

25 August 2006

Authors: John Gabriel Goddard
and H ela Chouk

First findings from the Survey of European Business Incubators

Contents:

Introduction	1
European business incubation landscape	1
Incubators' mission and organization	4
Managing risks during firm creation	6
Bridging early-stage financing gaps	7
Cross-country comparisons	10
Conclusions and next steps	11
Appendix—survey methodology	12

Major findings:

- European business incubation facilities are growing rapidly in number: 48% of surveyed incubators began to operate in the last 5 years
- The survey suggests that upwards of 5,500 people work in Europe's business incubators, offering services to around 24,000 firms
- Most incubators offer a range of options that reduce starting-up risks, going from flexible lease terms to risk-management tools
- External financing shortages regularly affect incubated firms, which often rely on public support from national and EU programs

Introduction

In recent years, there has been a major expansion in the number of business incubators (BIs) operating across the European Union. Thanks to the sustained commitment of public and private funds, many more structures are planned to open. As a result, the supply of business support services for entrepreneurs and early stage firms will continue to increase.

To learn from this experience and promote the adoption of best practices, associations of BIs, national governments and the European Commission have sponsored numerous studies. But because the panorama of European BIs is evolving so rapidly, there is much more that can still be learnt, for the benefit of entrepreneurs, practitioners, and policymakers.

By collecting a sample that is representative at the European level, this *Survey of European Business Incubators* generates information with an improved geographical coverage. More than 900 European BI managers were contacted, and 170 responses were submitted (see the Appen-

dix for the methodology). This represents a response rate of 18%, with rates of 10-70% in nearly all EU countries.

The study also provides new insights on two problems that are crucial for new firm creation. The first is that of the risks jeopardizing the entrepreneurial process; the second has to do with the financing shortages faced by startups. The survey aims to discover the extent and nature of these problems. In addition, it investigates the services included in the process of business incubation that can help to overcome these problems, and the role of public instruments for entrepreneurs.

This report presents the first findings from the survey. The conclusions that we draw from the statistical results are enriched by the comments provided in the responses. The report quotes some of these viewpoints, and we invite the reader to visit the Incunomics Project website located at www.incubation.fr, as further information and results will be posted there during the second half of 2006.

European business incubation landscape

Perhaps the key difficulty for an international study of business incubation is to select a single definition of what constitutes a business incubator. This survey adheres to the latest thinking in SPICE network conferences and the academic literature, in defining a business incubator as a structure involving both physical and

learning dimensions. Real estate owned, managed, or secured by business incubators provide space for starting-up. A permanent staff and/or external consultants offer business support services designed for early stage firms.

A careful search of existing databases of BIs, and communications with national and

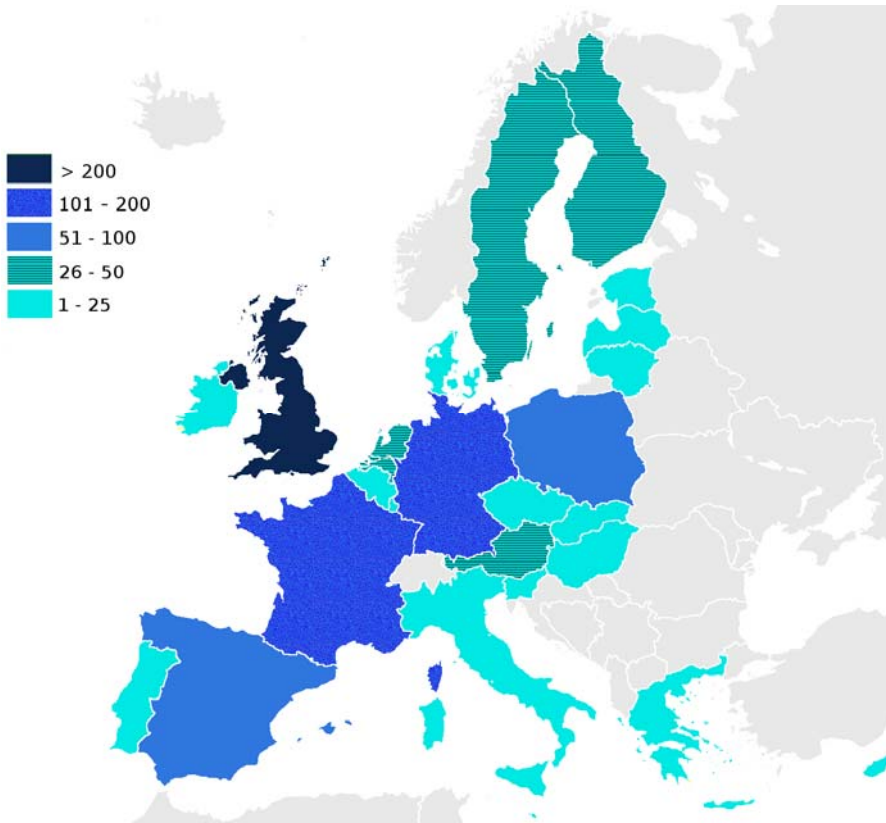


Figure 1
Distribution of BIs across the European Union

international associations of business incubators, allowed us to identify and contact 936 business incubators. Figure 1 shows their localization.

On the map we find that the UK leads with over 200 BIs, followed by France and Germany with 100-200 BIs. The number of BIs is 50-100 in Poland and Spain, and 25-50 in Austria, Finland, the Netherlands and Sweden. The other EU countries have less than 25 BIs. These figures are lower bounds, because it is possible that our search overlooked some BIs, particularly in larger countries or countries that lack a BI association. There are also BIs with multiple locations and if these were consid-

ered as separate facilities the number of BIs would be greater still.

Figure 1 shows that Europe’s business incubation landscape is characterized by geographic imbalances in entrepreneurship support facilities. The distribution of BIs is very different to the distribution by economic wealth or population. For example,

Table 1
Year in which BIs began operations

<i>Percentage of respondents</i>	
1981-1985	6%
1986-1990	8%
1991-1995	14%
1996-2000	25%
2001-2005	44%
2005-	4%

the density of incubation facilities measured in terms of BIs per 1,000 population is highest in Finland, followed closely by Austria, the UK, Luxembourg and Sweden.

Because the figures we present here were obtained using a common methodology for all countries and using all available public sources of information, they are arguably the most reliable estimates of the BIs operating in the EU today. A comparison with the EC CORDIS Incubator Database (CID) indicates that the CID significantly underestimates the availability of incubation facilities in Europe and does so to a greater extent in the case of Austria, France and Poland. There are several reasons for these discrepancies, for instance that entries into the CID are voluntary, are not validated, or kept up to date. This limits the value of this database for analysis.

Of course, another reason for the divergence between CID and this study is the surging number of BIs in the last five years. Table 1 presents the information about the year in which BIs began to operate, which shows that there is a high and even accelerating increase in the population of European BIs. The actual rate of growth in BI facilities since 2000 is most likely lower, as “surveying fatigue” is known to dampen response rates from BIs established in earlier dates. Even so, there is a remarkable tendency for setting-up additional

“We have developed incubator units in order to encourage businesses to develop in a geographical area with little history of entrepreneurial activity and a low business birth rate.”

BI viewpoint

Box 1

Table 2
Full-time employees in BIs

Percentage of respondents

1	15%
2	19%
2-3	15%
3-4	8%
4-5	9%
6-10	21%
11-20	9%
21-	3%

BIs and this effect is stronger in EU accession countries.

Tables 2-4 present three additional indicators of Europe's BI landscape that display its robust vitality. Consider first of all the employment pattern in BIs (measured in full-time equivalent employees). This shows that one-half of BI facilities are run by small teams of 1-3 staff, and 90% employ less than 10 people. Additional calculations reveal that the average number of employees is 5.6 and the median is 3.75. Since 936 employees work in the 170 BIs that responded to the survey, we can extrapolate from the survey sample to the entire population of BIs, giving an estimate of 5,500 people currently working for Europe's business incubators.

Table 3 shows that a large majority of BIs are currently supporting 1 to 30 tenant firms. In the top tail of the distribution, 13% of BIs support 50+ start-ups. The average number of firms per BI is therefore 25 with a median of 18. Summing across all the BIs that responded to the survey produces a total of 4,298 firms. Extrapolating as before implies that close to 24,000 firms are currently supported by BIs in Europe.

"The incubator has a small permanent staff of 3. The other 9 full-time equivalents are part-time mentors and service providers who provide their time gratis. The incubator is here to provide easy-in easy-out terms to university spin-outs and the private sector, with follow-on accommodation available on-site to a high standard."

BI viewpoint

Box 2

This is an impressive figure, and the data in Table 4 for the total number of firms supported by BIs since these began to operate is noteworthy too. About three-fifths of BIs have supported 1-50 firms thus far. The remainder is characterized by a great dispersion in the history of firm support, with a non-negligible 15% having helped in excess of 150 firms. The average number of firms per BI is 89 with a median of 40. The total firms that have undergone incubation for all 170 responding BIs is 14,100. Supposing that this figure is representative of the entire population of BIs in Europe would imply that around 80,000 firms have obtained support so far.

One possible indicator of the resource productivity of BIs is found by dividing the current number of tenant firms by that of employees. This calculation indicates that on average there are 6.4 tenant firms per BI employee (with a median of 5). There is a great deal of variation around this figure, which is to be expected, as some BIs rely more heavily than others on external specialists (sometimes assisting on a pro bono basis) and the human resources needed depend on the type of program, which is a function of many factors including the technological intensity.

Another performance indicator is the number of tenant firms that have been leaving BIs each year. The data shows that on average 9.2 firms graduate from a BI in a given year (with a median of 6). This suggests that 1/3 of tenant firms graduate each year, which is consistent with an average duration of 3 years for BI programs.

Without information about the survival and expansion of these firms, this study cannot assess whether their passage through a BI helped them to prosper and to boost their economic impact. This is an important question for current and potential BI sponsors and would deserve further data collection and analysis.

Table 3
Tenant firms currently in BIs

Percentage of respondents

1-10	27%
11-20	31%
21-30	16%
31-40	8%
41-50	6%
51-60	5%
61-	8%

Table 4
Tenant firms in BIs up to now

Percentage of respondents

1-25	36%
26-50	25%
51-75	9%
76-100	4%
101-125	4%
126-150	7%
151-	15%

Mission and organization of Europe's BIs

A variety of business incubation models co-exist in Europe, reflecting both the evolving ideas about what constitutes best practice in this area and government initiatives that established successive waves of public incubation programs. This section presents information describing some of the key dimensions in which these models differ. These dimensions are the sources of sponsorship, the nature of the financial goals, the degree of industrial and technological specialization, and characteristics about the offer of physical space and added-value services.

A variety of resources are used to cover the costs of operation incurred by BIs, as shown in Table 5, which presents the sources of sponsorship.

Table 5

Sources of sponsorship

Percentage of respondents

Publicly sponsored	48%
Privately sponsored	12%
Mixed sponsorship	38%

Table 6

Financial orientation

Percentage of respondents

Not-for-profit	70%
For-profit	30%

"We are a rural science park. We incubate our own companies in order to provide a flow of new tenants for our larger units and to maintain a sustainable business model. Although incubatees have their own area, they mix with more established companies in the same building. All are high-tech, most are reliant on their own or licensed IP for their business model to succeed."

BI viewpoint

Box 3

Almost half the BIs reported that they are sponsored entirely with public funds, two-fifths receive mixed sponsorship and one-tenth are financed from private sources. These figures highlight the widespread public support for BIs as an instrument of entrepreneurial policy.

The division by financial orientation in Table 6 shows that there is a strong tendency for BIs in Europe to operate as not-for-profit entities: two-thirds have this orientation; the remaining third are for-profit. Surprisingly, there is only a weak relationship between the sponsorship of a BI and its financial orientation (the correlation between public sponsorship and not-for-profit status is .28; that between private sponsorship and for-profit status is just .15). One potential reason for this is that BIs typically support entrepreneurs that face more or less pronounced financial constraints, which makes it unfeasible to aim for full-cost recovery. In this context, the most appropriate financial criterion for measuring success could be sustainability over the long-term rather than year-to-year profitability.

Table 7 presents the industrial and technological specialization of BIs. A

third of BIs responded that their firms are specialized in a niche or industry, such as biotech, digital media, and software. The proportion of BIs that specialize in incubating innovative firms is larger still, about three-fifths. This is a signal that entrepreneurship and innovation structures and public policies are closely intertwined in the case of BIs. It is a trend that is likely to continue in the future, because delivering business support services to innovating companies is essential for creating a knowledge-based economy and improving

"The role of both the university and local authorities has been fundamental for expanding the incubator. Besides sponsorship in various forms, joint promotion to raise awareness within the campus in the domains of IP protection, entrepreneurship and funding for business creation has been important."

BI viewpoint

Box 4

competitiveness in the EU. On the supply-side, this specialization suggests that many entrepreneurial opportunities are thought to exist in high-tech areas, to some extent owing to the strength of Europe's scientific institutions, but that successful transfer to industry via SMEs requires tailored support.

To make the best use of the physical and human resources BIs are endowed with, as well as to increase their economic impact, the process

Table 7

Industrial and technological specialisation

Percentage of respondents

Specialised in a niche or industry	29%
Only incubates innovative firms	58%

of business incubation is almost always selective and temporary. That is, would-be entrepreneurs are selected according to the potential of their projects, which can be measured in many different ways (expected growth, provision of patents, founder's business skills, etc.). And, once admitted into a BI, start-ups normally have a limited time in which to develop and relocate to a new locale, freeing-up space for the next generation of firms.

Table 8 implies that many European BIs take these important management decisions by developing and applying standardized criteria. Standardized entry criteria are in place in three-quarters of BIs and around one-half have criteria for exit; 42% employ both types of criteria. Notice also that entry and exit criteria are used to the same extent by BIs assisting innovative firms. Of course, the criteria may differ, as science-based BIs presumably need to check the technical feasibility and potential market of complex products and services.

Table 9

Physical spaces for lodging tenant firms

Percentage of respondents

Firms located in facilities managed by the BI	76%
Firms located off-site in an industrial or science park	34%
Firms located off-site in rented space	24%

Table 10

Delivery of business services

Percentage of respondents

Directly offer added-value business services	69%
Hire external business service providers	50%

Table 8

Entry and exit criteria

Percentage of respondents

Use standardised criteria for selecting firms	73%
Use standardised criteria for exit of firms	43%

“There is a policy to encourage exit after four years by raising the rent to approximately current commercial rates, but no formal limit on time; some smaller companies may well choose to stay indefinitely as they benefit from the location and the business administration support services.”

BI viewpoint

Box 5

The physical spaces for tenant firms are by-and-large managed by BIs, as shown in Table 9. Nonetheless, about one-third of responding BIs also locate start-ups off-site in industrial and science parks, and one-quarter locate tenant firms in off-site rented space. The high propensity for BIs to directly manage the spaces where firms are lodged is a consequence of the origins of business incubation, which at the beginning was seen as a way of sharing office space and clerical services to reduce fixed costs. It has continued to be a central feature of incu-

bation because of its positive results. Apart from reducing costs for tenant firms, proximity allows a closer interaction between the BI team and the founders, and among start-ups themselves.

There are quite a few BIs that report locating firms in multiple types of space: one-quarter

of BIs use a combination of managed facilities and industry/science parks to house firms, and one-tenth use all three types of space. A plausible explanation for this finding is that expansions in on-site space require “lumpy investments,” which can only be justified if there is enough unsatisfied demand from entrepreneurs, whereas off-site spaces provide BIs with added flexibility to accept start-ups at short-notice and allow start-ups that

are growing more rapidly to migrate to larger spaces.

Added-value business services are the second defining component of a business incubation program. In the survey results reported in Table 10, we can see that a majority of BIs offer such services directly, but that about one-half hire external consultants to provide these services. There is an overlap in this respect too, with two-fifths of BIs providing business services directly and through consultants.

In general we might expect that variables such as the size of the facilities and full-time staff will generate different “divisions of labor”. BIs with a smaller staff are more likely to provide general business advice in-house and to call upon external specialists to satisfy specific accountancy and legal needs. A more in-depth analysis would be needed to ascertain whether reasonably well-identified organizational models exist. We leave a solution to this question for future analysis.

Managing risks during firm creation

During their creation and early development, firms are exposed to many risks. The survey asked BI managers about the significance of these risks for tenant firms and what incubator services and options exist to mitigate them.

Table 11 lists the results to a question that differentiates between major classes of risk that have been identified in firm risk assessment frameworks. This shows that BIs consider business, market, and financial risks as the most significant. Organizational risks come lower in importance, and the least significant risks are technical, operational and intellectual property (IP) risks. From this ranking, we can draw the preliminary conclusion that the main variables that need to be monitored and managed by start-ups have to do with the general business strategy, the competitive environment, and financial factors.

“To me business incubation is running an operation aiming at bringing a new venture to the market faster and safely and making it a stable actor on that market. To a high degree that means working with minimizing risks.”

BI viewpoint

Box 6

Table 12

Risks targeted by BI programs

Percentage of respondents

Business risks	81%
Operational risks	68%
Market risks	62%
Financial risks	61%
Organizational risks	64%
Technical risks	45%
Intellectual property risks	54%

Table 11

Types of risks affecting tenant firms

Percentage of respondents

	1	2	3	4	5
	Not significant ...		Highly significant		
Business risks → <i>strategy, managerial experience, expense policy, ...</i>	2%	6%	22%	31%	40%
Operational risks → <i>internal systems, premises, supply reliability, ...</i>	5%	23%	36%	25%	10%
Market risks → <i>degree of competition, nature of customers, ...</i>	3%	5%	17%	39%	36%
Financial risks → <i>balance sheet leverage, variable interest rates, ...</i>	2%	9%	22%	33%	33%
Organizational risks → <i>human resources, communications, ...</i>	4%	12%	37%	32%	15%
Technical risks → <i>new product/service/machinery, regulation, ...</i>	7%	19%	32%	32%	11%
Intellectual property risks → <i>patents pending, licensing costs, ...</i>	7%	28%	30%	26%	10%

A natural question is whether BIs are centering their efforts on mitigating these special risks. To respond to this, the survey also asked about the risks that were targeted. The results are listed in Table 12. Business risks are indeed targeted by a large majority of BIs. Somewhat surprisingly, operational and organizational risks are targeted by a larger proportion of BIs than are market and financial risks, and technical and IP are only slightly less recurrent.

A possible reason for this mismatch is that internal risks are more controllable than market and financial risks, which would lead BIs to address the strategic and organizational dimensions of starting-up. It could also be that

moderating business risks is viewed as a precondition for early stage development. And, since a competent management team will be better able to monitor and mitigate other risk factors, this could be a policy that endogenously reduces the overall risk to firm survival.

Diverse options and services are offered by BIs to assist firms in tackling these risk factors. As shown in Table 13, firms very often benefit from flexible durations, spaces, and leases in the course of the incubation program. They are also offered tailored fee structures in one-half of BIs. Given that surveys point to wide variations in employment and revenue growth for new firms, the importance

of this flexibility cannot be overstated. Thanks to these features of incubation plans, start-ups can temporarily avoid the overheads, transaction costs, and contractual rigidities they would face in the commercial real estate market. As a result, early-stage operational and financial risks are limited to some extent.

BIs also provide services to enhance risk-management capabilities in tenant firms. Among the services that are preventive in nature, the survey results show that BIs frequently provide advice that helps to identify and measure potential risks and losses, and recommend the choice of legal structures that can minimize personal liabilities. In about one-third of BIs, firms are also supplied with tools to monitor and mitigate risks. Remedial services, in the form of special support to overcome an unexpected event that could endanger a firm's continuation, is available to firms in one-half of BIs.

Besides flexible incubation plans and risk-management services, BI programs commonly include finance-oriented services that can minimize the risks for firms and their founding partners. Table 13 shows that there is nearly always support towards preparing business plans and financial

forecast. This process generates a wealth of information that can be used both as a starting point for attracting external finance and for decision-making within firms themselves. Another financial service consists in assistance for securing credit, investment, or export guarantees. This is available in two-thirds of BIs. Such guarantees have dual roles as well, because they directly hedge against specific risks and by so doing can serve to catalyze external capital for start-ups.

Almost all BIs in Europe are assisting start-ups to apply for government aids. This probably reflects the im-

“Providing a good network of contacts can provide solutions to most business problems.”

BI viewpoint

Box 7

portance of low-cost public funding for new firms and the public vocation and goals of many BIs. Since these aids require standardized applications, it is also likely that BIs benefit from “internal economies of scale” that make the task of applying for public support easier for successive generations of tenant firms.

Table 13

Risk-reducing options and services offered by BIs

Percentage of respondents

<i>Incubation plans with flexible duration of stay</i>	81%
<i>Incubation plans with flexible space and leases</i>	79%
<i>Incubation plans with tailored fee structures</i>	46%
<i>Advice to identify and measure risks and potential losses</i>	68%
<i>Tools for companies to monitor and mitigate probable risks</i>	36%
<i>Special support if an unexpected event threatens with discontinuation</i>	54%
<i>Advising firms to adopt legal structures that minimize personal liabilities</i>	58%
<i>Support in creating business plans and financial forecasts</i>	89%
<i>Assisting firms to obtain credit, investment, or export guarantees</i>	66%
<i>Assisting firms to apply for government aids</i>	88%

Bridging early-stage financing gaps

A large and accumulating body of evidence points to persisting “financing gaps” for early-stage firms in Europe, and especially for innovative ones. These gaps mean that some new firms that would merit financing are rationed based on observable characteristics such as their age, size, or product market. Ration-

ing takes two main forms: a firm's financing application can simply be turned down; in addition, a firm can decide not to apply because it expects to be turned down. The survey asked BI managers about the incidence and origins of the financing gaps faced by their tenant firms and about the existence of financing ser-

vices from BIs and public sources that help to bridge the gaps.

Table 14 presents the incidence of financing gaps among incubated firms (measured as the percentage of tenant firms that confronted a specific type of financing shortage, averaged across all responding BIs). Overall, the responses corroborate

the view that a significant fraction of new firms face gaps for most types of external finance. About two-fifths of tenant firms were reported to have encountered shortages for loans, whether for micro-credits of €25,000 or less, or for debt capital in excess of €25,000. One-third of tenant firms con-

Table 14
Tenant firms that confronted financing shortages, by source

Percentage of firms

Micro-credits	38%
Revolving loans	32%
Debt capital	37%
Loan guarantees	33%
Leasing	25%
Factoring	18%
Supplier credit	33%
Corporate SME bonds	12%
Business angel capital	33%
Venture capital	31%
Corporate finance	27%
Public equity capital	22%

Table 15
Characteristics of tenant firms accounting for financing shortages

Percentage of respondents

	1	2	3	4	5
	<i>Not significant ... Highly significant</i>				
Age of the firm	7%	9%	25%	40%	19%
Size of the firm	7%	18%	29%	33%	13%
New product/service	2%	11%	34%	36%	17%
Firm's growth prospects	1%	16%	32%	34%	17%
Geographic location	32%	36%	21%	9%	2%
Intangibility of assets	10%	26%	27%	27%	10%
Gender of owner(s)	57%	25%	13%	4%	1%
Amount of collateral	11%	20%	28%	32%	9%
Uncertainty in revenues	1%	8%	22%	46%	22%
Structure of prior debt	7%	19%	34%	31%	10%

fronted shortages for revolving loans (also known as bank overdraft facilities), loan guarantees, supplier credit delaying payments of invoices, business angel funding, and venture capital. Less significant gaps were reported for leasing, factoring, long-term corporate bonds (maturing in 5+ years), corporate finance, and equity capital raised in IPOs.

These results appear to oppose the widely-held belief that early-stage gaps for equity are more serious than for debt. Two comments can be made to put this in context. First, there is evidence that debt is the most widespread source of external finance for new and small businesses in Europe, and it is therefore natural that a larger proportion of tenant firms encounter effective shortages for this type of financing. Second, there is a great deal of variation around the average figures, and so a straight comparison may not be appropriate. For example, a similar number of

BIs (one-fifth of respondents) report acute debt and equity shortages, in which 75-100% of firms faced a shortage. A more detailed study is called for to track the inci-

dence of financing gaps for firms currently supported by European BIs, as compared to firms that already graduated from incubation programs, or to firms that started-up independently.

The survey asked about the firm-level characteristics that could explain financing shortages. According to the responses presented in Table 15, the most significant characteristics are the uncertainty surrounding a firm's revenues, its age and size, the fact that it is developing a new product or service, and its expected growth. On average, the degree to which assets are intangible, the amount of collateral, and the debt company's structure are considered less significant. Only a small fraction of responding BIs consider geographic location and the gender of founders to have a strong impact on external financing prospects.

To interpret these findings, it is worthwhile making a distinction between non-financial and financial firm characteristics. Based on economic theory, there is no a priori case for expecting a negative relationship between non-financial characteristics (such as a company's age, size, and innovativeness) and future profitability, at least once financial metrics such as the uncertainty in reve-

Other reasons that explain financing shortages:

"Credibility, communication and presentation ability of lead entrepreneur."

"Shortage of management skills."

"Venture investment shortages."

"Incubation is not a widely known concept."

BI viewpoints

Box 8

nue are fully taken into account. This implies that rationing of finance based on the characteristics identified by BIs, which also happen to be those that can be most easily observed by banks and investors, is likely to produce inefficient outcomes at the micro- and macro-level.

In this difficult financial environment, an important function of BIs is to provide financial services that are tailored to cash-constrained start-ups. As shown in Table 16, firms can obtain financial planning assistance and referrals to investors in three-quarters of BIs. These services are knowledge-intensive because they are based on informational capabilities and relational assets that are accumulated by BI managers and teams over long periods of time. As recently created BIs acquire more experience, we can expect that positive learning dynamics will improve the quality of these intangible-based services.

In a significant but smaller number of BIs, the financial services take the form of grants and seed funding. Only few BIs provide loans to firms. Compared to assistance and referrals, these three instruments directly supply capital to firms undergoing incubation. Moreover, in the case of seed capital, a feedback loop is created that ties the future resources available to BIs to the success of tenant firms. For-profit BIs

account for 50% of the incubators offering seed capital, which suggests that equity funding is a key ingredient in the recipe used by BIs seeking to make a profit. It could also indicate that for-profit BIs have greater capital availability. It is worth noticing that in some EU countries the rules of operation for publicly-sponsored BIs prohibit these entities

from directly lending to or investing in tenant firms.

The survey shows that public instruments endorsed at the local, regional, national, and EU level are supplying much-needed resources to incubated firms. Table 17 shows that the most widespread sources of public support are regional development agencies and national programs for SMEs and innovative firms, followed closely by support from local authorities and EU programs for SMEs. In addition, one-quarter of BIs report that EU programs for innovative firms, tax credits and unemployment benefits are useful for their tenant firms.

Several conclusions can be drawn from these results. First, that multiple levels of government are actively participating in a common effort to foster a supportive entrepreneurial climate. Second, that the programs supporting SMEs and innovative firms that are in place across EU countries can be seen as promoting a “positive discrimination” in favor of firms with exactly those characteristics that limit external finance from private sources. Third, that European programs are still limited in their reach compared to other public policies. Fourth, that tax credits and unemployment benefits play a secondary role for start-ups in most countries.

Table 16

Financial services offered by BIs

Percentage of respondents

<i>Assistance in financial planning</i>	79%
<i>Referrals to a network of investors</i>	76%
<i>Non-reimbursable grants paid from public funds</i>	41%
<i>Loans tied to added-value business services</i>	12%
<i>Seed capital in return for equity</i>	23%

Other financial services provided during incubation:

“Syndicate capitals from third party investors.”

“We run an investment readiness program and links to a business angel network.”

“Specific agreements with the local banking system to experiment new forms of financing in the start-up phase.”

BI viewpoints

Box 9

Table 17

Public sources of support for tenant firms

Percentage of respondents

Local authorities	45%
Regional development agencies	59%
National programs for SMEs	64%
National programs for innovative firms	58%
Tax credits	26%
Unemployment benefits drawn by the firm's owner(s)	27%
European programs for SMEs	41%
European programs for innovative firms	31%

Cross-country comparisons

The broad geographical coverage of the survey makes it possible to compare the responses from different countries, thereby uncovering distinctive national and regional patterns. To improve the statistical reliability of these comparisons, this section groups the ten EU accession countries and the Nordic countries (Denmark, Finland, Sweden). These two groups are compared with Austria, France, Germany, Spain and the UK, the countries for which we have a large enough number of responses.

A comparison of general characteristics shows that German BIs started to operate 5 years earlier than the EU average (median=2000), whereas BIs in accession countries started 2 years later. It also shows that BIs located in Austria and Nordic countries have fewer employees (2 vs. 4 at the EU-level), yet Spanish BIs have more (7).

The current number of incubated firms per BI is smaller in Nordic countries (14 vs. 18 for the EU); it is larger in Germany (35) and Spain (32). The historic total of incubated firms per BI is smaller in accession countries (28 vs. 40 for the EU) yet larger in Germany (75) and Spain (51). As could be expected, this implies a positive relationship between: the current numbers of employees and incubated firms; the years of

operation of BIs and the cumulative number of incubated firms.

The mission and organization of BIs changes a great deal from country to country. Compared to the EU averages that we reported before, a larger proportion of BIs receive public sponsorship in France and mixed sponsorship in Spain. BIs are more often organized as not-for-profit entities in France and Nordic countries, and as for-profit in Austria.

Specialization by industry/niche is more common in the UK, Austria and Spain, but less so in France and accession countries. Spanish BIs more frequently specialize in working with innovative firms, whereas the opposite is true of accession countries. In Spanish BIs, it is more common to employ standardized criteria for admitting firms; by contrast, Austrian and German BIs do not employ either entry or exit criteria as frequently.

Several marked differences exist in terms of the physical facilities. A larger fraction of BIs locate tenant firms on-site in Austria, Germany and Spain; this happens less in accession countries. Start-ups are often housed in industry and science parks in Spain, Nordic and accession countries; in the UK, this is less common. Off-site rented space is used relatively more in Spain and Austria.

Added-value business services are delivered directly (in-house) to a larger extent in Spanish and Nordic BIs; this is less prevalent in those located in Austria. The same pattern is true for national propensities to hire external service providers.

“Many of our companies have worked closely with one important customer to develop their offer and at the same time their venture. I do not know how this works in the rest of Europe, but in Sweden it is fairly common.”

BI viewpoint

Box 11

Taken as a whole, the results suggest there are several organizational models for European BIs, confirming the findings from a 2002 EC/CSES benchmarking study. This heterogeneity would make the search for universal best practices much more difficult, and there is no a priori reason to think these models will converge.

Whether such convergence is appropriate is open to question anyhow, as there are marked international differences in the risks and financing shortages perceived by BIs. Relative to the EU average, BI managers consider certain risks to be more significant in some countries. To give just two examples: business, market and organizational risks are considered to be less significant by German BIs; for Spanish BIs, technical and intellectual property risks are more so.

Paralleling the evaluation of risks, there are variations in the risks actually targeted by BIs and the specific risk-reducing services that are made available. For example, French BIs tend to tackle business risks more than the EU average, and to more regularly offer flexible duration and tools for monitoring risks. Nordic BIs focus more on market and financial risks, as well as to provide advice to measure risks and obtain loan guarantees.

“We are working to influence government policy so that more incubators can be established in our country. Therefore, we do not focus on pushing firms through our incubator. We use the lessons learnt to influence government policy.”

BI viewpoint

Box 10

Turning to the critical issue of early stage funding, we find that Austrian BIs consider financing gaps to be less pronounced, whereas French BIs reckon that gaps are substantial. The firm-level characteristics thought to explain these gaps vary from one country to the next. For instance, the firm's age is perceived to have a larger impact on external finance in Spain and a smaller one in Austria. For BIs in accession countries, geographic localization is important, but this is less so in France.

Different approaches are used by BIs to satisfy (at least in part) the "excess demand" for financing. Comparing the financial services of the BIs themselves, there appears to be a greater emphasis on assisting startups through financial planning and investor networks in Nordic countries. Conversely, a larger than average proportion of Spanish BIs propose grants and seed capital.

Regarding domestic sources of public funding, the survey responses indicate that local authorities have a

larger presence in France, national SME programs are tapped to a greater extent in Austria and national innovation programs are more widely available in Germany. Fiscal measures such as tax credits and unemployment benefits play a more prominent role in France. The propensity for incubated start-ups to access EU programs for SMEs is greater in Germany, yet smaller in accession countries; in contrast, EU innovation programs are more significant in Spain.

Conclusions and next steps

This report presented the first findings from the Survey of European Business Incubators. This exploration shows that BIs vary enormously in key dimensions related to their internal organization and the services offered to tenant firms.

If we consider that this diversity reflects an evolutionary process of adaptation by BIs to fundamentally different entrepreneurial climates, as demonstrated by the mixed perceptions about risks and financing shortages, this is surely a positive trait of the landscape of European BIs.

Collectively, BIs appear to be having a large impact on European entrepreneurship, in terms of supporting a very large and growing number of new firms. Further EU-level studies are needed to check the broader economic impact of these activities.

We hope the specific insights provided by this report will be useful for BI managers as they consider the optimal range and combinations of services, specifically for managing risks and leveraging-in resources for tenant firms.

The cross-country comparisons point to significant differences between BIs located in neighboring and relatively similar economies. The comparisons also indicate that specific domestic and European public aids are more helpful for start-ups in some countries, which is another finding that merits further examination.

Over the following months, the Economics of Business Incubation Project plans to undertake more detailed analyses about the links between

risks and financing shortages facing start-ups, on one hand, and the services from BIs, on the other. The results from follow-on studies will be made available in newsletters that offer answers to specific questions and discuss key issues.

In order to address the most relevant questions for BIs, we would like to invite all those that participated in the survey or read the report to send us their suggestions and comments to survey@incubation.fr.

Acknowledgements

The results in this report reflect the views of 170 BI managers working across the EU. We are grateful for their participation in the survey.

Valuable suggestions and support were received from BI and science park associations and networks, including VTÖ (Austria), BASTIC (Baltic countries), Retis (France), DIA (Netherlands), PBICA (Poland), APTE (Spain), SiSP (Sweden), Incubation Northwest (UK), SPICE Group, and the Gate2Growth Incubator Forum.

We are thankful to Fabrizio Condorelli, Paul David, Mayra Munguia, John Ulhøi and Krzysztof Zasiadly for insights and feedback; and to Malek Shabou (AFNIC) and Erwan Mas for invaluable help in developing the website and online survey.

The team responsible for this study consisted of John Gabriel Goddard and H ela Chouk, with advice and support from Michel Poix, Marc Isabelle, Emilie-Pauline Gallie, St ephane Pitoun, and Liliane Begat.

Appendix—Survey methodology

The survey of European Business Incubators was funded by a Marie Curie research grant awarded by the EC. It was designed and conducted by a research team at IMRI-Paris Dauphine University, with assistance from researchers and practitioners in many countries.

The target population included all business incubator structures active in the 25 European Union member countries. According to our research, there are just under 1,000 structures that provide on-site rental space (in the incubator or in close proximity) and added-value business support services for start-ups.

In April we emailed an invitation to participate in the survey to the managers of all these structures. We

emailed a link to the online questionnaire in early May. Around 5% of those invited replied that they did not provide business incubation services — either the facilities were in construction, had been closed, or the service range did not include business support.

Country-by-country reminders were emailed to non-respondents in late May, giving BI managers information about survey response rates. We offered to post paper copies of the survey, but few BIs responded in this way. A second email reminder was sent to non-responding BIs in late June, specifying a July deadline for submitting responses. This allowed a two month window for responding to the survey.

With the dual objective of promoting increased response rates and collaboration in the dissemination of results, we contacted each association and network of BIs and science parks in Europe. A Polish translation of the questionnaires was produced by PBICA to assist respondents in Poland. Several French BIs asked for a translation, which we produced and distributed in June.

Valid responses were obtained from 170 BIs. This is an 18% response rate, which is typical of voluntary firm-level surveys. The sample is reasonably representative at the EU level, as response rates range between 10-70% in most countries. Individual responses will be treated as confidential for reporting purposes.

The Economics of Business Incubation Project (Incunomics)

IMRI, Paris Dauphine University
Place du Maréchal de Lattre de Tassigny
75775 Paris Cedex16
France

Tel.: +33-(0)1 44 05 49 82
Fax: +33-(0)1 44 05 48 49
E-mail: info@incubation.fr

“Our goal is to develop and disseminate economic tools and data for the business incubation community.”

**Find us on Internet:
www.incubation.fr**

The Economics of Business Incubation Project (Incunomics) was initiated in 2004 with the objective of contributing studies about business incubation based on an economic perspective. The initiative is organized by economists at Paris Dauphine University in France and benefits from funding by an EC research grant.

Our main activity at present is the Survey of European Business Incubators. Other ongoing studies are developing and applying economic tools to examine the: characteristics of “national systems of incubation”; interactions between incubators and early stage investors; contractual arrangements of incubators and tenant firms to foster entrepreneurial-specific investment.

The findings and analysis for the Survey of European Business Incubators and further studies will be made available online, so that entrepreneurs, incubator managers, policymakers, and those interested in the economic dimensions of business incubation can make use of these resources.

Contact: Dr. John Gabriel Goddard, Coordinator of the
Incunomics Project, E-mail: info@incubation.fr