLENGE

It is evident that the monitoring of the AM strategy involves new challenges for the Administrations compared to the consolidated monitoring of the ROP.

A key challenge is the definition of indicators for areas of specialization, requiring new methodological approaches to delimit the perimeter of the areas and the companies belonging to them. The specialization areas, in fact, do not coincide with the classifications of Economic Activity (ATECO codes), as they identify activities in terms of productive sectors and technological fields (often applications of enabling technologies, primarily ICT, in many sectors of economic activity).

Thank you!

Questions welcome

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