
Business Development Service centres in Italy: close to firms, far from innovation

Carlo Pietrobelli*

CREI, University of Rome 3, Italy

E-mail: c.pietrobelli@uniroma3.it

*Corresponding author

Roberta Rabbellotti

Department of Economics and Quantitative Methods,

Università del Piemonte Orientale, Via Perrone 18, 28100 Novara, Italy

E-mail: roberta.rabbellotti@eco.unipmn.it

Abstract: The notion of ‘Business Development Service’ (BDS) is quickly gaining popularity among policy makers and scholars of management, industrial organisation and development. Similarly, attention is increasingly paid to the institutions and centres offering BDS, as an essential part of the ‘local’ or ‘regional innovation system’. The paper analyses the experience of BDS Centres in three highly developed Italian regions, Emilia Romagna, Lombardia and Veneto, and evaluates their performance and contribution to the regional industrial, and notably SME, development. The paper is based on a survey of 30 BDS Centres and it uses quantitative together with qualitative evidence.

Keywords: business services; clusters; industrial districts; SMEs; industrial policy; regional development policy; innovation.

Reference to this paper should be made as follows: Pietrobelli, C. and Rabbellotti, R. (2007) ‘Business Development Service centres in Italy: close to firms, far from innovation’, *World Review of Science, Technology and Sustainable Development*, Vol. 4, No. 1, pp.38–55.

Biographical notes: Carlo Pietrobelli is a Professor of International Economics at the University of Rome 3, Italy, where he directs the Research Centre on the Economics of Institutions (CREI). He holds a PhD in Economics from the University of Oxford, UK, and is a regular advisor to the European Commission, the World Bank, the Inter-American Development Bank, the United Nations and the OECD. His recent books include: *Upgrading to Compete. Global Value Chains, Clusters and SMEs in Latin America* (with Roberta Rabbellotti), Harvard University Press 2006, and *Failing to Compete: Technology Development and Technology Systems in Africa* (with Sanjaya Lall), Edward Elgar, 2002.

Roberta Rabbellotti is Professor at the Economics Department, University of Piemonte Orientale. She has got a Master of Science at the University of Oxford and a Doctor of Philosophy at the Institute of Development Studies, University of Sussex. She specialises in the analysis of the industrial sector in developing countries. Her areas of interest are: industrial policies, small business promotion, international trade policies, industrial districts and clusters, sectoral studies. She has working experience with the Inter-American

Development Bank, the European Union, UNIDO, ILO, ECLAC-UN, UNCTAD, Banco de Comercio Exterior of Mexico, Institute of Development Studies and several Italian local institutions.

1 Introduction¹

The notion of ‘BDS’ is quickly gaining popularity among policy makers and scholars of management, industrial organisation and development studies. Several expressions are frequently found in the English-language literature to designate similar concepts with sometimes varying nuances, including industrial extension services, support services, advisory services, or business services. Recently, increasing attention has been paid to Knowledge-Intensive Business Services (KIBS), emphasising services contribution to the innovation process in firms as well as in regional and national innovation systems (Muller and Zenker, 2001).

Among all these labels, the notion that most vividly portrays the actual nature and function of such services is that of ‘real services’, to indicate their impact on structural features of firms, and notably on their competitiveness (Bellini, 1985, 2000; Bianchi, 1985; Brusco, 1992).² Thus, ‘real’ should not be interpreted as the opposite of ‘financial’: also the latter services may be real, to the extent that they have a structural impact. Ideally:

“The provision of these services transfers to user firms new knowledge and triggers learning processes within them, thereby modifying in a structural, non-transitory way their organisation of production and their relation with the market.” (Bellini, 2000, p.711)

Similarly, attention is increasingly paid on the institutions and centres offering BDS, as an essential part of the ‘local’ or ‘regional innovation system’ (Cooke et al., 1997). Along these lines, there is a growing literature aimed at investigating if and how BDS do contribute to regional and local economic development (Vickers and North, 2000; Rolfo and Calabrese, 2003).

This paper aims at contributing to this literature providing new empirical evidence of the experience of 30 BDS Centres located in three highly developed Italian regions: Emilia Romagna, Lombardia and Veneto. Using quantitative together with qualitative evidence, it analyses the details of a reality that is often quoted as a ‘success-story’, sometimes beyond the actual empirical evidence.

The paper presents a detailed analysis on the origin of BDS centres, their mode of operation and governance and their contribution to regional development, confronting the Italian case with the main issues discussed in the growing international literature on business support delivery.

The structure of the paper is as follows. In the next section we present a review of the main issues discussed in the literature, which are relevant to the understanding of our empirical evidence. Then, we analyse BDS centres as industrial policy tools in the general Italian context and more specifically in the three different regional contexts under investigation. The following section presents the findings of our survey in Emilia Romagna, Lombardia and Veneto. The final section concludes presenting our

considerations of how the international debate on BDS and on their role in regional development can learn from the Italian experience.

2 BDS in the literature

In principle all the specific skills and competencies required could be available within the firm's boundaries, thereby eliminating the reason for the existence of a market for BDS, and of 'centres' and institutions supplying them. Why then do many enterprises prefer to outsource, or buy from the market all (or some) of these services, thereby creating a demand for such centres? The main factors behind the firms' decision to outsource BDS can be identified in Bartoloni (2001):

- *Cost factors.* When the costs of accumulating the in-house competencies to perform functions that could be otherwise outsourced are too high in relation to the transaction costs of buying them from the market. Often also excessive minimum costs and indivisibilities occur.
- *Quasi-cost factors.* The firm may prefer a flexible organisation, focussing on core and strategic activities, and externalising all or part of its non-core activities; this strategic choice may vary overtime, and may imply also risk-reducing considerations.
- *Technological factors.* Related to the rising technological and organisational complexity of the environment in which firms currently operate. Thus, enterprises may lack the knowledge required and its rapid evolution imposes to purchase it from outside, from highly specialised entities. Moreover, the need to fulfil international technical and quality standards is increasing, and this further induces outsourcing of specialised technical functions.

A different, but related issue is that the provision of BDS to SMEs suffers from market failures both on the supply and on the demand side (Rabellotti and Viganò, 2000). Given asymmetry of information, SMEs are either unaware and/or unwilling to use outside consultancy services, which are commonly seen as expensive and of limited relevance (Wren and Storey, 2002). A survey of 2500 SMEs undertaken in the UK by Robson and Bennet (2000) reports that SMEs use just a few types of external services, typically on accounting and legal matters. Furthermore, the skill level of the firm and its innovation capability significantly affect its likelihood of seeking external advice.

On the supply side, the transaction costs for private sector (collective) suppliers to identify and market their services to SMEs are high relative to the demand of these firms, and this makes servicing them unprofitable. Therefore, the public sector may help underwriting the risks associated with technical uncertainties and the costs of aggregating and creating markets that private agents would not be ready to bear otherwise (Feller, 1997).

An interesting variant of this argument is that BDS tend to have positive externalities of consumption: as a consequence of imitative mechanisms, higher quality standards are introduced within the companies and in inter-company relations, and this is likely to have a multiplier effect on industrial and SME development (Bellini and Condorelli, 2004). In other words, a local endowment of real services adds to the collective assets of a

region, and generates positive externalities. For all these reasons, public intervention in creating and promoting BDS centres as well as in subsidising services is often justified in economic theory.

Nevertheless the market failure argument also needs to be considered in terms of dynamic efficiency (Bellini, 2000). As stated by Bellini:

“an option is open for privatisation as soon as the mission of public service providers is completed and those services can be sufficiently produced and efficiently sold through market mechanisms.” (Bellini, 2000, p.724)

This is clearly the case of the centres specialised in laboratory test and quality certification analysed in our empirical survey, discussed below in Section 4.2.

Another debated issue is the emphasis on local delivery justified on the basis of the localised nature of knowledge creation and utilisation, and the need for continuous user-producer interactions (Lundvall, 1988). Within such a framework, BDS centres are key players in local and regional innovation systems, actively participating in the learning process characterised by specific and local features, and contributing to create a systemic productive and innovative culture (Cooke et al., 1997).

Nevertheless there are some authors making the point that, although there are good reasons for delivering business support at local level, there are also cases in which there may be a need to achieve a critical mass and exploit economies of scale (Vickers and North, 2000). Bellini (2000) suggests that a balanced division of labour among the different local, regional and national levels is highly desirable.

A case in point may be highly advanced technological services, requiring very specific and rapidly changing knowledge. This makes very problematic and often impossible the standardisation and codification of the knowledge flows that are relevant to the enterprise. But also the provision of these services may be very expensive, and therefore when managed at the regional level, economies of scale make such services more viable.

Finally, there is the question of evaluation of BDS impact on firms, local, regional and national economic systems. Wren and Storey (2002) make the point that despite the considerable sums of money involved, the evaluation of such a kind of policy tools is remarkably underdeveloped. They provide an assessment, based on robust econometric techniques, of the impact of ‘soft’ business support on the performance of SMEs in the UK, finding that subsidised consultancy advice is most effective in the mid-range SMEs.

If it is true that there is little evaluation and much of it ends with collecting clients’ view on received services, it must also be said that evaluation is especially difficult because of the complexities of BDS provision. Some services may produce short-term, easily measurable, gains, others long-term, less tangible, indirect benefits. Moreover, policy objectives may also change over time and are different in different contexts. This is definitely an area for further research, trying to put some order among anecdotal evidence, incomparable case studies and benchmarking exercises (Pietrobelli and Rabellotti, 2002).³

3 BDS in Italy

Since the beginning of the 1980s, in Italy the BDS centres have become popular mainly as policy instruments to sustain SMEs' innovation capability and competitiveness. In those years there was an increasing decentralisation of industrial policy at the regional level, allowing the support of many local initiatives, highly customised to the specific industrial tradition of each area. Consequently, the Italian BDS centres were generally established in a de-centralised and uncoordinated way rather than as a result of nation-wide integrated SME support programmes (Rolfo and Calabrese, 2003).

Most of the Italian literature available on BDS centres is either on general policy issues or it is based on case studies, very often concentrating on success stories. Probably the most analysed centres are from Emilia Romagna (Bellini, 1985; Bianchi, 1985; Brusco, 1992; Bellini and Pasquini, 1998).⁴ There are only a few surveys aimed at providing a more general picture of the Italian experience in BDS centres. Nomisma undertook the first study aimed at a national census of the existing BDS centres in 1988 (Nomisma, 1988), counting 75 centres. To our knowledge, there are two more recent centres at national level: one was undertaken in 1997 by Ceris-Cnr (Calabrese et al., 2001) and the other was produced by Agitec and updated in 2000 (Farinelli, 2000).⁵ The Ceris-Cnr study counted 161 institutions supplying technological services⁶ to firms, but only 80 of them are proper BDS centres, the remaining being Business Innovation Centres (BIC), science parks, business incubators and national research agencies.

For the sake of international comparison, in 2004 the European Commission's Enterprise Directorate has released a new database of European technology transfer institutions within the member States⁷ and of a total of about 1600 institutions, 101 are Italian, 167 from the UK, 168 from Spain, 215 French and 431 German.

Considering the regional distribution, it clearly appears that most of the centres identified by Ceris-Cnr are located in the Northern and Central regions and particularly in Lombardia (15), Veneto (10), Emilia Romagna (11) and Toscana (16). Besides, in these four regions there are also a majority of centres located in industrial districts, given the high density of specialised clusters of firms in these regions.

The Ceris-Cnr study also presents information about the services supplied by these centres, the number of customers and their location, turnover, number of employees and external consultants. The main conclusion is that centres located inside as well as outside districts supply many different services, and they do not try to achieve a clear specialisation, therefore rarely reaching their declared aim of supporting innovation.

The little contribution to innovation of most of the BDS centres is also confirmed by a study undertaken on Lombardia (Cusmano et al., 2000), one of the most industrialised regions and characterised by the most innovative industrial sector in Italy (Cusmano et al., 2000).⁸ Based on a sample including both innovative enterprises⁹ and firms making use of services supplied by BDS centres, the authors conclude that there is clearly 'adverse selection': the service centres' customers are the less innovative firms while innovative enterprises interact more with universities, research centres and technical advisors in order to improve their innovative capability. Moreover, most of the BDS centres adjust their supply of services to the demand of their customers to improve their financial self-sufficiency; thus, they end up mainly supplying few innovative services, such as information, training, laboratory tests and quality certifications.

Some further evidence is presented in another study on the outsourcing of advanced services in Lombardia (Bartoloni, 2001). Using the 1996 industrial census database, Bartoloni concludes that there is a positive correlation between demand for innovative services, firm-size and technological level. Moreover, R&D services are mainly supplied in the metropolitan area of Milan, while centres located in industrial districts are more specialised in information and engineering services to satisfy the demand of their main clients, which are small and medium-sized firms.

The empirical studies reviewed here agree on one major result: most Italian BDS centres lack adequate capabilities to enhance innovation. BDS centres, originally set up to provide technological services, have gradually adjusted their supply to the local SMEs' demand of traditional services, such as information, laboratory tests, training. As documented later in this paper, this approach has at the same time positive and negative implications: BDS centres often succeed in increasing their financial self-sufficiency, as they supply services demanded by firms; however, they seldom induce new demands for innovative services. Innovative firms rather prefer to interact with other institutions, such as universities and research centres, to improve their innovation capability (Cusmano et al., 2000).

In the experience of other countries, particularly Germany with the well-known case of *Steinbeis-Stiftung* in the region of Baden-Wurttemberg, BDS centres play a crucial role in enhancing innovation and diffusing technologies, when they act as co-ordinators of a network of institutions, universities, research centres, and innovative firms (Schmitz, 1992).

This paper substantiates, with richer empirical evidence than the existing studies available (Calabrese et al., 2001; Nomisma, 1988) that this is not happening in Italy: BDS centres are good at adapting to the needs of local firms, but they often miss the opportunity to contribute to the modernisation of the local industrial economic system.

3.1 BDS in the three regions analysed

The three regions under analysis are large and important in the Italian economy, accounting for a large share of industrial employment (45%) and more than 50% of manufactured exports. Besides, they represent three different patterns of industrial development and regional policy, making them a very interesting object of analysis.

In Emilia Romagna there is a strong concentration of industrial districts and an old tradition of industrial policy at local and regional levels, reflecting a 'top-down' design planned by the Region's policymakers to lead the market and drive private enterprises and their associations towards the objectives planned (Bianchi and Giordani, 1993). Within this context the Emilia Romagna Region founded Ervet (*Ente Regionale per la Valorizzazione Economica del Territorio*) as a financial holding company in 1974. During the 1980s, in order to support the regional industrial system's competitiveness, Ervet created a network of centres located throughout the region to serve specific local needs. The set of Ervet Centres is known as the 'Ervet System', and includes nine specialised bodies, the so-called Centri di Servizio i.e., Service Centres (Russo et al., 2000).

Several of these centres are by now financially self-sufficient, but they could hardly have been sustainable since their inception. In the early years they played a useful ‘signalling’ role for private enterprises, pointing to specific activities and issues that would have turned out of strategic importance in due course (e.g., quality certification, metrology and industrial standards).

Such a ‘top-down’ approach, always in close collaboration with the private productive sector, helped anticipate some market trends, and lead firms’ efforts towards pursuing technological changes. This system was probably better suited to a phase of incipient industrialisation (Amin, 1997), and is currently undergoing a thorough process of restructuring. The main reforms aim at Russo et al. (2000) and Leoncini and e Lottim (2001):

- boosting Centres’ financial sustainability
- subsidising with public financing only highly innovative projects, always subjected to competitive tenders
- boosting the collaboration among Centres and the creation of networks with the Research and University system.

Also in Lombardia since the 1980s the promotion of BDS centres has been used as a tool of industrial policy to support SMEs. With a regional law (33/1981) the creation of 14 new BDS centres (Lombardia, 1995) was sponsored to help strengthen the capability of local systems of firms.

More recently with a new regional Law (35/1996), based on the experience accumulated during the last decade, a scheme aimed at promoting service centres while at the same time directly supporting new firms with grants for R&D projects and soft loans for innovation was launched (Garofoli and Musyck, 2003).

Now the Lombardia Regional Government is currently choosing to play a rather neutral role both inside and outside districts. It provides financial support to relatively small innovative projects, but it does not try to play any active role in promoting innovation or coordination of economic activities within the industrial system.

Finally, there is Veneto where industrial development, very much based on districts, is a more recent phenomenon than in the two other regions. Private initiatives by firms and institutions have played a central role in the promotion and development of local industry, to a much greater extent than local governments and public sector institutions. Therefore, an analysis of local industrial policy that only looks at regional laws would be misleading and underplaying the relevance of local institutions, often the outcome of spontaneous processes of self-organisation from below, inter-related through networks of exchanges, relations and competition that rarely have a consciously-pursued regional dimension. Perhaps paradoxically, the strength of some private structures and institutions, and of their networks, often invisible but real, lie in the *weak linkages* with the public administration (Corò, 2001).

However, such a set-up inevitably suffers from substantial weaknesses: the lack of public planning and support has hindered the co-ordination of initiatives, which have arisen casually and in response to specific and localised demands. In addition, the forward-looking nature of some service provision by subsidised public institutions (like in Emilia Romagna) was absent, and this limited the possibility to upgrade the whole industrial system, still largely specialised in traditional sectors. Only recently the

Region has begun to play a role of ex-post co-ordination of the already existing activities and centres, acknowledging their existence and role, and planning its support to industrial development accordingly.

4 The survey

4.1 The methodology

The present study is based on a questionnaire survey conducted on a sample of 30 BDS centres and on in-depth interviews with key informants, such as representatives of local and regional public bodies, business associations and chambers of commerce, scholars and practitioners of local development.

The current sample was selected from a list of institutions supplying BDS obtained from an updated inventory of existing databases on all institutions supporting industrial development in the three regions (Calabrese et al., 2001; Farinelli, 2000; Nomisma, 1988) and on broad research in the internet. Given that the resulting database includes highly heterogeneous institutions, the following criteria of selection were adopted:

- A first general criterion is to select only those institutions that offer at least some technological services because: a) innovation is necessary to acquire competitiveness and b) the characteristics of technology and technological change (imperfect information, uncertainty, incomplete/imperfect appropriability of the results of the investment, externalities, free-riding) determine an investment in technology that is lower than what it would be socially optimal, justifying public intervention and subsidies.
- The second criterion refers to the opportunity of excluding the institutions that only carry out theoretical research activities, although enterprises can also take advantage of it. In fact, basic research cannot be thought of as a service directly usable from the enterprises.
- The third criterion reflects the need to exclude the centres strongly linked to large national, international or multinational enterprises. They might offer useful services to other enterprises, but in this case service provision follows a more complex logic, and very different from the one of the development of the three regions.
- The fourth criterion is to exclude BIC, science and technological parks, business incubators, experimental stations, technological and industrial poles. Although similar in several respects, these are different in their aims, and in their operative and strategic logic, from BDS centres. The analysis and the questionnaire geared to this kind of actors should be different. In a similar way we exclude the laboratories that are involved only in technical tests.

Now we define a BDS Centre as an institution which can be private, public or mixed and which offers also technological services to small and medium-sized enterprises. In such a way we have defined a list of BDS centres sufficiently homogeneous to permit comparisons and representative of the universe in the three regions. From this list¹⁰ for the different number of centres in each region, we interviewed 11 centres out of a universe of 27 in Emilia Romagna, 12 out of 33 in Lombardia and 7 out of 13 in Veneto. The selection of the centres in each region was made on the basis of the information available and the advice of local experts in order to represent the wide variety of institutions in terms of type of clients, geographical (within or outside districts) and sector specialisation and take into account the actual possibility to visit the selected centres and the availability of the directors to be personally interviewed by the authors and to fill up the questionnaire.

The questionnaire included the following sections:¹¹

- The history of the centres: how do they originate? Which were the stated objectives?
- The different types of services supplied: how much do they contribute to the total activity of the centres? Are these services subsidised?
- The customers: how many customers? Which size do the customer firms have? Are there other institutions among the customers? Where are the customers located?
- The turnover: total revenues and source of revenues.
- Number of employees and their education.
- The linkages of the centres with other local, national and international institutions.
- Main channels of knowledge accumulation.
- Self-evaluation efforts and identification of main strengths and most urgent objectives to reach.

Like any other survey, there are potential problems regarding the accuracy of the results. To overcome some of the problems related to data accuracy and inconsistencies, they are complemented and cross-referenced with interviews to other key informants and with secondary sources available in the literature.

4.2 *The main findings*

The analysis of the services supplied by the BDS centres in our sample is the first step to discuss the empirical evidence collected. In accordance with other surveys (Committee of Donor Agencies for Small Enterprise Development, 1997), five classes of services are identified in the questionnaire:

- design, including information about fashion trends and services related with Computer Aided Design (CAD) technology
- marketing services such as market research, export promotion and organisation of trade fairs

- technological services such information about new technologies, R&D projects, development and implementation of hardware and software solutions, laboratory tests, quality certification and information on environmental regulations
- training for managers, technicians, technical engineers and trainers
- business management such as investment planning, legal and bookkeeping assistance and patent registration.

At the first glance, all the centres interviewed deliver services at least in two of the classes identified and 80% of them offer services in at least three classes. Centres were also asked for their most profitable area of services and technological services were indicated as the most profitable by 43% of the centres and training by 20% of them. Among technological services, the most profitable are laboratory testing and quality certification. With respect to training, its profitability is mostly owing to the large availability of EU funds in this field.

As a whole, according to their supply of services, BDS centres appear to be rather heterogeneous, and this makes any generalisation very problematic. In order to overcome this problem, we try to identify their main vocation deriving a classification on the basis of quantitative – the amount of human resources devoted to each service, to approximate the costs or resources employed, and the profitability of each area and/or service – and qualitative information collected with the questionnaire. From Table 1 it appears that some centres are much specialised in the provision of some specific services while others supply a wide variety of services. Accordingly, we classify the 30 centres in our sample in four categories each having the following characteristics:

- Nine centres (30% of the sample) are much specialised in laboratory tests and quality certification. As can be seen in Table 1, five of them devote at least 70% of their human resources to supply these services. For the remaining four centres in this category the exact amount of human resources is not available but the qualitative information collected confirms that they are also specialised. Moreover, in all these centres laboratory tests and quality certification services are considered as the most profitable area.
- Three centres (10% of the sample) are specialised in innovative technological services, devoting at least 65% of their human resources to supply this type of services.
- The remaining 17 centres are not specialised in any specific service but supply a variety of them. Within this large group two different categories can be identified:
 - Seven centres (23% of the sample) aim at the development of industrial districts with a clear sector specialisation (33% of the sample).
 - Ten centres (33% of the sample) have a more general target of territorial development and are not located in districts.

Table 1 Main vocations of the BDS centres

<i>Centre</i>	<i>Vocation</i>	<i>Justification</i>
Centro ceramico Bologna (ER)	Laboratory tests and quality certification	Percentage of N/A The centre mainly supplies laboratory tests and quality certifications, which are identified as the most profitable services provided
Certottica (V)	Laboratory tests and quality certification	Percentage of N/A The centre mainly supplies laboratory tests and quality certifications, which are identified as the most profitable services provided
CSQA (V)	Laboratory tests and quality certification	70% of human resources devoted to supply laboratory tests and quality certifications
AQM (L)	Laboratory tests and quality certification	Percentage of N/A The centre mainly supplies laboratory tests and quality certifications, which are identified as the most profitable services provided
CIMAC (L)	Laboratory tests and quality certification	80% of human resources devoted to supply laboratory tests and quality certifications
Centro servizi calza (L)	Laboratory tests and quality certification	70% of human resources devoted to supply laboratory tests and quality certifications
CENTROCOT (L)	Laboratory tests and quality certification	75% of human resources devoted to supply laboratory tests and quality certifications
CATAS (L)	Laboratory tests and quality certification	Percentage of N/A The centre mainly supplies laboratory tests and quality certifications, which are identified as the most profitable services provided
CERMET (ER)	Laboratory tests and quality certification	70% of human resources devoted to supply laboratory tests and quality certifications
ProMo (ER)	Territorial development	Main objective is territorial development. The centre supply services to firms specialised in various sectors and located in the Province
Treviso Tecnologia (V)	Territorial development	The centre supplies technological and training services. It does not have a sector specialisation. Customers are located in the Province
LUMETEL (L)	Territorial development	The centre supplies marketing, technological, training and business management services. It does not have a sector specialisation. Customers are located in the Province
CIL (L)	Territorial development	The centre supplies technological and training services. It does not have a sector specialisation. Customers are located in the Province
SECAS (L)	Territorial development	The centre supplies marketing, technological, training and business management services. It does not have a sector specialisation. Customers are local but it is not a district. Main objective is the development of a mountain area
CESTEC (L)	Territorial development	The centre supplies marketing, technological, training and business management services. It does not have a sector specialisation. Customers are located in the Region

Table 1 Main vocations of the BDS centres (continued)

<i>Centre</i>	<i>Vocation</i>	<i>Justification</i>
ASNM (L)	Territorial development	The centre supplies marketing, training and business management services. It does not have a sector specialisation. Customers are local but it is not a district. Main objective is the reorganisation of a de-industrialised area
PSTL (L)	Territorial development	The centre supplies marketing, technological, training and business management services. It does not have a sector specialisation. Customers are local but it is not a district
ASTER (ER)	Territorial development	The centre supplies technological, training and business management services. It does not have a sector specialisation. Customers are located in the Region
Tecnopadova (V)	Territorial development	The centre supplies design, technological, training and business management services. It does not have a sector specialisation. Customers are located in the Region
CITER (ER)	District development	The centre supplies design, technological, training and business management services. It does have a sector specialisation. It is located in a district
Centuria (ER)	District development	The centre supplies marketing, technological and business management services. It does have a sector specialisation. It is located in a district
Consobiomed (ER)	District development	The centre supplies marketing, technological and training services. It does have a sector specialisation. It is located in a district
Centro Veneto Calzaturiero (V)	District development	The centre supplies design, technological and training services. It does have a sector specialisation. It is located in a district
CLAC (L)	District development	The centre supplies design, marketing, technological, training and business management services. It does have a sector specialisation. It is located in a district
Legno legno (ER)	District development	The centre supplies marketing, technological, training and business management services. It does have a sector specialisation. It is located in a district
CERCAL (ER)	District development	The centre supplies design, technological and training services. It does have a sector specialisation. It is located in a district
Democenter (ER)	Innovative technological services	65% of human resources devoted to technological projects
Tecnologia and Design (V)	Innovative technological services	65% of human resources devoted to technological projects
Laboratorio d'impresa (ER)	Innovative technological services	70% of human resources devoted to technological projects
CPV – Rumor (V)	Training	70% of human resources devoted to training

ER = Emilia Romagna; L = Lombardia; V = Veneto.

Source: Authors' survey

Finally, there is only one centre specialised in training and devoting to this activity 70% of its human resources.¹²

On the basis of this classification, Table 2 summarises the major findings of our survey, presenting the main stylised facts that characterise the centres belonging to the different classes considered.

Table 2 BDS centres: some stylised characteristics

	<i>Laboratory tests quality certification</i>	<i>Territorial development</i>	<i>District development</i>	<i>Innovative technological services</i>
Main initiative	Public-private	Fully public	Public-private	Public-private
Majority of equity	Private	Public	Private	Private
Sector specialisation	Yes	No	Yes	No
Average no. of clients	1,155	710	213	223
Main location of clients	National	Local	Local	Regional
Main type of clients	SMEs	SMEs	SMEs	SMEs
Average turnover (Euro mill.)	2.5	2.6	1.2	1.5
Average public subsidy	13%	47%	31%	39%
Average revenue from sale	75%	40%	57%	61%
Average no. of employees	40	24	16	19
Share of technicians	>50%	<50%	<50%	<50%
Share of employees with a university degree	<50%	>50%	<50%	>50%
Internal training	Yes	Yes	Little	Yes
Average no. of external linkages	6.22	8.10	7.71	9.67
International collaborations	Yes	Little	Yes	Yes
Self-evaluation	Yes	Yes	Yes	Yes
Centres' certification	Yes	No	No	No

Source: Authors' survey

The first fact we want to stress is that the four types of centres differ according to their turnover size and centres specialised in laboratory tests and quality certification and those targeting territorial development are much larger than the rest. Using the number of customers as an indicator, the first type of centres are also reaching a much larger audience both in terms of number and geographical origin. Given the relative standardisation of the type of services supplied, some of these centres have in fact grown quite large, extending their market to the whole country and being able to sell their services to firms. Therefore, on average 75% of their turnover comes from selling their

services to customers. Centres specialised in laboratory tests and quality certification are typical examples of centres providing services that are demanded by firms and can therefore be efficiently sold in the market, exploiting economies of the scale of production.

Also the three centres supplying innovative technological services are able to sell their services in the market and in fact their turnover on average comes more from sales of services than from subsidies. Moreover, although their size is small in terms of turnover, customers and employees compared with other categories of centres, they offer their services to a regional audience confirming that the local scale is too limited for such a kind of services.

District centres are also small in terms of turnover, number of customers and employees. They supply a variety of services to sector-specialised firms located in industrial districts. Their main characteristic is the strong relationship with the private sector. The services they supply are not very innovative but well suited to the demand of their customers, which are mainly local SMEs. This is confirmed by their good capability to sell their services in the market.

Centres targeting territorial development are the most strongly linked with the public sector, depending on public grants more than the rest of the sample. In some cases this is justified by the nature of the services supplied: some of these centres are in fact playing a coordinating role in the allocation of resources that would not easily find their 'socially-best' use if left to market forces alone. Some other centres are providing the market with resources (and opportunities) that would not otherwise be available, and signal the future strategic relevance of services that are not demanded (nor offered) today, but whose role may be crucial in the future (Hamel and Prahalad, 1994, quoted in Bellini (2001)).¹³ At the same time, however, there are also centres supplying rather generic and simple services to a wide range of firms without a clear justification for their existence, and even less for public subsidies.

5 Lessons learned from Italian BDS

The analysis of the BDS experiences in three of the most industrialised regions in Italy allows drawing some general considerations about the contribution of service centres to the industrial development, competitiveness and innovative capability of local economic systems.

The first result is the wide heterogeneity of the BDS centres analysed, that mirrors a similar heterogeneity in Italy; they differ a great deal in terms of size, specialisation, original initiative, turnover composition, dependence on public subsidies and linkages with firms and other institutions. This variety is somehow the result of a consistent historical evolution, in a context characterised by a national policy, which only set the general legal framework, leaving room for regional and local industrial policy interventions. Thus, in Italy BDS centres have not been established within a consistent national policy framework supporting industrial development; rather, they are the result of much decentralised, bottom-up and diverse approaches. In most cases the creation of BDS centres is the effect of the collaboration among regional and local public institutions, very often together with the private sector, represented by Business Associations, Chambers of commerce, local banks, individual enterprises or groups of them.

Secondly, our survey confirms that BDS centres are often the expression of local specific needs, and have strong linkages with the local business environment. The remarkable private involvement in the creation of many centres, the predominance of local firms among clients, and the intense interactions with firms in the centres' activities are all frequent features of BDS centres.

Thirdly, this strong idiosyncrasy of BDS centres reflects the peculiarity of the Italian industrial system, especially strong in the three regions under analysis. In other words, BDS centres are the coherent expression of the economic environment from which and at the time in which they originated: initially many BDS centres contributed to the diffusion of services which were new when the centres were created. The initiative was often private (Veneto) or public but in close collaboration with the productive sector (Emilia Romagna).

Fourthly, most BDS centres have achieved financial self-sufficiency by now. As they supply services, which firms have learnt to demand and value, they have gradually managed to charge a price for their BDS. For this reason, a large part of BDS centres, particularly those specialised in laboratory testing and quality certification, and the district centres, have reached a good degree of financial sustainability, which is of course a good achievement in terms of budget constraint.

Italian BDS centres are very good examples of how firms together with local institutions can collaborate in order to set up a business environment conducive to industrial development. The local availability of specialised services is definitely one of the competitive assets of the Italian SMEs production systems in these three regions.

However, there is also a downside and this pattern has also some weaknesses. Our evidence reveals that nowadays Italian BDS centres generally play a limited role to promote technological innovation and management changes in the firms serviced. According to our empirical analysis, the BDS centres really contributing to enhance firms' innovation capabilities and fulfil their needs for new innovative services are only a minority. Most of them contribute to sustain firms' static competitive advantages but they do not help in creating new dynamic competitive advantages. In other words, Italian BDS centres generally played a crucial role in creating a market for services, and diffuse (transfer) basic services to large groups of firms. However, they have been slow to evolve and restructure their role as institutions supporting SMEs' innovation strategies.

This is coherent with one of the chief findings of a study undertaken in Lombardia by Cusmano et al. (2000) on the impact of BDS Centres on a sample of firms. These authors show that the really innovative firms do not search for assistance in their innovation efforts from BDS centres, but they rather interact with universities, research centres and independent advisors. BDS Centres appear to provide a large number of less innovative enterprises with simpler services, such as commercial and technical information, marketing, and training.

To sum up, the main weakness of the Italian pattern of BDS centres seems to be their slow capability to evolve and adapt to a rapidly changing industrial environment. It implies an ideal life cycle a BDS centre. But a question arises if a centre should close or change its main areas of operation? Is their replacement necessary?¹⁴ Is it necessary to move into new areas of operations of innovative activities or stop its operations after creating an effective market? Alternatively, a BDS centre should act as co-ordinator of networks of innovative specialised institutions, facilitating the matching of demand and supply of services and, very importantly, stimulating the demand for services fulfilling today hidden and tacit, but in the near future strategic needs. In the Italian system, this

type of BDS centre does not actually exist, unless at a very incipient stage in some isolated examples. Most BDS centres have in fact remained in their early stages of the 'life-cycle'. Only recently in Emilia Romagna, recent experiences have taught the centres some lessons resulting in a new tendency. Some of the existing BDS centres belonging to the Ervet system are restructuring their role to become 'network-facilitators', almost 'brokers' among different institutions, such as Universities and Research Centres, firms and their associations, other service centres.

To conclude, Italian BDS centres offer the right kind of services that are presently demanded by firms, but do not succeed in enhancing the innovation and dynamic competitiveness of local economic systems. In the new competitive environment prevailing today, we may cast doubts on the relevance of their role in advanced industrialised regions such as those analysed in this paper. Insofar as innovation and organisational change are essential conditions for the competitiveness of local systems, it would be desirable that BDS Centres were more active in fostering firms' and local institutions' innovation and linkages among themselves and with other (foreign) networks.

References

- Amin, A. (1997) *Il modello Emiliano: Sfide istituzionali*, Mimeo, (Laboratorio di Politiche Locali).
- Bartoloni, E. (2001) 'Distretti industriali e *outsourcing* di servizi avanzati: un'analisi empirica sulle imprese lombarde', paper presented at the *XXII Italian Regional Science Conference*, October, Venice.
- Bellini, N. (1985) 'Servizi reali ed innovazione: considerazioni di politica industriale', *Economia Pubblica*, Vol. 9, No. 10, pp.415–420.
- Bellini, N. (2000) 'Real services: a re-appraisal', *European Planning Studies*, Vol. 8, No. 6, pp.711–728.
- Bellini, N. (2001) 'Problemi di valutazione delle politiche di servizi reali alle imprese', paper presented to *The IV Congress of the Associazione Italiana di Valutazione*, Bari, April.
- Bellini, N. and Condorelli, F. (2004) 'Peripherality and proximity. Do business support services matter?', paper presented at *The Regional Science Association Conference on 'Europe at the Margins: EU Regional Policy, Peripherality and Rurality'*, Angers, April.
- Bellini, N. and Pasquini, F. (1998) 'The case of ERVET in Emilia-Romagna: towards a second-generation regional development agency', in Halkier, H., Danson, M., Damborg, C. (Eds.): *Regional Development Agencies in Europe*, Jessica Kingsley, London, pp.253–270.
- Bianchi, P. (1985) 'Servizi reali: considerazioni analitiche e implicazioni di politica industriale', *L'Industria*, Vol. 2, pp.233–246.
- Bianchi, P. and Giordani, M.G. (1993) 'Innovation policy at the local and national levels: the case of Emilia Romagna', *European Planning Studies*, Vol. 1, No. 1, pp.25–42.
- Brusco, S. (1992) 'Small firms and the provision of real services', in Pyke, F. and Sengenberger, W. (Eds.): *Industrial Districts and Local Economic Regeneration*, ILO, Geneva, pp.177–196.
- Calabrese, G., Cariola, M. and Rolfo, S. (2001) 'La valutazione delle politiche per l'innovazione a livello regionale', in Paganetto, L. and Pietrobelli, C. (Eds.): *Scienza, Tecnologia e Innovazione: Quali Politiche?*, Il Mulino, Bologna, pp.439–473.
- Committee of Donor Agencies for Small Enterprise Development (1997) *Business Development Services for SMEs: Preliminary Guidelines for Donor-funded Interventions*, The World Bank, Washington.

- Cooke, P., Uranga, M.G. and Etzebarria, G. (1997) 'Regional innovation systems: institutional and organisational dimensions', *Research Policy*, Vol. 26, pp.475–491.
- Corò, G. (Ed.) (2001) 'Il ruolo, la situazione e l'evoluzione della subfornitura nelle realtà distrettuali del Veneto', *Rapporto di ricerca per la Regione Veneto*, Comitato di Consultazione sulla Subfornitura, Venezia, Gennaio.
- Cusmano, L., Lissoni, F. and Sironi, M. (2000) 'Selezione avversa e trasferimento tecnologico: un'analisi dei centri di servizio alle imprese della Regione Lombardia', *Economia e Politica Industriale*, No. 105, pp.19–57.
- Farinelli, M. (2000) *Aggiornamento Della Ricognizione dei Centri di Servizio alle Imprese*, Centri di Ricerca e Università, Rome, May, Agitec.
- Feller, I. (1997) 'Manufacturing technology centres as components of regional technology infrastructures', *Regional Science and Urban Economics*, Vol. 27, pp.181–197.
- Garofoli, G. and Musyck, B. (2003) 'Innovation policies for SMEs: an overview of policy instruments', in Asheim, B.T., Nauwelaers, C. and Todtling, F. (Eds.): *Regional Innovation Policy for Small and Medium Enterprises*, Edward Elgar, Cheltenham, pp.119–138.
- Hamel, G. and Prahalad, C.K. (1994) *Competing for the Future*, Harvard Business School Press, Boston.
- Leoncini, R. and Lottim, F. (2001) 'Attività innovativa e politiche di sostegno. Il caso emilia romagna', in Paganetto, L. and Pietrobelli, C. (Eds.): *Scienza, Tecnologia e Innovazione: Quali Politiche?*, Il Mulino, Bologna, pp.475–500.
- Lombardia, R. (1995) *Le Politiche Industriali Della Regione Lombardia: Strategie, Normative, Attuazione, A Cura Dell'assessorato Industria e Artigianato – Servizio Industria*, Milan, Regione Lombardia.
- Lundvall, B. (1988) 'Innovation as an interactive process: from user-producer interaction to the national system of innovation', in Dosi, G., Freeman, C., Nelson, R.R., Silverberg, G. and Soete, L. (Eds.): *Technical Change and Economic Theory*, Pinter Publishers, New York, Columbia University Press, London, pp.349–369.
- Muller, E. and Zenker, A. (2001) 'Business services as actors of knowledge transformation: the role of KIBS in regional and national innovation systems', *Research Policy*, Vol. 30, pp.1501–1516.
- Nomisma (1988) 'I centri di servizio reale alle imprese: stato dell'arte e repertorio delle esperienze italiane', *Laboratorio di Politica Industriale*, Report no. 4, Nomisma, Bologna.
- Pietrobelli, C. and Rabellotti, R. (2002) 'Business development service centres in Italy. An empirical analysis of three regional experiences: Emilia Romagna, Lombardia and Veneto', *Serie Desarrollo Productivo*, WP No. 130: Santiago, ECLAC/CEPAL, United Nations.
- Rabellotti, R. and Viganò, L. (2000) 'La promozione del settore privato nei paesi in via di sviluppo: un approccio di mercato', *L'Industria*, Vol. XXI, No. 2, pp.345–385.
- Robson, P.J.A. and Bennet, R.J. (2000) 'The use and impact of business advice by SMEs in Britain: an empirical assessment using logit and ordered logit models', *Applied Economics*, Vol. 32, pp.1675–1688.
- Rolfo, S. and Calabrese, G. (2003) 'Traditional SMEs and innovation: the role of the industrial policy in Italy', *Entrepreneurship and Regional Development*, Vol. 15, No. 3, pp.253–271.
- Russo, M., Allari, G., Bertini, S., Bonaretti, P., de Leo, E., Fiorani, G. and Rinaldini, G. (2000) 'Le sfide per il prossimo decennio: note per un dibattito sulle politiche regionali per lo sviluppo locale dell'Emilia Romagna', *Sviluppo Locale*, Vol. VII, No. 14, pp.23–54.
- Schmitz, H. (1992) 'Industrial districts: model and reality in Baden-Wurttemberg', in Pyke, F. and Sengenberger, W. (Eds.): *Industrial Districts and Local Economic Regeneration*, ILO, Geneva, pp.87–121.

- Vickers, I. and North, D. (2000) 'Technology initiatives: some insights from the English regions', *European Planning Studies*, Vol. 8, No. 3, pp.301–318.
- Wren, C. and Storey, D. (2002) 'Evaluating the effect of soft business support upon small firm performance', *Oxford Economic Papers*, Vol. 54, pp.334–365.

Notes

- ¹Preliminary versions of this paper were presented at seminars at ECLAC, Santiago, University of Ferrara, AISRE annual conference in Reggio Calabria and RSAI annual conference in Pisa. We wish to thank Silvano Bertini, Wilson Peres, Giovanni Stumpo and two anonymous referees for their comments. Tommaso Ciarli provided skillful research assistance. Financial support from ECLAC in the context of the project on Small and medium-sized industrial enterprises in Latin America, financed by the Government of Italy, is gratefully acknowledged. The shortcomings of the paper are our responsibility alone.
- ²The expression appears to be derived from the Italian '*servizi reali*', often employed in policy documents as well as in academic papers by several Italian scholars (Bellini, 1985, 2000; Bianchi, 1985; Brusco, 1992).
- ³Some considerations on the evaluation of the performance of the BDS centres investigated in this paper are included in a previous paper presenting the first findings of our survey (Pietrobelli and Rabellotti, 2002).
- ⁴On policy issues see Bellini (1985), Bianchi (1985) and Brusco (1992). Among the case studies see for example Bellini and Pasquini (1998).
- ⁵The census prepared by Agitec includes any institution supporting and contributing at technological innovation, and therefore also universities, business associations, national research centres, innovation agencies, science parks, business incubators (Farinelli, 2000). The total number of institutions counted is 691 and among them the BDS centres are 90, somehow confirming the previous surveys.
- ⁶According to this study, technological services include: quality certification, R&D projects, laboratory tests, technological training and technological information.
- ⁷The database is downloadable at: http://europa.eu.int/comm/enterprise/enterprise_policy/competitiveness/index.htm.
- ⁸In the years 1980–1994, 40% of patents registered by Italian enterprises at the European Patent Office are from firms located in Lombardia (Cusmano *et al.*, 2000).
- ⁹The innovative enterprises are defined on the basis of two criteria: the enterprises which registered a patent in the period 1980–1994 and those which received a regional grant for innovation.
- ¹⁰The whole list of BDS centres in the three regions is included in Pietrobelli and Rabellotti (2002).
- ¹¹Available on demand from the authors.
- ¹²This centre is not considered in the rest of the analysis.
- ¹³On this, see the concept of *expeditionary marketing* (Hamel and Prahalad, 1994, quoted in Bellini, 2001), that recognises that present customer requirements in emerging markets can only be partially understood, but need to be foreseen, in our case with the help of BDS Centres.
- ¹⁴We would like to thank Silvano Bertini for stressing this point.