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**Working Paper**

## Public provision of business support services in Finland

ETLA Discussion Papers, No. 850

**Provided in Cooperation with:**

The Research Institute of the Finnish Economy (ETLA), Helsinki

*Suggested Citation:* Väänänen, Lotta (2003) : Public provision of business support services in Finland, ETLA Discussion Papers, No. 850, The Research Institute of the Finnish Economy (ETLA), Helsinki

This Version is available at:

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# ETLA

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## **Keskusteluaiheita – Discussion papers**

No. 850

Lotta Väänänen

### **PUBLIC PROVISION OF BUSINESS SUPPORT SERVICES IN FINLAND\***

\* Lotta Väänänen, Etlatieto Oy, Lönnrotinkatu 4 B, FIN-00120 Helsinki, E-mail: [lotta.vaananen@etla.fi](mailto:lotta.vaananen@etla.fi). This paper is one of the supporting studies conducted for the Evaluation of the Finnish Innovation Support System, and as such, its main task is to function as support material for the evaluators. The appendix of this paper provides a description of the second (November 2002) ETLA survey on SMEs. The views expressed are those of the author. The usual caveat applies.

**VÄÄNÄNEN, Lotta, PUBLIC PROVISION OF BUSINESS SUPPORT SERVICES IN FINLAND.** Helsinki: ETLA, Elinkeinoelämän Tutkimuslaitos, The Research Institute of the Finnish Economy, 2003, 59 p. (Keskusteluaiheita, Discussion Papers, ISSN 0781-6847; No. 850).

**ABSTRACT:** The Finnish government, in addition to providing finance to SMEs, has established a number of support mechanisms that provide assistance to SMEs via free or subsidized business support services. In this paper, we review the public organisations providing business services, and the instruments used. Using recent survey data on SMEs, we explore what kinds of SMEs use public services, and examine whether firm characteristics differentiate between users of public and private sector services. The appendix to this study presents the survey and the responses to it. We find that there is currently quite extensive service provision by the public sector, which may have both positive and negative implications. For one, it is encouraging to find that Finnish SMEs are supported throughout their growth cycle, and that the public sector organisations have taken an active role in further developing their cooperation to better serve the customers' needs. It is also positive to find that innovative firms are more likely to use public services, and thus there are likely to be some social returns from them due to positive externalities. However, there is also a concern of whether the extensive public sector activity has the effect of crowding out otherwise profitable private business, thus hampering the development of markets for SME consultants and service providers. For this reason, the public sector should put effort into examining where market failures exist and focus its activities where the private sector is not present but which can have positive social returns. Areas where the public sector would seem to have a clear role in service provision are, for example, in collecting and disseminating information, and in coordinating programs that involve networking.

**VÄÄNÄNEN, Lotta, JULKISEN SEKTORIN LIIKETOIMINNAN TUKIPALVELUJEN TARJONTA SUOMESSA.** Helsinki: ETLA, Elinkeinoelämän Tutkimuslaitos, The Research Institute of the Finnish Economy, 2003, 59 s. (Keskusteluaiheita, Discussion Papers, ISSN 0781-6847; No. 850).

**TIIVISTELMÄ:** Sen lisäksi, että Suomen valtio tarjoaa julkista rahoitusta suomalaisille pienille ja keskisuurille (pk-) yrityksille, se tukee niitä myös tarjoamalla niille palveluita. Tässä tutkimuksessa tarkastelemme minkälaiset pk-yritykset käyttävät julkisia liiketoiminnan tukipalveluita sekä tutkimme eroavatko julkisen ja yksityisen sektorin palveluita käyttävät yritykset ominaisuuksiltaan. Tutkimuksen liite sisältää kattavan kuvauksen tehdystä kyselystä sekä sen vastauksista. Selvitys osoittaa, että julkisen sektorin liiketoiminnan tukipalvelujen tarjonta on laajaa, ja sillä on pääosin positiivisia mutta mahdollisesti myös joitain negatiivisia vaikutuksia. Positiivisia havaintoja ovat, että pk-yrityksiä tuetaan läpi niiden elinkaaren ja että julkiset organisaatiot ovat lähteneet kehittämään yhteistyötään vastatakseen niiden tarpeisiin entistäkin paremmin. On myös positiivista havaita, että innovatiiviset yritykset käyttävät julkisia palveluita suuremmalla todennäköisyydellä kuin keskimääräinen pk-yritys, jolloin palvelujen käytöstä voidaan odottaa, ulkoisvaikutusten johdosta, myös yhteiskunnallisia hyötyjä yrityksen saaman hyödyn lisäksi. Huolen aiheita ovat, että laaja julkisen sektorin palvelujen tarjonta saattaa syrjäyttää yksityistä liiketoimintaa ja hidastaa yksityisen sektorin pk-yritysten konsultoinnin ja muun palveluntarjonnan kehitystä. Julkisen sektorin tulisikin ottaa toimintansa lähtökohdaksi markkinapuutteiden selvityksen ja siten rajata omaa rooliansa sellaisiin aktiviteetteihin, joita yksityinen sektori ei tarjoa, mutta joilla voidaan saavuttaa yhteiskunnallista hyötyä. Alueita, joilla julkisella toimijalla näyttäisi olevan selvä rooli ovat esimerkiksi tiedon kerääminen ja levittäminen sekä yritysten verkottumisen tukeminen.



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# 1 Introduction

Small and medium sized enterprises (SMEs) are considered to be an important source of innovation and economic growth. Thus, the Finnish government, through the administrative body of the Ministry of Trade and Industry (MTI), has established a number of support mechanisms that provide assistance to SMEs in terms of finance as well as via free or subsidized business support services. While recent studies have provided evidence on the government funding of SMEs in Finland (see, for example, Hyytinen & Väänänen 2003, Hyytinen & Toivanen 2003), the provision and use of various services that support SME development has remained so far little examined. The aim of this paper is to present some answers to the following questions: What kinds of services to promote SME development are offered by the various government organisations? How well does the public sector cover SME needs for business support services during different phases of development? Are there any gaps, or on the other hand overlaps, in service provision by the various players, both private and public? What kinds of SMEs use public business support services, and are there systematic differences between SMEs that use public and private sector services?

The fundamental economic rationale for government intervention in the market is based on the concept of market failure. Probably the most important kind of market failure, when considering the public sector role in service provision for firms, comes from the specific features of knowledge that render it a “public good”. For one, collecting and analysing information involves incurring sunk costs, i.e., costs that cannot be recovered through other uses. Furthermore, information is a non-exclusive good, i.e., somebody’s use of a piece of information does not prevent others from using the same piece of information. For these reasons, private actors may underinvest in information acquisition; at the same time, the social returns to such activities can be large. To generate the highest level of social returns, information should be distributed at marginal cost and this is likely to make these activities unprofitable. Second, externalities are often present in activities that involve knowledge creation. Firms may underinvest in training their personnel, because some returns from it will be lost once employees leave. However, the acquired skills and knowledge are not lost from the society’s point of view as the trained personnel can put their skills into use in other firms. Thus, the social returns from training, when it is general rather than firm-specific in nature, are higher than the private returns. This justifies the government’s role in activities that involve knowledge

creation that benefits the society at large. Provision of free education is a prime example of this. Externalities are also involved when information flows between firms, universities and research institutes, and these are especially prominent in research and development (R&D). The government can have a role in helping firms benefit from inward spillovers originating from research conducted outside the firm, as well as in promoting the realisation of outward spillovers, through supporting R&D networking and cooperation.

However, the provision of free or subsidised business support services by the public sector can have the effect of distorting markets if it is active in areas where no market failure is present. Thus, the identification of a market failure should form the basis of intervention, and otherwise the role of the public sector should be in promoting the development of a viable market for business support services (“conditions providing” or “enabling policies”). One way of doing this in practice would be by having a role as an information intermediary between private sector service providers and firms using them, rather than an actual producer or subsidizer of services.

The rest of the paper is structured as follows: Section 2 describes the main public organisations active in SME business service provision in Finland and provides an overview of the kinds of services offered; Section 3 presents a descriptive analysis of recently collected survey data on SMEs and their use of business support services. Section 4 goes on to extend the empirical analysis to identify what kinds of firms use services offered by the public and private sectors. Section 5 concludes. The appendix presents a description of the survey, the survey questionnaire, and tabulations of the survey responses.

## 2 Public sector service provision

In Finland, there are four public institutions under the MTI that have a significant role in providing business support services, other than direct financing, to SMEs: Foundation for Finnish Inventions (*FFI*), the National Technology Agency (*Tekes*), Employment and Economic Development Centres (*TE-Centres*), and *Finpro*. Finnvera Plc., and Finnish Industry Investment are not included in the study because their tasks are mainly in



financing.<sup>1</sup> The public sector organisations providing support to firms have recently begun to deepen their cooperation with each other. The first result of this is seen as the portal Yritysuomi.fi, which acts as a gateway to all the services provided by the public sector organisations. For the purpose of this study, a business support service refers to any kind of service offered to firms for the purpose of business development, for example, advising, consulting, training, evaluating, planning, providing information, finding partners, and coordinating programs.

## 2.1 Foundation for Finnish Inventions

The Foundation for Finnish Inventions (FFI) was established in 1971. Its task is to support and promote Finnish inventive work and the development and exploitation of inventions. The FFI has a staff of 23 persons at Espoo Innopoli, and in addition 26 invention agents at the main universities and at the regional TE-Centres around Finland offer FFI's services. According to the FFI, their personnel are experts on technology, the development of inventions and on marketing. They can also consult outside experts, mainly from universities and research institutions, for evaluating invention proposals. Outside experts abide by the confidentiality, which is a principle of the FFI. The FFI's budget is around 5 million euros, which comes mainly from the government.

The FFI's services and funding provide a chain of support for individuals and micro enterprises throughout the invention process up to commercialisation. However, due to their small financial resources, for example patenting abroad is typically too costly for them to fund. Invention agents provide free information and advice on the development of inventions, patenting, and commercialisation. They conduct evaluations of inventions, and provide expert assistance on the protection of inventions. The FFI also provides support for marketing inventions by presenting new products at fairs, events, and various media, as well as by maintaining an Invention Market where inventions can be sold, licensed, and purchased. The FFI can also help establish links with businesses locally and abroad, as well as provide legal and contractual assistance related to inventions.

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<sup>1</sup> There are many other important providers of public services from which SMEs can benefit, for example the education system and Statistics Finland to name a couple. These other institutions are outside the scope of this study.

The Foundation for Finnish Inventions provides advice to about 17,000 clients and undertakes evaluations of about 2,300 inventions annually. In 2002, they received 1,000 funding applications and provided financial support for the patenting, product development and commercialisation of 200 inventions. From the supported inventions, about 20% are commercialised either in the form of the inventor-entrepreneur's own production or under a licence agreement.

## 2.2 Tekes

Tekes, the National Technology Agency, is the main financing organization for research and development (R&D) in Finland, established in 1983. Tekes provides funding and expert services for R&D projects at companies registered in Finland and at Finnish research institutes and universities, and promotes national and international networking. Tekes has headquarters located in Helsinki and overseas offices in four cities: Brussels, Tokyo, San Jose and Washington D.C. In Finland Tekes' services are also available via the network of the TE-Centres. Tekes has a staff of over 200 people at the headquarters, 14 people at the overseas offices, and 56 technology agents at the TE-Centres, and it also uses some 45 outsourced managers for its technology programs.

Tekes offers a range of support funding and services for SMEs' and large firms' R&D, especially when related to new technology. Tekes publishes guides for the development of a firm's technology strategy and for searching for cooperative R&D projects. Tekes also offers assistance for the evaluation of R&D projects. SMEs can participate in Tekes' technology clinics where firms get assistance in gaining access to research results and expertise from Finnish universities and research institutes. Tekes also organizes technology programs in selected strategic areas. The aim of these programs is to promote the competitiveness of industry and enhance technological cooperation and networking of both SMEs and large firms. Technology seminars are often tied with a technology program and aim to shed light on specific technology fields. Technology law services such as legal issues of R&D cooperation and consultation on IPR matters are also available from Tekes. Tekes' TULI-program provides support for the mapping, evaluation, and development of researchers' business ideas related to technology. The LIKSA program, offered in cooperation with Sitra, provides assistance (including pre-seed funding) in the initial phases of technology start-ups. Both of these programs in-

volve support services that are provided by technology centres and technology transfer companies in Finland.

In 2001, Tekes funded 2,261 research and development projects to a total value of 387 million euros. Two thirds of this funding was aimed in the form of grants and loans at company research and development projects and one third at university and research institute projects. In 2001, there were 45 on-going technology programs in which there were 2,530 firm and close to 920 research organisation participations, and 185 million euros was directed through these programs. Technology clinics undertook 119 assignments from SMEs, and around 1 million euros was spent on these.

### 2.3 TE-Centres

TE-Centres are a network of 15 regional offices under ministerial supervision<sup>2</sup>, with business departments, whose main task is to serve the needs of SMEs by providing business support services, consultation and advice, as well as finance. They were established in 1997. TE-Centres provide advice for various business needs and can help businesses in finding the right services and funding to each particular case. Furthermore, they offer subsidized business development services, outsourced from private consultants. The business departments employ about 250 people nationwide.

TE-Centres' outsourced services include services from supporting start-up to business management and internationalisation. The *ProStart* program involves conducting a feasibility study of a business idea and a plan for developing it. For the early growth phase of small business development, TE-Centres offer the *PostStart* program. The *Pikara* -growth financing program guides small firms through growth. The *Design-Start* program involves planning and designing the image of the company's and/or its products. Firms beginning to export or already exporting can participate in export days and short courses offered by the TE-Centres. TE-Centres also offer the *Globaali* internationalisation program, which involves analysis, implementation, and follow-up of an internationalisation strategy, as well as long-term internationalisation programs lasting 1-2 years for firms with established export operations. In addition, Euro advice centres at the TE-Centres offer a range of services from information to searching for partners in

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<sup>2</sup> More specifically, TE-Centres operate under the supervision of MTI, Ministry of Agriculture and Forestry, and Ministry of Labour. MTI is responsible for their general administration.

the EU. TE-Centres also offer a range of business development programs to improve SME profitability and manageability. *Kunto* is meant for improving competitiveness of SMEs, *Tuotto+* is intended for improving firm profitability as a result of cooperation between management and personnel, *Balanssi* focuses on the firm's financial situation and its development. *Myyntiteho* is to improve the efficiency of the firm's sales and marketing operations. *Viestinvaihto* supports generation transfer in firms, where the founder is leaving the firm and looking for a follower. *EAskel* helps firms to identify and utilise opportunities brought about by the use of data networks in their businesses. Finally, SMEs requiring management training can participate in the young firm management program or ladies' business school, offered by the TE-Centres.

In 2003, the business departments at the TE-Centres have a total budget of 155 million euros, of which 65 million comes from the EU and 90 million from the Finnish government. Most of this is provided as subsidies through the EU structural fund programs. 18.5 million is spent on the outsourced business development or consulting services for SMEs. Overall, over 5000 firms used the consulting and business development services offered by the TE-Centres', and over 1,500 outsourced consulting service programs were held in 2002.

## 2.4 Finpro

Finpro is an expert service organization, partly financed from public funds, providing business support services for internationalisation. Its services include market information and advice, business development, consulting and marketing services. Finpro has a long history in promoting the internationalisation of Finnish companies, for it was founded in 1919 as the Finnish Export Association and later known as the Finnish Foreign Trade Association before being named Finpro in 1999. Today Finpro has a network of 50 Finland Trade Centres in 38 countries and personnel of 210 people abroad and 130 people in Finland.

Finpro offers free advisory services and information on markets and foreign trade to Finnish firms beginning to export or entering new markets. Finpro's publications, such as Country Files, Trade Show Catalogue, and Shipping Handbook, serve as sources of information for companies. Project guide offers information on internationally funded projects and helps firms take part in them. Finnish firms can present themselves and their products to international companies in Finpro's Export Registers. Pro-

ject advisory services convey tenders from major international financiers, and business leads services transmit enquiries about Finnish products and cooperation partners. Firms can also participate in EU business events coordinated by Finpro. Participation in Finpro's long-term cooperative Export groups, where participating companies' products complement each other, facilitates the sharing of experiences with other companies together with Finpro's expertise.

Firms can purchase services for their international marketing needs from Finpro Marketing Ltd. Finnish firms can be presented in Finpro's industry- and region- specific business publications to increase their international recognition. With Finpro's coordination, firms can participate in industry specific trade shows, and in various market area events. Firms can outsource Finpro to organize communication programs such as company and media visits for foreign clients, journalists and partners to their firms. In fact, firms can outsource all of their international marketing from Finpro Marketing Ltd.

Firms beginning to export or entering new markets can take part in Finpro's range of business development programs, which are essentially on-going consultation processes. *Intro* evaluates the internationalisation potential and market opportunities of the firm's products. *Ultra* focuses on the development of an internationalisation strategy and business plan. *Inka* is specifically designed for evaluating the market potential of an innovation to determine its suitability for international markets. *Risco* analyses the risks involved in the firm's internationalisation process. *Entra* phase is to ensure successful market entry into new markets, and finally *Impro* is intended for improving market position and evaluating the competitive situation.

In addition to directly serving SMEs, Finpro has linked itself more closely with the Finnish innovation support system. According to Finpro, it has:

“reviewed and redefined its mission and focuses in a way that offers a new kind of contribution to the other public inno-organizations. Finpro offers these organizations the expert services needed in their own development and research programs, either through specific projects or through consulting assignments. Through its extensive international network, Finpro is able to suggest new challenges and initiatives and thus help enterprises and public innovation organizations to steer their own activities according to the forecast market opportunities. Finpro's public funding will increasingly be based on its mission as an inno-organization and on projects financed through the new partners.”<sup>3</sup>

In 2002 Finpro had about 4,800 Finnish companies or organizations as its clients. Over 60% of the clients are SMEs. Finpro carried out over 2,200 expert assignments –

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<sup>3</sup> <http://www.finpro.fi/page.asp?Section=3445>

target market analyses, start-up assignments, partner searches, drawing up and execution of internationalisation plans – in Helsinki and Finland Trade Centres. During 2002 about 13,000 companies, organizations and individuals used Finpro's basic services, advisory and market information services. About 80 % of the requests came from SME companies. Over 1,300 client companies participated in the 160 marketing communication projects carried out in Finland and abroad in 2002.

## 2.5 Assessment

Overall, it seems that there is a relatively large number of different kinds of public services offered, and that it is difficult to find any significant gaps in service provision. Thus, it seems that all kinds of SME needs are covered. On the other hand, there are relatively few overlaps between the services offered, and it seems that the roles of the different organizations are fairly well defined to perform different tasks. Table 1 provides an overview of the services provided categorized by the purpose for which the service is targeted. The following points summarize the division of labour between the four organisations:

- TE-Centres are the main organization providing services for general business development needs, both during start-up and growth as well as for organizational development.
- Innovative start-ups, based on inventions or new technology, have access to the services of the FFI and Tekes. These two organisations are specialized in supporting innovative firms and R&D with a clear division of labour between them; the FFI at individual and micro level, and Tekes at R&D intensive SMEs and large firms.
- One aspect where there is evident overlap is in the provision of internationalisation services: Finpro is specialized in this area but also the TE-Centres offer consultation and training services in this area. Some overlap may also exist between the services offered by the FFI's invention agents at universities and Tekes' TULI program in supporting the development of innovations originating from research.
- The TE-Centres have a special role in functioning as the regional network through which the services of the other organizations can be offered to firms around Finland.

However, it would seem that many of the consulting type of services could be provided by the private sector and it is questionable whether public sector provision and subsidizing is necessary. The question also arises of whether such extensive role of the public sector may hamper the development of a private market for business development services (crowding out). On the other hand, there are certain types of services which either involve large sunk costs or create positive externalities, and may never be privately profitable, such as information broker services and services involving networking.

- There are a couple of services, which involve networking or cooperation (sharing and transmitting knowledge between different parties): Tekes' technology programs and clinics, and Finpro's export groups.
- There are some services where the public organization acts as an information provider, for example Finpro's exporter registers and similar publications, and Tekes' publications and advisory services.
- Finpro also acts as an information broker in its project advisory services and business leads services, where it transmits enquiries and tenders for Finnish firms and projects. Tekes has a similar role in promoting international R&D cooperation, and TE-Centres through the Euro-advice centres. FFI's invention market also serves as an information intermediary.
- The portal Yritysuomi.fi acts as a gateway to all the services provided by the public sector organisations. This is a positive way of providing information to firms in one place. However, it could be worthwhile to include services offered by the private sector as well, or develop another portal for that purpose. In that way, the public sector would be enabling the development of a private market by bringing together the supply and demand and thus lowering the search costs for firms.
- Finpro's network of Trade Centres around the world is the kind of infrastructure that is unlikely to be provided by the private sector alone, because of its large sunk costs. However, the activities of the network could perhaps be developed to serve the needs of private sector service providers so that the information and knowledge gathered at the Trade Centres would be made available to all market actors. With its current mode of operation, its full social benefits may remain unexploited.

**Table 1. Business support services offered**

Purpose	Organization	Service	Description
<b>EARLY PHASE</b>			
Start-up	TE-Centers	Advice for all phases	Help find right services and funding
	TE-Centers	Trade register services	Setting up and registering a new business
	TE-Centers	ProStart	Evaluation and development of business idea
Early growth	TE-Centres	Pikara	Financing small firm growth training program
	TE-Centres	PostStart	Development after 1-3 yrs of operations
	TE-Centres	DesignStart	Developing product/firm design (logo, trademark, etc.)
<b>BUSINESS DEVELOPMENT</b>			
	TE-Centres	Kunto	Development program
	TE-Centres	Tuotto+	Program for improving firm profitability
	TE-Centres	eAskel	Utilising data networks, business on the internet
	TE-Centres	Balanssi	Program on firm financing
	TE-Centres	Myyntiteho	Sales effectiveness program
	TE-Centres	Viestinvaihto	Generation transfer program
	TE-Centres	Monitaito	Personnel skills program
	TE-Centres	Ladies' business school	Management training
	TE-Centres	Young firm management program	Management training
	TE-Centres	Taitava	Handicrafts program
	TE-Centres	Profiitti	Program for retail, hotel, and restaurant industries
	TE-Centres	Industry-specific expert advice	



Purpose	Organization	Service	Description
<b>INNOVATION</b>			
Research	Tekes	Technology clinics	For SMEs to exploit research and expertise from universities, etc.
	Tekes	TULI	Mapping, evaluation, development of researchers' ideas for business
Product development	Tekes	Project guide	Free publication for planning, starting and implementing product development
	Tekes	Guide for technology strategy	Free publication for preparing firm's technology strategy
	Tekes	Technology Reviews and Reports	Mainly free publications to distribute information on technology development
	Tekes	R&D project evaluation	Assistance on evaluation and development of R&D projects, and finding experts
	Tekes	Technology seminars	Provide info on development and outlook of specific tech fields
	Tekes	Technology programs	Cooperative, promote development of specific sectors
	Tekes	R&D cooperation	Information on international cooperation and financing possibilities
	FFI	Advice on developing inventions	
IPR	FFI	Invention agents	Advice (also at the TE-Centres and universities)
	FFI, Tekes	Advice on patenting	
	Tekes	Technology law services	Legal issues of R&D cooperation
Commercialisation	FFI, Tekes	Advice on licensing	
	FFI	Invention market	License, sell, purchase inventions
	FFI	Marketing communication	Present inventions at fairs and events
	Tekes	International tech transfer	Licensing and cooperation

Purpose	Organization	Service	Description
<b>INTERNATIONALISATION</b>			
Info and advise	Finpro	Call Center	Free advice
	Finpro	Country files	Basic information on 72 countries
	Finpro	Trade Fair Catalogue	Information on 3000 international trade shows
	Finpro	Project Advisory Services	Invitations to tenders from EU and other major intl. financiers
	Finpro	Business Leads Service	Enquiries about Finnish products and cooperation partners
	Finpro	Shipping handbook	Information on import regulations in 190 countries
	Finpro	Market area events	Information events for companies in every stage of internationalization
	TE-Centres	Euro-advice centres	Information and partner search for the EU
Consulting	Finpro	Intro	Analysis of international market opportunities of a business
	Finpro	Ultra	Managed internationalisation
	Finpro	Inka	Evaluating market potential of an innovation
	Finpro	Risco	Risk analysis of internationalisation
	Finpro	Entra	To speed up and reduce the risks of going to new markets
	Finpro	Impro	Improving position in a market area
	Finpro	Export groups	Cooperative programs for SMEs
	TE-Centres	Internationalisation training	
	TE-Centres	Globaali	SME internationalisation program, 3 days
	TE-Centres	Long-term internationalisation	Programs lasting 1-2 years
Marketing	Finpro	Registers of Exporters	Finnish firms and products presented internationally
	Finpro	Trade fairs participation	Full service for participating in trade fairs abroad
	Finpro	Marketing communications	Promotion in the target markets, lasts 1 yr
	Finpro	EU business events	Coordinated participation
	Finpro	Business publications	Make Finnish firms well known in selected target markets

### 3 Empirical analysis

The empirical analysis in this paper is based on two combined ETLA surveys on SMEs. The first survey, conducted between December 2001 and January 2002, offers detailed information on SMEs. The second survey, conducted in November 2002, complements the first one by asking more detailed questions on the use of public funding, as well as adds new questions on the use of public services.<sup>1</sup>

#### 3.1 Descriptive analysis

The second survey asked questions on both the availability and use of business support services provided by the private and public sectors. Regarding the public services, questions were asked both by the organization offering the service, as well as by the purpose for which the service was targeted. For the descriptive analysis, statistics are presented first for the representative Finnish SME population (by weighting the survey sample), and then separately for the three most technology-oriented sectors: “high-tech”, “medium-tech”, and knowledge intensive services (referred to as “info-intensive” in the tables).

Table 2 presents the proportion of Finnish SMEs that have used public services from each of the organizations during the last 12 months (i.e. essentially in 2002). The first column shows this proportion for the whole Finnish SME population, and the next three columns for the technology-oriented sectors.

**Table 2. Use of services by organization**

	Population	High-tech	Medium-tech	Info-intensive
Tekes	2.9 %	5.9 %	6.0 %	10.7 %
TE-Centre	8.0 %	23.5 %	24.5 %	15.1 %
Finpro	2.9 %	9.4 %	10.3 %	11.3 %
FFI	0.5 %	2.4 %	0.4 %	0.0 %
Any public	12.1 %	29.4 %	31.8 %	26.4 %

Source: ETLA surveys on SMEs

<sup>1</sup> For description of the first survey, see Hyytinen & Pajarinen (2003). For description of the second survey, please refer to the Appendix.

TE-Centre services are the most widely used, as expected, with 8% of Finnish SMEs having used them in the last 12 months. Tekes' and Finpro's services have been used by 2.9% of Finnish SMEs, while those of the FFI by only 0.5% of the SMEs.<sup>2</sup> It is evident that among the three technology-oriented sectors, the usage of services from any of these organizations is much higher than in the average population. Firms from the knowledge intensive services sector are the heaviest users of Tekes' and Finpro's services. The usage of TE-Centre's services is highest in the high- and medium- technology sectors. The FFI's services are mostly used by firms from the high-tech sector. About 12% of Finnish SMEs have used services from at least one of the above-mentioned four organizations during the past 12 months. Of the high-tech firms and medium-tech firms, 1/3 have used public services, and a little over 1/4 of firms from the knowledge intensive services sector have used public services.

Table 3 presents the usage rates of services from both the public and private sectors by the purpose for which the service was used: 1) early phase and growth of the firm, 2) innovation activity (including research, product- and process development, patenting or other protection of innovation, and licensing), 3) commercialisation and marketing (including exports and internationalisation), 4) development of the organization, management or personnel, and 5) other. First, looking at the use of public services, it shows that among the SME population, public services are mostly used for organizational development and marketing. The same applies for the use of private sector services. We also see that all types of services have a higher usage among the technology-oriented sectors than in the population. However, when looking at the relative differences between the technology-oriented sectors and the population, we see that the biggest differences are in the usage rates of early phase & growth and innovation services, where the usage is three to four times that in the population.

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<sup>2</sup> The FFI's services are targeted at individuals as well as micro firms.

**Table 3. Use of public vs private sector services by purpose**

	Population		High-tech		Medium-tech		Info-intensive	
	Public	Private	Public	Private	Public	Private	Public	Private
Early phase & growth	2.1 %	4.1 %	7.1 %	7.1 %	8.2 %	9.0 %	8.2 %	8.8 %
Innovation	3.2 %	5.5 %	9.4 %	9.4 %	12.9 %	6.9 %	12.7 %	9.4 %
Marketing & International.	7.2 %	8.6 %	22.4 %	11.8 %	17.2 %	14.6 %	20.9 %	23.3 %
Organisation. develop.	7.9 %	16.4 %	12.9 %	14.1 %	15.5 %	18.9 %	12.7 %	25.2 %
Other	1.3%	6.5 %	1.2%	7.1%	3.0%	6.9%	1.3%	6.9 %

Source: ETLA surveys on SMEs

The next thing to note is, that by comparing the use of public and private sector services in the SME population, the usage of private sector services is higher than that of public sector services for all of the different types. The interesting results come from comparing the service usage among the technology-oriented sectors: there the usage of early phase & growth services is about the same for both private and public. For innovation services, the usage is about the same in the high-tech sector but in the medium-tech and knowledge intensive sectors it is actually lower for the private services than for the public services. The same applies for marketing services for the high- and medium tech sectors.

The overall picture that arises from this table is that:

- The usage of private sector services is higher than that of public sector services for all of the different types among the whole SME population.
- The usage of all types of public services is higher for the technology-oriented sectors than for the SME population as a whole, most prominently for the early phase & growth and innovation services, where the usage rates are three to four times those in the average population.
- The usage of early phase & growth services by the technology-oriented sectors is about the same for both private and public services.
- For the innovation and marketing services, the technology-oriented firms rely relatively more on public services than on private services.

Table 4 has segmented all the service users in the sample (unweighted results) for a given service type into three categories: firms that have used only private services, firms that have used only public services, and firms that have used both public and pri-

vate services. This enables us to identify the proportion of firms within service users that rely on both public and private services for a particular purpose, and compare this across different service types. For innovation services, about 1/6 of service users have used services from both sectors. For early phase and growth this figure is 1/5 and for marketing and organizational development it is 1/4.

**Table 4. Service users: private, public and both**

	Private only	Public only	Both
Early phase & growth	47.7 %	33.0 %	19.3 %
Innovation	37.2 %	46.0 %	16.8 %
Marketing & Internation.	37.2 %	38.3 %	24.6 %
Organisation. develop.	50.0 %	23.5 %	26.5 %
Other	76.6 %	15.6 %	7.8 %

Source: ETLA surveys on SMEs

The above findings indicate that there are selection processes regarding the types of firms that use business support services. They also give some indication that certain firms are service users, using both public and private sector services, while others are not. However, no conclusive evidence on these issues can be provided without controlling for the other characteristics of firms that may be behind the selection process, and this calls for multivariate techniques. This is done in the next section.

### 3.2 Regressions analysis

The empirical model employed to study the characteristics of firms that have used public sector services, as well as firms that have used private sector services, is a Probit model. In addition, bivariate Probit regressions (unreported) are run, enabling us to analyse not only the characteristics of firms that use services but also, whether, even after controlling away most of the firm characteristics, there remain unobserved features that affect the use of public services and private sector services in the same direction. This is done by looking at the correlation between the error terms of the two regressions.

Separate Probits were run for Tekes, TE-Centres, and Finpro. The FFI is not included in the regressions analysis due to the small number of positive observations. The

dependent variables are: a dummy set to one if the firm has used services from the relevant public organization, and from the private sector. The explanatory variables are explained in table 5 below.

**Table 5. Variable description**

Name	Type	Description
AGE	continuous	the age of firm in years
EMP	continuous	the number of employees
SMALL	dummy	firm employs < 20 people and has a turnover of < 1 million euros
GROWTH	dummy	targeted average sales growth rate over the next 3 years > 10%
GROWN	dummy	turnover has grown by more than 5% during the last 12 months
PROFIT	dummy	firm's return on assets was positive in the last fiscal year
R&D	continuous	the ratio of R&D expenditures to sales
INTANG	dummy	the firm owns intangible assets, including patents
INNO	dummy	the firm innovated a product/process in the past three years
HIGHEXPORT	dummy	the firms exports/sales > 25%
AUDIT	dummy	the firm is audited by one of the 'Big Five' accounting firms
PUBF00	dummy	received public funding in the year 2000 or prior to it
PUBF01	dummy	received public funding in the year 2001
REGION	dummy	firm resides in an agricultural municipality
SECTOR		
High-tech	dummy	NACE Rev.1: 244, 30, 321, 322, 353
Medium-tech	dummy	NACE Rev.1: 24 (excl. 244), 29, 31, 323, 33, 34, 352
Info-intensive	dummy	NACE Rev.1: 642, 721, 722, 73, 743
Other	dummy	
PROVINCE		
Uusimaa	dummy	
West	dummy	
East	dummy	
North	dummy	Provinces of Oulu and Northern Finland

Note: Public funding includes all types of finance (grants, guarantees, debt, equity, capital loans). The "Big Five" accounting firms are KPMG Wideri, Arthur Andersen, SVH PriceWaterhouseCoopers, Tuokko Deloitte & Touche, and Tilintarkastajien Oy Ernst & Young.

Table 6 provides results of probit estimations for public services by organization and for private sector services. The following results come out from the regressions:

**Table 6. Probit regressions on service use**

	Private services		Tekes		TE-Centre		Finpro	
	Coeff.	z-stat.	Coeff.	z-stat.	Coeff.	z-stat.	Coeff.	z-stat.
AGE <sub>i</sub>	0.00	0.66	0.00	0.67	0.01	1.69 *	0.00	0.55
EMP <sub>i</sub>	0.01	3.59 ***	0.01	3.65 ***	0.00	0.65	0.01	2.09 **
SMALL <sub>i</sub>	-0.09	0.66	0.43	1.70 *	0.04	0.26	-0.22	0.91
GROWTH <sub>i</sub>	0.10	0.74	0.42	1.62	0.35	2.04 **	0.67	2.06 **
GROWN <sub>i</sub>	0.15	1.35	-0.57	2.77 ***	0.09	0.64	-0.08	0.40
PROFIT <sub>i</sub>	-0.21	1.15	-0.53	2.00 **	-0.21	1.00	-0.27	0.98
RD <sub>i</sub>	0.27	0.70	-0.17	0.30	0.03	0.07	1.19	2.22 **
INTANG <sub>i</sub>	0.09	0.67	0.00	0.01	0.03	0.17	0.54	2.51 **
INNO <sub>i</sub>	0.22	1.70 *	0.43	1.92 *	0.32	2.15 **	0.15	0.70
HIGHEXPORT <sub>i</sub>	0.10	0.61	0.76	3.25 ***	0.20	1.06	0.65	2.92 ***
AUDIT <sub>i</sub>	0.03	0.22	-0.04	0.17	-0.17	1.03	0.39	1.89 *
PUBF00 <sub>i</sub>	0.02	0.18	0.09	0.40	0.17	1.12	0.47	1.90 *
PUBF01 <sub>i</sub>	-0.09	0.66	0.55	2.38 **	0.53	3.39 ***	0.04	0.17
REGION <sub>i</sub>	0.07	0.46	0.17	0.62	-0.05	0.25	-0.50	1.42
SECTOR								
Medium-tech	0.07	0.37	0.17	0.44	-0.06	0.28	0.02	0.07
Info-intensive	0.27	1.25	0.57	1.45	-0.29	1.16	-0.13	0.36
Other	-0.03	0.14	0.42	1.08	-0.29	1.32	-0.20	0.58
PROVINCE								
West	-0.06	0.48	0.01	0.07	0.36	2.30 **	0.34	1.46
East	-0.12	0.55	-0.04	0.12	0.57	2.33 **	-0.21	0.55
North	0.32	1.61	-0.40	0.98	0.24	1.00	0.10	0.28
Constant	-0.75	2.43 **	-2.68	4.77 ***	-1.78	4.92 ***	-2.81	4.93 ***
Observations	600		594		596		597	
Log likelihood	-356.35		-106.89		-232.06		-104.25	
LR Chi <sup>2</sup>	59.17		84.54		81.44		130.38	
degr. of freedom	20		20		20		20	
significance	0.00		0.00		0.00		0.00	
Pseudo R <sup>2</sup>	0.08		0.28		0.15		0.38	

\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

Source: ETLA surveys on SMEs

There are some firm characteristics that seem to have a similar effect on the likelihood of a firm having used services from the public organizations:

- Firm's size, as measured by the number of people employed by the firm, appears to increase the likelihood of a firm having used services, both public and private, with the exception of TE-Centre's services.
- Innovative firms are more likely to have used public services. Firms that have innovated a product/process in the past three years are more likely to have used Tekes' and TE-Centres' services, and R&D intensive firms and firms with intangible assets are more likely to have used Finpro's services.



- If the firm had received public funding in the year 2001, it is more likely to have used public services, with the exception of Finpro's services. Receiving public funding in 2000, or prior to that, increases the likelihood of having used Finpro's services. For the use of private services, neither seems to have any significant positive effect.
- Firms with high exports are more likely to have used services from Tekes and Finpro. For private services, high exports do not significantly increase the likelihood of using them.
- Finally, firms with high growth expectations are more likely to have used services from any of the public organizations.

In addition to these effects, there are some differences between the kinds of firms using services from these organizations:

- Firms that have shown little growth in the past 12 months and firms that were not making a profit the previous year are more likely to have used Tekes' services. Also small firms, employing less than 20 people or having a turnover of less than €1 million, are more likely to have used services from Tekes.
- TE-Centres' services are more likely to have been used by firms in the Western and Eastern provinces of Finland, and by firms that are older.
- Finpro's services are more likely to have been used by firms with an international auditor.

Overall, what these results indicate is that there is a common factor in the kinds of firms that use public services; the firms are innovative and growth-oriented, as well as present in international markets. What they also tell us is that the roles of the public organizations are nevertheless different: Tekes' services are used at the early phase of the firm growth cycle or innovation process (small firms, little realized growth in turnover, loss-making, and received public funding last year), while Finpro's services at a later phase (an international auditor, intangible assets, and received public funding the year before last). TE-Centres' role in promoting regional policy is evident from the results, and its customers are older.

Finally, the results of (unreported) biprobit regressions are not different from those reported above. The correlations of the error terms (rhos and p-values) are reported below in table 7. These tell us that apart from Tekes' services, there is significant

positive correlation between the error terms of the two regressions (service use from a public organization and private sector service use). We can see, that the highest correlation is between Finpro's services and private sector services ( $\rho=0.509^{***}$ ). These positive correlations indicate that even after controlling for the firm characteristics, it seems that there are some unobserved features that affect the service use from both public and private sectors in the same direction. Finally, most firms replied that the reason for using a public sector service was *not* that they were unaware of an equivalent private sector service, *nor* that the quality of the public sector service was better, but the most commonly cited reasons were "price" and "other".

**Table 7. Correlations of error terms in biprobit regressions**

	Private service use vs		
	Tekes	TE-Centre	Finpro
Rho	0.11	0.2**	0.509***
p-value	0.395	0.018	0.000

Source: ETLA surveys on SMEs

### 3.3 Assessment

I find that about 1/3 of the firms in the technology-oriented sectors have used public services during the past 12 months, although in the population services have been used by 12% of the firms. This, together with the finding from regressions analysis that innovative firms (firms with intangible assets, high R&D intensity, and firms that have innovated in the past three years) are more likely to have used public services, gives indication that there is a selection process to the kind of firms that seek and use support services from the public sector. Less of a selection is visible in the use of services from the private sector.

The fact that the use of public funding in the past increases the likelihood of using public services but has no positive effect on the use of private sector services is perhaps not such an encouraging finding. It of course tells us that firms that have become familiar with the public organizations in the past, are aware of and able to utilize the services they offer later on. However, it may also be an indication that firms continue to rely on the public sector year after year and do not move away from using subsidized services.

Thus, the public sector may be crowding out private sector service provision because of this continuing demand for its services, which are the more attractive option for firms to choose (because of price). If public funding has, as it should, a positive effect on the firm's growth possibilities and thus helps firms over the death valley, it should also eventually shift firms away from using the subsidized services. When the rationale for support is founded on appropriability and spillovers-based market failures, and only then, the continuing use of public sector support is justified.

Another fact that points to the same conclusion is that, even after controlling for firm characteristics, there are unobserved factors that have similar effects on the use of both public and private services, indicating that certain types of firms are service users, others are not. Since evidence showed that public services were used regardless of the firm being aware of similar private sector services, it may be a question of the public sector competing with the private sector and, with its subsidies, actually crowding out viable private business.

## 4 Conclusions

The Finnish government, in addition to providing finance to SMEs, has established a number of support mechanisms that provide assistance to SMEs via free or subsidized business support services. In this paper, the organizations providing public business services and the instruments they use were reviewed. Using recent survey data on SMEs, we explored what kinds of SMEs use public services, and examined whether firm characteristics differentiate between public and private service users.

Based on the analysis of the actual service instruments used by the public organizations, the main findings are as follows:

- Firms are provided with public support throughout their growth cycle. Overall, there are a large number of different kinds of public services offered, and it is difficult to find any gaps in service provision.
- The roles of the different organizations are fairly well defined to perform different tasks, and empirical findings support this view as different firms use services from the different organizations. Some overlap may exist between the FFI and Tekes (TULI program) in supporting the development of innovations originating from

research, as well as in the provision of internationalisation services by Finpro and the TE-Centres.

On the basis of the empirical analysis, the following results emerge:

- The public sector seems to attract and support innovative firms more than others. The usage of all types of public services is significantly higher for the technology-oriented sectors than for the SME population. The technology-oriented sectors rely relatively more on public services for innovation and marketing than on private services.
- Use of public funding in the past increases the likelihood of using public services but has no positive effect on the use of private sector services, indicating a continuing reliance on the public sector rather than a move away from subsidized support.
- Even after controlling for firm characteristics, there are unobserved factors that have similar effects on the use of both public and private services, indicating that certain types of firms are service users, others are not. Since evidence showed that public services were used regardless of the firm being aware of similar private sector services, it may be a question of the public sector competing with the private sector and, with its subsidies, actually crowding out private business.

Overall, the current extensive service provision by the public sector may have both positive and negative implications. For one, it is encouraging to find that Finnish SMEs are supported throughout their growth cycle, and that the public sector has taken active steps in improving the cooperation between the organisations to better serve the customers' needs. It is also positive to find that innovative firms are more likely to use public services, and thus there are likely to be some social returns from them due to positive externalities. However, there is also a concern about whether the extensive public sector activity has the effect of crowding out otherwise profitable private business, thus hampering the development of markets for SME consultants and service providers. It seems to be taken for granted that there is substantial need for the public provision of business support services without concrete evidence on the existence of a market failure. What is called for is a thorough examination of the existing markets, and possibly a direction of public efforts towards facilitating transactions between SMEs and private service providers.

One justification for the public sector to be present in service provision could be in the form of an information intermediary, or in coordinating programs that involve networking and thus transmitting knowledge between the participants. These kinds of services do already exist in the large portfolio offered by the public sector, but perhaps redirection of public sector resources towards these kinds of services would be advisable.

- There are a couple of services, which involve networking or cooperation (sharing and transmitting knowledge between different parties): Tekes' technology programs and clinics, and Finpro's export groups. The public sector should increase its role in encouraging the building of inter-firm networks
- Finpro also acts as an information broker in its project advisory services and business leads services, where it transmits enquiries and tenders for Finnish firms and projects. Tekes has a similar role in promoting international R&D cooperation, TE-Centres through its Euro-advice centres, and the FFI via its invention market. These kinds of roles of bringing together supply and demand should be extended for the public organizations.
- The portal Yritysuomi.fi acts as a gateway to all the services provided by the public sector organisations. This is a positive way of providing information to firms in one place. However, it could be worthwhile to include services offered by the private sector as well, or develop another portal for that purpose.
- Finpro's network of Trade Centres around the world is the kind of infrastructure that is unlikely to be provided by the private sector alone, because of its large sunk costs. However, the activities of the network could perhaps be developed to serve the needs private service providers so that the information and knowledge gathered at the Trade Centres would be made available to all players. With its current mode of operation, it is likely that its full social benefits remain unrealised.

One commonly heard view about the Finnish innovation environment for firms is that it is too technology-oriented and that marketing capabilities are lacking. What the statistical results in this paper tell us is that it is exactly marketing and internationalisation services that are most used by firms, and especially by technology-oriented firms, and the usage from the public sector exceeds the use from the private sector. The question that therefore remains is: could we perhaps benefit from reduced public sector intervention in service provision and through that, allow for the development of a viable

private sector which could, according to profit motives and appropriate incentives, more successfully respond to the firms' demands in providing support in the commercialisation and marketing process?

## 5 References

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## 6 Appendices

### 6.1 Survey description

Between Dec. 2001 and Jan. 2002 ETLA and its subsidiary *Etlatieto* administered a survey, gathering information on funding sources and financial structure of Finnish firms, particularly technology-based SMEs (see Hyytinen and Pajarinen, 2003). A new survey, administered by ETLA, *The Research Institute of the Finnish Economy* (Ari Hyytinen, Petri Rouvinen, Lotta Väänänen and Pekka Ylä-Anttila), and *Helsinki School of Economics* (Otto Toivanen), extends this data by collecting additional information on financial and other public services as well as innovative activities. The basic results of this new survey, done in Nov. 2002, are reported in this section.

#### Data and survey design

##### Data and survey design – original survey

This section summarizes the data and survey design with regard to the original survey as reported in Hyytinen and Pajarinen (2003).

Respondents are representatives of active, for-profit, non-financial and non-agricultural corporations (excl. proprietorships, partnerships, and subsidiaries) registered in Finland. High- (NACE Rev.1: 244, 30, 321, 322, 353) and medium-tech (NACE Rev.1: 24 excl. 244, 29, 31, 323, 33, 34, 352) as well as information-intensive service (NACE Rev.1: 642, 721, 722, 73, 743) sectors were over-sampled. The over-sampled sectors account for 60% of the sample; the remainder consists of firms in basic manufacturing, services and trade.

*Tietoykkönen* conducted computer-assisted telephone interviews (CATIs) with the objective of reaching a sample of around one thousand observations. The response rate of eligible firms was nearly fifty percent.

##### Data, survey and questionnaire design – current survey

The target group of the current survey is 992 firms sampled in the original one (see above). 13 firms have disappeared due to a bankruptcy, merger, acquisition or some similar incident. 43 firms were not reached, despite several attempts, due to a disconnected telephone line or otherwise. 106 declined to participate in the survey – the most frequently cited reason for this was that the (prospective) respondent was too busy

(61%). Thus, 830 respondents completed the survey, i.e., 84% of the “population” was covered with the response rate (of those existing/reached) of 87%. As discussed below, somewhat fewer observations are used in the analysis. In 95% of the cases the respondent was the same person as in the original survey.

CATIs were conducted by *Tietoykkönen* ([www.tieto1.fi](http://www.tieto1.fi)). Specifically trained interviewers were mostly students in statistics and business administration. Questions asked the respondent to provide a “Yes/No”-answer, select one of several alternatives, or provide quantitative data. Quantitative data was asked in two stages. First the respondent was asked to provide the data item in question. If unable to provide this information, the respondent was asked to indicate to which interviewer-provided category her firm belongs.

The survey had 46 questions, but since several of them had sub-sections of varying length, all in all there were over two hundred response occurrences. Since some questions were conditional on the prior answers, the “minimum path” would involve answering 26 and the “maximum path” 43 questions. Questions were divided to three main sections:

- Availability of market-based finance,
- Public business support organizations and services they offer, and
- Factors limiting innovative activity and the diffusion of knowledge.

The original survey form (in Finnish) can be found in Section 6.2; an abbreviated English version can be found in Section 6.3. Section 6.4 provides tabulations of the survey responses.

In the initial sample (the 830 observations), the average duration of an interview was 16 minutes, typically ranging from 13 to 18 minutes (25 and 75 percentiles).

### Refinements of the initial sample

In order to economize resources, the new survey did not recollect all the necessary background information on the observation units. Thus, for empirical analysis it is necessary to match the two data sets by using firm identification codes. Most likely due to coding errors and changes in firm identification codes, we were unable to match 8 observations in the new sample to the original data – we are forced to ignore these observations. In our vocabulary an SME has less than 250 employees *and* its annual turnover is under 40 million euros *or* its balance sheet is less than 27 million euros. 19 observa-



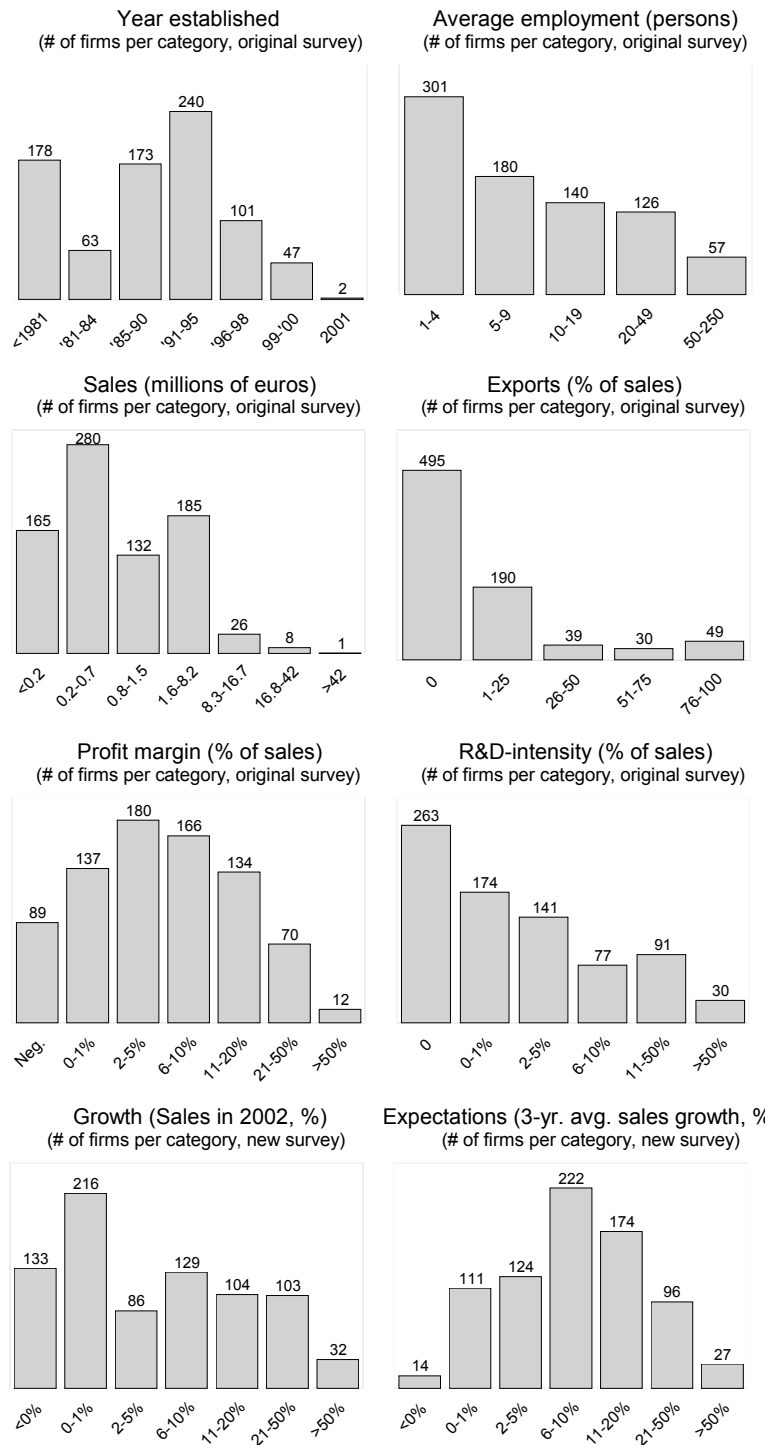
tions in the sample do not meet this definition and are thus dropped. After these two refinements above, we are left with a sample of 811 observations.

### Sample properties

Naturally the sample properties are quite similar to those of Pajarinen and Hyytinen (2003). Thus, we only summarize the properties of the sample by providing distributions of a few key dimensions.

Figures below show that the sample is roughly split by the establishment year of 1990. Sample firms are typically quite small – nearly 60% employ less than 10 persons and have less than one million euros in annual sales. They are domestically orientated – over 60% have no (direct) exports. Most (61%) are modestly (0-10% of sales) profitable. Two thirds of the sample had some R&D, although for only 43% R&D-intensity exceeded 1%. 84% had non-negative sales growth during the past twelve months. 37% expect to growth at over 10% rate during the next three years.

## Sample properties



## 6.2 Survey form (in Finnish)

Hyvää päivää. Olen Tietoykkönen Oy:n tutkimushaastattelija NN. Teemme parhaillaan Elinkeinoelämän tutkimuslaitoksen ETLAn ja Helsingin Kauppakorkeakoulun toimeksiannosta kyselyä, jossa selvitetään suomalaisten yritysten rahoitustarpeita, liiketoiminnan tukipalvelujen käyttöä, sekä innovaatiotoiminnan ongelmia. Tavoitteena on tunnistaa yritysten rahoitukseen ja innovaatiotoimintaan liittyviä ongelmia ja siten parantaa rahoituksen ja palveluiden saatavuutta. Tämä kysely täydentää aiempaa kyselyä, jossa yrityksenne oli mukana. Kaikki antamanne tiedot tullaan käsittelemään luottamuksellisesti ja kyselyaineistoa analysoidaan kokonaisuuksina tilastollisin menetelmin. Yksittäisiä tietoja yrityksistä ei tulla julkaisemaan missään muodossa, ja kysymykset ovat pääosin hyvin yleisluonteisia. Saanko haastatella teitäkin hetken? Haastattelu kestää noin 15 minuuttia.

### KYSYMYS 1:

Jos haastateltava ei voi tai ei halua vastata kyselyyn, niin syy:

1. yritystä ei enää ole, jos "kyllä" niin syy
  - a. yritys on mennyt konkurssiin
  - b. yritys on fuusioitunut toisen yrityksen kanssa
  - c. yritys on myyty toiselle yritykselle
  - d. muu syy, mikä?
2. vastaajalla ei ole asemansa vuoksi oikeutta antaa pyydettyjä tietoja
3. vastaaja ei halua antaa yritystä koskevia tietoja
4. ei ole aikaa
5. joku muu syy, mikä?

Jos 2, 3, 4, tai 5, niin kysytään olisiko yrityksessä joku muu henkilö, joka voisi vastata kyselyyn tai voitaisiinko soittaa takaisin myöhemmin.

### VASTAUSTYYPPI:

Vaihtoehdot luetaan tai haastattelija valitsee vastauksen perusteella vastausvaihtoehdon.

### LISÄINFO:

Kysytään ja vastaukset dokumentoidaan *kaikilta yrityksiltä, joihin otetaan yhteyttä* ja jotka eivät vastaa kyselyyn.

## I. MARKKINAEHTOISEN RAHOITUKSEN SAATAVUUS

Seuraavat kysymykset koskevat yrityksenne tarvetta ja mahdollisuuksia hankkia ulkoista rahoitusta yksityiseltä sektorilta. Keskeisenä tavoitteena on tunnistaa yritysten rahoitukseen liittyviä ongelmia ja siten parantaa rahoituksen saatavuutta.

### LUETAAN VASTAAJALLE:

Seuraavat kysymykset koskevat vain yksityiseltä sektorilta kuten pankeilta, rahoituslaitoksilta, muilta yrityksiltä tai yksityishenkilöiltä saatavilla olevaa luottoa, eli velkarahoitusta, eli vierasta pääomaa. Kysymykset eivät siis koske julkisilta rahoittajilta, kuten esimerkiksi Finnveralta ja Tekesiltä, saatavilla olevaa luottoa. HUOM: pääomalainoja ei tässä kyselyssä käsitellä luottona.

### KYSYMYS 2:

Toimiiko yksityisen sektorin luoton tarjonta yrityksille riittävän hyvin Suomessa?

### VASTAUSTYYPPI:

Kyllä/Ei

### LISÄKYSYMYKSET:

Jos vastaa "kyllä", siirrytään kysymykseen 4. Jos vastaa "ei", kysytään tarkentava kysymys 3.

### KYSYMYS 3:

Onko mielestänne yksityisen sektorin luoton tarjonnassa suurimpana ongelmana se, että

- (a) on puutetta pitkäaikaisesta ja kärsivällisestä rahoituksesta
- (b) on puutetta riskinottokyvystä ja -halusta muutoin kuin rahoituksen aikajänteeseen liittyen
- (c) ei puutteita riskinottokyvyssä, mutta rahoittajilla ei ole tarvittavaa teknologiatuntemusta
- (d) ei puutteita riskinottokyvyssä, mutta rahoittajat eivät ymmärrä kasvuyrityksen tarpeita
- (e) on jokin muu ongelma

### VASTAUSTYYPPI:

Vain YKSI: a, b, c, d tai e

### KYSYMYS 4:

Onko yrityksenne hakenut luottoa yksityiseltä sektorilta viimeisten 12 kuukauden aikana?

### VASTAUSTYYPPI:

Kyllä/Ei

### LISÄKYSYMYKSET:

Jos vastaa "ei", jatketaan seuraavasta kysymyksestä. Jos vastaa "kyllä" siirrytään kysymykseen 6.

### KYSYMYS 5:

Onko yrityksellänne ollut tarve saada luottoa viimeisten 12 kuukauden aikana, mutta tarpeestanne huolimatta ette hakenneet luottoa yksityiseltä sektorilta?

### VASTAUSTYYPPI:

Kyllä/Ei

Jos vastaa "kyllä", niin kysytään tärkeintä syytä miksi ei haettu:

- saitte rahoitusta julkiselta sektorilta
- koska ette uskoneet luotonsaanti mahdollisuuksiinne
- koska uskoitte rahoituksen hakukustannusten olevan liian korkeat ts. sopivan rahoittajan löytäminen olisi vienyt liikaa aikaa ja resursseja
- koska luoton korkokustannukset ja järjestelykustannukset ml. vakuuskustannukset olisivat olleet liian korkeat
- jokin muu syy

**VASTAUSTYYPPI:**

Vain YKSI: a, b, c, d, tai e

**LISÄKYSYMYKSET:**

Siirrytään kysymykseen 11.

**KYSYMYS 6:**

Onko yksityiseltä sektorilta hakemianne luottoja hylätty viimeisten 12 kuukauden aikana?

- kaikki luottohakemukset hylätty
- osa luottohakemuksista hylätty ja osa hyväksytty
- kaikki luottohakemukset hyväksytyt

**VASTAUSTYYPPI:**

a, b tai c

**LISÄKYSYMYKSET:**

Jos vastaa a) tai b) niin kysytään seuraava kysymys. Jos vastaa c), niin siirrytään kysymykseen 8.

**KYSYMYS 7:**

Hylättiinkö luottohakemuksenne:

- riittämättömien vakuuksien ja/tai takauksien takia
- jokin muu syy

**VASTAUSTYYPPI:**

Vain YKSI: a tai b

**LISÄKYSYMYKSET:**

Jos tultiin 6a:sta niin seuraavaksi 10. Jos tultiin 6b:stä niin seuraava.

**KYSYMYS 8:**

Saitteko hakemanne summan luottoa?

**VASTAUSTYYPPI:**

Kyllä/Ei

**KYSYMYS 9:**

Oletteko jättäneet jonkin teille myönnetyn luoton nostamatta viimeisten 12 kuukauden aikana, vaikka olisitte sellaisen saaneet?

**VASTAUSTYYPPI:**

Kyllä/Ei

Jos vastaa "kyllä", kysytään tärkeintä syytä:

- teille ei myönnetty riittävästi luottoa
- tarjottu korko oli liian korkea
- jotkin muut lainaehdot eivät täyttäneet toiveitanne
- jokin muu syy

**VASTAUSTYYPPI:**

Vain YKSI: a, b, c tai d

**KYSYMYS 10:**

Jos viimeisten 12 kuukauden aikana jokin luottohakemuksenne hylättiin tai jos jätitte jonkin myönnetyn luoton nostamatta tarjotuilla ehdoilla, saitteko korvaavaa rahoitusta muualta?

**VASTAUSTYYPPI:**

Kyllä/Ei

Jos vastaa "kyllä", kysytään tarkennus.

Saitteko korvaavaa rahoitusta:

- vain yksityiseltä sektorilta
- vain julkiselta sektorilta
- molemmilta

**VASTAUSTYYPPI:**

Vain YKSI: a, b, tai c

**LUETAAN VASTAAJALLE:** Seuraavaksi kysytään yksityiseltä sektorilta saatavilla olevaa oman pääoman ehtoista rahoitusta. Tiedot ovat tutkimuksen kannalta tärkeitä, sillä niiden avulla pystytään arvioimaan oman pääoman ehtoisen rahoituksen saatavuutta. Kysymykset ovat ajankohtaisia koko yrityskehityksen kannalta, sillä pääoman saatavuus on selvästi vaikeutunut yleisen taloudellisen tilanteen heikentyessä. Oman pääoman ehtoista rahoitusta tarkoitetaan pääomasijoituksia, pääomalainoja sekä oman pääoman ehtoisia välirahoitusinstrumentteja. Kysymykset koskevat vain yksityistä sektoria, eivätkä siis koske julkisia pääomasijoittajia kuten Tekes, Sitra, ja Teollisuussijoitus, eivätkä myöskään muita valtionomisteisiksi tai kunnallisiksi mieltämiänne pääomasijoitusrahastoja.

**KYSYMYS 11:**

Toimiiko yksityisen sektorin oman pääoman ehtoisen rahoituksen tarjonta yrityksille riittävän hyvin Suomessa?

VASTAUSTYYPPI:

Kyllä/Ei

LISÄKYSYMYKSET:

Jos vastaa "kyllä", siirrytään kysymykseen 13. Jos vastaa "ei", kysytään tarkentava kysymys 12.

**KYSYMYS 12:**

Onko mielestänne yksityisen sektorin oman pääoman ehtoisen rahoituksen tarjonnassa suurimpana ongelmana se, että

- (a) on puutetta pitkäaikaisesta ja kärsivällisestä rahoituksesta
- (b) on puutetta riskinottokyvystä ja -halusta muutoin kuin rahoituksen aikajänteeseen liittyen
- (c) ei puutteita riskinottokyvyssä, mutta rahoittajilla ei ole tarvittavaa teknologiatuntemusta
- (d) ei puutteita riskinottokyvyssä, mutta rahoittajat eivät ymmärrä kasvuyrityksen tarpeita
- (e) on jokin muu ongelma

VASTAUSTYYPPI:

Vain YKSI: a, b, c, d tai e

**KYSYMYS 13:**

Onko yrityksenne yrittänyt saada oman pääoman ehtoista rahoitusta yksityiseltä sektorilta viimeisten 12 kuukauden aikana?

VASTAUSTYYPPI:

Kyllä/Ei

LISÄKYSYMYKSET:

Jos vastaa "ei", jatketaan seuraavasta kysymyksestä. Jos vastaa "kyllä" siirrytään kysymykseen 15.

**KYSYMYS 14:**

Onko yrityksellänne ollut tarve saada oman pääoman ehtoista rahoitusta viimeisten 12 kuukauden aikana, mutta tarpeestanne huolimatta ette yrittäneet saada sitä yksityiseltä sektorilta?

VASTAUSTYYPPI:

Kyllä/Ei

Jos "kyllä", niin tärkein syy:

- a) koska saitte rahoitusta julkiselta sektorilta
- b) koska ette uskoneet mahdollisuuksiinne saada markkinaehtoista oman pääoman ehtoista rahoitusta
- c) koska uskoitte rahoituksen hakukustannusten olevan liian korkeat ts. sopivan rahoittajan löytäminen olisi vienyt liikaa aikaa ja resursseja
- d) koska rahoituksen todelliset kustannukset olisivat olleet liian korkeat
- e) jokin muu syy

VASTAUSTYYPPI:

Valitse YKSI: a, b, c, d, tai e

LISÄKYSYMYKSET:

Siirrytään kysymykseen 20.

**KYSYMYS 15:**

Ovatko yrityksenne saada oman pääoman ehtoista rahoitusta yksityiseltä sektorilta kaatuneet viimeisten 12 kuukauden aikana?

- a) kaikki yritykset kaatuivat, eli teille ei tarjottu mahdollisuutta saada oman pääoman ehtoista rahoitusta
- b) osa yrityksistä kaatui ja osa onnistui
- c) kaikki yritykset onnistuivat, eli teille tarjottiin mahdollisuus saada oman pääoman ehtoista rahoitusta

VASTAUSTYYPPI:

a, b tai c

LISÄKYSYMYKSET:

Jos vastaa a) tai b) niin jatketaan seuraavasta kysymyksestä. Jos vastaa c), niin jatketaan kysymyksestä 17.

**KYSYMYS 16:**

Oliko pääasiallinen syy, miksi yrityksenne saada oman pääoman ehtoista rahoitusta kaatui, se että:

- a) yrityksenne liikeidea ei vakuuttanut sijoittajia
- b) yrityksenne ei pystynyt vastaamaan sijoittajien tuotto-odotuksiin
- c) jokin muu syy

VASTAUSTYYPPI:

Valitse YKSI: a, b tai c

LISÄKYSYMYKSET:

Jos tultiin 15a:sta niin siirrytään kysymykseen 19. Jos tultiin 15b:stä niin kysytään seuraava.

**KYSYMYS 17:**

Saitteko haluamanne summan oman pääoman ehtoista rahoitusta?

VASTAUSTYYPPI:

Kyllä/Ei

**KYSYMYS 18:**

Oletteko jossain tapauksessa jättäneet ottamatta vastaan oman pääoman ehtoista rahoitusta viimeisten 12 kuukauden aikana, vaikka olisitte sitä saaneet?

**VASTAUSTYYPPI:**

Kyllä/Ei

Jos vastaa "kyllä", kysytään syytä:

- a) teille ei olisi myönnetty riittävästi rahoitusta
- b) omistussuosuksista ei päästy sopuun
- c) yrityksen arvosta ei päästy sopuun
- d) jokin muu syy

**VASTAUSTYYPPI:**

Valitse YKSI: a, b, c, tai d

**KYSYMYS 19:**

Jos viimeisten 12 kuukauden aikana jokin yrityksenne saada oman pääoman ehtoista rahoitusta kaatui tai ette halunneet ottaa vastaan rahoitusta tarjotuilla ehdoilla, saitteko korvaavaa rahoitusta muualta?

**VASTAUSTYYPPI:**

Kyllä/Ei

Jos vastaa "kyllä", kysytään tarkennus.

Saitteko korvaavaa rahoitusta:

- a) vain yksityiseltä sektorilta
- b) vain julkiselta sektorilta
- c) molemmilta

**VASTAUSTYYPPI:**

a, b tai c

Seuraavat kaksi kysymystä koskevat mahdollisten kohtaamienne rahoitusrajoitteiden vaikutuksia. Rahoitusrajoitteilla tarkoitetaan ongelmia sekä tulorahoituksen riittävytydessä että ulkoisen rahoituksen saatavuudessa.

**KYSYMYS 20:**

Onko jokin yrityksenne toiminnan kannalta keskeinen investointi-, t&k-, markkinointi- tai muu vastaava hanke jäänyt toteuttamatta rahoitusrajoitteiden takia viimeisten 12 kuukauden aikana?

**VASTAUSTYYPPI:**

Kyllä/Ei

Jos vastaa "ei", kysytään tarkennus:

Ovatko hankkeet voitu toteuttaa sen ansiosta, että yrityksen toiminnassa aktiivisesti mukana olevat henkilöt ovat sijoittaneet yrityksen toimintaan lisää varoja?

**VASTAUSTYYPPI:**

Kyllä/Ei

**KYSYMYS 21:**

Uskotteko, että rahoitusrajoitteiden takia toiminnan kannalta keskeisiä hankkeita on jäänyt toteuttamatta viimeisten 12 kuukauden aikana, yrityksillä jotka

- a) toimivat yrityksenne kanssa samalla toimialalla
- b) toimivat yrityksenne kanssa samalla alueella
- c) ovat yrityksenne kanssa samanikäisiä

**VASTAUSTYYPPI:**

Kyllä/Ei

**II. JULKISET YRITYKSIÄ TUKEVAT ORGANISAATIOT JA NIIDEN TARJOAMAT PALVELUT**

Seuraavaksi kysytään keskeisten yrityksiä tukevien julkisten organisaatioiden tunnettuutta sekä niiden tarjoamien rahoituksen ja liiketoiminnan tukipalvelujen käyttöä. Tavoitteena on selkeyttää julkisen sektorin yrityksiä tukevaa toimintaa ja parantaa yrityksenne mahdollisuuksia saada tukea liiketoiminnan kehittämiseen.

**KYSYMYS 22:**

Oletteko tietoisia seuraavien organisaatioiden tarjoamista rahoituspalveluista ja muista liiketoiminnan tukipalveluista niin, että osaatte niitä hyödyntää?

- a) Finnvera
- b) Tekes
- c) TE-Keskukset
- d) Finpro
- e) Keksintösäätiö
- f) Teollisuussijoitus
- g) Sitra
- h) muut valtionomisteisiksi ja/tai kunnallisiksi mieltämämme palvelun tarjoajat

**VASTAUSTYYPPI:**

Kyllä/Ei

**LUETAAN VASTAAJALLE:**

Seuraavat kysymykset koskevat edellä mainittujen organisaatioiden tarjoamaa rahoitusta.

**KYSYMYS 23:**

Onko yrityksenne saanut tukia ja/tai takauksia viimeisten 12 kuukauden aikana seuraavilta julkisilta organisaatioilta? Huomaa, että kysymyksessä ei tarkoiteta luottoja eikä oman pääoman ehtoista rahoitusta.

**VASTAUSTYYPPI:**

Kyllä/Ei

1. Finnvera, jos Ei niin syy:
  - a. ei ole haettu, miksi
    - i. ei tarvetta
    - ii. hakuprosessi koettiin hankalaksi
    - iii. sopivaa rahoitusmuotoa ei ollut tarjolla
    - iv. muu syy
  - b. on haettu mutta ei saatu
2. Tekes, jos Ei niin syy:
  - a. ei ole haettu, miksi
    - i. ei tarvetta
    - ii. hakuprosessi koettiin hankalaksi
    - iii. sopivaa rahoitusmuotoa ei ollut tarjolla
    - iv. muu syy
  - b. on haettu mutta ei saatu
3. TE-keskukset, jos Ei niin syy:
  - a. ei ole haettu, miksi
    - i. ei tarvetta
    - ii. hakuprosessi koettiin hankalaksi
    - iii. sopivaa rahoitusmuotoa ei ollut tarjolla
    - iv. muu syy
  - b. on haettu mutta ei saatu
4. Muut julkiset organisaatiot, esimerkiksi Keksintösäätiö, jos Ei niin syy:
  - a. ei ole haettu, miksi
    - i. ei tarvetta
    - ii. hakuprosessi koettiin hankalaksi
    - iii. sopivaa rahoitusmuotoa ei ollut tarjolla
    - iv. muu syy
  - b. on haettu mutta ei saatu

**KYSYMYS 24:**

Onko yrityksenne saanut lainoja, pääomalainoja tai oman pääoman ehtoista rahoitusta viimeisten 12 kuukauden aikana seuraavilta organisaatioilta?

**VASTAUSTYYPPI:**

Kyllä/Ei

1. Finnvera, jos Ei niin syy:
  - a. ei ole haettu, miksi
    - i. ei tarvetta
    - ii. hakuprosessi koettiin hankalaksi
    - iii. sopivaa rahoitusmuotoa ei ollut tarjolla
    - iv. muu syy
  - b. on haettu mutta ei saatu
2. Tekes, jos Ei niin syy:
  - a. ei ole haettu, miksi
    - i. ei tarvetta
    - ii. hakuprosessi koettiin hankalaksi
    - iii. sopivaa rahoitusmuotoa ei ollut tarjolla
    - iv. muu syy
  - b. on haettu mutta ei saatu
3. Julkiset pääomasijoittajat, eli Teollisuussijoitus, Sitra, ja muut valtionomisteisiksi tai kunnallisiksi mieltämämme pääomasijoitusrahastot, jos Ei niin syy:
  - a. ei ole haettu, miksi
    - i. ei tarvetta
    - ii. hakuprosessi koettiin hankalaksi
    - iii. sopivaa rahoitusmuotoa ei ollut tarjolla
    - iv. muu syy
  - b. on haettu mutta ei saatu
4. Muut julkiset organisaatiot, kuten Keksintösäätiö, jos Ei niin syy:
  - a. ei ole haettu, miksi
    - i. ei tarvetta
    - ii. hakuprosessi koettiin hankalaksi
    - iii. sopivaa rahoitusmuotoa ei ollut tarjolla
    - iv. muu syy
  - b. on haettu mutta ei saatu

**LISÄKYSYMYKSET:**

Jos on vastannut "ei" kaikkiin kohtiin 1-4 kysymyksissä 23 tai 24, niin siirrytään kysymykseen 26. Muuten jatketaan seuraavasta.

**KYSYMYS 25:**

Mihin seuraavista käyttötarkoituksista yrityksenne sai julkista rahoitusta viimeisten 12 kuukauden aikana (valitse yksi tai useampi vaihtoehto)? Huomaa, että kysymys koskee kaikkea viimeisten 12 kuukauden aikana saamaanne julkisen sektorin rahaa.

VASTAUSTYYPPI:

Kyllä/Ei

- a) yrityksen alku- ja kasvuvaihe
- b) innovaatiotoiminta, ml. tutkimus, tuotekehitys, prosessikehitys, patentointi tai muu innovaation suojaus, ja lisensointi
- c) kaupallistaminen ja markkinointi, ml. vienti ja kansainvälistyminen
- d) organisaation, johdon, tai henkilöstön kehittäminen
- e) käyttömajaisuushankinnat eli investoinnit koneisiin, laitteisiin, rakennuksiin tai maa-alueisiin
- f) käyttöpääoman rahoitus (tarkennus: käyttöpääoma on yrityksen päivittäiseen toimintaan sitoutunutta pääomaa, jota sitoutuu myyntisaamisiin, vaihto-omaisuuteen (varastoon) ja ennakkomaksuihin)
- g) muu

LUETAAN VASTAAJALLE:

Seuraavat kysymykset koskevat liiketoiminnan tukipalvelujen tarjontaa. Kysymykset koskevat muuta kuin rahoituksen tarjontaa, esimerkiksi neuvonta-, markkinointi-, ja koulutuspalveluita. Tarkoituksena on parantaa yritysten mahdollisuuksia löytää tarpeisiinsa sopivia liiketoiminnan tukipalveluja ja hyödyntää niitä toimintansa kehittämiseen.

**KYSYMYS 26:**

Onko yksityisellä sektorilla tarjolla sopivia liiketoiminnan tukipalveluja, esimerkiksi neuvonta-, markkinointi-, ja koulutuspalveluita, tukemaan seuraavia yrityksenne toimintoja?

VASTAUSTYYPPI:

Kyllä/Ei

- a) yrityksen alku- ja kasvuvaihe
- b) innovaatiotoiminta, ml. tutkimus, tuotekehitys, prosessikehitys, patentointi tai muu innovaation suojaus, ja lisensointi
- c) kaupallistaminen ja markkinointi, ml. vienti ja kansainvälistyminen
- d) organisaation, johdon, tai henkilöstön kehittäminen
- e) muu

**KYSYMYS 27:**

Onko yrityksenne käyttänyt viimeisten 12 kuukauden aikana yksityisen sektorin tarjoamia liiketoiminnan tukipalveluja seuraaviin toimintoihin liittyen?

VASTAUSTYYPPI:

Kyllä/Ei

- a) yrityksen alku- ja kasvuvaihe
- b) innovaatiotoiminta, ml. tutkimus, tuotekehitys, prosessikehitys, patentointi tai muu innovaation suojaus, ja lisensointi
- c) kaupallistaminen ja markkinointi, ml. vienti ja kansainvälistyminen
- d) organisaation, johdon, tai henkilöstön kehittäminen
- e) muu

**KYSYMYS 28:**

Onko yrityksenne käyttänyt joitain seuraavien julkisten organisaatioiden tarjoamia liiketoiminnan tukipalveluja viimeisten 12 kuukauden aikana?

VASTAUSTYYPPI:

Kyllä/Ei

- a) Finnvera
- b) Tekes
- c) TE-Keskukset
- d) Finpro
- e) Keksintösäätiö
- f) julkiset pääomasijoittajat, kuten Teollisuussijoitus, Sitra, ja muut vatio-omisteisiksi tai kunnallisiksi mieltämämme pääomasijoitusrahastot
- g) joku muu ei yksityinen

LISÄKYSYMYKSET:

Jos vastasi edellisessä kaikkiin kohtiin a-g "ei", niin siirrytään kysymykseen 31. Muuten jatketaan seuraavasta.

**KYSYMYS 29:**

Mitä seuraavista yrityksenne toiminnoista viimeisten 12 kuukauden aikana käyttämämme julkisten organisaatioiden tarjoamat palvelut tukivat (valitse yksi tai useampi vaihtoehto)?

VASTAUSTYYPPI:

Kyllä/Ei

- a) yrityksen alku- ja kasvuvaihe
- b) innovaatiotoiminta ml. tutkimus, tuotekehitys, prosessikehitys, patentointi ja muu innovaation suojaus, lisensointi
- c) kaupallistaminen ja markkinointi ml. vienti ja kansainvälistyminen
- d) organisaation, johdon, ja henkilöstön kehittäminen
- e) muu



**KYSYMYS 30:**

Oliiko syy siihen, että käytitte juuri julkisen sektorin tarjoamia palveluja, se että vastaavia palveluja ei tietääksenne ollut tarjolla yksityisellä sektorilla?

VASTAUSTYYPPI:

Kyllä/Ei

Jos vastaa "ei", kysytään mikä oli syy:

- a) vastaavat palvelut olivat yksityisen sektorin tarjoamina liian kalliita
- b) julkisen organisaation palveluiden laatu oli korkeampi, jos "kyllä", niin mikä laatutekijä oli ratkaiseva:
  - i. julkisen organisaation tarjoama luotettavuus, maine, olivat ratkaisevia laatutekijöitä
  - ii. julkisen organisaation tarjoama poliittinen suoja, esimerkiksi ulkomaantoiminnassa, oli ratkaiseva laatutekijä
  - iii. muu laatutekijä
- c) muu syy

LUETAAN VASTAAJALLE:

Seuraava kysymys koskee julkiselta sektorilta viimeisten 12 kuukauden aikana saamaanne rahoitusta ja/tai liiketoiminnan tukipalveluita.

Seuraavaa ei kysytä, jos on vastannut "ei" kaikkiin kohtiin kysymyksissä 23, 24, 28.

**KYSYMYS 31:**

Oliiko saamaanne rahoitus tai palvelut osa jotain ohjelmaa, esimerkiksi Tekesin teknologiaohjelma tai Finpron vientiymppäri?

VASTAUSTYYPPI:

Kyllä/Ei

**III. INNOVAATIOTOIMINTAA RAJOITTAVAT TEKIJÄT SEKÄ TIEDON JA OSAAMISEN LEVIÄMINEN**LUETAAN VASTAAJALLE:

Seuraavassa kysytään innovaatiotoiminnasta. Kysymyksillä kartoitetaan innovaatiotoimintaa rajoittavia ja tukevia tekijöitä, tarkoituksena tunnistaa siihen liittyviä ongelmia ja jatkossa parantaa yritysten mahdollisuuksia harjoittaa innovaatiotoimintaa ja hyötyä siitä.

Innovaatiotoiminta tähtää uuden tai olennaisesti parannetun tuotteen markkinoille tuomiseen TAI uuden tai olennaisesti parannetun tuotantomenetelmän käyttöönottoon. Innovaation perustana voi olla jokin uusi teknologia, entisten teknologioiden sovellus tai yrityksen hankkiman uuden tiedon hyödyntäminen.

**KYSYMYS 32:**

Onko yrityksenne harjoittanut innovaatiotoimintaa viimeisten 12 kuukauden aikana?

VASTAUSTYYPPI:

Kyllä/Ei

LISÄKYSYMYKSET:

Jos vastaa "kyllä", jatketaan seuraavasta kysymyksestä. Jos vastaa "ei", niin 36.

**KYSYMYS 33:**

Ovatko yrityksenne investoinnit innovaatiotoimintaan vähentyneet viimeisten 12 kuukauden aikana?

VASTAUSTYYPPI:

Kyllä/Ei

Jos kyllä, niin mikä oli tärkein syy:

- a) potentiaalisesti kannattavia innovaatiohankkeita on vähemmän
- b) ongelmia tulo-rahoituksessa ts. heikko kannattavuus
- c) ongelmia ulkoisen rahoituksen saannissa
- d) jokin muu syy

VASTAUSTYYPPI:

Valitse YKSI: a, b, c, tai d

**KYSYMYS 34:**

Oletteko tehneet viimeisten 12 kuukauden aikana innovaatiotoimintaan liittyvää yhteistyötä seuraavien tahojen kanssa:

- a) saman toimialan yritysten, jos "kyllä" niin,
  - i. oliko mukana ulkomaisia yrityksiä
- b) muiden toimialojen yritysten, ml. alihankkijat, asiakkaat, toimittajat, konsultit, jne. jos "kyllä" niin,
  - i. oliko mukana ulkomaisia yrityksiä
- c) korkeakoulujen ja/tai tutkimuslaitosten jos "kyllä" niin,
  - i. oliko mukana ulkomaisia korkeakouluja ja/tai tutkimuslaitoksia

VASTAUSTYYPPI:

Kyllä/Ei

LISÄKYSYMYKSET:

Jos vastaa "kyllä" johonkin kohtaan, kysytään seuraava kysymys. Jos vastaa "ei", siirrytään kysymykseen 36.

**KYSYMYS 35:**

Liittyikö yhteistyö tuen saamisen ehtoihin tai oliko se osa jotain ohjelmaa?

VASTAUSTYYPPI:

Kyllä/Ei

**KYSYMYS 36:**

Ovatko seuraavat ulkopuoliset tiedonlähteet tärkeitä innovaatiotoiminnan kannalta yrityksenne toimialalla?

- patentti-informaatio
- lisenssin ostaminen
- alan konferenssit, tapahtumat ja julkaisut
- kilpailijat, samalla toimialalla toimivat yritykset
- asiakkaat, alihankkijat, toimittajat ja muut oman toimialan ulkopuoliset yritykset
- yhteistyö yliopistojen ja tutkimuslaitosten kanssa
- työntekijöiden rekrytointi
- muiden yritysten markkinoilla olevat tuotteet (reverse engineering)

VASTAUSTYYPPI:

Kyllä/Ei

**KYSYMYS 37:**

Valitkaa seuraavista vaihtoehdoista merkittävin yrityksenne innovaatiotoimintaa rajoittava tai estävä tekijä.

- arvioitu taloudellinen riski liian suuri, eli esimerkiksi innovaatiotoiminnan kustannukset ovat liian suuret
- soveltuvien rahoituslähteiden puuttuminen
- innovaatiotoiminnan hyödyt vuotavat muille, ja näin ollen tuotot omalle yritykselle jäävät liian pieniksi
- sopivan ja osaavan henkilökunnan puute
- sopivien yhteistyötahojen puute
- julkisen vallan toimet kuten esimerkiksi joustamaton lainsäädäntö
- muu syy

VASTAUSTYYPPI:

Valitse YKSI: a, b, c, d, e, f, tai g

**KYSYMYS 38:**

Onko tärkeää, että yrityksenne toimialalla innovaatiotoiminnan tulokset suojataan, ts. estetään innovaatiotoiminnan tulosten vastikkeeton hyväksikäyttö muilta?

VASTAUSTYYPPI:

Kyllä/Ei

**KYSYMYS 39:**

Mikä seuraavista innovaatioiden suojausmenetelmistä on toimialallanne tärkein?

- patentit ja muut lakisääteiset suojaustavat
- salassapito
- innovaatiota täydentävä tai tukeva tuotanto- tai kehittämistoiminta, palvelu tai muu tuote
- kilpailijoita nopeampi toiminta
- joku muu

VASTAUSTYYPPI:

Valitse YKSI: a, b, c, d, tai e

Kysytään mikäli vastaus kysymykseen 32. oli "kyllä".

**KYSYMYS 40:**

Leviääkö yrityksenne innovaatiotoiminnasta ratkaisevaa tietoa tai osaamista seuraavien toimien johdosta

- oikeuksien lisensointi tai myynti, markkinointi-, tuotanto- tai jakelusopimus
- patenttijulkaisut
- kilpailijoille siirtyvät työntekijät
- valmiit tuotteet (reverse engineering)

VASTAUSTYYPPI:

Kyllä/Ei

**KYSYMYS 41:**

Oletteko te riitautaneet tai uhanneet riitauttaa innovaatiotoimintaanne, sen tuloksiin, tai muihin immateriaalioikeusasioihin liittyviä asioita?

SELVENNYS:

Immateriaalioikeuksilla tarkoitetaan patenteja, tavaramerkkejä ja tekijänoikeuksia, eli aineettoman omaisuuden suojausta.

VASTAUSTYYPPI:

Kyllä/Ei

**KYSYMYS 42:**

Onko yleistä, että yrityksenne toimialalla riitautetaan tai uhataan riitauttaa innovaatiotoimintaan, sen tuloksiin, tai muihin immateriaalioikeusasioihin liittyviä asioita?

VASTAUSTYYPPI:

Kyllä/Ei

LUETAAN VASTAAJALLE:

Lopuksi kysytään vielä kolme lyhyttä kysymystä.

**KYSYMYS 43:**

Mikä on ollut yrityksenne liikevaihdon kasvu viimeisten 12 kuukauden aikana?

**VASTAUSTYYPPI:**

Lukuarvot

**LISÄINFO:**

Tarvittaessa vastausluokat: &lt;0%, 0-1%, 2-5%, 6-10%, 11-20%, 21%-50%, &gt;50%

**KYSYMYS 44:**

Mikä on liikevaihtonne keskimääräinen vuosittainen kasvutavoite seuraavalle kolmelle vuodelle? (prosenttiluku per annum)

**VASTAUSTYYPPI:**

Lukuarvot

**LISÄINFO:**

Tarvittaessa vastausluokat: &lt;0%, 0-1%, 2-5%, 6-10%, 11-20%, 21%-50%, &gt;50%

**KYSYMYS 45:**

Kilpailevatko mielestänne julkiset organisaatiot ja yksityinen sektori keskenään tarjotessaan yrityksille rahoitusta ja/tai liiketoiminnan tukipalveluja?

**VASTAUSTYYPPI:**

Kyllä/Ei

**KYSYMYS 46:**

Onko käsityksenne mukaan Suomessa tarjolla ulkomaista rahoitusta kaltaisillenne yrityksille?

**VASTAUSTYYPPI:**

Kyllä/Ei

## 6.3 Abbreviated survey form (in English)

### NO ANSWER

#### 1. The interviewee is not able or does not want to answer, because

1. the firm does not exist anymore, if "yes", then reason
  - a) the firm has gone bankrupt
  - b) the firm has been merged with another firm
  - c) the firm has been sold to another firm
  - d) other reason, what?
2. the respondent does not have the authorization to answer, because of his position
3. the respondent does not want to give out information on the firm
4. there is no time
5. other reason, what?

### I. AVAILABILITY OF MARKET-BASED FINANCE

#### 2. Does the private sector supply of debt function sufficiently well in Finland?

#### 3. In your opinion, is the biggest problem in the private sector supply of debt that

- a) there is a lack of long-term and patient debt finance
- b) there is a lack of will for risk-taking, other than in the time dimension
- c) there is no lack in risk-taking, but the financiers have insufficient knowledge of technology
- d) there is no lack in risk-taking, but the financiers do not understand the needs of growth firms
- e) there is some other problem

#### 4. Has your firm applied for debt from the private sector within the last 12 months?

#### 5. Has your firm had the need for outside debt finance within the last 12 months, but you haven't applied for it from the private sector? if "yes", then reason

- a) you got finance from the public sector
- b) you did not believe in your possibilities to get finance
- c) you believed the search costs for finance would be too high, i.e. it would take too much time and resources to find appropriate financiers
- d) the interest expenses and other costs of debt, including securities, would have been too high
- e) some other reason

#### 6. Have your applications for debt from the private sector been rejected within the last 12 months?

- a) all debt applications rejected
- b) some applications rejected and some approved
- c) all applications approved

#### 7. Was your debt application rejected, because of

- a) insufficient securities (collateral or guarantees)
- b) some other reason

#### 8. Did you get the amount of debt you applied for?

#### 9. Have you turned down a debt that you would have received within the last 12 months? if "yes, then reason

- a) you were not granted enough debt
- b) the offered interest rate was too high
- c) some other terms of the debt did not satisfy you
- d) some other reason

#### 10. If during the last 12 months, your debt application was rejected or you turned down an offered debt, did you get substitutive finance from elsewhere?

- a) from the private sector alone
- b) from the public sector alone
- c) from both

#### 11. Does the private sector supply of equity function sufficiently well in Finland?

#### 12. In your opinion, is the biggest problem in the private sector supply of equity that

- a) there is a lack of long-term and patient equity finance
- b) there is a lack of will for risk-taking, other than in the time dimension
- c) there is no lack in risk-taking, but the financiers have insufficient knowledge of technology
- d) there is no lack in risk-taking, but the financiers do not understand the needs of growth firms
- e) there is some other problem

#### 13. Has your firm attempted to get equity from the private sector within the last 12 months?

#### 14. Has your firm had the need for outside equity finance within the last 12 months, but you haven't attempted to get it from the private sector? if "yes", then reason

- a) you got finance from the public sector
- b) you did not believe in your possibilities to get finance
- c) you believed the search costs for finance would be too high, i.e. it would take too much time and resources to find appropriate financiers
- d) the real costs of equity would have been too high
- e) some other reason

#### 15. Have your attempts to get equity from the private sector failed within the last 12 months?

- a) all attempts failed
- b) some attempts failed and some were successful
- c) all attempts were successful

#### 16. Was the main reason why you failed to get equity from the private sector that

- a) your business plan did not convince the investors
- b) your firm could not match the investors' expectations for returns
- c) some other reason

#### 17. Did you get the amount of equity you wanted?

#### 18. Have you turned down any equity that you would have received within the last 12 months? if "yes, then reason

- a) you were not granted enough equity
- b) you could not agree on the ownership shares
- c) you could not agree on the value of the firm
- d) some other reason

19. If during the last 12 months, your attempt to get equity failed or you turned down offered equity, did you get substitutive finance from elsewhere?

- a) from the private sector alone
- b) from the public sector alone
- c) from both

20. Has any important investment-, R&D, marketing- or other similar project been left unimplemented due to financial constraints during the last 12 months?

21. Do you believe that due to financial constraints important projects have been left unimplemented during the last 12 months, for firms that

- a) operate in the same industry as your firm
- b) operate in the same region as your firm
- c) are the same age as your firm

## II. PUBLIC BUSINESS SUPPORT ORGANISATIONS AND SERVICES OFFERED BY THEM

22. Are you aware of the funding options and other business support services offered by the following organizations, so that you can utilize them?

- a) Finnvera
- b) Tekes
- c) TE-Centres
- d) Finpro
- e) Foundation for Finnish Inventions
- f) Finnish Industry Investment
- g) Sitra
- h) other government and/or district owned service providers

23. Has your firm received any grants and/or guarantees during the last 12 months from the following public organisations?

1. Finnvera, if "no" then reason:

- a. have not applied, why
  - i. no need
  - ii. application process was viewed as too complex
  - iii. no suitable funding option was available
  - iv. some other reason
- b. have applied but not received

2. Tekes, if "no" then reason:

- a. have not applied, why
  - i. no need
  - ii. application process was viewed as too complex
  - iii. no suitable funding option was available
  - iv. some other reason
- b. have applied but not received

3. TE-Centres, if "no" then reason:

- a. have not applied, why
  - i. no need
  - ii. application process was viewed as too complex
  - iii. no suitable funding option was available
  - iv. some other reason
- b. have applied but not received

4. Other public organizations, e.g. Foundation for Finnish inventions, if "no" then reason:

- a. have not applied, why
  - i. no need
  - ii. application process was viewed as too complex
  - iii. no suitable funding option was available
  - iv. some other reason
- b. have applied but not received

24. Has your firm received any loans, capital loans and/or equity finance during the last 12 months from the following public organisations?

1. Finnvera, if "no" then reason:

- a. have not applied, why
  - i. no need
  - ii. application process was viewed as too complex
  - iii. no suitable funding option was available
  - iv. some other reason
- b. have applied but not received

2. Tekes, if "no" then reason:

- a. have not applied, why
  - i. no need
  - ii. application process was viewed as too complex
  - iii. no suitable funding option was available
  - iv. some other reason
- b. have applied but not received

3. Public equity investors, i.e. Finnish Industry investment, Sitra, and other state or district owned equity investment funds, if "no, then reason:

- a. have not applied, why
  - i. no need
  - ii. application process was viewed as too complex
  - iii. no suitable funding option was available
  - iv. some other reason
- b. have applied but not received

4. Other public organizations, e.g. Foundation for Finnish inventions, if "no" then reason:

- a. have not applied, why
  - i. no need
  - ii. application process was viewed as too complex
  - iii. no suitable funding option was available
  - iv. some other reason
- b. have applied but not received

25. For which of the following purposes did your firm receive public funding during the last 12 months (choose one or more alternatives)?

- a) early phase and growth of the firm
- b) innovation activity, including research, product- and process development, patenting or other protection of innovation, and licensing
- c) commercialization and marketing, including exports and internationalization
- d) development of the organization, management or personnel
- e) investments in fixed assets, i.e. machinery, equipment, buildings or land
- f) working capital financing
- g) other

26. Does the private sector offer appropriate business support services, e.g. advice, marketing, and training services, to support the following firm operations?

- a) early phase and growth of the firm
- b) innovation activity, including research, product- and process development, patenting or other protection of innovation, and licensing
- c) commercialization and marketing, including exports and internationalization
- d) development of the organization, management or personnel
- e) other

27. Has your firm used, within the last 12 months, business support services offered by the private sector for the following firm operations?

- a) early phase and growth of the firm
- b) innovation activity, including research, product- and process development, patenting or other protection of innovation, and licensing
- c) commercialization and marketing, including exports and internationalization
- d) development of the organization, management or personnel
- e) other

28. Has your firm used any business support services, within the last 12 months, offered by the following public organizations?

- a) Finnvera
- b) Tekes
- c) TE-Centres
- d) Finpro
- e) Foundation for Finnish Inventions
- f) Public equity investors, i.e. Finnish Industry investment, Sitra, and other state or district owned equity investment funds
- g) some other non-private

29. For which of the following purposes did your firm use public business support services during the last 12 months (choose one or more alternatives)?

- a) early phase and growth of the firm
- b) innovation activity, including research, product- and process development, patenting or other protection of innovation, and licensing
- c) commercialization and marketing, including exports and internationalization
- d) development of the organization, management or personnel
- e) other

30. Was the reason why you used services offered by the public sector, that corresponding services were not available, to your knowledge, from the private sector? if "no", then reason

- a) corresponding services were too expensive from the private sector
- b) the quality of the services from the public sector was higher, if "yes", then which quality factor was the most important:
  - i. the credibility and reputation of the public organization
  - ii. the political cover offered by the public organization, e.g. in foreign operations
  - iii. other quality factor
- c) other reason

31. Were the funding or the services used part of a program, e.g. Tekes' technology program or Finpro's export circle?

### III. FACTORS LIMITING INNOVATION ACTIVITY AND THE SPREAD OF KNOWLEDGE AND KNOW-HOW

32. Has your firm practiced innovation activity within the last 12 months?

33. Have your firm's investments into innovation activity decreased over the last 12 months? if "yes", then reason

- a) there are fewer potentially profitable innovation projects
- b) problems in income financing, in other words poor profitability
- c) problems in accessing external finance
- d) some other reason

34. Has your firm participated in cooperative innovation activity with any of the following parties:

- a) firms in the same industry, if "yes" then
  - i. were foreign firms involved
- b) firms in other industries, including subcontractors, customers, suppliers, consultants, etc., if "yes" then
  - i. were foreign firms involved
- c) universities and/or research institutes, if "yes" then
  - i. were foreign firms involved

35. Was the cooperation compulsory, due to clauses on the support or as part of some program?

36. In your industry, are the following outside sources of information important for innovation activity?

- a) patent information
- b) purchasing a license
- c) conferences, events and publications for the industry
- d) competitors, firms in the same industry
- e) customers, subcontractors, suppliers and other firms outside your firm's industry
- f) cooperation with universities and research institutes
- g) employee recruitment
- h) reverse engineering of products in the markets

37. Choose from the following alternatives the most important factor that is inhibiting or limiting your firm's innovation activity

- a) estimated economic risk is too high, e.g. expenses of the innovation activity are too high
- b) lack of appropriate financing
- c) the benefits of the innovation activity spill over to others, and thus the appropriate returns to your firm remain too small
- d) lack of appropriate and qualified personnel
- e) lack of appropriate cooperation partners
- f) government actions, e.g. inflexible legislation
- g) other reason

38. Is it important that, in your industry, the results of innovation activity are protected, i.e. gratuitous use of the results by others is prevented?

39. Which of the following methods of protecting innovations is the most important in your industry?

- a) patents and other legal methods

- b) secrecy
  - c) complementary production or development activity, service or other product
  - d) first to market
  - e) some other reason
40. Does crucial knowledge or know-how of your firm's innovation activity spread to others due to the following actions
- a) sale or licensing of rights, marketing-, production or distribution agreement
  - b) patent publications
  - c) employees that go to competitors
  - d) products in the market (through reverse engineering)
41. Have you contested or threatened to contest matters related to your innovation activity, its results or other intellectual property rights issues?
42. Is it common in your industry to contest or threaten to contest matters related to innovation activity, its results or other intellectual property rights issues?
43. What has been the growth of your firm's turnover over the past 12 months?
44. What is the targeted average annual growth rate for your firm's turnover for the next three years? (% per annum)
45. In your opinion, do the public organizations and the private sector compete with each other in offering firms funding and/or business support services?
46. In your understanding, is there foreign financing available to your kind of firms in Finland?

## 6.4 Tabulations of survey results

<b>2. Priv sector debt functions well</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	641	77,2	77,2	77,2
	no	109	13,1	13,1	90,4
	does not know	80	9,6	9,6	100,0
	<b>Total</b>	<b>830</b>	<b>100,0</b>	<b>100,0</b>	
<b>3. Biggest problem in priv sector debt</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	lack of long-term, patient finance	20	2,4	18,3	18,3
	lack of risk-taking otherwise	49	5,9	45,0	63,3
	lack of tech knowledge	5	0,6	4,6	67,9
	lack of understanding growth-firm needs	17	2,0	15,6	83,5
	other problem	16	1,9	14,7	98,2
	does not know	2	0,2	1,8	100,0
	<b>Total</b>	<b>109</b>	<b>13,1</b>	<b>100,0</b>	
Missing	System	721	86,9		
<b>Total</b>		<b>830</b>	<b>100,0</b>		
<b>4. Applied for priv sector debt</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	257	31,0	31,0	31,0
	no	572	68,9	68,9	99,9
	does not know	1	0,1	0,1	100,0
	<b>Total</b>	<b>830</b>	<b>100,0</b>	<b>100,0</b>	
<b>5. Needed but did not apply</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	52	6,3	9,1	9,1
	no	518	62,4	90,4	99,5
	does not know	3	0,4	0,5	100,0
	<b>Total</b>	<b>573</b>	<b>69,0</b>	<b>100,0</b>	
Missing	System	257	31,0		
<b>Total</b>		<b>830</b>	<b>100,0</b>		
<b>Reason for not applying</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	got public funding	4	0,5	7,7	7,7
	anticipated negative decision	10	1,2	19,2	26,9
	high search costs	4	0,5	7,7	34,6
	high costs of debt	12	1,4	23,1	57,7
	other reason	22	2,7	42,3	100,0
	<b>Total</b>	<b>52</b>	<b>6,3</b>	<b>100,0</b>	
Missing	System	778	93,7		
<b>Total</b>		<b>830</b>	<b>100,0</b>		
<b>6. Applications</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	all rejected	10	1,2	3,9	3,9
	some rejected, some approved	19	2,3	7,4	11,3
	all approved	224	27,0	87,2	98,4
	does not know	4	0,5	1,6	100,0
	<b>Total</b>	<b>257</b>	<b>31,0</b>	<b>100,0</b>	
Missing	System	573	69,0		
<b>Total</b>		<b>830</b>	<b>100,0</b>		



7. Reason for rejection					
		Frequency	Percent	Valid %	Cumulat. %
Valid	insufficient collateral or guarantees	21	2,5	72,4	72,4
	other reason	8	1,0	27,6	100,0
	Total	29	3,5	100,0	
Missing	System	801	96,5		
Total		830	100,0		

8. Got applied amount					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	229	27,6	94,2	94,2
	no	13	1,6	5,3	99,6
	does not know	1	0,1	0,4	100,0
	Total	243	29,3	100,0	
Missing	System	587	70,7		
Total		830	100,0		

9. Turned down debt					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	50	6,0	20,6	20,6
	no	192	23,1	79,0	99,6
	does not know	1	0,1	0,4	100,0
	Total	243	29,3	100,0	
Missing	System	587	70,7		
Total		830	100,0		

Reason for turning down					
		Frequency	Percent	Valid %	Cumulat. %
Valid	interest rate too high	2	0,2	4,0	4,0
	other terms unsatisfactory	4	0,5	8,0	12,0
	other reason	43	5,2	86,0	98,0
	does not know	1	0,1	2,0	100,0
	Total	50	6,0	100,0	
Missing	System	780	94,0		
Total		830	100,0		

10. Substitutive finance					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	22	2,7	28,9	28,9
	no	48	5,8	63,2	92,1
	does not know	6	0,7	7,9	100,0
	Total	76	9,2	100,0	
Missing	System	754	90,8		
Total		830	100,0		

Substitutive finance from					
		Frequency	Percent	Valid %	Cumulat. %
Valid	from private sector only	16	1,9	72,7	72,7
	from public sector only	2	0,2	9,1	81,8
	from both	4	0,5	18,2	100,0
	Total	22	2,7	100,0	
Missing	System	808	97,3		
Total		830	100,0		

11. Priv sector equity functions well					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	397	47,8	47,8	47,8
	no	175	21,1	21,1	68,9
	does not know	258	31,1	31,1	100,0
	Total	830	100,0	100,0	

<b>12. Biggest problem in priv sector equity</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	lack of long-term, patient finance	40	4,8	9,2	9,2
	lack of risk-taking otherwise	79	9,5	18,2	27,5
	lack of tech knowledge	15	1,8	3,5	30,9
	lack of understanding growth-firm needs	26	3,1	6,0	37,0
	other problem	47	5,7	10,9	47,8
	does not know	226	27,2	52,2	100,0
Valid	Total	433	52,2	100,0	
Missing	System	397	47,8		
Total		830	100,0		
<b>13. Applied for priv sector equity</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	66	8,0	8,0	8,0
	no	761	91,7	91,7	99,6
	does not know	3	0,4	0,4	100,0
	Total	830	100,0	100,0	
Missing	System				
Total					
<b>14. Needed but did not apply</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	55	6,6	7,2	7,2
	no	702	84,6	91,9	99,1
	does not know	7	0,8	0,9	100,0
	Total	764	92,0	100,0	
Missing	System	66	8,0		
Total		830	100,0		
<b>Reason for not applying</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	got public funding	2	0,2	3,6	3,6
	anticipated negative outcome	25	3,0	45,5	49,1
	high search costs	4	0,5	7,3	56,4
	high costs of equity	9	1,1	16,4	72,7
	other reason	15	1,8	27,3	100,0
	Total	55	6,6	100,0	
Missing	System	775	93,4		
Total		830	100,0		
<b>15. Applications</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	all failed	13	1,6	18,6	18,6
	some failed, some successful	8	1,0	11,4	30,0
	all successful	39	4,7	55,7	85,7
	does not know	10	1,2	14,3	100,0
	Total	70	8,4	100,0	
Missing	System	760	91,6		
Total		830	100,0		
<b>16. Reason for rejection</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	business idea not convincing	6	0,7	28,6	28,6
	could not match return expectations	5	0,6	23,8	52,4
	other reason	9	1,1	42,9	95,2
	does not know	1	0,1	4,8	100,0
Valid	Total	21	2,5	100,0	
Missing	System	809	97,5		
Total		830	100,0		

17. Got applied amount					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	34	4,1	59,6	59,6
	no	14	1,7	24,6	84,2
	does not know	9	1,1	15,8	100,0
	Total	57	6,9	100,0	
Missing	System	773	93,1		
Total		830	100,0		

18. Turned down equity					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	6	0,7	10,5	10,5
	no	44	5,3	77,2	87,7
	does not know	7	0,8	12,3	100,0
	Total	57	6,9	100,0	
Missing	System	773	93,1		
Total		830	100,0		

Reason for turning down					
		Frequency	Percent	Valid %	Cumulat. %
Valid	no agreement on ownership shares	2	0,2	33,3	33,3
	other reason	4	0,5	66,7	100,0
	Total	6	0,7	100,0	
Missing	System	824	99,3		
Total		830	100,0		

19. Substitutive finance					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	13	1,6	27,7	27,7
	no	21	2,5	44,7	72,3
	does not know	13	1,6	27,7	100,0
	Total	47	5,7	100,0	
Missing	System	783	94,3		
Total		830	100,0		

Substitutive finance from					
		Frequency	Percent	Valid %	Cumulat. %
Valid	from private sector only	7	0,8	53,8	53,8
	from public sector only	3	0,4	23,1	76,9
	from both	2	0,2	15,4	92,3
	does not know	1	0,1	7,7	100,0
	Total	13	1,6	100,0	
Missing	System	817	98,4		
Total		830	100,0		

20. Financial constraints, firm					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	114	13,7	13,7	13,7
	no	714	86,0	86,0	99,8
	does not know	2	0,2	0,2	100,0
	Total	830	100,0	100,0	

Inside owners' financing					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	116	14,0	16,2	16,2
	no	589	71,0	82,5	98,7
	does not know	9	1,1	1,3	100,0
	Total	714	86,0	100,0	
Missing	System	116	14,0		
Total		830	100,0		

<b>21. a) Financial constraints, industry</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	393	47,3	47,3	47,3
	no	246	29,6	29,6	77,0
	does not know	191	23,0	23,0	100,0
	Total	830	100,0	100,0	
<b>21. b) Financial constraints, region</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	344	41,4	41,4	41,4
	no	208	25,1	25,1	66,5
	does not know	278	33,5	33,5	100,0
	Total	830	100,0	100,0	
<b>21. c) Financial constraints, age</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	298	35,9	35,9	35,9
	no	194	23,4	23,4	59,3
	does not know	338	40,7	40,7	100,0
	Total	830	100,0	100,0	
<b>22. a) Finnvera: aware</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	589	71,0	71,0	71,0
	no	241	29,0	29,0	100,0
	Total	830	100,0	100,0	
<b>22. b) Tekes: aware</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	566	68,2	68,2	68,2
	no	262	31,6	31,6	99,8
	does not know	2	0,2	0,2	100,0
	Total	830	100,0	100,0	
<b>22. c) TE-Centres: aware</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	596	71,8	71,8	71,8
	no	233	28,1	28,1	99,9
	does not know	1	0,1	0,1	100,0
	Total	830	100,0	100,0	
<b>22. d) Finpro: aware</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	273	32,9	32,9	32,9
	no	554	66,7	66,7	99,6
	does not know	3	0,4	0,4	100,0
	Total	830	100,0	100,0	
<b>22. e) FFI: aware</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	224	27,0	27,0	27,0
	no	603	72,7	72,7	99,6
	does not know	3	0,4	0,4	100,0
	Total	830	100,0	100,0	
<b>22. f) FII: aware</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	70	8,4	8,4	8,4
	no	759	91,4	91,4	99,9
	does not know	1	0,1	0,1	100,0
	Total	830	100,0	100,0	

<b>22. g) Sitra: aware</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	386	46,5	46,5	46,5
	no	442	53,3	53,3	99,8
	does not know	2	0,2	0,2	100,0
	Total	830	100,0	100,0	
<b>22. h) Other public: aware</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	141	17,0	17,0	17,0
	no	676	81,4	81,4	98,4
	does not know	13	1,6	1,6	100,0
	Total	830	100,0	100,0	
<b>23.1. Finnvera: grants/guarantees</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	97	11,7	11,7	11,7
	no	731	88,1	88,1	99,8
	does not know	2	0,2	0,2	100,0
	Total	830	100,0	100,0	
<b>Finnvera: why not</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	no need	582	70,1	79,6	79,6
	complex application process	26	3,1	3,6	83,2
	no suitable funding option	18	2,2	2,5	85,6
	other reason	94	11,3	12,9	98,5
	applied, not received	8	1,0	1,1	99,6
	does not know	3	0,4	0,4	100,0
	Total	731	88,1	100,0	
Missing	System	99	11,9		
Total		830	100,0		
<b>23.2. Tekes: grants/guarantees</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	114	13,7	13,7	13,7
	no	714	86,0	86,0	99,8
	does not know	2	0,2	0,2	100,0
	Total	830	100,0	100,0	
<b>Tekes: why not</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	no need	572	68,9	80,1	80,1
	complex application process	21	2,5	2,9	83,1
	no suitable funding option	17	2,0	2,4	85,4
	other reason	90	10,8	12,6	98,0
	applied, not received	13	1,6	1,8	99,9
	does not know	1	0,1	0,1	100,0
	Total	714	86,0	100,0	
Missing	System	116	14,0		
Total		830	100,0		
<b>23.3. TE-Centres: grants/guarantees</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	141	17,0	17,0	17,0
	no	685	82,5	82,5	99,5
	does not know	4	0,5	0,5	100,0
	Total	830	100,0	100,0	

<b>TE-Centres: why not</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	no need	535	64,5	78,1	78,1
	complex application process	29	3,5	4,2	82,3
	no suitable funding option	16	1,9	2,3	84,7
	other reason	90	10,8	13,1	97,8
	applied, not received	11	1,3	1,6	99,4
	does not know	4	0,5	0,6	100,0
Valid	Total	685	82,5	100,0	
Missing	System	145	17,5		
Total		830	100,0		
<b>23.4. Other: grants/guarantees</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	19	2,3	2,3	2,3
	no	809	97,5	97,5	99,8
	does not know	2	0,2	0,2	100,0
	Total	830	100,0	100,0	
<b>Other: why not</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	no need	667	80,4	82,4	82,4
	complex application process	23	2,8	2,8	85,3
	no suitable funding option	17	2,0	2,1	87,4
	other reason	96	11,6	11,9	99,3
	applied, not received	2	0,2	0,2	99,5
	does not know	4	0,5	0,5	100,0
Valid	Total	809	97,5	100,0	
Missing	System	21	2,5		
Total		830	100,0		
<b>24.1. Finnvera: debt/equity</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	56	6,7	6,7	6,7
	no	773	93,1	93,1	99,9
	does not know	1	0,1	0,1	100,0
	Total	830	100,0	100,0	
<b>Finnvera: why not</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	no need	642	77,3	83,1	83,1
	complex application process	17	2,0	2,2	85,3
	no suitable funding option	19	2,3	2,5	87,7
	other reason	89	10,7	11,5	99,2
	applied, not received	6	0,7	0,8	100,0
	Total	773	93,1	100,0	
Missing	System	57	6,9		
Total		830	100,0		
<b>24.2. Tekes: debt/equity</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	54	6,5	6,5	6,5
	no	776	93,5	93,5	100,0
	Total	830	100,0	100,0	
<b>Tekes: why not</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	no need	644	77,6	83,0	83,0
	complex application process	24	2,9	3,1	86,1
	no suitable funding option	11	1,3	1,4	87,5
	other reason	90	10,8	11,6	99,1

	applied, not received	5	0,6	0,6	99,7
	does not know	2	0,2	0,3	100,0
	<b>Total</b>	776	93,5	100,0	
<b>Missing</b>	<b>System</b>	54	6,5		
<b>Total</b>		830	100,0		

### 24.3. VC: debt/equity

		Frequency	Percent	Valid %	Cumulat. %
<b>Valid</b>	yes	11	1,3	1,3	1,3
	no	818	98,6	98,6	99,9
	does not know	1	0,1	0,1	100,0
	<b>Total</b>	830	100,0	100,0	

### VC: why not

		Frequency	Percent	Valid %	Cumulat. %
<b>Valid</b>	no need	681	82,0	83,3	83,3
	complex application process	30	3,6	3,7	86,9
	no suitable funding option	15	1,8	1,8	88,8
	other reason	88	10,6	10,8	99,5
	applied, not received	3	0,4	0,4	99,9
	does not know	1	0,1	0,1	100,0
	<b>Total</b>	818	98,6	100,0	
<b>Missing</b>	<b>System</b>	12	1,4		
<b>Total</b>		830	100,0		

### 24.4 Other: debt/equity

		Frequency	Percent	Valid %	Cumulat. %
<b>Valid</b>	yes	6	0,7	0,7	0,7
	no	823	99,2	99,2	99,9
	does not know	1	0,1	0,1	100,0
	<b>Total</b>	830	100,0	100,0	

### Other: why not

		Frequency	Percent	Valid %	Cumulat. %
<b>Valid</b>	no need	700	84,3	85,1	85,1
	complex application process	19	2,3	2,3	87,4
	no suitable funding option	11	1,3	1,3	88,7
	other reason	91	11,0	11,1	99,8
	does not know	2	0,2	0,2	100,0
	<b>Total</b>	823	99,2	100,0	
<b>Missing</b>	<b>System</b>	7	0,8		
<b>Total</b>		830	100,0		

### 25. a) Early phase & growth: funding

		Frequency	Percent	Valid %	Cumulat. %
<b>Valid</b>	yes	71	8,6	26,2	26,2
	no	200	24,1	73,8	100,0
	<b>Total</b>	271	32,7	100,0	
<b>Missing</b>	<b>System</b>	559	67,3		
<b>Total</b>		830	100,0		

### 25. b) Innovation: funding

		Frequency	Percent	Valid %	Cumulat. %
<b>Valid</b>	yes	142	17,1	52,4	52,4
	no	129	15,5	47,6	100,0
	<b>Total</b>	271	32,7	100,0	
<b>Missing</b>	<b>System</b>	559	67,3		
<b>Total</b>		830	100,0		

### 25. c) Commercialization & marketing: funding

		Frequency	Percent	Valid %	Cumulat. %
<b>Valid</b>	yes	83	10,0	30,6	30,6
	no	188	22,7	69,4	100,0

	<b>Total</b>	271	32,7	100,0
<b>Missing</b>	<b>System</b>	559	67,3	
<b>Total</b>		830	100,0	

### 25. d) Organizational development: funding

		Frequency	Percent	Valid %	Cumulat. %
<b>Valid</b>	<b>yes</b>	46	5,5	17,0	17,0
	<b>no</b>	225	27,1	83,0	100,0
	<b>Total</b>	271	32,7	100,0	
	<b>Missing</b>	<b>System</b>	559	67,3	
<b>Total</b>		830	100,0		

### 25. e) Investments: funding

		Frequency	Percent	Valid %	Cumulat. %
<b>Valid</b>	<b>yes</b>	81	9,8	29,9	29,9
	<b>no</b>	189	22,8	69,7	99,6
	<b>does not know</b>	1	0,1	0,4	100,0
	<b>Total</b>	271	32,7	100,0	
<b>Missing</b>	<b>System</b>	559	67,3		
<b>Total</b>		830	100,0		

### 25. f) Working capital: funding

		Frequency	Percent	Valid %	Cumulat. %
<b>Valid</b>	<b>yes</b>	40	4,8	14,8	14,8
	<b>no</b>	231	27,8	85,2	100,0
	<b>Total</b>	271	32,7	100,0	
<b>Missing</b>	<b>System</b>	559	67,3		
<b>Total</b>		830	100,0		

### 25. g) Other: funding

		Frequency	Percent	Valid %	Cumulat. %
<b>Valid</b>	<b>yes</b>	16	1,9	5,9	5,9
	<b>no</b>	254	30,6	93,7	99,6
	<b>does not know</b>	1	0,1	0,4	100,0
	<b>Total</b>	271	32,7	100,0	
<b>Missing</b>	<b>System</b>	559	67,3		
<b>Total</b>		830	100,0		

### 26. a) Early phase & growth: priv services exist

		Frequency	Percent	Valid %	Cumulat. %
<b>Valid</b>	<b>yes</b>	546	65,8	65,8	65,8
	<b>no</b>	125	15,1	15,1	80,8
	<b>does not know</b>	159	19,2	19,2	100,0
	<b>Total</b>	830	100,0	100,0	

### 26. b) Innovation: priv services exist

		Frequency	Percent	Valid %	Cumulat. %
<b>Valid</b>	<b>yes</b>	469	56,5	56,5	56,5
	<b>no</b>	165	19,9	19,9	76,4
	<b>does not know</b>	196	23,6	23,6	100,0
	<b>Total</b>	830	100,0	100,0	

### 26. c) Commercialization & marketing: priv services exist

		Frequency	Percent	Valid %	Cumulat. %
<b>Valid</b>	<b>yes</b>	581	70,0	70,0	70,0
	<b>no</b>	128	15,4	15,4	85,4
	<b>does not know</b>	121	14,6	14,6	100,0
	<b>Total</b>	830	100,0	100,0	

### 26. d) Organizational development: priv services exist

		Frequency	Percent	Valid %	Cumulat. %
<b>Valid</b>	<b>yes</b>	645	77,7	77,7	77,7



	no	94	11,3	11,3	89,0
	does not know	91	11,0	11,0	100,0
	<b>Total</b>	<b>830</b>	<b>100,0</b>	<b>100,0</b>	
<b>26. e) Other: priv services exist</b>					
		<b>Frequency</b>	<b>Percent</b>	<b>Valid %</b>	<b>Cumulat. %</b>
Valid	yes	295	35,5	35,5	35,5
	no	306	36,9	36,9	72,4
	does not know	229	27,6	27,6	100,0
	<b>Total</b>	<b>830</b>	<b>100,0</b>	<b>100,0</b>	
<b>27. a) Early phase &amp; growth: used priv sector</b>					
		<b>Frequency</b>	<b>Percent</b>	<b>Valid %</b>	<b>Cumulat. %</b>
Valid	yes	59	7,1	7,1	7,1
	no	766	92,3	92,3	99,4
	does not know	5	0,6	0,6	100,0
	<b>Total</b>	<b>830</b>	<b>100,0</b>	<b>100,0</b>	
<b>27. b) Innovation: used priv sector</b>					
		<b>Frequency</b>	<b>Percent</b>	<b>Valid %</b>	<b>Cumulat. %</b>
Valid	yes	63	7,6	7,6	7,6
	no	763	91,9	91,9	99,5
	does not know	4	0,5	0,5	100,0
	<b>Total</b>	<b>830</b>	<b>100,0</b>	<b>100,0</b>	
<b>27. c) Commercialization &amp; marketing: used priv sector</b>					
		<b>Frequency</b>	<b>Percent</b>	<b>Valid %</b>	<b>Cumulat. %</b>
Valid	yes	114	13,7	13,7	13,7
	no	712	85,8	85,8	99,5
	does not know	4	0,5	0,5	100,0
	<b>Total</b>	<b>830</b>	<b>100,0</b>	<b>100,0</b>	
<b>27. d) Organizational development: used priv sector</b>					
		<b>Frequency</b>	<b>Percent</b>	<b>Valid %</b>	<b>Cumulat. %</b>
Valid	yes	159	19,2	19,2	19,2
	no	666	80,2	80,2	99,4
	does not know	5	0,6	0,6	100,0
	<b>Total</b>	<b>830</b>	<b>100,0</b>	<b>100,0</b>	
<b>27. e) Other: used priv sector</b>					
		<b>Frequency</b>	<b>Percent</b>	<b>Valid %</b>	<b>Cumulat. %</b>
Valid	yes	55	6,6	6,6	6,6
	no	769	92,7	92,7	99,3
	does not know	6	0,7	0,7	100,0
	<b>Total</b>	<b>830</b>	<b>100,0</b>	<b>100,0</b>	
<b>28. a) Finnvera: used services</b>					
		<b>Frequency</b>	<b>Percent</b>	<b>Valid %</b>	<b>Cumulat. %</b>
Valid	yes	27	3,3	3,3	3,3
	no	799	96,3	96,3	99,5
	does not know	4	0,5	0,5	100,0
	<b>Total</b>	<b>830</b>	<b>100,0</b>	<b>100,0</b>	
<b>28. b) Tekes: used services</b>					
		<b>Frequency</b>	<b>Percent</b>	<b>Valid %</b>	<b>Cumulat. %</b>
Valid	yes	54	6,5	6,5	6,5
	no	770	92,8	92,8	99,3
	does not know	6	0,7	0,7	100,0
	<b>Total</b>	<b>830</b>	<b>100,0</b>	<b>100,0</b>	

<b>28. c) TE-Centres: used services</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	140	16,9	16,9	16,9
	no	685	82,5	82,5	99,4
	does not know	5	0,6	0,6	100,0
	Total	830	100,0	100,0	
<b>28. d) Finpro: used services</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	64	7,7	7,7	7,7
	no	762	91,8	91,8	99,5
	does not know	4	0,5	0,5	100,0
	Total	830	100,0	100,0	
<b>28. e) FFI: used services</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	5	0,6	0,6	0,6
	no	822	99,0	99,0	99,6
	does not know	3	0,4	0,4	100,0
	Total	830	100,0	100,0	
<b>28. f) VC: used services</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	16	1,9	1,9	1,9
	no	812	97,8	97,8	99,8
	does not know	2	0,2	0,2	100,0
	Total	830	100,0	100,0	
<b>28. g) Other public: used services</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	38	4,6	4,6	4,6
	no	789	95,1	95,1	99,6
	does not know	3	0,4	0,4	100,0
	Total	830	100,0	100,0	
<b>29. a) Early phase &amp; growth: used public sector</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	47	5,7	20,0	20,0
	no	187	22,5	79,6	99,6
	does not know	1	0,1	0,4	100,0
	Total	235	28,3	100,0	
Missing	System	595	71,7		
Total		830	100,0		
<b>29. b) Innovation: used public sector</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	78	9,4	33,2	33,2
	no	155	18,7	66,0	99,1
	does not know	2	0,2	0,9	100,0
	Total	235	28,3	100,0	
Missing	System	595	71,7		
Total		830	100,0		
<b>29. c) Commercialization &amp; marketing: used public sector</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	118	14,2	50,2	50,2
	no	116	14,0	49,4	99,6
	does not know	1	0,1	0,4	100,0
	Total	235	28,3	100,0	
Missing	System	595	71,7		
Total		830	100,0		

29. d) Organizational development: used public sector					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	101	12,2	43,0	43,0
	no	133	16,0	56,6	99,6
	does not know	1	0,1	0,4	100,0
	Total	235	28,3	100,0	
Missing	System	595	71,7		
Total		830	100,0		

29. e) Other: used public sector					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	15	1,8	6,4	6,4
	no	217	26,1	92,3	98,7
	does not know	3	0,4	1,3	100,0
	Total	235	28,3	100,0	
Missing	System	595	71,7		
Total		830	100,0		

30. Used public because was not aware of private					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	85	10,2	36,2	36,2
	no	145	17,5	61,7	97,9
	does not know	5	0,6	2,1	100,0
	Total	235	28,3	100,0	
Missing	System	595	71,7		
Total		830	100,0		

Reason for using public sector					
		Frequency	Percent	Valid %	Cumulat. %
Valid	price	63	7,6	43,4	43,4
	quality	16	1,9	11,0	54,5
	other reason	65	7,8	44,8	99,3
	does not know	1	0,1	0,7	100,0
	Total	145	17,5	100,0	
Missing	System	685	82,5		
Total		830	100,0		

Quality factor					
		Frequency	Percent	Valid %	Cumulat. %
Valid	credibility and reputation	12	1,4	75,0	75,0
	other quality	4	0,5	25,0	100,0
	Total	16	1,9	100,0	
Missing	System	814	98,1		
Total		830	100,0		

31. Part of a public program					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	130	15,7	35,5	35,5
	no	224	27,0	61,2	96,7
	does not know	12	1,4	3,3	100,0
	Total	366	44,1	100,0	
Missing	System	464	55,9		
Total		830	100,0		

32. Innovation activity					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	462	55,7	55,7	55,7
	no	366	44,1	44,1	99,8
	does not know	2	0,2	0,2	100,0
	Total	830	100,0	100,0	

<b>33. Reduced innovative activity</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	79	9,5	17,1	17,1
	no	377	45,4	81,6	98,7
	does not know	6	0,7	1,3	100,0
	Total	462	55,7	100,0	
Missing	System	368	44,3		
Total		830	100,0		

<b>Reason for reduced innovation</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	fewer potentially profitable projects	15	1,8	19,0	19,0
	problems in income financing	27	3,3	34,2	53,2
	problems in external financing	9	1,1	11,4	64,6
	other reason	28	3,4	35,4	100,0
	Total	79	9,5	100,0	
Missing	System	751	90,5		
Total		830	100,0		

<b>34. a) Cooperation within industry</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	235	28,3	50,9	50,9
	no	226	27,2	48,9	99,8
	does not know	1	0,1	0,2	100,0
	Total	462	55,7	100,0	
Missing	System	368	44,3		
Total		830	100,0		

<b>International parties involved</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	100	12,0	42,6	42,6
	no	135	16,3	57,4	100,0
	Total	235	28,3	100,0	
Missing	System	595	71,7		
Total		830	100,0		

<b>34. b) Cooperation with other industries</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	315	38,0	68,2	68,2
	no	146	17,6	31,6	99,8
	does not know	1	0,1	0,2	100,0
	Total	462	55,7	100,0	
Missing	System	368	44,3		
Total		830	100,0		

<b>International parties involved</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	97	11,7	30,8	30,8
	no	218	26,3	69,2	100,0
	Total	315	38,0	100,0	
Missing	System	515	62,0		
Total		830	100,0		

<b>34. c) Cooperation with universities/research</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	178	21,4	38,5	38,5
	no	282	34,0	61,0	99,6
	does not know	2	0,2	0,4	100,0
	Total	462	55,7	100,0	
Missing	System	368	44,3		
Total		830	100,0		

International parties involved					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	33	4,0	18,5	18,5
	no	142	17,1	79,8	98,3
	does not know	3	0,4	1,7	100,0
	Total	178	21,4	100,0	
Missing	System	652	78,6		
Total		830	100,0		

35. Compulsory cooperation					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	92	11,1	23,4	23,4
	no	289	34,8	73,5	96,9
	does not know	12	1,4	3,1	100,0
	Total	393	47,3	100,0	
Missing	System	437	52,7		
Total		830	100,0		

36. a) Patents: info source					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	290	34,9	34,9	34,9
	no	515	62,0	62,0	97,0
	does not know	25	3,0	3,0	100,0
	Total	830	100,0	100,0	

36. b) License: info source					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	202	24,3	24,3	24,3
	no	601	72,4	72,4	96,7
	does not know	27	3,3	3,3	100,0
	Total	830	100,0	100,0	

36. c) Industry events: info source					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	558	67,2	67,2	67,2
	no	262	31,6	31,6	98,8
	does not know	10	1,2	1,2	100,0
	Total	830	100,0	100,0	

36. d) Competitors: info source					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	618	74,5	74,5	74,5
	no	194	23,4	23,4	97,8
	does not know	18	2,2	2,2	100,0
	Total	830	100,0	100,0	

36. e) Firms outside industry: info source					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	709	85,4	85,4	85,4
	no	105	12,7	12,7	98,1
	does not know	16	1,9	1,9	100,0
	Total	830	100,0	100,0	

36. f) Universities/research: info source					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	382	46,0	46,0	46,0
	no	434	52,3	52,3	98,3
	does not know	14	1,7	1,7	100,0
	Total	830	100,0	100,0	

<b>36. g) Recruitment: info source</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	388	46,7	46,7	46,7
	no	428	51,6	51,6	98,3
	does not know	14	1,7	1,7	100,0
	Total	830	100,0	100,0	
<b>36. h) Reverse engineering: info source</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	593	71,4	71,4	71,4
	no	223	26,9	26,9	98,3
	does not know	14	1,7	1,7	100,0
	Total	830	100,0	100,0	
<b>37. Innovation inhibiting factor</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	high economic risk	254	30,6	30,6	30,6
	lack of appropriate finance	79	9,5	9,5	40,1
	spillovers	50	6,0	6,0	46,1
	lack of expert personnel	130	15,7	15,7	61,8
	lack of partners	46	5,5	5,5	67,3
	government actions	43	5,2	5,2	72,5
	other reason	104	12,5	12,5	85,1
	does not know	124	14,9	14,9	100,0
	Total	830	100,0	100,0	
<b>38. Protection of inno important in industry</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	539	64,9	64,9	64,9
	no	262	31,6	31,6	96,5
	does not know	29	3,5	3,5	100,0
	Total	830	100,0	100,0	
<b>39. Protection method</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	patents and other legal	204	24,6	24,6	24,6
	secrecy	119	14,3	14,3	38,9
	complementary activity	31	3,7	3,7	42,7
	first to market	353	42,5	42,5	85,2
	other reason	16	1,9	1,9	87,1
	does not know	107	12,9	12,9	100,0
	Total	830	100,0	100,0	
<b>40. a) Sale/license rights: spillovers</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	179	21,6	38,7	38,7
	no	272	32,8	58,9	97,6
	does not know	11	1,3	2,4	100,0
	Total	462	55,7	100,0	
Missing	System	368	44,3		
Total		830	100,0		
<b>40. b) Patent publications: spillovers</b>					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	92	11,1	19,9	19,9
	no	360	43,4	77,9	97,8
	does not know	10	1,2	2,2	100,0
	Total	462	55,7	100,0	
Missing	System	368	44,3		
Total		830	100,0		

40. c) Employees: spillovers					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	144	17,3	31,2	31,2
	no	316	38,1	68,4	99,6
	does not know	2	0,2	0,4	100,0
	Total	462	55,7	100,0	
Missing	System	368	44,3		
Total		830	100,0		

40. d) Reverse engineering: spillovers					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	328	39,5	71,0	71,0
	no	128	15,4	27,7	98,7
	does not know	6	0,7	1,3	100,0
	Total	462	55,7	100,0	
Missing	System	368	44,3		
Total		830	100,0		

41. Contested IPRs					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	54	6,5	6,5	6,5
	no	768	92,5	92,5	99,0
	does not know	8	1,0	1,0	100,0
	Total	830	100,0	100,0	

42. Common to contest IPRs in industry					
		Frequency	Percent	Valid %	Cumulat. %
Valid	yes	140	16,9	16,9	16,9
	no	632	76,1	76,1	93,0
	does not know	58	7,0	7,0	100,0
	Total	830	100,0	100,0	

43. Turnover growth past year %					
		Frequency	Percent	Valid %	Cumulat. %
Valid	-80	1	0,1	0,1	0,1
	-60	2	0,2	0,3	0,4
	-50	4	0,5	0,5	0,9
	-45	1	0,1	0,1	1,1
	-40	3	0,4	0,4	1,5
	-35	1	0,1	0,1	1,6
	-30	10	1,2	1,3	2,9
	-28	1	0,1	0,1	3,1
	-25	1	0,1	0,1	3,2
	-23	1	0,1	0,1	3,3
	-20	27	3,3	3,6	6,9
	-16	1	0,1	0,1	7,0
	-15	11	1,3	1,5	8,5
	-14	2	0,2	0,3	8,8
	-12	2	0,2	0,3	9,0
	-10	26	3,1	3,5	12,5
	-9	1	0,1	0,1	12,6
	-8	4	0,5	0,5	13,1
	-7	1	0,1	0,1	13,3
	-6	1	0,1	0,1	13,4
	-5	11	1,3	1,5	14,9
	-4	1	0,1	0,1	15,0
	-3	4	0,5	0,5	15,5
	-2	4	0,5	0,5	16,1
-1	1	0,1	0,1	16,2	
0	211	25,4	28,0	44,2	
1	5	0,6	0,7	44,9	
2	9	1,1	1,2	46,1	
3	8	1,0	1,1	47,1	
4	3	0,4	0,4	47,5	
5	59	7,1	7,8	55,4	
6	5	0,6	0,7	56,0	
7	8	1,0	1,1	57,1	
8	8	1,0	1,1	58,2	
9	1	0,1	0,1	58,3	
10	93	11,2	12,4	70,7	
11	2	0,2	0,3	70,9	

	12	9	1,1	1,2	72,1
	13	1	0,1	0,1	72,2
	14	1	0,1	0,1	72,4
	15	36	4,3	4,8	77,2
	16	1	0,1	0,1	77,3
	17	2	0,2	0,3	77,6
	19	1	0,1	0,1	77,7
	20	47	5,7	6,2	83,9
	22	1	0,1	0,1	84,1
	25	18	2,2	2,4	86,5
	26	1	0,1	0,1	86,6
	27	1	0,1	0,1	86,7
	30	34	4,1	4,5	91,2
	32	1	0,1	0,1	91,4
	35	6	0,7	0,8	92,2
	37	1	0,1	0,1	92,3
	40	13	1,6	1,7	94,0
	42	1	0,1	0,1	94,2
	43	1	0,1	0,1	94,3
	45	1	0,1	0,1	94,4
	50	14	1,7	1,9	96,3
	70	1	0,1	0,1	96,4
	78	1	0,1	0,1	96,5
	80	1	0,1	0,1	96,7
	100	15	1,8	2,0	98,7
	105	1	0,1	0,1	98,8
	137	1	0,1	0,1	98,9
	150	2	0,2	0,3	99,2
	200	3	0,4	0,4	99,6
	300	2	0,2	0,3	99,9
	400	1	0,1	0,1	100,0
	<b>Total</b>	<b>753</b>	<b>90,7</b>	<b>100,0</b>	
<b>Missing</b>	<b>System</b>	<b>77</b>	<b>9,3</b>		
<b>Total</b>		<b>830</b>	<b>100,0</b>		

### Turnover growth past year %, category

		Frequency	Percent	Valid %	Cumulat. %
	<0%	18	2,2	23,1	23,1
	0-1%	5	0,6	6,4	29,5
	2-5%	10	1,2	12,8	42,3
	6-10%	17	2,0	21,8	64,1
	11-20%	4	0,5	5,1	69,2
	21-50%	10	1,2	12,8	82,1
	>50%	5	0,6	6,4	88,5
	does not know	9	1,1	11,5	100,0
<b>Valid</b>	<b>Total</b>	<b>78</b>	<b>9,4</b>	<b>100,0</b>	
<b>Missing</b>	<b>System</b>	<b>752</b>	<b>90,6</b>		
<b>Total</b>		<b>830</b>	<b>100,0</b>		

### 44. Targeted growth %

		Frequency	Percent	Valid %	Cumulat. %
<b>Valid</b>	-50	1	0,1	0,1	0,1
	-20	1	0,1	0,1	0,3
	-10	1	0,1	0,1	0,4
	-5	1	0,1	0,1	0,6
	-3	1	0,1	0,1	0,7
	0	100	12,0	14,1	14,8
	1	3	0,4	0,4	15,2
	2	9	1,1	1,3	16,5
	3	14	1,7	2,0	18,4
	4	4	0,5	0,6	19,0
	5	89	10,7	12,5	31,5
	6	4	0,5	0,6	32,1
	7	13	1,6	1,8	33,9
	8	9	1,1	1,3	35,2
	9	2	0,2	0,3	35,4
	10	181	21,8	25,5	60,9
	12	2	0,2	0,3	61,2
	13	2	0,2	0,3	61,5
	15	73	8,8	10,3	71,7
	20	88	10,6	12,4	84,1
	22	2	0,2	0,3	84,4
	25	15	1,8	2,1	86,5
	30	38	4,6	5,3	91,8
	35	3	0,4	0,4	92,3
	40	11	1,3	1,5	93,8
	45	1	0,1	0,1	94,0



	50	21	2,5	3,0	96,9
	70	1	0,1	0,1	97,0
	100	13	1,6	1,8	98,9
	156	1	0,1	0,1	99,0
	200	2	0,2	0,3	99,3
	300	3	0,4	0,4	99,7
	350	1	0,1	0,1	99,9
	800	1	0,1	0,1	100,0
	<b>Total</b>	711	85,7	100,0	
<b>Missing</b>	<b>System</b>	119	14,3		
<b>Total</b>		830	100,0		

### Targeted growth %, category

		Frequency	Percent	Valid %	Cumulat. %
	<0%	10	1,2	8,3	8,3
	0-1%	10	1,2	8,3	16,7
	2-5%	10	1,2	8,3	25,0
	6-10%	21	2,5	17,5	42,5
	11-20%	12	1,4	10,0	52,5
	21-50%	5	0,6	4,2	56,7
	>50%	5	0,6	4,2	60,8
	does not know	47	5,7	39,2	100,0
<b>Valid</b>	<b>Total</b>	120	14,5	100,0	
<b>Missing</b>	<b>System</b>	710	85,5		
<b>Total</b>		830	100,0		

### 45. Public and private sector compete

		Frequency	Percent	Valid %	Cumulat. %
	yes	266	32,0	32,0	32,0
	no	474	57,1	57,1	89,2
	does not know	90	10,8	10,8	100,0
<b>Valid</b>	<b>Total</b>	830	100,0	100,0	

### 46. Foreign financing available

		Frequency	Percent	Valid %	Cumulat. %
	yes	378	45,5	45,5	45,5
	no	264	31,8	31,8	77,3
	does not know	188	22,7	22,7	100,0
<b>Valid</b>	<b>Total</b>	830	100,0	100,0	

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