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Addressing Information Needs in Employment Services Provision in Italy:

The Role of Co-Design Networks

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Abstract:

This article examines how co-production can contribute to information quality in support of labour-market decision-making. Data was gathered on different types of Labor Market Intelligence as decision-support systems for stakeholders, and subsequently by analyzing a specific program, with a focus on the role of information within its co-production process. Results confirm the importance of information systems to support employment services design, but highlight the limitations of existing channels, and outline the types of information that are needed for policy effectiveness: those that are gathered through continuous relations with employers and jobseekers, and which often derive from participation in policy networks.

Keywords: active labour market policy, Public Employment Services (PES), services co-design, knowledge sharing, decision support systems

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1. Introduction

This paper explores the functioning of a networked system of employment services implemented by the government of the Lombardy region, in northern Italy, with a specific focus on the information needs of the various actors involved in services provision, so as to examine how co-design and co-production can contribute to improvements in the quality of information in support of decision-making processes. The value of information systems for employment policies and services providers is uncontroversial among labour market experts and researchers (Larsen et al., 2009). Indeed, among the several causes of the mismatch between labour demand and supply (CEDEFOP, 2010), one concerns the failure by existing information systems to provide adequate data and information to labour market stakeholders (e.g. labour market and education policy-makers, business associations, educational and training institutions, employees, jobseekers, etc.). In order to reduce the mismatch and improve the overall functionality of the national and local labour markets, information systems should be developed so that they can generate adequate information for the relevant users, thereby allowing them to take more informed decisions (Larsen et al., 2009).

In Lombardy, employment policies and services are run on a system of multilevel governance where, in line with international trends (Lindsay et al., 2013), governments are increasingly turning to private organizations to implement activation and reintegration measures aimed at jobseekers. The system is designed so as to promote the establishment of locally-based partnerships among providers to address the specific needs of citizens who are at risk of social as well as labour market exclusion. A specific program – called “Employment Actions in Partnership” - was launched by the Lombardy Region in 2012 and promoted the establishment of local networks, composed of private employment services providers, enterprises and local institutions (Municipalities, Provinces, workers’ unions, employers’ associations, and NGOs) participating in the co-design and co-delivery of employment services aimed at placing homogeneous groups of unemployed persons. Given that

the target beneficiaries of employment services are jobseekers but also firms looking for employees, these networks were designed to include also representatives of these two categories of users, in the form of enterprises themselves, business associations, and trade unions.

This paper looks at this system from the perspective of services co-production, where the latter can be defined as «the provision of services through regular, long-term relationships between professionalized service providers (in any sector) and service users or other members of the community, where all parties make substantial resource contributions» (Bovaird, 2007, p. 847). The term ‘co-production’ is used here in a way that implies that the word ‘production’ is not a synonym for ‘delivery’, but is rather close to collaboration. Within the paper, a specific focus is placed on the following issues:

- What are the information needs of the actors involved in public employment policies, and the shortcomings of existing information systems?
- How can co-production or co-design systems involving various categories of service users contribute to address these shortcomings, thereby generating information that effectively supports decision-making processes?

These questions are addressed based on the data supplied by a research project that was developed in two different phases: the first phase aimed at exploring the role of different types of Labor Market Intelligence (LMI) as decision-support systems for labour market stakeholders in the Lombardy region, whereas the second phase analyzed specifically the “Employment Actions in Partnership” program, with a particular focus on the role of information within the actions’ operational processes.

The study confirms the importance of information systems as a critical instrument in support of the design and planning of active labour market policies and employment services. However, the paper highlights the limits of existing LMIs, and outlines the kind of information that stakeholders need in order to improve the effectiveness of their policy actions. In fact, the data and information

which strategically support stakeholders' decision-making are those gathered through continuous relations with both employers and jobseekers during the design and delivery phases of specific programs and services, and which often derive from participation in policy networks. Moreover, mechanisms that are shown to allow better circulation of information in these cases include the empowering of unemployed persons, and the involvement of employers in all phases - design, implementation and evaluation - of the policy process.

The paper is organized as follows: section 2 outlines the theoretical framework and is followed by a brief description of Lombardy's system of employment services in section 3. Section 4 describes the method and data, and sections 5 and 6 respectively outline the research results on the role of LMI for labour market stakeholder and on the function performed by the "Employment Actions in Partnership" program. Section 7 provides the discussion and conclusions.

2. Theoretical Framework

The role of knowledge within and between organizations has been reported as significant by several studies (Reagans and McEvily, 2003). The ability to transfer knowledge effectively is critical to several organizational processes and outcomes, including the transfer of best practices (Szulanski, 1996), new product development (Hansen, 1999), learning rates (Argote et al., 1990, Darr et al., 1995), and organizational survival (Baum and Ingram, 1998). These contributions later supported further development of the fields of knowledge management and 'knowledge management systems', which address the organization of the processes related to the creation, storage, transfer, and application of knowledge. Moreover, a large body of literature shows that social relationships and the networks they contribute to create are influential in explaining knowledge creation, diffusion, and use: Phelps et al. (2012) refer to such networks as "knowledge networks", and define one as «a set of nodes—individuals or higher level collectives that serve as heterogeneously

distributed repositories of knowledge and agents that search for, transmit, and create knowledge—interconnected by social relationships that enable and constrain nodes' efforts to acquire, transfer, and create knowledge.» (p. 1117).

Recently, attention has been devoted also to the role played by knowledge management systems for the effectiveness of public services (Laihonen and Sillanpää, 2013), and to the growing importance of data and information for local public governance (Wilson et al., 2013). Information systems produce considerable quantities of data that constitute valuable assets for both single organisations and the community at large (Martini and Mezzanica, 2010). The processing of information - as the activity of acquiring, interpreting and storing knowledge (Huber, 1991) - may help organizations to better understand the internal and external environment (Daft and Weick, 1984), thereby assisting them in developing plans for improvement (Bourne et al., 2000). Therefore, the availability of data and information is shown to be positively related to organizational learning and performance improvement (Fiol and Lyles, 1985; Argyris and Schon, 1996; Rainey and Steinbauer, 1999).

However, the effectiveness of information systems as decision support system is not just a matter of the quantity of available data, but also of their quality. Indeed, information quality is a core component of the overall information systems effectiveness (DeLone and McLean, 2003) and it is usually measured in terms of accuracy, timeliness, completeness, relevance and consistency. Moreover, a significant relationship between information quality and individual impact was found, in terms of decision-making performance, job effectiveness and quality of work (Etezadi-Amoli and Farhoomand, 1996; Teo and Wong, 1998; Yoon et al., 1998). With particular reference to the public context, a precondition for achieving high-quality information systems is likely to reside in the degree of collaboration that takes place between the actors who are part of the system. Existing research, however, suggests that sharing of data or information between organizations and practitioners involved in the delivery of public services has often proved extremely hard to achieve

for a range of legal, ethical, cultural and organizational reasons (Baines et al., 2010; Wilson et al., 2011) and this may reduce the overall effectiveness of public services.

A contribution to a better understanding of the mechanisms that promote information and knowledge sharing within collaborative endeavours may be provided by the recent literature on the New Governance model (Bingham et al., 2005), New Public Governance (Osborne, 2010), and Collaborative Governance (Emerson et al., 2012), complemented by a focus on public services through a ‘service-dominant approach’ (Osborne et al., 2012). The latter claims that public services cannot be considered as products subject to manufacturing-like production processes, as assumed by the New Public Management; greater attention needs to be given to their nature as processes, where the user is necessarily involved (Edvardson et al., 2005). This approach emphasizes the relationships between various individual and collective actors, where the organizational landscape is characterized by networks, inter-organizational relationships, and multi-actor policymaking (Agranoff and McGuire, 2003; Huxham and Vangen, 2005; Stoker, 2006). In this perspective, intermediate and final services users such as third sector organizations, businesses, and citizens, are not simply users or providers of services outsourced by public institutions: they become involved in the various phases of a service’s construction, thereby leading to services ‘co-production’. Collective actors such as for profit or non-profit organizations can be services’ producers, but they can also be services’ recipients, and therefore they can be seen as a particular category of users in addition to individuals and households. Alford (2014) suggests that co-production occurs when various actors participate in the production process as consumers, suppliers, and partners, and when service production and delivery are closely linked. Several authors distinguish co-production from co-governance and co-management (Osborne and McLaughlin, 2004; Pestoff et al. 2006), while others stress the importance of users/citizens involvement in all phases of service creation, and especially planning, design, managing, delivering and evaluation activities (Bovaird and Löffler, 2012; Bovaird, 2007). Among the conditions that facilitate co-production, Joshi and Moore (2004)

name the specific governance model being adopted, as well as the logistical drivers, which refer to situations where some services cannot be effectively delivered to users because of environmental complexity or variability and high costs.

By bringing together service producers and users - as well as other categories of actors in a public services context – co-design and co-production have the potential to facilitate the exchange of information that is relevant to the satisfaction of collective and individual users' needs, as well as to improve the quality of such information exchange. In fact, improvements in service production can result from users making requests for assistance or providing information to service agents, as noted by Whitaker (1980) and others (Bovaird, 2007; Brudney and England, 1983; Thomas, 2013). By providing information to government officials, users' involvement facilitates better decision making and the ability to respond more effectively to public demands and concerns (Percy, 1984). Moreover, new information technologies have extended the applicability of the co-production model in government services delivery (Clark et al., 2013). The advent of digitized information and web-connected databases enables the government to deliver highly personalized information to help inform citizens' personal decisions. Government data mining, for instance, can notify users of relevant health risks, useful government programs for which they qualify, and neighbourhood crime. Such personalized information can be particularly effective in pushing actors to make socially-beneficial choices (Linders, 2012), and to actively contribute to policies' implementation.

3. The Lombardy System for the Provision of Employment Services

The recent reform of the education, training and employment system in Lombardy (regional law n. 22/2006) was made possible by a comprehensive reform of the labour market implemented a few years earlier at the national level, which gave significant autonomy to regional governments in these areas of policy: since the 1990s there has been a significant devolution of functions, which has

changed radically the relationship between the central, regional, and local governments. A critical role was also played by the abolition of the public monopoly in the provision of employment services. The two national laws n.469/1997 and 30/2003 opened the market to private providers, which were to coexist with the traditional public system of the Employment Centres (*Centri per l'Impiego* - CPI). This reform introduced the so-called Private employment agencies (*Agenzie private per il lavoro* - APL) which need to obtain an authorization at the national level, and are then allowed to provide services such as intermediation, temporary work provision, recruitment, training, and so on. Since 2003 also other institutions are allowed to carry out intermediation activities, including private and public universities, foundations, chambers of commerce, secondary schools, business associations, and others.

Following these developments, the Lombardy government reformed its training and employment policies through the regional law n. 22/2006, with a reorganisation of the competences and roles of different institutions, and the definition – together with local public bodies and the trade unions - of specific measures aimed at increasing employment. This allowed the establishment of a market with public and private bodies, both for profit and non profit, where the role of public institutions has been reduced. In fact, the regional government only maintains a role of coordination of the various participating actors, and of monitoring, evaluation, and control through the Regional agency for education, training, and employment (ARIFL - *Agenzia regionale per l'istruzione, la formazione e il lavoro*).

The main instrument designed by the Lombardy government to finance access to training and employment services for specified targets of users is the endowment (*dote*). In its general form, it is a set of resources to be used by an individual with certain characteristics, in order to access services in support of labour market participation. It offers also financial support to laid-off workers in order to facilitate program participation, and it can be accessed only by residents of the Lombardy region. Based on labour market dynamics and policy priorities, different endowment programs with a

predefined duration are announced and subsequently implemented. These are usually targeted at specific groups of individuals, such as temporary workers, or employees of firms in difficult financial conditions, etc. The endowment is then meant to be a flexible and modular instrument that can be adapted to the needs of individual users.

4. Method and Data

This paper relies first on the findings of a study on the role of Labor Market Intelligence (LMI) as decision-support systems for labour market stakeholders in the Lombardy region. This study was part of an EU-project carried out by XXX - in 2013 in collaboration with partners from seven regions in six countries across the EU (Czech Republic, Germany, Italy, Sweden and the United Kingdom, Netherlands).

For the purpose of this study, LMI was defined as: «analyzed, processed, directed, and/or regularly collected information and intelligence about the labour market, which is provided by a source (internal or external) that is not temporary or spontaneous in its provision of the information that organizations use to plan their activities in order to achieve their overall goals» (Tanaka and Lannemyr, 2014). Particular attention was placed on information related to the characteristics of labour demand and supply (i.e. number of vacancies in different sectors; skills and qualifications requested by employers; levels of education, qualification, and working experience of the labour force; forecasts of workers' demand in the medium-long term, etc.) as they were considered the most relevant data to reduce the mismatch between demand and supply.

Stakeholders were identified among institutions interested in knowing the conditions and dynamics of labour demand and supply, who are therefore potential users of LMI. The selection favored institutions which operate in the Lombardy Region, if not exclusively, and play a role within the regional active labour market policy programs. Twelve institutions were involved in the

study, including the regional government, development agencies, local governments, public employment services (PESs), training providers, Temporary Work Agencies (TWAs), career guidance providers, employers' associations and labour unions. The list of the stakeholders involved is provided in Table 1 together with a short description of the main function of each institution.

[Table 1 about here]

Data and information were gathered from April to July 2013; in addition to relevant documents and reports, the principal source were face-to-face semi-structured interviews carried out with one, and in some cases two, representatives from each of the twelve stakeholders involved. The interview protocol intended to shed light on the role of LMI for the stakeholders, the characteristics of the existent LMI infrastructure, the shortcoming and the solutions taken by the regional stakeholders. Data analysis was carried out by constructing matrices describing the variables analyzed in the various cases, thereby making comparisons easier (Stake 2006).

Following this first phase of the research, a specific analysis of the above-mentioned "Employment Actions in Partnership" (*Avviso di azioni di reimpiego in partenariato*) program was carried out in the first half of 2014, with a focus on the role of information within the actions' production process. The program was introduced in 2012 and aimed at the outplacement of laid-off workers (including those who are receiving unemployment benefits from the state) due to business crises, through the establishment of partnerships among employment services providers and other local actors such as public institutions, firms, unions, chambers of commerce and outplacement companies. In addition to the regional decrees and regulations related to the program, the sources of data for this phase include the reports drafted by the coordinators of 25 partnerships and sent to

ARIFL at project's completion, and interviews with the Director of ARIFL and with two ARIFL employees who were directly involved in the program.

5. The Role of LMI for Labour Market Stakeholders in Lombardy

Interviews with stakeholders confirmed that the availability of information on occupations and skill demand is an important element for their activities. Institutional and economic changes which have affected the Italian labour market increase the need for LMI and information about employment dynamics, in order to better support the design and implementation of effective policies and services. Compared to the past, various stakeholders today operate as providers of employment services both independently and in the context of public policies. Moreover, the Italian labour market, and that of Lombardy in particular, is characterized by a high level of job turnover and occupational mobility, resulting in high demand for placement, training and outplacement services. The economic crisis has also contributed to rising unemployment and job insecurity, thereby reducing the time span for interventions both by policy-makers and services providers. As a consequence, most of the interviewees consider LMI to be fundamental in supporting their decision-making processes, and an inescapable condition for designing active labour market policies and providing effective job placement and training services.

In terms of the type of information that is needed to improve services' effectiveness and quality, stakeholders emphasise data and information about the local territory, as they provide services which are mainly targeted at jobseekers and enterprises operating in a specific territory. Moreover, they look at information both on the demand (enterprises) and the supply side (jobseekers) of the labour market even if they stress that the most important types of information for improving policies' effectiveness are those about the occupations and skills that are required by enterprises. Finally, certain stakeholders focus their attention on specific sectors and within particular groups of

occupations. For example, employers' associations are mainly interested in data regarding the sectors to which their members belong; training providers focus on occupations covered by their training courses; and public employment services are mostly interested in understanding the skills required within low-level occupations as they are mainly targeted at disadvantaged groups (e.g. low educated, long-term unemployed). As for the strategic role of LMI systems, most actors note that their importance has increased over the years, together with an increase of the internally available resources for collecting, analyzing and disseminating data and information on the labour market.

The existing LMI infrastructure: shortcomings and current strategies to address them

A distinction can be made between nationally and locally supplied LMI. National LMI systems are provided by ISTAT (the National Institute of Statistics) and INPS (the National Social Security Institute), while the Excelsior database – collecting data on a sample of about 100.000 Italian enterprises - is one of the major sources of information on labour demand. On the same topic, ISFOL regularly provides the results of an annual survey aimed to analyze skills' needs following technological and organizational developments. As for regional/local LMI providers, an important role is played by the Regional Labor Market Observatories (RLMOs), who are in charge of the collection, integration, analysis and dissemination of data and information on the labor market, as well as of the assessment of the results achieved through active policies implemented at the regional level. Data are administrative in nature, including the so-called 'mandatory communications' performed by firms in relation to new hirings.

Stakeholders are interested in LMI mainly in support to their short-term planning, and in particular to services' design. However, the study highlights that existing LMI is mainly used by the stakeholders to gain a broad understanding of the main labour market trends and dynamics; the existing LMI infrastructure appears to be less useful as a strategic support to the re-design of

employment policies and services. In particular, several shortcomings of existing LMI systems have emerged from the interviews, and can be grouped in three main areas: (1) plurality and heterogeneity of LMI; (2) scarce integration of data sources; and (3) low quality of information on demand for occupations and skills.

The excessive numerosity and heterogeneity of LMI systems contributes to a substantial overlapping of data and work methodologies and a waste of resources. Difficulties in accessing the information provided by LMI systems substantially reduce the incentive to use them to support policies and services design. Stakeholders therefore advocate a rationalization of the regional LMI infrastructure, for instance by providing a single access point (e.g. a website) where all the data and information provided by different providers are accessible in a simple and personalized way.

Another shortcoming refers to the lack of integration between existing data sources. Improvements in services effectiveness largely depend on the availability of information on both the demand and supply side of the labour market. However, most stakeholders tend to have better information only on one side of the market: for example, PES have information about the characteristics of the unemployed, while private employment agencies collect information on the open-job vacancies. This suggests that collaboration between these different operators is desirable, but the evidence shows that actors, both public and private, are not willing to share their data, as they consider them to be of strategic value and/or a source of competitive advantage.

A final problem relates to the overall quantity and quality of data and information on the demand side of the labour market. Most of the existing LMI systems provide information on the supply side, (e.g. characteristics of the labour force in terms of knowledge, competences and abilities, past working experience, training activities, etc) whereas few relevant information is available on the demand side, and in particular on the types of occupations and skills required by employers. When this information exists, such as that provided by Excelsior, it suffers from shortcomings related to the time-span of the data and the way by which occupations and skills are described.

An important limitation of LMI systems for stakeholders is that they are based on past information and therefore on jobs for which the companies have likely already found candidates. For this reason, the existing LMI is used to understand trends in the demand for occupations and skills, but not to support decision-making and the improvement of employment policies and services. In Italy, contrary to other European countries, there is no unique access to data related to job vacancies: past experiments in this direction have failed due to scarce incentives for firms and labour market intermediaries to share information with ‘competitors’. This is a problem that significantly reduces the transparency of the regional labour market, and the ability for intermediaries to reduce the skills’ mismatch. Moreover, in terms of information quality, the current LMI infrastructure is biased towards ‘occupations’ rather than ‘skills’ because of the way in which the infrastructure itself developed, and skills descriptions suffer from excessive standardization. As a consequence, available information does not reflect the real requests of firms (e.g. soft skills are regularly under-considered) and limit their overall usefulness to design job placement and training services which are really effective.

Because of these shortcomings, most stakeholders rely on informal channels and networks to get the information that really supports their decision-making processes. In particular, alongside the official statistics, most get data and information on labour demand and supply mainly through the contacts and the constant relations they maintain with both employers and jobseekers. These informal sources of information are declared to be more strategic for stakeholders than official LMI, and are used specifically to understand and forecast the demand for occupations and skills by private and public organizations. Consequently, the design of policies and services for matching purposes is actually based more on information collected directly in the field rather than sourced from formal and institutionalized LMI. In this respect, many respondents have stressed the role of the networks where they operate within public policy programs: here they have the chance to interact intensively with the two sides of the labour market – including various types of services

users - thereby collecting relevant information to improve the matching process. In this respect, several stakeholders mentioned as being very valuable their participation in the “Employment Actions in Partnership” and in similar public policy programs which stress the participation of different actors - including employers - in the design, implementation and evaluation of policy actions.

6. ‘Employment actions in partnership’ as systems for information co-production

The “Employment Actions in Partnership” program differs from others where eligible individuals can use their endowment with an accredited service provider of their choice. Freedom of choice has been shown as having a number of shortcomings in the Lombardy system, as noted by ARIFL’s management, with the following implications: structured outplacement activities normally lead to better employment results; synergies with local actors increase activities’ effectiveness; and the involvement of various actors (employers, business associations, unions, non-profit organizations, local media) and partnerships allows a better response to individual and collective users’ needs.

In order to experiment with a new instrument with greater focus on networks’ creations, ARIFL and the regional government promoted a call for tender requiring the establishment of networks with at least three participants who were willing to create a public-private partnership (PPP) that was representative of local stakeholders. Three types of activities could be provided by these PPPs:

- *activities targeted at individuals*, such as outplacement, skills shortage analysis, support to change management, motivational support;
- *activities targeted at firms*, such as analysis of local or sectoral employment needs, promotion of specific programs and projects, support to profiles’ identification, and provision of information on available public incentives;

- *cross-sectional actions*, aimed at monitoring and information exchange among various actors on the evolution of the programs and of the local context.

The call for tender listed four assessment dimensions with different weights: the project's coherence (10 points), the project's quality (50 points), the partnership's composition (20 points), and other complementary initiatives (20 points). The 'project's quality' dimension focused especially on the homogeneity of the group of individuals to be subject to outplacement activities, as well as on the presence of a target firm. In fact, a main objective of this program was to promote partnerships that could identify at an early stage the firms that were willing to employ laid-off workers receiving unemployment benefits. The 'partnership's composition' dimension focused on the partners' competences and on the presence of public partners that were representative of the local territory. Projects were presented in the period from June 26, 2012 to October 31, 2013, with their allowed length lasting until October 31, 2014. Fifty-nine projects were presented, and 45 were approved, with the corresponding establishment of 45 partnerships. The average number of network members is 6.3, more than double the minimum number required by the call. The types and number of partners involved are summarized in table 2.

[Table 2 about here]

Partnerships are very different in terms of number and types of partners; also, some were driven by the need to address local needs (business crises, collective dismissals, etc), while others were driven by less urgent needs. During the design phase, partners were meant to discuss various aspects of the project: each network had a leading institution which, starting from certain objectives, began to involve other actors and to promote collaboration among often competing institutions in order to draft a project proposal to be submitted to the call.

The primary objective of the program was to ensure employment to the highest possible share of services recipients, while taking into account the relative employability of the recipients themselves. Out of 1,661 beneficiaries of the program, 556 (33.5%) have been outplaced. Successful outplacements do not share the same features of the contracts that were previously held by the beneficiaries: while 89.5% of previous contracts were permanent and full time, outplaced contracts are 51.3% fixed term, 26% temporary work, and only 13.2% is permanent (8.7% full time and 4.5% part time).

ARIFL devised an ongoing monitoring activity, involving meetings with network participants after the first 30 days and subsequently each quarter, so as to assess results. This highlighted that a critical role within all partnerships was played by the tools used to gather and disseminate information among the partners themselves. The actions performed by each partnership were co-designed because of extensive involvement especially of firms, which constitute one of the two primary categories of employment services users (together with jobseekers). Co-design was in fact a defining feature of the program, aiming at producing actions that were both locally targeted and promoting cooperation among actors who are often otherwise competitors. The criteria for selection and admission to the program implied that information started to circulate already during the design phase. Moreover, the pursuit of a common objective – first admission to the program, and subsequently successful outplacement of the beneficiaries - promoted the search of multiple ways to share information about employment opportunities.

7. Discussion and Conclusions

Lombardy's labour market stakeholders highlight certain limits of existing LMI systems, which are not fully used as a support to the decision-making process. On one hand, these limits refer to inadequate integration among information sources about labour demand and supply, due to a

significant reluctance by operators to collaborate with ‘competitors’ and exchange information. On the other hand, available information – especially on demand on the part of businesses – is often of poor quality. More specifically, these data lack a sufficient level of updating and detail (in terms of requested profiles and job descriptions) in order to effectively support actors’ activities.

As a consequence, actors use other channels in order to gather the information they need and to improve the effectiveness of labour market matching. The case of the “Employment Actions in Partnership” represents one of these channels, and is judged by the same stakeholders as a positive experience for its role in gathering updated information and converting it into valuable knowledge, to be used as input for strategic decision-making processes. These networks act precisely on the basis of the information exchange among partners and of the quality of such information. Through these networks, both services providers and users (the latter including firms on the demand side and jobseekers on the supply side) have an incentive to exchange information so as to increase the project’s probability of success, and therefore of public financing being provided. This implies that operators who often compete with each other in services provision are pushed to exchange information on labour demand and supply, thereby improving the quality of the overall available data. These knowledge networks allow operators to obtain directly certain updated and detailed information on firms’ labour demand and on requested characteristics; direct involvement of employers in the networks allows access to information about their current and specific needs. Moreover, additional empowerment mechanisms allow jobseekers to better express the relevant information about their knowledge, competences, and skills, and on their professional expectations. These networks, therefore, facilitate information sharing among actors who may otherwise either be reluctant to do it for strategic reasons (services providers) or do not have appropriate or sufficiently effective channels (employers and jobseekers). The “Employment Actions in Partnership” appear, then, to be an example of knowledge network where the primary objective is the co-design – rather than actual co-production – of effective bundles of services, whereas a secondary though significant

output is the co-production of information and knowledge that contributes to improve their overall effectiveness. A powerful incentive to participate in these networks is provided by the possibility to access public funds in the context of active labour market policies, where a critical role is played by access conditions – the dimensions for the assessment of the proposed partnerships – which strongly favour the presence of certain actors and competences.

This work is a first attempt at the study of co-production systems in the realm of labour market policies and services. The Lombardy system represents an interesting examples, though with the limitations of a single case study, with a number of issues requiring, a more in-depth analysis. Future research should explore the actual mechanisms within networks that facilitate the gathering and sharing of information, and the related knowledge creation. Information sharing despite competing interests may indeed be promoted and further research should analyse the characteristics of effective incentive systems in this particular sector.

From the perspective of co-production, it would be useful to explore the drivers of - and avenues for - greater involvement on the part of service users (jobseekers and employers) in the planning, implementation, and evaluation of the actions. From this point of view, employers' involvement is already clear and shown to produce benefits, but the involvement of jobseekers in the various phases of the process requires further study. In fact, while employers do indeed constitute a critical part of employment policies beneficiaries, co-production requires direct involvement of jobseekers not only in services implementation, but also in their planning and results' assessment. The drivers and implications of greater jobseekers' involvement along these lines should, then, be the subject of further analysis.

These results have policy implications for Lombardy's government and other public organisations in charge of employment policy design. According to ARIFL's Director, this model based on networks and services co-design represents the preferred approach by the regional government to address local unemployment: this appears to be conducive to the information sharing

that is critical to effective matching, as long as clear and explicit incentive systems are put in place to promote such information sharing and collaboration. On the other hand, the limitations of current LMI systems for strategic decision-making by labour market stakeholders points to opportunities to restructure them, especially those at the regional/local level. This could be done, for instance, in terms of better integration of various sources and creation of a single and more user-friendly access point.

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